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MANURE MANAGEMENT PLAN

The following sections are for the MANURE MANAGEMENT PLAN

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PROHIBITIONS ON DISCHARGES

1. For all CAFFs except new source swine, veal or poultry operations, there shall be no discharge of manure from the production area to waters of the State, except that manure in an overflow may be discharged when a 25-year, 24-hour storm event (or greater) or a chronic rainfall event causes an overflow from the production area, which is properly designed, constructed, operated, and maintained to contain manure, direct precipitation, and the runoff from a 25-year, 24-hour rainfall event, and the production area is operated in compliance with the measures and records required in this permit and under Rules 901:10-2-08 and 901:10-2-16 of the Ohio Administrative Code. Any overflow that occurs in accordance with the above shall be noted in the operating records for the facility. In order for the permittee to use this discharge exception, the permittee must provide documentation that establishes the conditions necessary to meet the exception.

   For new source swine, veal or poultry CAFFs, there shall be no discharge of manure from the production area to waters of the State, except that manure in an overflow may be discharged when a 100-year, 24-hour storm event (or greater) or a chronic rainfall event causes an overflow from production area, which is properly designed, constructed, operated, and maintained to contain manure, direct precipitation, and the runoff from a 100-year, 24-hour rainfall event and the production area is operated in compliance with the measures and records required in this permit and under Rules 901:10-2-08 and 901:10-2-16 of the Ohio Administrative Code. Any overflow that occurs in accordance with the above shall be noted in the operating records for the facility. In order for the permittee to use this discharge exception, the permittee must provide documentation that establishes the conditions necessary to meet the exception.

2. Dry weather discharges of manure are prohibited from the production and land application areas.

3. Any spill, discharge, or overflow of pollutants from the production area to waters of the State shall not cause an exceedance of Ohio Water Quality Standards in the receiving water of the State.

4. In the event of any overflow or other discharge of manure from a manure storage or treatment facility, whether authorized by this permit, the following actions shall be taken:

   a. Record an estimate of the volume of the release and the date and time.

   b. The discharge must be analyzed by methods in 40 CFR Part 136.

   c. If conditions are not safe for sampling, the owner or operator must provide documentation of why samples could not be collected and analyzed. For example, due to dangerous weather conditions. But once these conditions have passed, samples shall be collected.

   d. Refer to **Form 1: ANNUAL DISCHARGE INFORMATION** from the Operating Record which may be used as part of your required Annual Report to be submitted to the Director. This form shows the information that is required for an annual report of any discharges.

   e. Any spills or discharge **must be reported within 24 hours of discovery as required** by the Emergency Response Plan, which is a part of the Permit to Operate.

Refer to **the attached ODA Form for Emergency Response Reports or use your own approved form**. This Form shows the information that is required and this information shall be submitted for each emergency report.

LAND APPLICATION OF MANURE

There shall be no discharge of manure into waters of the state from the land application areas under the control of the facility except for discharges that are composed of storm water runoff and/or snow melt runoff originating from a land application area where manure from the facility has been applied in compliance with the manure management plan in this permit and in compliance with the best management practices set forth in Chapter 901:10-2 of the Administrative Code.

FORM 3900-PTO-005, PART 1: MANURE MANAGEMENT PLAN

GENERAL INFORMATION

Name of Facility: _____

Contact Person: _____

Manure Management Plan Prepared By:

Name: _____

Address: _____

_____

Telephone: _____

Email: _____

Fax: _____

EQUIPMENT MAINTENANCE, REPAIR AND CALIBRATION

As required by Rule 901:10-2-08(A)(2) of the OAC, the owner or operator shall maintain a list of equipment used, including land application equipment and a written chronological record of the dates of inspections, maintenance, calibration monitoring and repairs that shall be maintained in the operating record required by rule 901:10-2-16 of the Administrative Code and be made readily available during an inspection of the facility. All repairs shall be completed promptly. The owner or operator must periodically inspect equipment used for land application of manure, litter, or process wastewater for leaks. OAC Rule 901:10-2-08(A)(3).

