



State of Ohio Environmental Protection Agency

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CERTIFIED MAIL

July 8, 2008

Pieter Assen  
Assen Dairy, LLC  
8500 Yankeetown-Chenoweth Road  
London, OH 43140

Re: Notice of Violation of Ohio EPA Permit for Concentrated Animal Feeding Operation (4IK00026\*AD) and Ohio Administrative Code

Dear Mr. Assen:

This correspondence is sent to you as an official notice to describe violations of permit 4IK00026\*AD and the Ohio Administrative Code after investigating manure discharges to waters of the State that occurred May 1, May 7, and May 8, 2008. Ohio EPA's role in the investigation was limited. As such, I have attached the investigation reports from Mr. Jim Young, Ohio Department of Agriculture.

Background:

- 1) Manure discharge from subsurface tile at "Mom and Dad" field on Armstrong Road on May 1, 2008. Discharge identified and tile broken, and plugged with packed soil. Method of application caused ponding in several locations. There was failure to identify and plug tiles ahead of land application of manure.
- 2) Manure discharge to Madden Ditch on or before May 7, 2008. Ohio Department of Natural Resources (ODNR), Division of Wildlife Officer R. Niese notified me (Rick Wilson) that dark colored manure-laden slug was migrating downstream from field where manure was applied (i.e., adjacent and in front of the Assen Dairy, LLC facility). I detoured to the site that afternoon while on way back to Columbus office to quickly assess the reported incident and severity of impact. Discharge was not occurring when I arrived at the site on May 7, 2008. Tile draining manure application field was not monitored appropriately during or after land application. Manure slug was not found by Ohio EPA on May 7, 2008. Madden Ditch was clear at Yankeetown Chenoweth Rd. and at confluence of Bradford Creek at approximately 6:00 p.m. on May 7, 2008. I noted surficial ponding of recent manure application along Madden-Higgins Road on May 7, 2008. I discussed the forecasted rain (forecast for May 8, 2008) with you during our brief meeting.
- 3) Manure discharge to Madden Ditch on May 8, 2008 relating to manure application previous day. DNR-Wildlife investigated and found tile sources of discharge. The required 35 foot vegetated setback was not met. Forecast called for greater than 50% chance of rain less than 24 hours from manure application event. A fish kill was documented.

Ted Strickland, Governor  
Lee Fisher, Lieutenant Governor  
Chris Korleski, Director

Pertinent Definitions as provided in NPDES permit:

**LAND APPLICATION:** means the placement of manure within the boundaries of a land application site by: 1) spraying or spreading onto the land surface; 2) injection below the land surface in the crop root zone using equipment specifically designed for this purpose; or 3) incorporation into the soil by means of the mixing of manure with the surface soil using standard agricultural practices, such as tillage.

**MANURE:** means any of the following wastes used in or resulting from the production of agricultural animals or direct agricultural products such as milk or eggs: animal excreta, discarded products, bedding, litter, process wastewater, process generated wastewater, waste feed, silage drainage and leachate, and compost products resulting from mortality composting or the composting of animal excreta.

**SETBACK:** means a specified distance from surface waters or potential conduits to surface waters where manure, litter, and process wastewater may not be land applied. Examples of conduits to surface waters include but are not limited to: open tile line intake structures, sinkholes, and agriculture wellheads.

**VEGETATED BUFFER:** means a narrow, permanent strip of dense perennial vegetation established parallel to the contours of and perpendicular to the dominant slope of the field for the purposes of slowing water runoff, enhancing water infiltration, and minimizing the risk of any potential nutrients or pollutants from leaving the field and reaching surface waters.

**WATERS OF THE STATE:** defined in Rule ORC 6111.01(H) as: "means all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, regardless of the depth of the strata in which underground water is located, which are situated wholly or partly within, or border upon, this State, or are within its jurisdiction, except those private waters which do not combine or effect a junction with natural surface or underground waters."

