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G-000-101.96

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**NOTIFICATION OF DETECTION OF ABOVE
BACKGROUND CONCENTRATIONS OF
URANIUM IN SOILS OFFSITE OF THE FMPC**

05-03-89

**WMCO/DOE
WMCO:R:89-034**

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LETTER

**Westinghouse
Materials Company
of Ohio**

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Cincinnati, Ohio 45239-8704

(513) 738 8200

WMCO:R:89-034
May 3, 1989

Mr. James A. Reafsnyder
Site Manager
U. S. Department of Energy
P. O. Box 398705
Cincinnati, Ohio 45239-8705

**NOTIFICATION OF DETECTION OF ABOVE BACKGROUND CONCENTRATIONS OF URANIUM IN
SOILS OFFSITE OF THE FMPC**

Dear Mr. Reafsnyder:

The purpose of this letter is to notify the DOE of the detection of above background concentrations of uranium in surface soils in an isolated offsite location. These soils were detected during an offsite soil sampling event on property owned by William Knollman, et al. The affected parcel of land is located to the east of the FMPC, adjacent to the buried effluent outfall line to the Great Miami River. Preliminary information indicates that the elevated concentrations are a result of past surcharges of FMPC effluent from Manhole 180 on the outfall line. Analytical data from collected surface soil samples at the affected location indicate a range of total uranium concentration from background to 127 parts per million (ppm).

On April 4, 1989 WMCO was notified by Ms. Hope Laubric, a local resident, that a manhole on the FMPC discharge line to the Great Miami River was surcharging water into a nearby farm field. The WMCO AEDO was apprised of the situation and corrective actions were implemented to eliminate the surcharge situation. A water sample was collected by WMCO of the water surcharging from the manhole. Analysis of this sample indicated a concentration of 2.24 mg/l of total uranium. Calculations were completed by WMCO on April 4, 1989 of the potential amount of uranium released during the event. These calculations indicated that a reportable quantity, as defined under CERCLA, had not been released during the surcharge event. Ray Hansen of the DOE-FMPC was verbally notified of the situation at that time.



Subsequent communication with Mr. Knollman on April 4, 1989 indicated that the surcharge of the manhole was not an isolated event, but had occurred on occasions in the past. A preliminary evaluation of the surcharge event indicates that the situation potentially occurred as a result of near capacity discharges of wastewater in the 16 inch buried pipeline which was severely aggravated by high water conditions in the Great Miami River.

With the consent of Mr. Knollman, WMCO personnel performed cursory sampling in the vicinity of the manhole on April 6, 1989 to determine the relative concentrations of uranium in the soil at that location. Eight surface soil samples, 0 to 2 inches in depth, were collected at the location and submitted to the FMPC Laboratory for analysis of concentrations of total uranium and thorium.

Analytical data was received from the laboratory on May 2, 1989. The data indicates a range of total uranium concentrations in soil from the detection limit to 127 ppm. Total thorium concentrations exceeded the detection limit of 23 ppm in only one sample with a value of 25 ppm. These analytical results are considered preliminary until final isotopic analysis is completed on the collected samples. Isotopic analysis is anticipated to be completed by May 5, 1989. A copy of the analytical results and a preliminary map from this sampling event appear as Attachment 1 to this correspondence. Attachment 2 provides a one page summary of the available information to date on the surcharge event and subsequent sampling program.

With DOE concurrence, WMCO proposes to complete the following actions to fully address this issue.

- o Develop for issuance (through the DOE Site Office) a Press Release apprising the media of the situation.
- o Develop and implement a detailed sampling program in the vicinity of Manhole 180.
- o Develop and implement a detailed sampling program in the vicinity of the other manholes on the outfall line.
- o Develop a work plan for implementation of possible cleanup actions at the affected locations.
- o Thoroughly investigate the cause of the surcharge and implement the necessary procedural or facility enhancements to preclude the reoccurrence of the situation.

WMCO is proceeding with the bulletized items listed above. Mr. Knollman was notified of the results of the sampling by WMCO on May 3, 1989. Please provide WMCO with prompt notification of any changes or comments to the proposed actions listed above.

J. A. Reafsnyder

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If additional information is required, please don't hesitate to contact WMCO.

