



United States Department of the Interior

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NIROP FRIDLEY
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U.S. GEOLOGICAL SURVEY
Water Resources Division
2280 Woodale Dr.
Mounds View, MN 55112
September 1, 1998

Mr. Ron Thompson
Minnesota Department of Health
121 East Seventh Place
P.O. Box 64975
St. Paul, MN 55164-0975

Dear Mr. Thompson,

This letter is in response to the violation notice of August 25, 1998, regarding a monitoring well (Unique Number 582072) installed at the United Defense plant in Fridley, Minnesota. The U.S. Geological Survey acknowledges and regrets the violation cited in the notice. The policy of the U.S. Geological Survey has been and will continue to be that the installation of all monitoring wells with the U.S. Geological Survey as the Contractor shall comply with all applicable Minnesota Department of Health well code regulations. Corrective actions that address the violation should consider the following background information.

The well in question is a deep monitoring well that is needed for an ongoing, federally funded study of ground-water contamination being conducted by the Dept. of the Navy. This well is and will be an important source of water-quality and water-level data that supports the federal study. The importance of this well is due in large part to its strategic location and depth within the study site. This well is located within the primary contamination plume of organic solvents and their by-products. No other deep monitoring well is located near the well in question. Water-quality samples will probably be collected from this well to evaluate the downward migration of contaminant chemicals into the deep drift. Samples from this well may also be analyzed for hydrogen ion concentration. These analyses would not be feasible for samples collected from steel casing wells or PVC-casing wells with glued fittings.

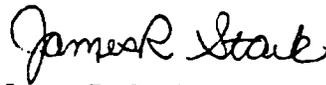
Additionally, water-level data from this well will be used to define both horizontal and vertical hydraulic gradients and local flow directions. These data will be used in the development and calibration of computer-modeled simulations of the ground-water flow and movement of contaminant chemicals.

The well in question was installed by E.H. Renner & Sons, a reputable well drilling company that has installed numerous other wells in the study area. The PVC casing was purchased from Goodin Supply in the Twin Cities. The well was grouted with bentonite from a depth of 115 ft to 50 ft below land surface, and with cement from a depth of 50 ft below land surface to the surface. We

consider this well to be well constructed with high-quality materials.

Given the importance and overall construction quality of the well in question, the U.S. Geological Survey requests a stipulation agreement granting a variance for Unique Well 582072 from the 50-ft depth limitation for flush-threaded PVC casing wells. Sealing this well would obviously be a costly remedy for the violation, and may result in the permanent loss of an important source of hydrologic and water-quality data. The U.S. Geological Survey and the Department of the Navy will fully cooperate with the Minnesota Department of Health to meet all necessary conditions to execute such an agreement.

FOR THE DISTRICT CHIEF



James R. Stark
Supervisory Hydrologist

cc Scott Glass, Dept. of the Navy
cc Roger Renner, E. H. Renner & Sons
cc Doug Hildre, United Defense