



United States Department of the Interior

NATIONAL PARK SERVICE
Apostle Islands National Lakeshore
415 Washington Avenue
Bayfield, Wisconsin 54814-4809

1.A.2.

May 13, 2015

Ms. Nancy J. Larson
Natural Resources Manager
Agency Spokesperson, Badgerwood CAFO
Wisconsin Department of Natural Resources
Ashland Service Center
2501 Golf Course Road
Ashland, Wisconsin 54806

Dear Ms. Larson:

The proposed Badgerwood Swine operation, and the agricultural fields that are proposed recipients of the manure to be spread under the accompanying Nutrient Management Plan, lie within the watershed of south Fish Creek, which drains into north Fish Creek, and ultimately the Chequamegon Bay of Lake Superior. Long Island, part of the Apostle Islands National Lakeshore, forms the northernmost land boundary of Chequamegon Bay. The beaches of Long Island are the only location in the state where the federally-endangered piping plover nests, hence as the Superintendent of the National Lakeshore and the federal official responsible for the stewardship of the plovers, I am greatly concerned about the Badgerwood proposal.

Ongoing studies by Dr. Randy Lehr of Northland College suggest that currents within Chequamegon Bay often have a counterclockwise circulation and then flow out of the Bay either up the West Channel, or out the South Channel. In either case, the waters of the Bay interact with the waters of the National Lakeshore, and the currents bring whatever biological or chemical constituents within them onto the shores of Long Island and several of the other islands of the National Lakeshore, including Basswood, Oak, Raspberry, and York Islands.

The Lake Superior waters of the islands of the National Lakeshore are designated by Chapter NR 102.10 (1m) of the Wisconsin Administrative Code as "Outstanding Resource Waters." This is the highest level of water resource protection that the state designates, and a component of the state's responsibilities under the non-degradation provisions of the federal Clean Water Act. Under NR 102.10 (2), these waters "may not be lowered in quality." The north branch and main stem of Fish Creek itself (which south Fish Creek directly flows into) are also designated by NR 102.10 (1) as Outstanding Resource Waters. The Badgerwood proposal and the related manure spreading certainly raise the possibility of a lowering of water quality in Fish Creek and Lake Superior, something that would belie the purpose of the ORW designations and should be part of the analysis by the Department of Natural Resources (DNR).

Dr. Lehr's monitoring shows that phosphorous levels are already likely elevated over state water quality standards in south Fish Creek, therefore adding additional phosphorous from either point or non-point sources is of great concern. While agricultural sources (and especially non-point agricultural sources, such as the spreading of manure on fields) are treated more leniently than point sources in both state and federal water quality regulations, adding any additional phosphorous into Fish Creek's waters that drain into Lake

Superior have the potential to impair water quality conditions of the nearshore "receiving waters" of the Lake. The first-ever blue green algal bloom detected on Lake Superior occurred in 2012 in the Apostle Islands National Lakeshore (albeit not in designated ORW waters) so the prospect of higher nutrient levels in nearshore waters is a real concern, especially since Lake Superior surface water temperatures have been documented to be increasing. I encourage DNR to assess the impact of phosphorous and other nutrient increases into nearshore Lake Superior waters, whether or not these are strictly permitted under existing regulation.

As I understand Wisconsin's applicable statutes and Administrative Code, the Wisconsin DNR is authorized to conduct either a detailed environmental analysis or "an equivalent analysis" for an animal feeding operation of this nature. I further understand that the Nutrient Management Plan is not formally part of this review, although DNR will review the plan and require mitigation measures, if necessary.

The frequency and intensity of large rainfall events in the Chequamegon Bay area has been documented to be on the increase, and projections suggest this will be an even larger issue during the life of the proposed facility. DNR's analysis of both the Badgerwood facility and the Nutrient Management Plan needs to consider up-to-date and projected rainfall and runoff patterns (i.e. NOAA's recently published Atlas 14, Volume 8) to assure that pollutant load, holding tank, and flow calculations reflect the expected climate rather than historical conditions.

State water quality standards are intended to serve as a basis for decisions in other regulatory, permitting or funding activities that impact water quality, per NR 102.01 (3). Due to potential water quality impacts related to spread manure on Fish Creek, Chequamegon Bay, and ultimately on Lake Superior and other protected natural resources of the Apostle Islands National Lakeshore, I strongly encourage the state to conduct a "detailed environmental analysis" rather than rely on an "equivalent analysis." That detailed review should thoroughly and transparently address the issues I have raised in this letter.

The level of public concern surrounding this proposal makes public involvement essential to ensure the integrity and accountability of your permitting decision and the protection of the public trust.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert J. Krumenaker". The signature is fluid and cursive, with a large initial "R" and "K".

Robert J. Krumenaker
Superintendent

cc:

John Gozdziński
Secretary's Director, Northern Region, Wisconsin DNR