

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor George E. Meyer, Secretary Gloria L. McCutcheon, Regional Director

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November 10, 1998

file:Ozaukee/Grafton/Lime Kiln GW

TELEFAX TRANSMISSION TO : (608) 229-2100

Raymond M. Roder Reinhart, Boerner, Van Deuren, Norris & Rieselbach, S.C. PO Box 2020 Madison, WI 53701-2020

SUBJECT: Providing Municipal Water, Freon in Private Wells on Green Bay Road, Village of Grafton

Dear Mr. Roder:

I reviewed your summary of our telephone conversation on September 11, 1998 as memorialized in your letter to me dated September 22, 1998. This letter affirms that I agree with your characterization of our discussion and your conclusions.

I offer these additional comments:

The basis for this department to issue a drinking water "health advisory" is not limited by levels of contamination alone. In cases of wide-spread or complex groundwater problems, where it is judged prudent or expedient to protect public health, the department can established "Health Advisory Areas" in which all groundwater users are advised to seek an alternate safe drinking water source, even if each individual well has not been tested or some wells do not currently exceed any established standard. This is done a)to preempt contamination of drinking water likely to be affected by fluctuating or increasing levels, b)to avoid long term monitoring and tracking c)to engineer the best overall water supply for the area, not a piecemeal approach d) to ameliorate the concerns of property owners regarding long-term safety and property values. Other Health Advisory Areas have been established in this region including: Town of Sheboygan, 1985; Prochnow Landfill-Cedarburg, 1993; Denow Landfill-Grafton, 1998.

In this case where homes on Green Bay Road in the Town of Grafton, where Freon was only found at low levels below the drinking water standard, the decision to include them in a Health Advisory Area was influenced in part by these factors:

- 1. Freon was found to occur together with Trichloroethylene (TCE) and other VOCs in wells closest to Lime Kiln Dump. Freon was also detected east of the river along Manchester Drive with vinyl chloride (VC). Freon was viewed as a component of the contamination plume and an obvious Freon concentration gradient was apparent moving south and east away from the Lime Kiln Dump.
- 2. It seemed reasonable to believe that the Freon might represent a portion of the plume moving by fracture flow along preferential routes controlled by some chemical or physical characteristic . The Freon gradient along Green Bay road was viewed as a probable leading edge or halo emanating from the central portion of the plume. Wells containing any Freon were believed "at risk" since other wells with Freon also contained excessive TCE and VC.

(Ray Roder, November 10, 1998)

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The boundaries of the health advisory area were discussed and agreed upon by this department, the Wisconsin Division of Health and the United States Environmental Protection Agency (USEPA) to provide a conservative yet reasonable buffer zone for protection of public health and safety. USEPA was prepared to issue a unilateral order to the Village of Grafton and commence installation of the water main extension project using federal money to mitigate the risks within the health advisory area. The decision to hook-up wells along Green Bay Road was ultimately agreed upon by the Village of Grafton thru a consent order with the USEPA, as they perceived advantages to managing the project.

I apologize to your client for my very delayed response to your inquiries made at an August meeting with our department. Due to personnel vacancies within our reorganized program I have had to severely prioritize my efforts. I appreciate your patience. If I can be of further service call me at (414) 263-8628.

Sincerely,

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Chad Czarkowski Regional Drinking Water and Groundwater Program Expert

c:Private DG/2 Ken Theisen - USEPA Rust Environmental and Infrastructure Village of Grafton
John Feeney - WDNR Sharon Schaver - WDNR Chuck Warzecha - WDOH