



State of Ohio Environmental Protection Agency

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Columbus, OH 43216-1049

January 3, 2007

Mercer County

**CERTIFIED MAIL**

Rick Kremer  
Stateline Agri.  
1031 State Route 29  
Celina, Ohio 45822

Dear Mr. Kremer:

Re: Swine Finishing Operation

On November 30, 2006, Ohio EPA was notified of a pollution incident in Mercer County in the vicinity of your swine operation near State Route 29 and Wabash Road. Rick Wilson with Ohio EPA, Division of Surface Water responded to the complaint along with Officer Ryan Garrison with Ohio Department of Natural Resources (ODNR), Division of Wildlife, Jerry Linn with Mercer County Soil and Water Conservation District (SWCD) and Christine Pence with Ohio Department of Agriculture, Livestock Environmental Permitting Program (ODA-LEPP). The following letter details the findings and outlines corrective actions required by Ohio EPA.

**Background**

On November 30, 2006, Officer Garrison responded to a complaint regarding discoloration of the Wabash River in the vicinity of State Route 29 and Wabash Road. Officer Garrison tracked the source of discoloration to your swine facility. Manure had been land applied the day before through a traveling gun irrigator to adjacent corn stubble fields and was being applied when Officer Garrison arrived at the site even though it had started to rain.

The source of the pollution was determined to be land applied manure that had entered a field tile and discharged into Crab Branch, a tributary of the Wabash River. Mrs. Pence and Mr. Wilson arrived at the site later that afternoon. The manure storage pond was inspected and it was evident that the pond had been full and possibly overflowing prior to the land application of manure. See the attached digital photographs.

All three responders collected water quality samples. It should be noted that Officer Garrison's samples were collected prior to significant precipitation had

Bob Taft, Governor  
Bruce Johnson, Lieutenant Governor  
Joseph P. Konecnik, Director

occurred. Mr. Wilson collected samples in approximately the same locations as Officer Garrison about 3.5 hours later and after rainfall occurred. The following table lists the water quality sample results.

Water Quality Sample Results

Parameters	Crab Branch at Wabash Rd. Upstream, Start of Rain (Garrison)	Crab Branch at Wabash Rd. Upstream, ~3.5 hrs later (Wilson)	Wabash Rd. Tile Outlet, Start of Rain (Garrison)	Wabash Rd. Tile Outlet, ~3.5 hrs later (Wilson)	Crab Branch at Wabash Rd. Mixing Point, Start of Rain (Garrison)	Crab Branch at Wabash Rd. Mixing Point, ~3.5 hrs later (Wilson)	SR 29 Culvert (Pence)	Wabash Rd. Tile Receiver (Pence)
Ammonia	0.809 mg/L	0.310 mg/L	173 mg/L	35.5 mg/L	<b>168 mg/L</b>	<b>22.7 mg/L</b>	0.285 mg/L	61.8 mg/L
Nitrate+nitrite	7.32 mg/L	7.14 mg/L	5.90 mg/L	4.38 mg/L	5.35 mg/L	5.62 mg/L	5.32 mg/L	5.42 mg/L
Total Phosphorus	0.348 mg/L	0.990 mg/L	4.76 mg/L	2.46 mg/L	4.75 mg/L	1.83 mg/L	0.596 mg/L	2.94 mg/L
BOD5		3.7 mg/L		68 mg/L		47 mg/L		
Total Suspended Solids		42 mg/L		116 mg/L		120 mg/L		
Nitrite		0.162 mg/L		0.180 mg/L		0.158 mg/L		

The above sample results indicate that the manure discharge caused an exceedance of Ohio Water Quality Standards in Ohio Administrative Code 3745-1-07 for ammonia. Basically the standards set a limit on the concentration of ammonia in surface waters to be protective of aquatic life. Concentrations above the standards level is considered toxic to fish and other aquatic life. The highest concentration level listed in the standards for warmwater habitats (Crab Branch is designated as a warmwater habitat in OAC 3745-1-29) is 13 mg/L. The sample results of water in Crab Branch downstream of the manure discharge of **168 mg/L** and **22.7 mg/L** (rain diluted) are much higher than the state standards and are a violation.

