

4463

**RESULTS OF WATER SAMPLING OF WELLS
(9 INDIVIDUAL LETTERS)**

04/16/93

**DOE/CITIZEN
DOE-1585 TO 1590-93
20
LETTERS**



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

APR 16 1993

DOE-1585-93

Mrs. Heyob

Dear Mrs. Heyob:

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 March 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 Annual Environmental Report.

<u>Sampling Date</u>	<u>Uranium Concentration</u>	
	<u>(ppb)</u>	<u>(pCi/L)</u>
March 3, 1993	0.6	0.4

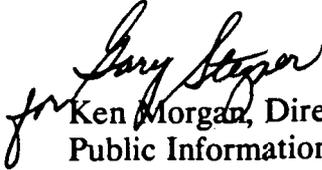
For comparison, a groundwater study conducted by an independent consultant for the Fernald Site determined that background concentrations of naturally-occurring uranium in the groundwater for this area range from less than 0.1 ppb to 2.7 ppb (0.068 to 2.0 pCi/L).

Mrs. Heyob

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If you have any questions regarding the result reported to you in this letter or on any aspect of our environmental program, please contact me by phone (648-3131) at your convenience.

Sincerely,


Ken Morgan, Director
Public Information

FN:Quaider



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

APR 16 1993

DOE-1585-93

Mrs. Corrine Horning
[Redacted]

Dear Mrs. Horning:

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). The well at [Redacted] was sampled on March 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 Annual Environmental Report.

<u>Sampling Date</u>	<u>Uranium Concentration</u>	
	<u>(ppb)</u>	<u>(pCi/L)</u>
March 3, 1993	0.6	0.4

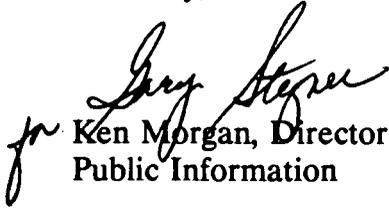
For comparison, a groundwater study conducted by an independent consultant for the Fernald Site determined that background concentrations of naturally-occurring uranium in the groundwater for this area range from less than 0.1 ppb to 2.7 ppb (0.068 to 2.0 pCi/L). Also, a U. S. Geological Survey study (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.

0 3

If you have any questions regarding the result reported to you in this letter or on any aspect of our environmental program, please contact me by phone (648-3131) at your convenience.

Sincerely,


for Ken Morgan, Director
Public Information

FN:Quaider



Department of Energy
Fernald Environmental Management Project
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(513) 738-6357

APR 16 1993
DOE-1586-93

Mr. Les Flick
[Redacted]

Dear Mr. Flick:

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 March 12, 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 Annual Environmental Report.

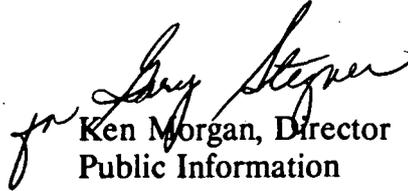
<u>Sampling Date</u>	<u>Uranium Concentration</u>	
	<u>(ppb)</u>	<u>(pCi/L)</u>
March 12, 1993	0.5	0.3

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.

If you have any questions regarding the result reported to you in this letter or on any aspect of our environmental program, please contact me by phone (648-3131) at your convenience.

Sincerely,


Ken Morgan, Director
Public Information

FN:Quaider



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Fernald Environmental Management Project
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APR 16 1993

DOE-1587-93

Mr. Dennis Heyob
 [REDACTED]

Dear Mr. Heyob:

The purpose of this letter is to provide you with the results of the water sampling of your wells conducted by Fernald Environmental Restoration Management Corporation (FERMCO). The wells at [REDACTED] were sampled on March 15, 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 Annual Environmental Report.

<u>Sampling Date</u>	<u>Uranium Concentration</u>	
	<u>(ppb)</u>	<u>(pCi/L)</u>
Barn - [REDACTED] March 15, 1993	0.3	0.2
Hydro-Cooler March 15, 1993	0.6	0.4
Hydrant March 15, 1993	0.8	0.5
Irrigation Well March 15, 1993	0.3	0.2

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 samples is well below this limit and is within the range expected for naturally-occurring background uranium in this area.

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 (648-3131) at your convenience.

