

**5322**

**RESULTS OF THE WATER SAMPLING OF WELLS  
(2 INDIVIDUAL LETTERS)**

**12/10/93**

**DOE-0402-94  
DOE-FN/CITIZENS  
4  
LETTERS**



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

DEC 10 1993  
DOE-0402-94

Mr. Donald Thien  
[Redacted]

Dear Mr. Thien:

The purpose of this letter is to provide you with the results of the water sampling of your well conducted by Fernald Environmental Restoration Management Corporation (FERMCO). Your well at [Redacted] was sampled on November 3, 1993, in response to your request. The result of this sampling is 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 Site Environmental Report.

<u>Sampling Date</u>	<u>Uranium Concentration</u>	
	<u>(ppb)</u>	<u>(pCi/L)</u>
November 3, 1993	1.5	1.0

For comparison, 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.

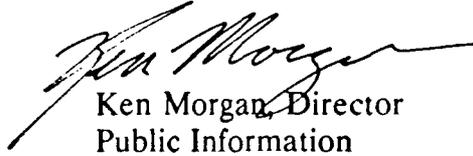
The Environmental Protection Agency (EPA) has proposed an interim drinking water standard for total uranium of 20 ppb (13.5 pCi/L). The uranium concentration in your sample is well below this limit and is within the range expected for naturally-occurring background uranium in this area.

D. Thien

-2-

If you have any questions regarding the result reported to you in this letter or on any aspect of our environmental program, please contact Wally Quaider by phone (648-3137) at your convenience.

Sincerely,



Ken Morgan, Director  
Public Information

FN:Quaider



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

DEC 10 1993  
DOE-0401-94

Mrs. Joan Pottenger  
[Redacted]

Dear Mrs. Pottenger:

The Fernald Environmental Restoration Management Corporation (FERMCO), 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. 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 November 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 Site Environmental Report.

<u>Sampling Date</u>	<u>Uranium Concentration</u>	
	<u>(ppb)</u>	<u>(pCi/L)</u>
(Kitchen Tap) November 3, 1993	4.8	3.2
(Reverse osmosis filter) November 3, 1993	<0.1	<0.1
(Outside Tap) November 3, 1993	4.2	2.8

J. Pottenger

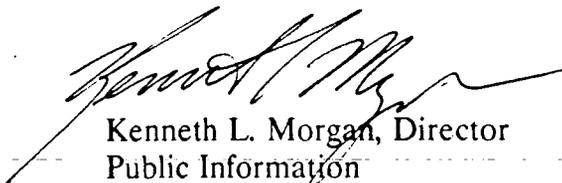
-2-

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 (0.07 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 (0.07 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 concentrations in your reverse osmosis and water softener samples are within this limit. The uranium concentrations in your well and water softener samples continue to indicate concentrations of uranium above the background range expected for this part of the country. Environmental Monitoring will continue to collect water samples 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 Wally Quiader by phone (648-3137) at your convenience.

Sincerely,



Kenneth L. Morgan, Director  
Public Information

FN:Quaider