In addition to the above mentioned violation, you are in violation of the following state regulations for the discharge of manure to water of the State:

**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.

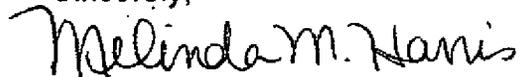
**Ohio Administrative Code 3745-1-04(C) and (D)** – The following general water quality criteria shall apply to all surface waters of the State including mixing zones. To every extent practical and possible as determined by the Director, these waters shall be: (C) Free from materials entering the waters as a result of human activity producing color, odor or other conditions in such a degree as to create a nuisance and (D) Free from substances entering the waters as a result

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Should you have any questions, comments, or concerns, please contact Rick Wilson at (614) 644-2032 or via email at [rick.wilson@epa.state.oh.us](mailto:rick.wilson@epa.state.oh.us).

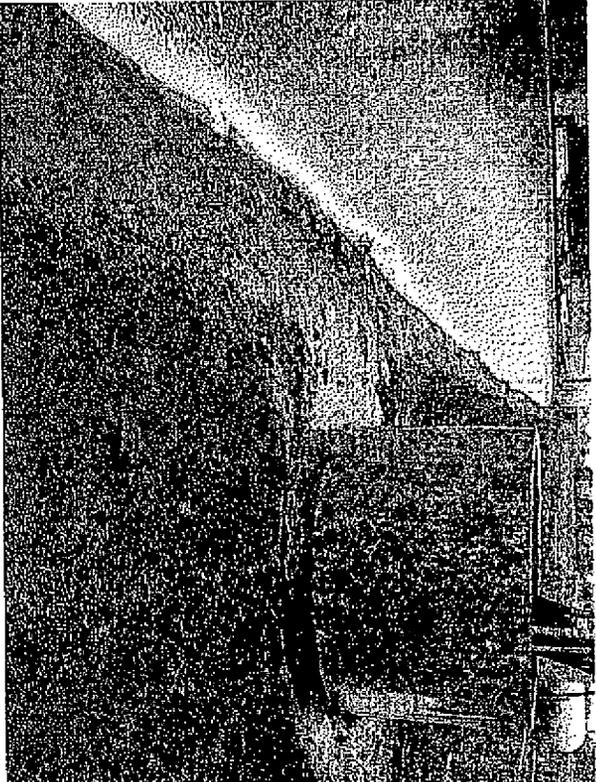
Sincerely,



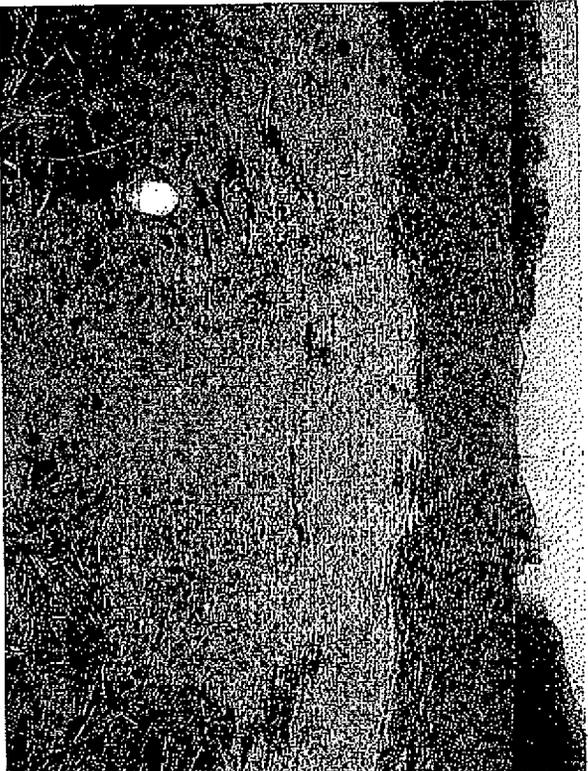
Melinda M. Harris  
Division of Surface Water

cc: Ryan Garrison, ODNR-DW  
Mercer County SWCD  
Rob Hamilton, ODNR-DSWC  
Kevin Elder, ODA-LEPP  
Christine Pence, ODA-LEPP  
Rich Fisher, Stateline Agri.