Sincerely,


Ken Morgan, Director
Public Information

FN:Quaider



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APR 16 1993
DOE-1587-93

Century Farms, Inc.
 Attn: David Brate
 3901 Oxford Trenton Road
 Oxford, OH 45056

Dear Mr. Brate:

The purpose of this letter is to provide you with the results of the water sampling of your wells conducted by Fernald Environmental Restoration Management Corporation (FERMCO). The wells at 7238 New Haven Road were sampled on March 15, 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 Annual Environmental Report.

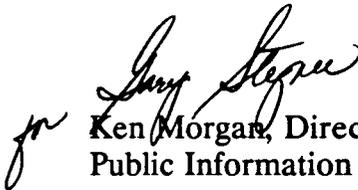
<u>Sampling Date</u>	<u>Uranium Concentration</u>	
	<u>(ppb)</u>	<u>(pCi/L)</u>
Barn - 7238 New Haven March 15, 1993	0.3	0.2
Hydro-Cooler March 15, 1993	0.6	0.4
Hydrant March 15, 1993	0.8	0.5
Irrigation Well March 15, 1993	0.3	0.2

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 samples is well below this limit and is within the range expected for naturally-occurring background uranium in this area.

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 (648-3131) at your convenience.

Sincerely,


for 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

APR 16 1993

DOE-1588-93

Mr. Marvin Rugg
 [REDACTED]

Dear Mr. Rugg:

The purpose of this letter is to provide you with the results of the water sampling of your cistern conducted by Fernald Environmental Restoration Management Corporation (FERMCO). Your cistern at [REDACTED] was sampled on February 23, 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 Annual Environmental Report.

<u>Sampling Date</u>	<u>Uranium Concentration</u>	
	<u>(ppb)</u>	<u>(pCi/L)</u>
February 23, 1993	0.1	0.1

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.

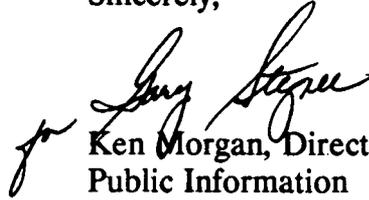
The Environmental Protection Agency (EPA) has proposed an interim drinking water standard for total uranium of 20 ppb (13.5 pCi/L). The uranium concentration in your sample is well below this limit and is within the range expected for naturally-occurring background uranium in this area.

M. Rugg

-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 me by phone (648-3131) at your convenience.

Sincerely,


Ken Morgan, Director
Public Information

FN:Quaider



Department of Energy
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(513) 738-6357

APR 16 1993

DOE-1589-93

Mr. William Knollman

[Redacted]

Dear Mr. Knollman:

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] has been sampled biweekly during the month of March, 1993. Also, samples were collected from the house well located at [Redacted] and from [Redacted] during the month of March, 1993. An ion exchange system was installed at your home June 18, 1992. This system is designed to remove the uranium from your well water by filtering the water through two columns.

Samples have been collected from three different sample points to determine the effectiveness of the system: untreated well water, treated water from the first column, and treated water from both columns. The results are expressed in Attachment I in parts of uranium per billion parts of water (ppb), and picocuries of uranium per liter of water (pCi/L). Environmental Monitoring will continue to collect samples from these three points and provide you with the results verbally on a biweekly basis. Also, a notification letter with results will be mailed to you on a monthly basis.

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 the samples from [Redacted] is below this limit. However, the results from the sampling of your well at [Redacted] indicate levels of uranium above background and the interim EPA standard. The results from the water filtered through the ion exchange system (first and second columns) indicate that the uranium is being removed and that the uranium concentrations in the treated water are within the background range for this area.

W. Knollman

-2-

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 (648-3131) at your convenience.

Sincerely,

for Gary Stegner
Ken Morgan, Director
Public Information

FN:Quaider

Enclosure: As Stated

014

W. Knollman

**ENCLOSURE I
WELL WATER RESULTS**

SAMPLING LOCATION / DATE	UNTREATED WELL WATER		TREATED ONE COLUMN		TREATED TWO COLUMN	
	(ppb)	(pCi/L)	(ppb)	(pCi/L)	(ppb)	(pCi/L)
██████████ March 2, 1993	53	36	<0.1	<0.1	0.1	0.1
March 16, 1993	65	44	<0.1	<0.1	<0.1	<0.1
██████████ March 2, 1993	11	7.4	0.1	0.1	<0.1	<0.1
March 16, 1993	59	40	0.3	0.2	<0.1	<0.1
██████████ March 2, 1993	1.8	1.2				



Department of Energy
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P.O. Box 398705
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(513) 738-6357

APR 16 1993
DOE-1589-93

Mr. Melvin Knollman
[Redacted]

Dear Mr. Knollman:

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). The well at [Redacted] has been sampled biweekly during the month of March 1993. Also, samples were collected from the house well located at [Redacted] and from your house at [Redacted] during the month of March 1993. An ion exchange system was installed at your home June 18, 1992. This system is designed to remove the uranium from your well water by filtering the water through two columns.

