10/19/00

Gary Hougen
607 Kirkwood
Winthrop Harbor, IL 60096

Dorothy Gunn, Clerk
Illinois Pollution Control Board
100 W. Randolph
Chicago, IL

R01-10

P.C. #12

Dear Ms. Gunn,

I wish to file a comment re: docket R01-10, peaker plant permitting near Zion, Illinois.

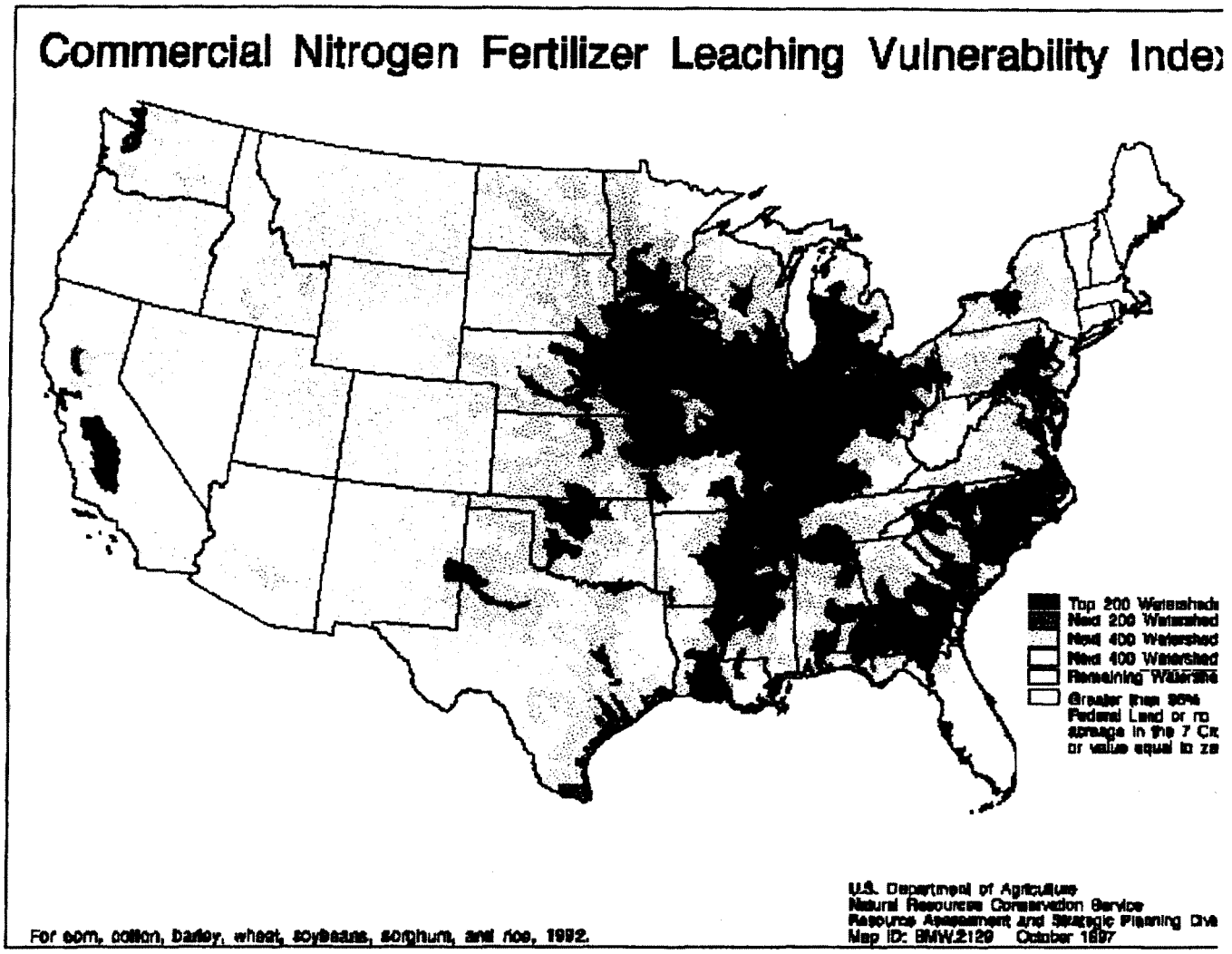
My specific comment concerns heightened nitrate ion content in ground water during summer low- flow water conditions. Heightened nitrate (NO3) content has been linked to various illnesses in drinking water, such as methemoglobinemia in children (American Academy of Pediatrics, *Infant Methemoglobinemia: The Role of Dietary Nitrate.* 46.3, September 1970, p. 475). Heightened nitrates would occur as the ambient level of this ion is increased during cooling water usage by (water- cooled) peaker plants.

The ambient level of NO3 in ground water is already high in Illinois, due to widespread nitrate fertilizer application; please see the attached map showing commercial nitrogen fertilizer leaching vulnerability (Kellogg, R. L., et. al. Potential Priority Watersheds for Protection of Water Quality from Nonpoint Sources Related to Agriculture. Poster presentation at 52nd Annual SWCS Conference, 1997). In addition, the USEPA classifies the northeastern Illinois watersheds as subject to "more serious water quality problems" generally.

I would request that the Pollution Control Board develop a protocol to assure that drinking water of those households on well water in the vicinity of the proposed peaker plant would not incur a significant deterioration from their operation. Hopefully, the protocol would demonstrate through engineering studies that the EPA limit of 10ppm would not be exceeded.

Yours truly,

Gary Hougen


Commercial Nitrogen Fertilizer Leaching Vulnerability Inde
Top 200 Watersheds
Next 200 Watershed
Next 400 Watershed
Next 400 Watershed
Remaining Watersheds
Greater than 90%
Federal Land or no
acreage in the 7 Cr
or value equal to ze
U.S. Department of Agriculture
Natural Resources Conservation Service
Resource Assessment and Strategic Planning Div
Map ID: BMW.2129 October 1997
For corn, cotton, barley, wheat, soybeans, sorghum, and rice, 1992.