Manure Storage Pond  
(Note that the manure level had been to the top of the berm and possibly overflowed around the pump station.)



Land Application Field  
(Note ponding manure.)



of human activity in concentrations that are toxic or harmful to human, animal or aquatic life and/or rapidly lethal in the mixing zone.

**Ohio Administrative Code 3745-33-02(A)** – No person may discharge any pollutant or cause, permit, or allow a discharge of any pollutant without applying for and obtaining an Ohio NPDES permit in accordance with the requirements of this Chapter, 3745-33.

Please note that this discharge is not covered under the agricultural storm water exemption because the manure was not applied in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure and the discharge occurred prior to the precipitation.

Best management practices for the land application of manure not followed include: do not exceed the available water capacity of the soil; do not land apply manure prior to forecasted precipitation in amounts likely to cause runoff; do not apply manure in such amounts that cause ponding; inspect tile outlets prior to, during, and after the land application of manure; and do not cause a dry weather discharge of manure to waters of the State.

#### Corrective Actions

At this time, Ohio EPA requests that the following corrective actions be taken by you to prevent future discharges of manure into waters of the State:

1. A manure management plan (MMP) must be developed for your facility. This plan should be a Comprehensive Nutrient Management Plan (CNMP) or equivalent and based on the United States Department of Agriculture, Natural Resources Conservation Service (USDA, NRCS) Conservation Practice Standards 590 (Nutrient Management) and 633 (Waste Utilization). A consultant and/or agricultural agencies, such as Mercer County Soil and Water Conservation District (SWCD) and USDA, NRCS, should be contacted to develop the MMP. A MMP identifies actions or priorities that will be followed to meet clearly defined nutrient management goals at an agricultural operation while incorporating best management practices that are protective of water quality. As soon as practical but no later than June 1, 2006, a MMP should be developed and implemented. Please submit written verification to this office when the MMP is complete to the address below.
2. A level indicator shall be installed in the manure storage pond that will be used to record the level of manure and the amount of freeboard in the storage pond. This level indicator shall be visually inspected weekly, at a minimum, and the amount of freeboard remaining in the pond shall be recorded. The pond shall be maintained so that there is at least a one foot freeboard plus the amount at storage for a 25-year, 24-hour storm event direct precipitation and runoff into the

pond. Please submit written verification to this office when the level indicator has been installed to the address below.

3. Best management practices (BMPs) for the operation and management of the manure at the facility and during land application shall be followed. These practices should be outlined in the above required MMP. Records shall be maintained that document the enactment of the practices. Suggested record keeping forms should be included in your MMP. See link to suggested forms at: <http://www.epa.state.oh.us/dsw/cafo/monitor.htm>. These forms or ones similar to those at the provided link should be completed to document BMP implementation daily for every manure application event. This office also strongly suggests you become more educated with regard to manure management. I am enclosing information with regard to an upcoming Certified Livestock Manager (CLM) training in February.

Please submit the above required information to:

Rick Wilson, Ohio EPA, Division of Surface Water,  
P.O. Box 1049, Columbus, Ohio 43216-1049

#### Conclusion

At this time, this swine facility is not required to be operated under National Pollutant Discharge Elimination System (NPDES) permit as long as progress is made towards improving the facility and manure management. However, if your facility continues to discharge from land application you could be designated as a medium Concentrated Animal Feeding Operation (CAFO) and be required to obtain an NPDES permit. Also, if your facility has a discharge from the production area, you would be a medium CAFO by definition and be required to submit an NPDES permit application.

Please note that Crab Branch is included in the Wabash River watershed Total Maximum Daily Load (TMDL) report, which is a plan to restore the impaired watershed. The report indicates that large reductions of nutrients (phosphorus and nitrogen) are required to bring the watershed out of impairment. Improper manure management is a cause of impairment. Efforts are required on your part to properly manage your manure so that you are no longer a source of excess nutrients in this watershed.

Understand that you could be held liable for further 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 could lead to escalated enforcement action from this Agency.

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Crab Branch at the Location of the Tile Outlet  
(Note discoloration and foam.)



Water Quality Samples Collected by Rick Wilson

