

CAFO manure on snow-covered and frozen ground – when will Michigan stop it?

Other Great Lakes states – Minnesota, Wisconsin, Ohio, Indiana – ban CAFO manure application on frozen or snow-covered ground. What's stopping Michigan? Late winter and early spring "pulses" of phosphorus flow from agricultural watersheds into Lake Erie, Saginaw Bay, Lake Huron, where the nutrients feed algae blooms. Some of the algal blooms are toxic, with a neuro-toxin "more potent than cyanide," according to an Ottawa Co (OH) drinking water treatment plant engineer.

Michigan is falling behind in protection of its waters, of fisheries, of recreation and tourism economies. And it's costing us.

Beaches close when the algae heaps up. Drinking water treatment plants spend millions to remove the algal neuro-toxin, microcystin – last year Toledo spent \$4 million. Other municipalities, unable to remove the toxin, have had to close valves and at times suspend treatment entirely.

And truck in drinking water.

The water crisis is clear. Changes need to be made.

2 Great Lakes Reports reach consensus

Last year, two important Great Lakes reports were published on the algae crisis in Lake Erie, drawing on current research and water data – The International Joint Commission Lake Erie Ecosystem Priority Draft Report, and the Ohio Lake Erie Phosphorus Task Force Final Report. The Phosphorus Task Force was a comprehensive group, including researchers and agencies, including agriculture: Ohio Dept. of Agriculture, Ohio Farm Bureau. This diverse group, having seen the data, the green-goo and dangerous consequences of excess Phosphorus – reached consensus on a range of recommendations.

Both reports recommended that application of manure on frozen or snow-covered ground be prohibited.

More than 1/2 of Phosphorus from Ag

61% of the total Phosphorus from all sources entering western Lake Erie is from agriculture. Cities have been required to improve waste treatment – municipalities now contribute only 7% of the Phosphorus. Lawn fertilizer companies are cutting back Phosphorus in their products. So with agriculture the major contributor, the pressure is on for significant change in practices.

Highest risk practice

Some ag practices are changing already. You may have noticed all the cover crops on fields after harvest, those leafy oil-seed radishes – like fields of parsnips! That's an important change, preventing surface run-off of sediment.

But the highest-risk agricultural practice, applying manure on frozen or snow-covered ground, hasn't changed in Michigan. **A frozen field is an impermeable surface.** Even radishes can't stop manure from flowing off a field frozen solid, not when the sun comes out. Not if it rains.

DEQ – ban CAFO winter application now

With the CAFO General Permit coming up for revision this year, ECCSCM and other Great Lakes groups are calling on Michigan's Department of Environmental Quality to prohibit application of CAFO waste to frozen or snow-covered ground.

The CAFO Permit already requires 6 mos. manure storage, to avoid winter application. The Permit, however, has a giant loophole – the Manure Application Risk Index (MARI). If a field's MARI score registers as Low Risk (slight slope, some crop debris, etc), manure can be applied. It's a loophole CAFOs drive right through, again and again. But a snowball melts and flows – even off a flat table.

Michigan must honor the health and beauty of our Great Lakes waters, honor the CAFO Permit's purpose, water protection – and prohibit the application of CAFO waste to frozen or snow-covered ground.

"The same algae blooms that have erupted in Lake Huron and Lake Erie now coat the wild summer shoreline of Sleeping Bear Dunes National Lakeshore.

Algae blooms are caused by phosphorous, a single water pollutant, much of it produced from a single source – agriculture."

– Keith Schneider

"Algae Blooms, A New Visitor, Ruin Sleeping Bear Dunes Shoreline," in Circle of Blue (www.circleofblue.org)

From 2003 . . . CAFO manure flowed off a snow-covered field after sunshine and surface thaw. Black manure water flowed across a neighbor's field, into a ditch, a county drain, and onto the ice of Toad Creek (right). In DEQ tests, E. coli bacteria in the manure flow was as high as 1,340,000/100 ml.



On through 2005 . . . (no crop for manure, as fertilizer, of course)



And 2008 . . .



On and on, this winter 2013-2014 . . .



GOT MILK? (DO YOU KNOW THE DAIRY?)

Is the milk I buy from a factory farm?
 What about organic milk? Is some from CAFOs?
 Where can I find local, pasture-based meat?

SOME LINKS TO ANSWERS:

To find out where your milk comes from, organic or not, you can check a code on the milk carton or container. The site below links the carton code to a particular dairy, by name and address:

Where is My Milk From?

