



## Ohio Administrative Code

### Rule 901:10-2-10 Contents of manure management plan: manure characterization.

Effective: February 13, 2021

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The manure management plan shall contain information on manure to allow the owner or operator to plan for nutrient utilization at recommended agronomic rates and to minimize nutrient runoff that may impact waters of the state.

(A) Manure characterization shall describe the manure by the per cent of liquid content, the per cent of solids content and/or manure density and shall follow the sampling procedures for manure sampling and analysis in "Recommended Methods of Manure Analysis" (a 3769), university of Wisconsin extension, 2003 a free copy of which can be downloaded at <http://learningstore.uwex.edu/>. For an existing facility that will continue to have similar manure storage or treatment facilities with no change in treatment technology, the manure shall be characterized utilizing an actual sample from the facility. If the owner or operator is proposing a new facility, new manure storage or treatment facility, or a change in treatment technology, then the manure shall be characterized by using the table appended to this rule or by utilizing a representative analysis from a similar type facility with a similar type of manure storage or treatment facility to characterize manure, the owner or operator shall submit this alternative manure data along with the identification of the source of the data. Manure characterization shall include the following:

(1) Total manure production quantified:

(a) Pounds per day; or

(b) Tons per year; or

(c) Cubic yards per day; or

(d) Gallons per day.

(2) Nutrient content quantified:



(a) Pounds per day; and/or

(b) Pounds per ton; or

(c) Pounds per one thousand gallons.

(B) The manure management plan shall contain an estimate, supported by calculations of the quantity and total nutrient content of manure produced, stored and treated during a twelve month period along with a schedule for manure removal or manure transfer for purposes of land application. Manure may be removed based on results of inspections conducted pursuant to paragraph (A)(4)(f) of rule 901:10-2-08 of the Administrative Code or in accordance with distribution and utilization methods.

(C) At a minimum, manure from each manure storage or treatment facility shall be analyzed annually for the following: total nitrogen; ammonium nitrogen; organic nitrogen; phosphorus; potassium; and per cent total solids.

(D) In addition to the minimum requirements for annual manure analysis in paragraphs (A) to (C) of this rule, any manure with wastes that are process waste water, shall be characterized annually by the owner or operator by utilizing an actual sample from the facility, provided, however that for a permit to install application as required by paragraph (C) of rule 901:10-2-01 of the Administrative Code or for an operational change to be made to the manure management plan in accordance with rule 901:10-1-09 of the Administrative Code, the owner or operator may utilize a sample from a similar facility or by relying upon on existing published or documented data.

(E) Results of analyses and estimates conducted in paragraphs (A) to (D) of this rule shall be recorded in the operating record and shall be submitted as part of the annual report to the director required by rule 901:10-2-20 of the Administrative Code. Results of the manure analysis conducted in paragraph (C) of this rule shall be recorded in the operating record.

(F) After conducting manure analysis required in paragraph (C) of this rule, the owner or operator may request approval from the director for a major operational change to reduce the number of



samples needed to be representative of each manure storage and treatment facility and to utilize composite sampling and analysis. The director may approve a request provided all of the following apply:

- (1) The owner or operator submits a written request to the director along with copies of manure analyses from manure storage or treatment facilities from the same permitted facility;
- (2) Manure analyses for three consecutive years demonstrate that analytical results are the same or similar for a twelve month period for each manure storage or treatment facility at the permitted facility; and
- (3) The owner or operator acknowledges that the director may notify the owner or operator in writing that the owner or operator shall comply with paragraph (C) if at any time the director or the director's representative find that composite sampling is no longer representative for reasons that include, but are not limited to:
  - (a) Changes in feed and feed rations;
  - (b) Age, size, or type of animals;
  - (c) Changes in clean out times;
  - (d) Changes in building design, such as changes in ventilation;
  - (e) Changes due to diseases and actions taken to eliminate disease.
- (G) The manure management plan shall contain information on manure to allow the owner or operator or the person accepting manure under rule 901:10-2-11 of the Administrative Code to plan for nutrient utilization.