#### **Findings:**

As a result of the reported incidents, Ohio EPA has determined that on May 1, May 7, and May 8, 2008 you were responsible for violations of the following State regulations:

1. Ohio Revised Code 6111.04(A)(1)

No person shall cause pollution or place or cause to be placed any sewage, sludge, sludge materials, industrial waste, or other wastes in a location where they cause pollution of any waters of the State.

2. Ohio Administrative Code 3745-1-04(A-C)

The following general water quality criteria shall apply to all surface waters of the State including mixing zones. To every extent practical and possible as determined by the Director, these waters shall be:

(A) Free from suspended solids or other substances that enter the waters as a result of human activity and that will settle to form putrescent or otherwise objectionable sludge deposits, or that will adversely affect aquatic life.

(B) Free from floating debris, oil, scum and other floating materials entering the waters as a result of human activity in amounts sufficient to be unsightly or cause degradation.

(C) Free from materials entering the waters as a result of human activity producing color, odor or other conditions in such a degree as to create a nuisance.

(D) Free from Substances entering the waters as a result of human activity in concentrations that are toxic or harmful to human, animal or aquatic life and/or are rapidly lethal in the mixing zone. (May 7 and 8 only).

**Violations of Permit 4IK00026\*AD:**

**Page 2: Part I, A. - Daily Maximum Discharge Limitations**

1.b. Dry weather discharges of manure are prohibited from production and land application areas.

**Comment:** Dry weather discharges of manure to waters of the state resulting from manure application and migration of manure to drainage tiles was documented on May 1, May 7, and May 8.

**Page 3: Part I, A, 2. LAND APPLICATION ACTIVITIES**

c. There shall be no discharge of pollutants to waters of the State from land applied manure except for discharges that are composed of storm water runoff and/or snow melt runoff originating from a land area where manure from a CAFO has been applied in compliance with the manure management plan and this permit.

**Comment:** Manure was not applied in accordance with all terms and conditions of permit.

**Page 12, Part 1, C-Schedule of Compliance**

**This Schedule requires you to update your manure management plan to meet the terms and conditions of your NPDES permit. This update was due October 31, 2006. Notices were sent to you on November 14, 2006, February 21, 2007, May 21 2007, and August 16, 2007 highlighting this violation. This office still has not received the required update. Failure to provide an updated Manure Management Plan will result in escalated enforcement in the form of Director's Final Findings and Orders (DFFOs), with potential for monetary civil penalty.**

**Page 13, Part II, OTHER REQUIREMENTS**

B. The discharge of manure or other wastes to waters of the State as defined in ORC 6111.01 and which include surface waters, wetlands (not included constructed treatment wetlands), and ditches is prohibited except in compliance with this permit.

**Comment:** Manure was not applied in accordance with all terms and conditions of permit.

**Page 13, Part II, OTHER REQUIREMENTS, 2. KEEPING PLANS CURRENT**

The permittee shall amend the plan prior to a change in design, construction, operation, or maintenance, which has an effect on the potential for the discharge of pollutants to the surface waters of the State **or if the manure management plan proves to be ineffective in eliminating or minimizing pollutants from sources identified under Part I, A, 3, or otherwise achieving the general objectives of minimizing pollutant discharges associated with the CAFO.**

**Page 14-15, Part II, OTHER REQUIREMENTS, 3. CONTENTS OF PLAN**

**The manure management plan shall address the form, source, amount, timing, agronomic rate, and method of application of nutrients to each field to achieve compliance with this permit, ensure appropriate agricultural utilization of the nutrients, and minimize movement of pollutants to surface waters. To the extent applicable, the MMP shall address the following:**