Please refer to FORM 2: LAND APPLICATION EQUIPMENT RECORDS in the Operating Record for the type of information required in your records or you may use your own approved form, which is part of the Permit to Operate. List all equipment owned or operated by the facility to be used as part of managing manure at the manure storage or treatment facility.

Equipment Type	Capacity/Size	Number Available	Major Maintenance Frequency	Calibration Frequency
Solid Spreader				
Liquid Spreader (Inject/Incorp.)				
Liquid Spreader (Surface)				
Drag Hose (Inject/Incorp.)				
Drag Hose (Surface)				
Traveling Gun				
Center Pivot				
Pumps				
Other (Describe)				

MANURE STORAGE OR TREATMENT FACILITIES

Please refer to FORM 3A or 3B: INSPECTION OF MANURE STORAGE AND TREATMENT FACILITIES in the Operating Record for the type of information required in your records or you may use your own forms if approved by ODA. Complete the following information on the form provided for each manure storage or treatment facility:

1. List all manure storage or treatment facilities located on the facility. In Column A, provide the Structural ID that is, or will be utilized in identifying this structure. (*Examples would be Deep Pit-Barn 1, North Manure Storage Pond, Concrete Settling Basin, Manure Treatment Lagoon-Cell 1, etc.*)

2. In Column B, provide volume of manure that will be removed from that manure storage or treatment facility on an annual basis.

3. Specify a frequency for inspecting the operating level of each manure storage or treatment facility in Column C. All liquid manure storage structures must be inspected a minimum of once a week. Refer to Form 3A in the ODA Operating Record. Depth markers must be installed on all ponds or lagoons and must clearly indicate the minimum capacity necessary to contain the runoff and direct precipitation of (one of the following):

    a. The 25-year, 24-hour rainfall event
    b. The 100-year, 24-hour rainfall event

4. Please specify in Column D the required freeboard for each manure storage pond, manure treatment lagoon or fabricated structure. The freeboard for manure storage ponds or treatment lagoons shall be **1 foot plus the direct precipitation and runoff** collected by that representative structure for the appropriate design storm as described under "Prohibitions on Discharges" (See page 2 above, paragraph 1) and as required by Rule 901:10-2-06(A)(8). The freeboard for fabricated structures shall be **6 inches plus the direct precipitation and runoff** collected by that representative structure for the appropriate design storm as described under "Prohibitions on Discharges" (See page 2 above, paragraph 1) and as required by Rule 901:10-2-05(A)(4).

5. State the Maximum Operating Level of the manure storage or treatment facility in Column E. This should be calculated based on the total depth of structure minus the required freeboard as described in Step 4 above.

6. Provide the Total Manure Storage Volume of the manure storage or treatment facility in gallons for liquid systems and cubic feet for solid systems in Column F. This volume should not include the volume that should be designated as required freeboard as provided in Step 4 above.

7. State the Storage Period Provided for the manure storage or treatment facility in days in Column G. To calculate, take the *Total Monthly Storage Volume* and divide by the *Total Amount of Manure Produced In One Year* and then multiply by *365 Days*.

8. In Column H specify a Frequency for Inspecting the Overall Structural Integrity of the manure storage or treatment facility. Refer to Forms 3A and 3B in the ODA Operating Record. Manure storage or treatment facilities shall be inspected for evidence of erosion, leakage, animal damage, cracking, excessive vegetation or a discharge as required by Rule 901:10-2-08 (A)(4)(e).

MANURE STORAGE OR TREATMENT FACILITIES

A. Structure ID	B. Annual Volume of Manure Removed from this Structure	C. Inspection Frequency of Operating Level	D. Freeboard (Feet)	E. Maximum Operating Level (Feet)	F. Total Manure Storage Volume (Gallons or Cubic Feet)	G. Storage Period Provided (Days)	H. Inspection Frequency of Overall Structural Integrity

INSPECTION AND MAINTENANCE OF STORMWATER AND EROSION CONTROL

List the frequency at which you will inspect the following items in the chart in order to satisfy Rule 901:10-2-08(A)(4)(d), (h), (i), (j) and (k).

