



Ohio Department of Agriculture  
**LIVESTOCK ENVIRONMENTAL PERMITTING PROGRAM**  
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## PERMIT TO INSTALL

The following sections are required for the Permit to Install:

1. Manure Storage or Treatment Facilities (Rule 901:10-2-04)
  - *Part 1 – Manure Storage or Treatment Facilities Record*
2. Water Quantity (Rule 901:10-2-01[C][3])
  - *Part 2 – Water Quantity Record*
3. Ground Water Quality (Rules 901:10-2-01[C][6] and 901:10-2-03[A] and 901:10-2-03[B])
  - *Part 3 – Ground Water Quality Record*
4. Construction and Operation Dates (Rule 901:10-2-01[C][7])
  - *Part 4 – Construction and Operation Dates*
5. Siting Criteria for a Manure Storage or Treatment Facility (Rule 901:10-2-02)
  - *Part 5 – Siting Criteria for A Manure Storage or Treatment Facility Record*
    - a. *Part 1 – Location of Structure(s)*
    - b. *Part 2 – Prohibition of Structure(s)*
    - c. *Part 3 – Fabricated Structure*
    - d. *Part 4 – Structures and Aquifer*
    - e. *Part 5 – Location of Manure Storage Pond or Manure Treatment Lagoon*
    - f. *Part 6 – Manure Storage Pond or Manure Treatment Lagoon and Aquifer*
    - g. *Part 7 – Solid Manure Structures*
6. Site Map (Rule 901:10-2-01[C][5])
  - *Part 6 – Site Map Requirements*
7. Geological Exploration Report
  - *Part 7 – Geological Exploration Report*
8. Precipitation Runoff and Storm Water Grading Plans
  - *Part 8 – Precipitation Runoff and Storm Water Grading Plans Requirements*
9. Detail engineering drawings, designs, and plans for construction
  - *Part 9 – Detail Engineering Drawings, Designs, and Plans for Construction Requirements*
10. Signature
  - *Part 10 – Signature of Permit to Install*

## MANURE STORAGE OR TREATMENT FACILITIES

Complete the chart below for all the manure storage or treatment facilities, both existing and proposed, that are, or are planned, to be located at the facility. Refer to the footnotes at the bottom of the chart for clarification on what is required for each column in the chart.

### INSTRUCTIONS

Please see Rule 901:10-1-01 for the three types of structures that are referred to as "manure storage or treatment facility:"

- Fabricated structures
- Manure storage ponds
- Manure treatment lagoons

1. **Structure ID:** Provide the manure structure identification that is, or will be utilized by the facility. (i.e.: Deep Pit #1, North Pond, etc.)
2. **Existing or Proposed:** State whether the structure is existing or is proposed as part of the expansion.
3. **Type of Structure:** State either fabricated structure, manure storage pond, manure treatment lagoon or stormwater pond.
4. **Description of Structure:** Provide brief description of structure (i.e.: deep pit – liquid, deep pit – solid, outside tank – covered, outside tank – uncovered, concrete slab, dry stack, earthen pond, earthen lagoon, etc.)
5. **Total Manure Storage Volume:** Provide in gallons for liquid systems and cubic feet for solid systems. This volume shall be to the maximum operating level, which is the total depth minus the required freeboard.
6. **Minimum Treatment Volume:** Only for manure treatment lagoons – Provide in gallons.
7. **Dimensions of Storage Structure:** Provide overall dimensions of structure. For ponds/lagoons, provide dimensions at maximum operating level.
8. **Days of Storage:** Days of storage provided for the number of animals that contribute to that structure.
9. **Freeboard Required:** Freeboard required shall be 1-foot for ponds/lagoons and 6-inches for fabricated structures containing liquid manure or solid manure, if exposed to rainfall/runoff; plus the direct precipitation and runoff received by the respective structure from the 25-year, 24-hour rainfall event or the 100-year, 24-hour rainfall event, which ever applies.

Provide a detailed calculation sheet that shows annual manure produced, total manure storage volume, days of storage provided and calculation for freeboard required (if necessary) for each manure storage or treatment facility listed in the above chart.



## WATER QUANTITY INFORMATION

1. How much water will the facility utilize on an:

Average daily basis: \_\_\_\_\_

Average annual basis: \_\_\_\_\_

2. Please include with this application a detailed description of the basis for the above calculations.

\_\_\_\_\_  
\_\_\_\_\_

3. Please describe the source(s) of the water:

\_\_\_\_\_  
\_\_\_\_\_

## GROUND WATER QUALITY

Ground water sampling for Total Coliform Bacteria and Nitrates:

1. Date Conducted: \_\_\_\_\_

2. Coliform Results (positive/negative): \_\_\_\_\_

Nitrates Results (mg/l): \_\_\_\_\_

3. Please illustrate the location of all well(s) on the Site Map. Rule 901:10-2-01[C][5]. Also, if multiple wells exist, mark the well that was used for the sampling provided above.

