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RESULTS FROM THE ENVIRONMENTAL MONITORING PROGRAM

10/21/96

**DOE-0075-97
DOE-FN CITIZEN
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LETTER**



Department of Energy

**Ohio Field Office
Fernald Area Office**

P. O. Box 538705
Cincinnati, Ohio 45253-8705
(513) 648-3155



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OCT 21 1996

DOE-0075-97

**Knollman Farms, Inc.
Attention: Norman Knollman
7312 Willey Road
Hamilton, OH 45013**

Dear Mr. Knollman:

RESULTS FROM THE ENVIRONMENTAL MONITORING PROGRAM

The Department of Energy, Fernald Environmental Management Project (DOE-FEMP) in cooperation with the Ohio Environmental Protection Agency (OEPA) and the Ohio Department of Health (ODOH), has been collecting water samples from your well and others in the area as part of our continuing environmental monitoring program. These samples are analyzed for uranium concentration to assist in the continual assessment of the impacts of Fernald site operations on groundwater quality.

This letter provides you with results from the Environmental Monitoring program. The laboratory results from the month of July 1996 are expressed below in parts of uranium per billion parts of water (ppb), and picocuries of uranium per liter of water (pCi/L). In the Site Environmental Report, picocuries per liter refers to the quantity of radioactivity per liter of groundwater:

<u>Sampling Date (1996)</u>	<u>Uranium Concentration</u>	
	<u>(ppb)</u>	<u>(pCi/L)</u>
July 24		
Old Well (shallow well)	124.0	83.7
House Well (dairy well)	2.7	1.8

The Remedial Investigation (RI) process at the FEMP determined that background concentrations of naturally-occurring uranium in the groundwater for this area range from less than 0.1 to 3.1 ppb (0.07 to 2.2 pCi/L). Also, a U.S. Geological Survey study (J.D. Hem, 1970, Geological Survey Water-Supply Paper 1473) reported a range of uranium concentration of less than 0.1 ppb to 10 ppb (0.07 to 6.8 pCi/L) in most natural water within the United States.

The EPA has proposed an interim drinking water standard for total uranium of 20 ppb (13.5 pCi/L). This interim drinking water standard has also been selected as an appropriate remediation level for aquifer restoration. The uranium concentration in the sample taken from the house (dairy) well at 7312 Willey Road is below this limit and is within the range expected for naturally-occurring background uranium concentrations in this part of the country. However, the uranium concentration in the sample collected from the old (shallow) well at 7308 Willey Road is higher than the range expected for naturally-occurring background uranium concentrations in this part of the country. The results are consistent with those obtained and reported to you during previous periods.

If you have any questions regarding this letter, or on any aspect of our environmental monitoring program, please contact Kathleen Nickel at (513) 648-3166.

Sincerely,



for Jack R. Craig
Director

FEMP:Nickel

cc:

AR Coordinator, FDF/78