Please refer to the forms included as the Operating Record Forms 3A or 3B for the type of information required for your records for each item listed below. You may use your own forms if these are approved by ODA.

You are required to perform weekly visual inspections of all storm water diversion devices, runoff diversion structures, and devices channeling contaminated storm water to the manure storage pond(s) and/or manure treatment lagoon(s). For any other devices, please insert the inspection frequency.

On the following chart, check all of the types of control structures that apply at your facility, and, where appropriate, the inspection frequency.

A. Control Structure Type	**B. Inspection Frequency**	**C. Maintenance Frequency[1]**	**Check if applicable**
Storm Water Diversion(s)	Weekly		☐
Runoff Diversion	Weekly		☐
Erosion Control/Surface Outlet Structures	Weekly		☐
Contaminated Storm Water Channels or Conveyances	Weekly		☐
Berms/Embankments of all Earthen Stormwater Structures			☐
Manure Transfer Systems or Conveyances			☐
Grassed Waterways and Filter Strips around production area			☐
Vegetative Cover around production area.			☐
Gutters/Downspouts			☐
Contaminated Storm Water Pond	Weekly		☐
Domestic/Industrial Waste Structures or Controls			☐
Other (describe):			☐

[1] *Item C: Maintenance Frequency* – This shall describe the intended frequency that each item will be maintained. For items that relate to vegetative cover, this could be as simple as "Weekly during the growing season." For other items, like Manure Transfer Pipes and Gutter/Downspouts, this could be noted as "As needed or required."

FORM 3900-PTO-005, PART 5: MANURE MANAGEMENT PLAN

OTHER REQUIREMENTS FOR THE PRODUCTION AREA OF THE FACILITY

There shall be no disposal of animal mortalities in any fabricated structure, manure storage pond, or manure treatment lagoon, unless the system is specifically designed to treat animal mortalities. Handle animal mortalities so as to prevent discharge of manure to waters of the state.

There shall be no disposal of untreated or unapproved domestic or industrial wastewater from showers, toilets, or sinks. In addition, there shall be no disposal of medical wastes, chemicals, or other contaminants used in the production area into any manure storage or treatment facility. There shall be no access to waters of the state by any animals in the production area of the facility.

Daily, visual inspections of all drinking water and cooling water lines shall be recorded in the **Operating Record Form. Select from Forms 8A, 8B, or the form provided by the U.S. EPA.** You may also use your own form if pre-approved by ODA.

Deficiencies found during any of the inspections required by this permit shall be corrected as soon as possible and listed in the Operating Record as required by Rules 901:10-2-08(A)(4)(q) and 901:10-2-16.

Best Management Practices and good housekeeping practices shall be maintained by the operation as provided with the approved engineering plans and/or in accordance with Rules 901:10-2-04 (E). For instance, all areas designed or approved to be free of manure or other pollutants and therefore considered clean storm water shall be maintained as such. Any contaminated areas within the production area shall have all runoff collected and stored as designed or approved.

FORM 3900-PTO-005, PART 6: MANURE MANAGEMENT PLAN

GROUNDWATER SAMPLING AND ANALYSIS

Unless submitted as part of an application for a PERMIT TO INSTALL that accompanies an application for this PERMIT TO OPERATE, you must provide a copy of the results of sampling and analysis of groundwater from a well at the facility. Rule 901:10-2-08(A)(4)(l) also requires **annual** sampling of groundwater from a well that is properly located, protected and operated at the facility. The well must be accessible for sampling and have adequate water quantity for a sample. The analysis shall include, at a minimum, Total Coliform Bacteria and Nitrates.

A copy of the sample results as provided by the laboratory to you must be kept in the Operating Record. **Refer to Form 4: ANNUAL GROUND WATER RECORDS of the Operating Record** for the type of information required for your record.

