

Groundwater Contamination and CAFOs (Part 3)

When to test your drinking water well

Last year the wells of several neighbors went dry when Vreba-Hoff irrigated fields for 4 days. After well-work restored his water, one neighbor decided to test his drinking water, given the apparent groundwater connection to Vreba-Hoff.

Those well test results showed arsenic levels at the Maximum Contaminant Level (MCL) for drinking water, with iron levels also high, above the level for health concern. The Department of Natural Resources and Environment (DNRE) has responded and begun an investigation to determine if the contamination is related to Vreba-Hoff waste practices.

Most rural residents near CAFOs have groundwater wells for their drinking water.

Concern has grown in recent years about contamination of these wells from the repeated application of liquid manure to fields. In western Michigan, food processors who spray wastewater again and again on fields have contaminated drinking water wells with arsenic, manganese and iron. Wastewater that is high in organic content, like CAFO wastewater, can interact with arsenic and other metals in the soil and mobilize them into a form that's soluble, contaminating the groundwater.

Who should test their drinking water

If you live near a CAFO or near a field where CAFO liquid manure is frequently applied, if your well is fairly shallow, and especially if your well has gone dry during CAFO irrigation of fields – it's important to test your drinking water.

What you should you test for

Four tests cover the pollutants of most concern: 1) arsenic, 2) manganese and iron, 3) nitrate 4) *E. coli* bacteria. You'll need 4 bottles; manganese and iron are both tested from one water sample.

How to test your well

It's easy to take the water samples from any unsoftened-water faucet at your house. Get 4 sample bottles and an instruction sheet from your local Health Department. The bottles are free and come with a mailing carton already addressed to the state DNRE lab in Lansing.

How much it costs

If you run all 4 tests at the DNRE lab, the total cost will be \$79, plus postage. A fee sheet will come with your sample bottles. An explanation of the Maximum Contaminant Levels (MCL) will arrive with your test results.

Test Costs	Levels of Concern (mg/L)
Arsenic test – \$18.00	Arsenic: 0.010 or higher
Manganese/Iron – \$28.00	Manganese: 0.05 or higher; Iron, 2.0 or higher
Nitrate (Autom. Partial Chemistry) – \$18.00	Nitrate: 10 or higher
<i>E. coli</i> (counts to 10,000) – \$15.00	<i>E. coli</i> : drinking water should be 0

CAFO liquid manure on saturated ground leads to runoff, manure discharges to River Raisin Watershed



May 6, 2010 – Hoffland draglining manure, with waste ponding in tire tracks. Draglines are hoses attached to field applicators. The liquid manure is pumped directly from lagoons through the hoses to the field.



May 11, 2010 – After heavy rain, Hoffland manure runoff is ponding on saturated ground, draining to the South Branch of the River Raisin at several locations.



Photo: Goldman Environmental Prize

Lynn Henning receiving 2010 Goldman Environmental Prize in San Francisco

Lynn Henning awarded Goldman Environmental Prize for North America

Lynn Henning, ECCSCM Vice-President and Sierra Club CAFO Water Sentinel, was awarded the prestigious Goldman Environmental Prize for North America.

Each year, the Goldman Foundation selects one grassroots activist from each of the six inhabited continents from nominations submitted by selected environmental groups.

Lynn was honored for her fight these last ten years against CAFO pollution here, for her work documenting manure discharges and informing agencies.

The six 2010 winners received their awards in San Francisco on April 19 and appeared at Earth Day events in Washington, D. C. They met with EPA Administrator Lisa Jackson and were invited into the Oval Office to meet with President Barak Obama.

See the Goldman Prize website for a video on Lynn: www.goldmanprize.org

CONGRATULATIONS, LYNN!