Very truly yours,

W. A. Weinreich

W. A. Weinreich
Vice President
Restoration

CRC:dal

- c: R. Hansen, DOE/FMPC
- M. Stone, DOE/FMPC
- M. Wilson, DOE/FMPC

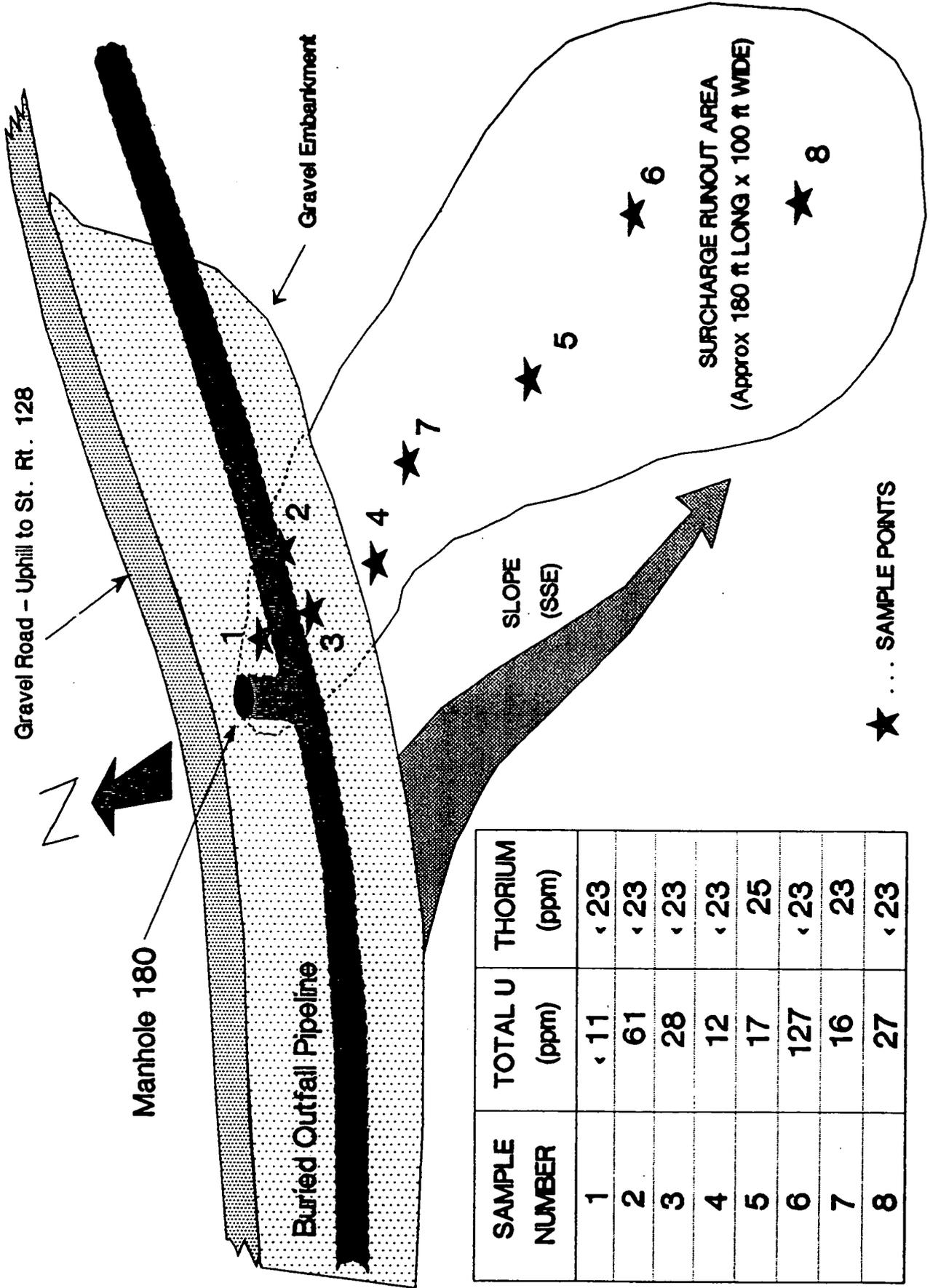
J. A. Reafsnyder

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WMC0:R:89-034

- bc: G. E. Baker
- L. C. Bogar
- M. B. Boswell
- D. J. Brettschneider
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- K. Miskell
- P. E. Mohr
- L. Pennington
- A. M. Schwartzman
- P. C. Weddle

Central Files



SAMPLE NUMBER	TOTAL U (ppm)	THORIUM (ppm)
1	< 11	< 23
2	61	< 23
3	28	< 23
4	12	< 23
5	17	25
6	127	< 23
7	16	23
8	27	< 23

FACT SHEET

Surcharge of Manhole 180

- April 4, 1989 0 WMC0 notified by Mrs. Hope Laubric of surcharge of manhole on Outfall Line.
- 0 AEDO notified, water sample collected, flow corrections implemented to eliminate surcharge situations, and manhole sealed.
- 0 Mr. Knollman contacted by WMC0, consent to survey property received, Mr. Knollman indicated that the manhole had surcharged in the past.
- 0 Ray Hansen verbally notified by WMC0 of the situation.

- April 6, 1989 0 Cursory soil sampling performed by WMC0 in vicinity of Manhole 180.

- May 2, 1989 0 Analytical results of collected samples received from laboratory. Analysis indicated range of total uranium in soil at that location of background to 127 ppm. Water sample collected from manhole indicated total uranium concentration of 2.24 ppm.

- May 3, 1989 0 Mr. Knollman contacted by WMC0 and apprised of analytical results.