## CONSTRUCTION AND OPERATION DATES

1. List the anticipated beginning date of construction: \_\_\_\_\_

List the anticipated proposed ending date of construction: \_\_\_\_\_

2. List the anticipated beginning date of operation for a new facility: \_\_\_\_\_

## SITING CRITERIA FOR A MANURE STORAGE OR TREATMENT FACILITY

*Note: ODA can assist the owner/operator with these determinations.*

1. Is a fabricated structure, manure storage pond or manure treatment lagoon located wholly or partially in any of the following areas? (*Rule 901:10-2-05*)

*Note: Answering "Yes" to any of the following will require additional design criteria to be satisfied in Rule 901:10-2-02 to obtain a Permit to Install.*

**(CHECK ANSWER)**

a. An area of potential subsidence due to an underground mine(s):  Yes  No

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b. A karst area  Yes  No

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2. A fabricated structure (structure), manure storage pond (storage pond) or manure treatment lagoon (treatment lagoon) is prohibited in the following areas: (*Rule 901:10-2-02*)

a. The one-year time-of-travel contour from a well for which the Ohio EPA has delineated or endorsed a ground water source protection area and which serves a community water system. If no delineation or endorsement, then no closer than 1,000 feet from the well.

b. The one-year time-of-travel contour from a well for which the Ohio EPA has delineated or endorsed a ground water source protection area and which serves a non-community water system not owned or operated by the owner or operator of the facility. If no delineation or endorsement, then no closer than 300 feet from the well.

c. If a well is identified as highly susceptible by Ohio EPA, then installation is prohibited between the one-year time-of-travel contour and five-year time-of-travel contour unless additional ground water monitoring, or additional engineered controls or both are added, installed, and implemented as approved by the Director of Agriculture.

d. A regulatory floodway as designated by FEMA.

3. Will a fabricated structure be located within any of the following?

*Note: Answering "Yes" to any of the following violates the siting criteria listed in Rule 901:10-2-02 or may require additional monitoring or design criteria.*

**(CHECK ONE)**

a. 300 ft. of a well serving a public water system that is owned or operated by the Owner or Operator of the facility:  Yes  No  N/A

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b. 3 ft. (including liner) of bedrock without an aquifer:  Yes  No

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c. 100 ft. of a property line or public road:  Yes  No

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d. For a fabricated structure, 50 ft. of a water well or Class V well:	<input type="checkbox"/> Yes <input type="checkbox"/> No
e. 1,500 ft. of a surface water intake:	<input type="checkbox"/> Yes <input type="checkbox"/> No
f. 120 ft. from a stream – if a CAFF:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
g. 300 ft. from a stream – if a MCAFF:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
h. Between the one-year and five-year time-of-travel contours for a well for which the Ohio EPA has delineated or endorsed a ground water source protection area and is identified as highly susceptible:	<input type="checkbox"/> Yes <input type="checkbox"/> No
i. 300 feet from Cold Water Habitat and Seasonal Salmonid Stream:	<input type="checkbox"/> Yes <input type="checkbox"/> No

4. A fabricated structure shall have fifteen vertical feet of low permeable material between the bottom of the structure and the uppermost aquifer, unless additional design criteria are added, installed, and implemented as approved by the Director.

a. Depth to uppermost aquifer (in feet): \_\_\_\_\_

b. Source of information for determining the depth to aquifer including documents referred to, computations, and a description of field work:

\_\_\_\_\_

c. Feet of low permeable material between the bottom of structure and uppermost aquifer (in feet):

\_\_\_\_\_

d. Are provisions for ground water monitoring required and included as part of the Permit to Install?

Yes  No

5. Is manure storage pond or manure treatment lagoon located within:

*Note: Answering "Yes" to any of the following violates the siting criteria listed in Rule 901: 10-2-02 or may require additional monitoring or design criteria.*

**(CHECK ONE)**

a. 300 ft. of a well serving a public water system that is owned or operated by the owner or operator of the facility:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
b. 3 ft. (including liner) of bedrock without an aquifer:	<input type="checkbox"/> Yes <input type="checkbox"/> No
c. 100 ft. of a property line or public road:	<input type="checkbox"/> Yes <input type="checkbox"/> No
d. 300 ft. of a water well, Class V well, or a sinkhole:	<input type="checkbox"/> Yes <input type="checkbox"/> No
e. 1,500 ft. of a surface water intake:	<input type="checkbox"/> Yes <input type="checkbox"/> No
f. 300 ft. from a stream – if a CAFF:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
g. 600 ft. from a stream – if a MCAFF:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
h. Between the one-year and five-year time-of-travel contours for a well for which the Ohio EPA has delineated or endorsed a ground water source protection area and is identified as highly susceptible:	<input type="checkbox"/> Yes <input type="checkbox"/> No

- |   |  |
|---|--|
| i. 600 feet from Cold Water Habitat and Seasonal Salmonid Stream: | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| j. A sole source aquifer as designated by US EPA:                 | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| k. A 100-year flood plain:  | <input type="checkbox"/> Yes <input type="checkbox"/> No |

6. A manure storage pond or manure treatment lagoon shall have fifteen vertical feet of low permeable material between the bottom of the structure and the uppermost aquifer, unless additional design criteria or ground water monitoring are added, installed and implemented as approved by the Director of Agriculture.