Samples have been collected from three different sample points to determine the effectiveness of the system: untreated well water, treated water from the first column, and treated water from both columns. The results are expressed in Attachment I in parts of uranium per billion parts of water (ppb), and picocuries of uranium per liter of water (pCi/L). Environmental Monitoring will continue to collect samples from these three points and provide you with the results verbally on a biweekly basis. Also, a notification letter with results will be mailed to you on a monthly basis.

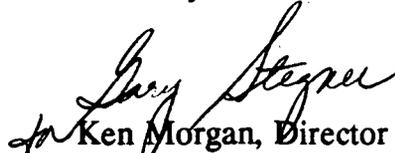
The Environmental Protection Agency (EPA) has proposed an interim drinking water standard for total uranium of 20 ppb (13.5 pCi/L). The uranium concentration in the samples from [Redacted] is below this limit. However, the results from the sampling of the well at [Redacted] indicate levels of uranium above background and the interim EPA standard. The results from the water filtered through the ion exchange system (first and second columns) indicate that the uranium is being removed and that the uranium concentrations in the treated water are within the background range for this area.

M. Knollman

-2-

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 (648-3131) at your convenience.

Sincerely,


for Ken Morgan, Director
Public Information

FN:Quaider

Enclosure: As Stated

M. Knollman

ENCLOSURE I
WELL WATER RESULTS

SAMPLING LOCATION / DATE	UNTREATED WELL WATER		TREATED ONE COLUMN		TREATED TWO COLUMN	
	(ppb)	(pCi/L)	(ppb)	(pCi/L)	(ppb)	(pCi/L)
██████████ March 2, 1993	53	36	<0.1	<0.1	0.1	0.1
March 16, 1993	65	44	<0.1	<0.1	<0.1	<0.1
██████████ March 2, 1993	11	7.4	0.1	0.1	<0.1	<0.1
March 16, 1993	59	40	0.3	0.2	<0.1	<0.1
██████████ March 2, 1993	1.8	1.2				



Department of Energy
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ARC

APR 16 1993
DOE-1590-93



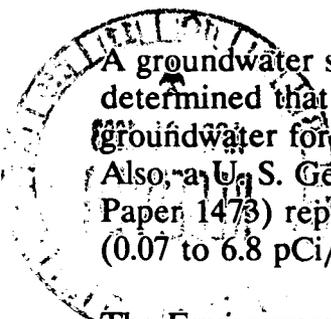
Mrs. Joan Pottenger

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 months of December, 1992 and January, 1993 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>	<u>Uranium Concentration</u>	
	<u>(ppb)</u>	<u>(pCi/L)</u>
(Kitchen Tap)		
December 19, 1992	3.4	2.3
January 23, 1993	5.0	3.4
(Reverse osmosis filter)		
December 19, 1992	<0.1	<0.1
January 23, 1993	<0.1	<0.1

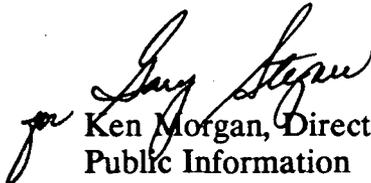


A groundwater study conducted by an independent consultant for the Fernald Site determined that background concentrations of naturally-occurring uranium in the groundwater for this area range from less than 0.1 ppb to 2.7 ppb (0.07 to 2.0 pCi/L). Also, a U. S. Geological Survey study (J.D. Hem, 1970, 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 concentration in your samples is well below this limit. The uranium concentration in your water softener samples continues to indicate an elevated concentration of uranium above the background range expected for this part of the country. However, the results are consistent with those obtained and reported to you during the previous periods. 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 me by phone (648-3131) at your convenience.

Sincerely,


Ken Morgan, Director
Public Information

FN:Quaider