



Ohio Administrative Code

Rule 901:10-2-04 Manure storage and treatment facilities.

Effective: February 13, 2021

(A) An application for a permit to install shall include analysis of manure that is sampled and analyzed in accordance with paragraphs (A) to (D) of rule 901:10-2-10 of the Administrative Code.

(B) For the purposes of a permit to install, manure shall be quantified and characterized to allow for proper sizing and design of the proposed manure storage or treatment facility. For an existing facility that submits a permit to install application for a similar type of manure storage or treatment facility with no change in treatment technology to what is currently utilized by the facility, the volume of manure and characterization of manure shall be based on manure production records and manure analysis from an actual sample from the facility. If actual manure production records or manure analysis are not available or are deemed not accurate by the department, or if the permit to install application is for a new facility or treatment technology not in use by the existing facility, then the owner or operator shall use the table appended to this rule or use manure production records and manure characterization records from a similar type facility with a similar type of manure storage or treatment facility or treatment technology. If manure data or analysis is used from a similar type facility to characterize manure, the owner or operator shall submit this alternative manure data along with the identification of the source of the data.

(C) General design and construction criteria for a manure storage or treatment facility.

(1) An appropriate design plan shall be required for a new or expanding manure storage or treatment facility.

(2) A manure storage or treatment facility shall be designed and constructed to handle manure volume, precipitation and surface water runoff in a manner that prevents the discharge of manure to waters of the state, except as provided in applicable standards set forth in rules 901:10-3-02 to 901:10-3-06 of the Administrative Code.

(D) Calculating storage volume for manure storage or treatment facilities.



(1) The total storage volume of a manure storage or treatment facility shall not be less than the volume calculated as the summation of the following, unless the owner or operator or the director determines that additional storage capacity is required to meet permit conditions.

(a) Manure generated during the storage period required by rule 901:10-2-05 or rule 901:10-2-06 of the Administrative Code;

(b) Average precipitation less evaporation on the surface area of the manure storage or treatment facility during the storage period;

(c) Normal runoff that drains from the concentrated animal feeding facility's drainage area into the manure storage or treatment facility during the storage period. Impermeable surfaces shall utilize a minimum factor of fifty per cent of the average precipitation;

(d) A precipitation event based on the surface of the manure storage or treatment facility and applicable standards in rules 901:10-3-02 to 901:10-3-06 of the Administrative Code;

(e) The runoff from a precipitation event that drains from the concentrated animal feeding facility's drainage area into the manure storage or treatment facility based on applicable standards in rules 901:10-3-02 to 901:10-3-06 of the Administrative Code; and

(f) Residual manure after liquids have been removed.

(2) In addition to the requirements in paragraph (D)(1) of this rule, the total storage volume of a manure treatment lagoon shall not be less than the volume calculated using one of the following methods set forth in the appendix to this rule.

(E) Stormwater pollution prevention plans. Each owner or operator of a concentrated animal feeding operation shall prevent pollution of stormwater resulting from an animal feeding facility by submitting plans to satisfy this rule and rule 901:10-3-11 of the Administrative Code to do the following:



- (1) Maintain separation of uncontaminated stormwater runoff from contaminated water with designs and installations that include, but are not limited to, settling basins, runoff ponds, liquid impoundments, and areas within berms and diversions;
- (a) Grade the area around the livestock buildings and the manure storage or treatment facility;
- (b) Divert stormwater runoff and roof water away from the manure storage or treatment facility or other structures in the production area.
- (c) Use spill prevention and good housekeeping techniques to ensure that stormwater discharges from the following areas comply with Ohio water quality standards: immediate access roads and rail lines used or traveled by carriers; or raw materials, products, waste materials, or by-products used or created; refuse sites; sites used for storage and maintenance of material handling equipment; sites used for handling material other than manure and shipping and receiving areas.
- (d) Install systems that are designed to capture and treat contaminated runoff and prohibit discharge of contaminated discharge. The owner or operator may use the following criteria, provided that in no case shall grassed filter strips satisfy effluent limitations for large facilities in rules 901:10-3-02 to 901:10-3-06 of the Administrative Code.
- (i) The "Ohio Natural Resource Conservation Service, Conservation Practice Standards Section IV, Field Office Technical Guide" which includes the following which are available for review at the Ohio department of agriculture website <http://agri.ohio.gov/>:
- (a) "Pond, No 378," January 2003;
- (b) "Constructed Wetland Conservation Practice Standard, No. 656," January 2010, but provided there shall be no discharge;
- (c) "Heavy Use Area Protection Practice, No. 561," December 2012;
- (d) "Composting Operation, No. 317," March 2010;



- (e) "Critical Area Planting, No. 342," March 2012;
 - (f) "Dike, No. 356," June 2002;
 - (g) "Diversion, No. 362," June 2002;
 - (h) "Grade Stabilization Structure, No. 410," May 1, 1988;
 - (i) "Pipeline, No. 516," June 2002;
 - (j) "Roof Runoff Structure, No. 558," June 2002;
 - (k) "Sediment Basin, No. 350," June 2002;
 - (ii) The "Ohio Livestock Manure And Wastewater Management Guide, Bulletin 604, The Ohio State University Extension, January 2006," which is available for review at the Ohio department of agriculture's campus in Reynoldsburg, Ohio and
 - (iii) USDA natural resource conservation service - NHCP which is available for review at the Ohio department of agriculture's campus in Reynoldsburg, Ohio.
- (2) Construct coverings over any structures in the production area where manure may be exposed to direct precipitation; or
- (3) Install vegetative cover and protect stream channels and areas adjacent to such channels from a concentrated animal feeding operation.
- (4) The owner or operator may submit plans that implement alternative practices to the director for approval provided that any alternative practices must be demonstrated to be equivalent to the practices listed in paragraph (F)(1) of this rule unless the owner or operator or the director determine that additional total storage capacity is required to meet permit conditions. All of the practices listed are subject to the design standards for precipitation events in paragraphs (C) and (D) of this rule.