- a. Depth to uppermost aquifer (in feet): \_\_\_\_\_
- b. Source of information for determining the depth to aquifer including documents referred to, computations, and a description of field work:  
 \_\_\_\_\_  
 \_\_\_\_\_
- c. Feet of low permeable material between the bottom of structure and uppermost aquifer (in feet):  
 \_\_\_\_\_
- d. Are provisions for ground water monitoring required and included as part of the Permit to Install?  
 Yes       No

7. Will a fabricated structure, manure storage pond or manure treatment lagoon that will contain solid manure be located closer than (Rule 901:10-2-02):

*Note: Answering "Yes" to any of the following violates the siting criteria listed in Rule 901:10-2-02 or may require additional monitoring or design criteria.*

**(CHECK ONE)**

- a. 500 ft. of a neighboring residence – if a CAFF: \_\_\_\_\_ Yes No N/A
- b. 1000 ft. of a neighboring residence – if a MCAFF: \_\_\_\_\_ Yes No N/A

*If the fabricated structures, manure storage ponds or manure treatment lagoons for new or expanded facilities do not meet the restrictions set forth in paragraphs c(iii), e(iii), g. and h., above, then the applicant may provide additional documentation as described in the Appendix to Rule 901:10-2-02.*

8. Will a fabricated structure, manure storage pond or manure treatment lagoon that will contain liquid manure be located closer than (Rule 901:10-2-02):

**(CHECK ONE)**

- a. 1,000 ft. of a neighboring residence – if a CAFF: \_\_\_\_\_ Yes No N/A
- b. 2,000 ft. of a neighboring residence – if a MCAFF: \_\_\_\_\_ Yes No N/A

*If the fabricated structures, manure storage ponds or manure treatment lagoons for new or expanded facilities do not meet the restrictions set forth in paragraphs c(iii), e(iii), g. and h., above, then the applicant may provide additional documentation as described in the Appendix to Rule 901:10-2-02.*

## SITE MAP REQUIREMENTS

1. For a concentrated animal feeding facility (CAFF), provide a site map of the location of the manure storage and treatment facilities that demonstrates a 1,000 foot radius surrounding this location.
2. For a major concentrated animal feeding facility (MCAFF), provide a site map fo the location of the manure storage and treatment facilities that demonstrates a 2,000 foot radius of surrounding this location.
3. For both 1 and 2 above, include any landmarks such as residence or barns or machine storage that serve as points of reference for boundaries and for locations of manure storage and treatment facilities.
4. For 1 and 2 above, provide overall dimensions of the manure storage or treatment facilities.
5. For 1 and 2 above, show approximate location of known subsurface drainage tiles within 100 feet of the proposed manure storage or treatment facilities.
6. For 1 and 2 above, show the location of well(s) to be used for groundwater sampling.

## GEOLOGICAL EXPLORATION REPORT

Please enclose a Subsurface Geological Exploration Report of the soils, hydrology, subsurface geology, and topography of the land area used for the manure storage or treatment facility and describe how the site meets Rule 901:10-2-03. See Rule 901:10-2-03 for additional detail required.

Provide the following information, completing all blanks, of the Professional Engineer or Engineering Geologist who prepared the Geological Exploration Report (required by Rule 901:10-2-03).

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

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

Telephone: \_\_\_\_\_

Fax: \_\_\_\_\_

## PRECIPITATION RUNOFF AND STORMWATER GRADING PLANS

Refer to the requirements in Rules 901:10-2-04 (F) and 901:10-3-11. This can be included as part of Item 9, engineering drawings.

## DETAIL ENGINEERING DRAWINGS, DESIGNS, AND PLANS FOR CONSTRUCTION

Please include design plans and detailed engineering drawings for the construction of the manure storage or treatment facilities. Rules 901:10-2-01[C][7], 901:10-2-03, and 901:10-2-04 to 901:10-2-06.

## SIGNATURE OF PERMIT TO INSTALL

### SIGNATURE

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information is, to the best of my knowledge and belief, true and accurate and complete. I am aware there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations." Rule 901:10-1-02[A][8] of the Ohio Administrative Code.

Check one or both:

- Name of Owner, or
- Name of Operator

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Print Name

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Signature

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Date Signed