<http://whereismymilkfrom.com/finding-my-code>

Remember, some organic milk comes from CAFOs, where cows are fed organic feed but confined year-round. The Cornucopia Institute has rated organic dairies according to their practices, using cow-icons instead of stars. 5 cows is the highest rating for dairies with the best practices, such as cows raised mostly on pasture, from smaller farm operations:

Organic Dairy Ratings

http://www.cornucopia.org/dairysurvey/Ratings_Alphabetical.html



If I Want to Buy Local, Pasture-based Meat?

For a series of articles with good information and links on humanely-raised animals, grassfed beef, from the Organic Consumers Association, here's a how-to for avoiding factory-farm products and buying local, organic food:

http://www.organicconsumers.org/articles/article_28778.cfm

ECCSCM's website has a Sustainable Alternatives section, with links to local sources (within about 50 mi. of Hudson, MI) for organic and/or pasture-based meat and dairy. For instance, get out-of-this-world bacon! and other pasture-based meats at Sparrow Market in Ann Arbor.

<http://www.nocafos.org/localfood.htm>

Update: Terrehaven violations & compliance check

In Nov 2013, DEQ cited Terrehaven CAFO near Adrian for multiple violations, including runoff into a temporary pool; runoff into a field and small pond; and several lapses in Permit record-keeping. The CAFO was also at that time under a Consent Order requiring an engineering review of its waste storage facilities by Dec 1, 2013, identifying improvements necessary.

According to DEQ, the engineering review was submitted on time. However, as of Feb 7, 2014, DEQ had not responded to the findings. Terrehaven record-keeping actions required by Jan 2, 2014 still had not been completed.

ECCSCM water monitoring projects, 2014: Hazen Cr, S. Br River Raisin, Milk Source

ECCSCM will conduct 3 water monitoring projects in 2014, testing in watersheds with CAFO impact: routine tests at several sites in Hazen Creek northwest of Adrian; in the South Branch of the River Raisin in townships west of Adrian; and random testing in streams near the Milk Source CAFOs as they begin operation in spring and summer.

The monitoring will include tests for *E. coli*, Dissolved Oxygen, Ammonia, Nitrates, and Phosphorus.

Letter to Editor – Milk Source & dairy B.S.

To the editor,

It appears that dairy-related manure currently being spread around Hillsdale and Lenawee counties may not be from cows. It's possible the BS is flying from another Source already.

The *Daily Telegram* story (Jan. 10, 2014) stated that Milk Source informed the Lenawee County Commissioners that the economic impact to the community would be \$147 million. Now the *Hillsdale Daily News* (Feb. 5, 2014) has Mr. Ostrom stating a \$90 million economic impact. Are these numbers based on any fact or just whatever come to mind at the time?

"Economic Impact," along with "Sustainable," "Stewards of the Land" and "Innovative." I think we have heard these words before. Fourteen years ago from Vreba-Hoff Dairy to be precise. Vreba-Hoff Dairy confirmed violations neared the 1,000 mark before they closed. Our area experienced no noticeable increased positive economic impact from Vreba-Hoff Dairy. Although the state of Michigan (meaning us) did spend almost a million dollars for a better road leading to one of the dairies.

The \$85-\$147 million Milk Source economic impact predicts is interesting. I expect the economic impact to be pretty high myself.

I expect Milk Source will pocket \$85-\$147 million at the expense of those residents unfortunate to be in their path of destruction. If my experiences prove correct, Milk Source profits will come at the cost of decreased property values, unbreathable air, waste discharges to our waters, road destruction, increased dangerous traffic, excessive noise, illness, massive amounts of particulate matter in the air for us to breathe, freely seizing hundreds of millions of gallons from our shared ground water and then dumping it back on the land as dangerous animal waste which contains feces, urine and whatever else makes it out of the back end of the dairy cows they use. I conclude that Milk Source can achieve the economic impact they are predicting by pretty much destroying the quality of life of those around them.

Thanks to the lack of foresight by the state of Michigan, it appears we cannot stop the Milk Source invasion. But welcoming them would be absurd by anyone with any common sense.

John Klein, President
 Environmentally Concerned Citizens of South Central Michigan

*ECCSCM Meetings - 3rd Wednesday of the month, 7:30 p.m. Hudson Community Center
 (check our website for last-minute changes)*

JOIN US: Yes, I want to help protect our water and air, and promote sustainable agriculture. **All contributions support monitoring projects and community education.**

Name: _____

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

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Or, mail check to: ECCSCM, P.O. Box 254, Hudson, MI 49247

Thank You!

We Support Sustainable Agriculture

- that preserves and protects our air, 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