- a. Storage of manure, management of mortalities, diversion of clean water, prevention of contact of animals with waters of the State, and proper chemical handling to ensure compliance with Part I, A, 1, Part II, and Part VII of this permit.
- b. Inspections, monitoring, and maintenance activities for structures and equipment involved in manure handling and storage in compliance with Part II and Part VII, Production Area Requirements of this permit.
- c. If applicable, a manure land application plan that will be implemented to comply with Part VII of this permit, including: 1) a total nutrient budget; 2) manure and soil characterizations; **3) application methods and timing that will minimize nutrient transport to waters of the State;** and 4) field specific agronomic application rates.
- d. If applicable, a manure distribution and utilization plan including: 1) total nutrient budget; 2) manure characterization; and 3) manure removal methods and timing that will minimize nutrient transport to waters of the State.
- e. **Site specific conservation practices to be implemented, including as appropriate buffers or equivalent practices, to control runoff of pollutants to waters of the State.**

**Comment:** Your manure management plan must be updated to account for improved site specific manure management so that "nutrient transport to waters of the State," is minimized. This office recommends the use of suggested recordkeeping forms (enclosed), for each location where manure is applied. There is space on the form to insert topographic or aerial photo, so that tile locations, setbacks, and other areas of potential concern can be identified, marked, and provided to the person doing the land application.

**Page 34: Part VII A, 5-Production Area Monitoring and Inspections and Land Application Requirements, 5. Record Keeping Requirements: At a minimum, the following records must be kept by the permittee:**

- a. **Expected crop yields.**
- b. The date(s) manure is applied to each field.
- c. **Weather conditions at the time of application and for 24 hours prior to and following application. See Part VII, B, 2, e.**
- d. Test methods used to sample and analyze manure and soil.
- e. Results from manure and soil sampling.
- f. **Explanation of the basis for determining manure application rates, as provided by Part VII, A, 4.**
- g. **Calculations showing the total nitrogen and phosphorus to be applied to each field, including sources other than manure.**
- h. **Total amount of nitrogen and phosphorus actually applied to each field, including documentation of calculations for the total amount applied.**
- i. **The method used to apply the manure.**
- j. **Date(s) of manure application equipment inspection.**

**Comment:** Your records did not include all required items listed above. Future manure application records must include documentation sufficient to meet this requirement.

**Page 34-35: Part VII B, 1 Land Application Restrictions**

**Land Application of manure shall be conducted in accordance with the following:**

Manure Application Distance Restrictions and, Where Appropriate, Rate Restrictions For the Following Items:  
Streams, Lakes, Ponds, Watercourses, Other Surface Water, Waterways, Open Tile Line Intake Structures, or Other Conduits to Surface Waters

Manure shall not be applied closer than 100 feet, unless a 35-foot vegetated buffer has been established where manure application is prohibited. A mandatory 35-foot vegetated buffer must be established along fields with perennial streams regardless of setback requirement.

**Comment:** Manure was applied up to the road ditch (which is included in the definition of waters of the State).

**Page 36: Part VII B, 2(e).**

e. Land application shall not occur on saturated soils or during rain or runoff events, and shall not occur if the forecast contains a greater than 50% chance of precipitation for any individual hour, for a period extending 24 hours after the commencement of land application.

**Comment:** Manure was applied when there was a greater than 50% chance of rain beginning at 10:00 p.m., May 7, 2008.

**Page 36: Part VII B 3.**

For land application sites with subsurface tile drainage, the permittee shall visually monitor all field tile outlets before, during and after application of manure to the site and record the results of that monitoring. The permittee shall have access to or methods/devices to stop or capture subsurface drain flow. If manure reaches the subsurface drain outlet to waters of the State, the application of manure shall cease and the flow stopped or captured. If land application has caused manure laden water to be discharged from a field tile, Ohio EPA shall be notified by calling 1-800-282-9378 as soon as possible, but in no case later than 24 hours following first knowledge of the occurrence. See Part I, A, 2, d.

**Comment:** Records do not show do not show this requirement was met. DNR-Wildlife Officers informed you of the manure discharges into the creek.

