MEMORANDUM

DATE: August 12, 1991

- TO: Northern Township Board
- FROM: Raymond W. Thron, Ph.D., P.E., Director Division of Environmental Health
- SUBJECT: Groundwater Contamination and Water Well Advisory--Northern Township, Beltrami County, Minnesota

NOTIFICATION OF WELL ADVISORY

The Minnesota Department of Health (MDH) is issuing a WELL ADVISORY for the portions of Northern Township, Beltrami County, as shown and described on the attached map.

The surficial aquifer within much of the described advisory area has been contaminated with leachate from Kummer Sanitary Landfill. The WELL ADVISORY reflects our concern that the drilling of new wells, or the deepening of existing wells within the advisory area, may result in contamination of deeper, normally protected aquifers. The MDH is also concerned about the public health effects that could result from further development of water wells in contaminated aquifers.

BOUNDARIES OF THE ADVISORY AREA

The advisory area is bounded on the north by Fern Street and the section line between Sections 28 and 33. The southern boundary is defined by Rose Street and a line running due west from Rose Street to the North Country Hospital, 34th Street Northwest, and a line extending due east from 34th Street Northwest to Lake Bemidji. The eastern boundary is defined by Lake Bemidji. The western boundary is defined by a north-south line set 500 feet to the west of Greenleaf Avenue Northwest.

REQUIREMENTS OF THE WELL ADVISORY

- 1. Within the advisory area, the deepening of existing wells or the construction of any new types of wells, is prohibited until further notice. This ban includes the installation of shallow sand point wells. The shallow wells are of particular concern because the majority of the known contamination exists within the shallow aquifers (less than 40 feet in depth).
- 2. Wells other than domestic water wells, i.e., dewatering wells for construction purposes, will be considered on an individual basis and, if allowed, would require a variance from the MDH.
- 3. It is recommended that the MDH be contacted before the construction of any large capacity wells within one mile of the advisory area boundaries. These are wells with a drawdown capacity that could significantly alter the existing groundwater flow patterns. Examples of such wells are municipal, industrial, or dewatering wells. These wells usually require a groundwater appropriations permit from the Minnesota Department of Natural Resources (DNR).
- 4. Within the advisory area any wells other than monitoring wells, with water found to currently contain, or have in the past, contained contamination levels exceeding the MDH Recommended Allowable Limits (RALs) shall be permanently sealed and abandoned by a licensed water well contractor.
- 5. Within the advisory area, all wells located west of Tamarack Avenue Northwest and west of the line running due north of Tamarack Avenue Northwest shall be sealed unless it can be shown in each individual well that the levels of contamination do not exceed MDH RALs. To have a well tested for contamination, the water must be analyzed for the contaminants of concern using MDH Method 465D or an equivalent method. An MDH inspector must be present at the time each well

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is sampled <u>or</u> the well owner must contract with a certified lab to collect and analyze their water sample. All water samples must be submitted to the laboratory by October 15, 1991.

- 6. In the event of the sale of any property, or any other type of property title transfer within the entire advisory area, if there is an existing well on the property, the well water shall be tested for contamination. If levels of contamination are found that exceed MDH RALs, the well shall be permanently sealed and abandoned by a licensed water well contractor.
- 7. Total compliance must be met by December 1, 1991.

In the future, the restrictions and boundaries of this advisory area may change. This would be based on the extent of changes in contamination levels and flow directions of the contaminant plume. The indicator chemicals chosen for study in this area include tetrachloroethene, trichloroethene, trans-1,2-dichloroethene, vinyl chloride, and benzene. Tetrachloroethene and vinyl chloride have already been found at levels exceeding the MDH RALs in several wells, and are the most commonly found contaminants.

Payment assistance for well sealing may be requested through Minnesota's Harmful Substance Compensation Board. Please contact Jean Small-Johnson at 612/642-0455.

If you have any questions regarding this advisory, contact Steve Gruber of the MDH in Bemidji at 218/755-3820 or Ed Schneider of the MDH in Duluth at 218/723-4642.

RWT:SG:fal Attachment cc: David Gray, MDH Steve Gruber, MDH Miriam Horneff, MPCA Bill Patnaude, Beltrami County Planning and Zoning Ann F. Allen, Beltrami County Recorder bcc: Ed Schneider, MDH Dan Wilson, MDH Larry Cole, MDH





28 and 33. The southern boundary is defined by a line running straight west from Rose Street to the North Country Hospital, 34th Street, N.W., and a

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Bemidji. The eastern boundary is defined by Lake Bemidji. The western boundary is defined by a north/south line set 500 feet to the west of Greenleaf Avenue, N.W.