ANNUAL MANURE VOLUME CALCULATIONS

Provide an estimate, supported by calculations, of the quantity of manure produced, stored and treated during a twelve-month period, including rainfall and contaminated runoff. For existing facilities, actual records of manure generated shall be used and for new facilities, records from a similar type facility or book values can be used. If a separate volume calculation spreadsheet is available, please attach and reference.

A. Animal Species	B. Animal Weight	C. Volume of manure per animal per day	D. Animal Numbers	E. Days at Facility	F. As is Tons or gallons Generated

In the space provide below or on with an attachment, provide calculations for additional sources of manure and total annual manure generation for the facility. These shall include, at a minimum, excreted manure, bedding, direct rainfall, contaminated runoff, process wastewater, washwater, silage leachate, etc.

MANURE CHARACTERISTICS AND NUTRIENT DATA

Provide manure analysis from each manure storage or treatment facility that will have manure applied from it for land application or any other alternative use.

Check Source of Data:

☐ Book Value ☐ Facility records ☐ Other Facility

If from a source other than this facility, identify:

Name/Title:

Address:

%Moisture:	Total N	Ammonia N	Organic N	P_2O_5	K_2O
Lbs/Ton or Lbs/1000 Gal.					
Total Annual Lbs. of Nutrient					

Manure Storage ID:

Annual Volume from Part 3, Column B:

Check Source of Data:

☐ Book Value ☐ Facility records ☐ Other Facility

If from a source other than this facility, identify:

Name/Title:

Address:

%Moisture:	Total N	Ammonia N	Organic N	P_2O_5	K_2O
Lbs/Ton or Lbs/1000 Gal.					
Total Annual Lbs. of Nutrient					

Manure Storage ID:

Annual Volume from Part 3, Column B:

Check Source of Data:

☐ Book Value ☐ Facility records ☐ Other Facility

If from a source other than this facility, identify:

Name/Title:

Address:

%Moisture:	Total N	Ammonia N	Organic N	P_2O_5	K_2O
Lbs/Ton or Lbs/1000 Gal.					
Total Annual Lbs. of Nutrient					

Manure Storage ID:

Annual Volume from Part 3, Column B:

Check Source of Data:

☐ Book Value ☐ Facility records ☐ Other Facility

If from a source other than this facility, identify:

Name/Title:

Address:

%Moisture:	Total N	Ammonia N	Organic N	P_2O_5	K_2O
Lbs/Ton or Lbs/1000 Gal.					
Total Annual Lbs. of Nutrient					

Manure Storage ID:

Annual Volume from Part 3, Column B:

APPENDIX C, TABLE 6 – CALCULATING AVAILABLE NITROGEN OF MANURE

Calculate the available nitrogen based on time of year and type of application. Determine available nitrogen by multiplying the percent available for ammonia N and organic N and adding them together (i.e., 0.5 x NH_4N + 0.33 x Organic N). **Use the table below or attach an additional sheet showing calculations.**

Manure Applied TONS	Manure Available Nitrogen POUNDS	Poultry Manure Available Nitrogen POUNDS

ODA APPENDIX C, TABLE 6: METHOD OF CALCULATING N AVAILABILITY OF MANURES [1]

Available Nitrogen % NH_4	Available Nitrogen % ORGANIC	Time of Application DATE	Days Until Incorporated[2] DAYS
50	33	NOV – FEB	≤ 5
25	33	NOV – FEB	> 5
50	33	MAR - APR	≤ 3
25	33	MAR – APR	> 3
75	33	APR - JUN	≤ 1
25	33	APR - JUN	> 1
75	15	JUL – AUG	≤ 1
25	15	JUL – AUG	> 1
25	33	SEP – OCT	≤ 1
15	33	SEP – OCT	> 1

[1] The calculations are for all animal manures. It is assumed that 50% of the organic N in poultry manure is converted to NH_4 rapidly and is therefore included in the NH_4 column for calculating available N.

