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RESULTS OF THE WATER SAMPLING OF WELL

03/23/92

**DOE-1155-92
DOE-FN/PUBLIC
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LETTER**



Department of Energy
Fernald Environmental Management Project
 P.O. Box 398705
 Cincinnati, Ohio 45239-8705
 (513) 738-6357

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MAR 24 1992

MAR 23 1992

DOE-1155-92

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Mrs. Joan Pottenger
 10435 Paddy's Run Rd.
 Harrison, Oh. 45030

Dear Mrs. Pottenger:

The Westinghouse Environmental Management Company of Ohio (WEMCO), in cooperation with the Ohio Environmental Protection Agency and the Department of Health, has been collecting water samples from your well and others in the area as part of our continuing environmental monitoring program. In addition, samples have been collected from your water softener system and the reverse osmosis filter in your kitchen. These samples are analyzed for uranium concentration in order to assess any possible effects of Fernald Site operations on groundwater quality.

The purpose of this letter is to provide you with an update on the results of our sampling. The laboratory results from the month of February are expressed below in parts of uranium per billion parts of water (ppb), and picocuries of uranium per liter of water (pCi/L). Picocuries per liter are the units used to express groundwater data in the Annual Environmental Report.

| <u>Sampling Date</u> (Reverse osmosis) | <u>Uranium Concentration</u> | |
|---|------------------------------|----------------|
| | <u>(ppb)</u> | <u>(pCi/L)</u> |
| February 22, 1992 | 0.1 | 0.07 |
| (Water softener system) | | |
| February 22, 1992 | 2.5 | 1.69 |
| (Outside faucet) | | |
| February 22, 1992 | Unable to obtain sample | |

J. Pottenger

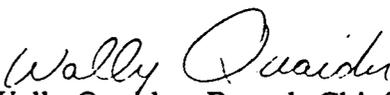
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A groundwater study conducted by an independent consultant for the Fernald Site determined that background concentrations of naturally-occurring uranium in the groundwater for this area range from less than 0.1 ppb to 2.7 ppb (0.068 to 2.0 pCi/L). 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 (0.068 to 6.8 pCi/L) in most natural water within the United States.

The Environmental Protection Agency (EPA) has proposed an interim drinking water standard for total uranium of 20 ppb (13.5 pCi/L). The uranium concentration in your samples is well below this limit and is within the range expected for naturally-occurring background uranium in this part of the country. A sample could not be obtained from your outside faucet during the month of February because the sampling point has been shut off for the winter. Environmental Monitoring will continue to collect samples from your well on a monthly basis, at your convenience.

If you have any questions regarding the results reported to you in this letter or on any aspect of our environmental program, please contact me by phone (738-6160) at your convenience.

Sincerely,


Wally Quaider, Branch Chief
Environmental Compliance

FO:Quaider