**Page 36: Part VII B, 4**

For the land application of liquid manure to sites with subsurface tile drainage, the following criteria must be followed:

- a. Application rates shall be less than or equal to half an inch or thirteen thousand gallons per acre per application event;
- b. A tool shall be used that can disrupt and/or close the preferential flow paths in the soil using horizontal fracturing, or the surface of the soil shall be tilled three to five inches deep to a seedbed condition to soak up the liquid manure and keep it out of preferential flow channels;**
- c. If injection is used, manure shall only be injected deep enough to cover manure with soil. The soil shall be tilled at least three inches below the depth of injection prior to application; and
- d. For fields with growing crops or continuous no till fields where tillage is not an option, all tile outlets from the application area are to be plugged/till stops closed prior to application.

**Comment:** Item "b" above was not followed

**Page 38: Part VII B, 6**

The permittee is responsible for complying with this permit for land application activities conducted on each site where the permittee, or anyone employed by the permittee, owns, operates, or land applies manure generated from the CAFO or determines timing and amount of manure to be applied on fields not otherwise owned, rented, or leased by the CAFO.

**Comment:** Absent a contract or other information outlining the responsibilities of the manure applicator and/or a claim of distribution and utilization (i.e., manure sales or giveaway to another party), you are responsible for following the terms and conditions of your permit.

**Action items:**

1) Update Manure Management Plan. Identify all fields available for manure utilization and describe site specific management necessary to minimize potential for manure discharges. Along with suggested record keeping forms, I have included an "Update Packet", which includes forms and reporting templates that can aid you in meeting the terms and conditions of your permit.

Record forms available here: <http://www.epa.state.oh.us/dsw/cafo/monitor.html>

Update packet: <http://www.epa.state.oh.us/dsw/cafo/NPDESMMPCompleteUpdatePacket.pdf>

2) In accordance with NPDES Permit condition Part II, L (page 16):

"The manure handling equipment shall be effectively maintained and operated at all times so that there is no discharge to waters of the State, except in compliance with Part I, A. In the event that the equipment fails to perform satisfactorily, including the creation of nuisance conditions or failure of an application area to adequately assimilate the manure, the permittee shall take immediate corrective actions including those actions that may be required by Ohio EPA, such as the acquisition of equipment capable of properly applying manure in the proper approved amounts in accordance with this permit."

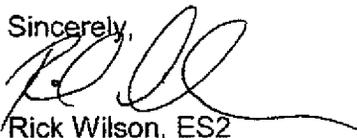
This office requests that Assen Dairy, LLC cease use of manure tanker application method described in the investigation report by Jim Young (i.e., surface application via side discharge without splash plate). This means of application limits the likelihood that manure will be evenly applied, and places the liquid manure at rates and intensity that can easily leads to migration of manure through soil macropores. For example, like rainfall, manure applied at a rate of ½ inch in only a few seconds onto undisturbed soil has a much higher likelihood to migrate over the surface or through macropores to waters of the State.

Understand that you could be held liable via enforcement for these violations and for future impacts to waters of the State, which may include further degradation of habitat, fish kills, and possibly public health and nuisance complaints. Please note that failure to mitigate potential releases and failure to take the preventative measures as listed above to minimize further impacts to waters of the State will lead to escalated enforcement action from this Agency. Please respond to this office in writing within **15 days** from the receipt of this correspondence with indication of:

- a) The date of completion of specific items above;
- b) The date you expect to complete specific items above; or
- c) Discuss rationale for disagreement or suggestion of alternatives to specific action items above.

Should you have any questions, comments, or concerns, do not hesitate to contact me at (614) 644-2032 or via email at [rick.wilson@epa.state.oh.us](mailto:rick.wilson@epa.state.oh.us) .

Sincerely,



Rick Wilson, ES2

PTI, Compliance Assistance and CAFO Unit  
Division of Surface Water

enclosures

cc: Kevin Elder and Jim Young, ODA-LEPP  
Julia Cummings, Madison Co. SWCD  
R. Bonner, OEPA  
K. Klosterman, DNR-Wildlife  
OEPA-Legal