[2] Incorporation is the mixing of manure and soil in the tillage layer. Disking is usually enough tillage for conserving N availability.

TOTAL NUTRIENT BUDGET

Rule 901:10-2-09 requires a manure management plant to include a total nutrient budget for the land application areas under the control of the facility and the quantity of nutrients to be managed by distribution and utilization. To the extent the manure is not managed through distribution and utilization, the rule requires a total summary of land application areas to be used for the for the duration of the permit. This means that a summary statement is required in this MMP that demonstrates your plan to manage manure over the life of the permit (5 years) with the means of reusing and recycling manure and manure nutrients. Please provide the following information:

Summary of Manure To Be Land Applied under the Control of the Facility

Annual Total N Applied (lbs): _____

Annual Total P_2O_5 Applied (lbs): _____

Annual Total K_2O Applied (lbs): _____

Total Acres under Control of the CAFF:

Summary of Manure To Be Distributed to Others through Distribution and Utilization

Annual Total N Distributed (lbs):	
Annual Total P_2O_5 Distributed (lbs):	
Annual Total K_2O Distributed (lbs):	

In cases where manure generated by the facility is sold or given away, the owner or operator must comply with the following conditions, and maintain records of the distribution and utilization as required by FORM 6: DISTRIBUTION AND UTILIZATION RECORD of the Operating Record:

Check all that apply:

☐ Sale/Distribution/Donation of manure to a Certified Livestock Manager
☐ Sale/Distribution/Donation of manure to a someone other than a Certified Livestock Manager
☐ Sale/Distribution/Donation of manure for renewable energy alternatives.
☐ Sale/Distribution/Donation of manure to composting facility certified by Ohio EPA
☐ Other (Explain)

For Distribution and Utilization to others, the CAFF shall be aware of the requirements set forth in Rule 901: 10-2-11 (D). This rule specifically says that "If the owner or operator is notified by the Director, or otherwise becomes aware that the recipient is not in compliance with rule 901: 10-1-06 of the Administrative Code or best management practices set forth in Chapter 1501: 15-5 of the Administrative Code or with other applicable laws and rules, the owner or operator shall cease providing manure to the recipient until written authorization to continue is provided by the department."

ANNUAL CROP REMOVAL

The following chart was developed by ODA to assist the applicant with calculating nutrient budgets. An applicant may substitute an MMP using similar software or other forms if they address all items covered in the following forms and ODA rules. This plan must be developed as a starting point for manure planning purposes. Changes (i.e., differing crops, manure applications, addition of land, etc.) to the MMP must be recorded in the Operating Record and are considered operational changes by ODA rules. ODA has prepared a form that is included in the Operating Record to record such changes. As an alternative to using this form, a copy of the MMP with changes noted is also acceptable or any other method of recording pre-approved by ODA.

				Total lbs of Nutrients Removed		
	Crop	Yield Goal bu/ac or ton/ac	Acres	Nitrogen	P_2O_5	K_20
Grains/ Grasses	Corn Grain (after grain)					
	Corn Grain (after legumes)					
	Corn Silage					
	Corn Silage (after legumes)					
	Wheat (grain only)					
	Wheat (grain and straw)					
	Grasses (Cool season- or Tall-)					
	Rye (double cropped)[1]					
Legumes	Soybeans (double cropped)[1]					
	Soybeans					
	Alfalfa					
	All Crops	----------				

Avg. Nutrients Removed per acre per year			
Avg. Nutrients Removed per acre/year (at only 150lbs N/acre for legumes)[2]			
Total Manure Nutrients Available (lbs) per year			
Total Annual Nutrient Balance (Supplied by manure - Crop needs) (lbs)			
Ave. Acres required to utilize manure N at crop removal =		acres	
Avg. Acres required to utilize manure N at crop removal (only 150 lbs N/ac for legumes)[2] =		acres	
Ave. Acres required to utilize manure P_2O_5 at crop removal =		acres	
Average Annual P_2O_5 balance (per acre)[3] =		lbs P_2O_5/ac	

Footnotes:

1. The acreage of double-cropped fields is only counted once towards the total available for application.
2. ODA Rules limit application rate of N on legume crops to 150 lbs./acre.
3. Average annual P_2O_5 balance is positive value if nutrients applied per acre exceed crop removal rate. It is negative value if crop removal rate exceeds nutrients applied per acre.