USA AG UPDATES

New Pasture Rules

USDA rules that "organic" milk must come from cows on pasture the full length of the grazing season, at least 120 days a year. Some CAFOs had labeled milk from cows confined year-round as organic if their feed was organic. (from *New York Times*, Feb. 13, 2010)

Chesapeake Bay Ruling

Under a court settlement, the EPA must limit the nitrogen, phosphorus, and sediment flow into the Chesapeake Bay and formulate regulations to control agricultural pollution. Manure has surpassed human waste as a bay pollutant. (from *Washington Post*, May 12, 2010)

Financial, violation woes plague Vreba-Hoff entities

•Chesterfield Dairy removes all cows, SHUTS DOWN for good

Neighbors of Chesterfield Dairy, Lyons, OH, a CAFO developed by Vreba-Hoff Dairy Development, report that all cows were removed from the CAFO on April 20-21. Chesterfield Dairy turned out the lights on April 22. "There's no activity at all," one neighbor reports, although "the smell is just as bad as it's ever been." Some manure was removed in April, but apparently a month later, plenty of waste remains in several large lagoons.

•Vreba-Hoff tax forfeitures total more than \$650,000 in Hillsdale, Lenawee Counties

Tax rolls in Hillsdale and Lenawee Counties show Vreba-Hoff in arrears for taxes on 46 parcels of land for 2008, 2009, 2010. Forfeitures on these properties total \$652,936.75 as of May 31, 2010.

•Vreba-Hoff "satellite" lagoon in violation of court order, stipulated penalties accumulating

In a Court Order in 2007, Vreba-Hoff was ordered to close down its "satellite" lagoon on Packard Rd. However, in late April 2010 Vreba-Hoff was seen hauling liquid manure to the pit. DNRE explained to ECCSCM on April 29, "we have been through a lengthy bit of correspondence with Vreba-Hoff regarding closure or permitting pursuant to the Interim Order. They have asked repeatedly for extensions from the 32 month deadline in the Order and we have denied those requests with the exception of an additional month (moving deadline to March 8) ...They have been advised that stipulated penalties continue to accrue until compliance with the Order is achieved."



ECCSCM-Lighthawk-Sierra Club

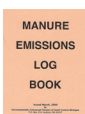
Vreba-Hoff's "satellite" lagoon on Packard Rd (left) **March 19** – still not shut down, well after **March 8** deadline; (middle) **May 19** – still there and filling up with excess Vreba-Hoff liquid manure; (right) **May 30** – photo from far side, showing gap bulldozed shut and hauler dumping manure, foaming at the corner.

•Some Vreba-Hoff lagoons at "Emergency Volume"

With heavy rains and saturated ground through May, the DNRE reports some Vreba-Hoff lagoons are above operational levels, at "Emergency Volume." Vreba-Hoff continues hauling waste to the illicit satellite lagoon. DNRE says they are "keeping a very close eye on the situation."

How to document the health impacts on our community

When you notice manure emissions, have physical or mental health symptoms, have to change your daily activities, please report the details to ECCSCM. All information will remain anonymous. We use the health data to raise awareness and to inform policy makers, legislators and health departments.



To report health symptoms from manure emissions

1) go online: www.nocafos.org/reportform.htm

or

2) use printed log: contact us for a free copy of *Manure Emissions Log Book*



ECCSCM Meetings - 3rd Wednesday of the month, 7:30 p.m. Hudson Community Center

JOIN US: Yes, I want to help protect our water and promote sustainable agriculture. Contributions support water monitoring and community education.

Name: _____

Address _____

City _____ State _____ Zip _____

____ Annual Membership \$25 ____ Senior Membership \$10

Mail to: ECCSCM, P.O. Box 254, Hudson, MI 49247

Thank You!

We Support Sustainable Agriculture

that preserves and protects water quality in streams and lakes

that raises animals in a healthy, natural environment, grazing, absorbing sunshine

that avoids the steady diet of hormones and antibiotics given animals in the crowded, confined conditions of industrial facilities

that values and protects farmland, the environment and the rural community