PREDICTED SOIL TEST P

Provide information summarized in the following tables using the same or a similar format to show the predicted soil test P at the end of the 5-year plan.

		Average Annual P_2O_5 balance (per acre) from previous part =		lbs P_2O_5/ac
		Change in soil P (in ppm) each year at avg application rate =		ppm
		Total acreage available for land application ("spreadable" acres) =		acres

Field ID	Spreadable Acres[4,5]	Soil Sample Date	Beginning Soil Test P Rating[1]	Predicted P (ppm) test after 5 years with avg application rate (only manure P added)	Predicted Soil Test P Rating[1] at end of 5 years (i.e.: High, Med, Low)	N Leaching Potential Index[2,3]
Total =		acres available for land application (or spreadable acres)				

Note 1: See Appendix E to Table 2 of Rule 901:10-2-14 for P Soil Test Level
Note 2: See Appendix C to Table 5 of Rule 901:10-2-14 for N Leaching Assessment Procedures
Note 3: All systematically tiled fields are considered to have a HIGH N Leaching Potential
Note 4: Acres available for land application in that field, **not** including setbacks.
Note 5: Each soil test can represent no more than 25 acres (1 test every 25 acres or less).

FORM 3900-PTO-005, PART 13: MANURE MANAGEMENT PLAN

SOIL CHARACTERIZATION

Soil samples for soil tests shall be representative of a land application area, with one composite soil sample representing no more than 25 acres or one composite soil sample for each land application site, whichever is less.

Soil test analysis shall be performed as required by Rule 901:10-2-13 and performed by laboratories that can provide the North Central Region 13 (NCR 13) method of testing. NCR 13 specifies extraction methods appropriate for the Midwest conditions. Avoid taking soil test samples (other than for presidedress nitrogen) anytime in a six-month period after manure application. All soil samples shall be taken to a uniform, 8-inch depth.

In developing appropriate manure application rates for land application, the Bray P_1 soil test level shall be used or an equivalent appropriate phosphorus soil test may be used, if approved by the Director of Agriculture.

This MMP uses the following soil test (select one):

☐ Bray P_1	☐ Parts per million (ppm)	☐ Pounds per acre (lbs./acre)
☐ Mehlich III	☐ Parts per million (ppm)	☐ Pounds per acre (lbs./acre)
☐ Olsen	☐ Parts per million (ppm)	☐ Pounds per acre (lbs./acre)
☐ Phosphorus Retention Test	☐ Parts per million (ppm)	☐ Pounds per acre (lbs./acre)
☐ Other (describe):	☐ Parts per million (ppm)	☐ Pounds per acre (lbs./acre)

These soil samples shall have been taken within the last three years and each sample shall not represent more than 25 acres. A detailed spreadsheet and a copy of the lab results shall be provided at the time of application for all fields under the control of the facility.

FORM 3900-PTO-005, PART 14: MANURE MANAGEMENT PLAN

ODOR CONTROL AND WEATHER DATA

The following are the best management practices to be used to minimize odors. Check all those that apply as conditions in your permit. Rule 901:10-2-12, 901:10-2-14, and 901:10-2-16(A)(1)(c)(xvii).

Record weather conditions 24 hours before land application, during land application, and 24 hours after land application activities in the FORM 7B: LAND APPLICATION RECORDS – FIELD INFORMATION of the Operating Record or your own pre-approved form.

Check all that may be used:

- ☐ Remove, transfer and land apply manure when wind direction is less likely to affect neighboring residences.
- ☐ Inject Manure.
- ☐ Incorporate Manure.
- ☐ Utilize appropriate pressure and nozzles for spray irrigation.
- ☐ Utilize an appropriate odor control volume in the design and operation of manure treatment lagoon.
- ☐ Other: _____

FORM 3900-PTO-005, PART 15: MANURE MANAGEMENT PLAN

LAND APPLICATION

The following describes the procedures to be used in this MMP for land application as required by Rule 901:10-2-14.

APPLICATION PROCEDURES:

In the space provided below, briefly describe the general application methods that will be utilized by your facility. This shall include the type of equipment for application, type of equipment for incorporation or injection, type of equipment to be utilized for transportation to fields, approximate number of days and/or loads needed to land apply the annual manure produced, whether land application will be performed by a custom applicator, etc. *Note: If Distribution and Utilization is utilized for all manure, please answer as "N/A."*

_____

_____

_____

_____

_____

_____

Use **FORMS 7A & 7B of the Operating Record**, or your own approved forms, to record all of the following to satisfy the Rules listed:

1. Field observations of liquid manure applications, based on Available Water Capacity. Rules 901:10-2-16(A)(1)(c)(iii), 901:10-2-16(A)(1)(c)(iv), and 901:10-2-14.

2. Soil survey maps for all land application areas. Rule 901:10-2-16(A)(1)(c)(v).

3. Cropping schedules. Rule 901:10-2-16(A)(1)(c)(viii).
   a. Past Year
   b. Current Year
   c. Anticipated 2-Year projection for planned crop (after the current year)

4. Targeted crop yield for each crop (productivity and yield data). Rule 901:10-2-16(A)(1)(c)(ix).

5. Actual yield. Rule 901:10-2-16(A)(1)(c)(xi).

6. Results of Rule 901:10-2-16(A)(1)(c)(xii).

    a. Nitrogen leaching risk assessment procedures.
    b. Phosphorus soil test assessment procedures.
    c. Phosphorus index risk assessment procedure.

7. Nutrient applications. Rule 901:10-2-16(A)(1)(c)(xiv).
    a. Date
    b. Rate
    c. Quantity Rule 901:10-2-16(A)(1)(c)(xv).
    d. Method
    e. Source
    f. Form
    g. Identify as manure, commercial fertilizer, and/or organic byproduct.

8. Soil conditions at the time of application Rule 901:10-2-16(A)(1)(c)(xvi).
    a. Available Water Capacity
    b. Soil cracks
    c. Other

9. Dates of implemented best management practices to reduce runoff by crop rotation, cover crops or residue management. Rule 901:10-2-16(A)(1)(c)(xviii).

10. Site inspections to inspect setbacks used to maintain vegetative cover and protect stream channels or areas adjacent to such stream channels and as required by rule 901:10-2-14 of the Administrative Code. Rule 901-10-2-16(A)(1)(c)(vii).

11. Temperature, including general weather conditions at time of application and for twenty-four hours prior to and following application. Rule 901:10-2-16(A)(1)(c)(xvii).

Use **FORM 7C: NUTRIENT MANAGEMENT RECORDS** of Operating Record, or your own form if approved by ODA, only in the event that you need to modify or update the MMP during the 5-year term of the Permit to Operate, based on substantive changes in how the facility is managed, including the location, method, timing, or frequency of land application, and significant changes to crop rotations or yearly cropping patterns, or in the event of a discharge.

CLOSURE PLAN

If the owner or operator of a facility need not to continue permit coverage under a PTO or NPDES permit or reapply for permit coverage if the facility has ceased operation, is no longer a CAFF or CAFO, or if the facility is no longer required to maintain permit coverage in the permit program, then the owner or operator shall notify the director in writing and shall submit a closure plan that is in compliance with Rule 901:10-2-18. A closure plan shall also be submitted and approved if a portion of an existing CAFF's manure storage or treatment facility is closed or if the CAFF chooses to reduce its design capacity for a