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**URANIUM CONTAMINATION IN
KNOLLMANS'S FIELD FROM MANHOLE 177
BACKFLOWS**

05-02-1989

**WMCO/WMCO
WMCO:R(SW):89-0101
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LETTER**

G. E. Baker

WMCO:R(SW):89-0101

From: May 2, 1989

Date: URANIUM CONTAMINATION IN KNOLLMAN'S FIELD FROM MANHOLE 177 BACKFLOWS

Subject:

W. A. Weinreich

To :

surcharge
Hope [unclear] source →

surcharge

On April 4, 1989, I was notified by Sandy Spradlin of a reported backflow of FMPC discharge effluent from the main sewer line running to the Great Miami River at Manhole 177. The backflow had been reported by a neighbor that morning. The field is owned by Mr. Knollman. Sandy indicated that Mr. Knollman indicated he wasn't surprised, that backflow into the field occurred with major rainstorms in the past.

Sandy had sent staff to the manhole site and observed small flow coming up through the cover lift holes. Utilities was notified, and they reduced the effluent outflow to stop the backup. This action was completed successfully by 11 a.m. I gathered subjective data on the length of the backflow, its volume, and obtained uranium concentration data from Utilities from a sample taken at the manhole during the backflow. Based on data received, I calculated that we had not exceeded one pound of uranium released in a 24 hour period. (Attachment 1)

Area sampled 100' x 180'

Howard Christiansen was immediately advised of the backflow, and suggested that soil samples be taken to address the possibility of contamination from past backflows. Due to the extremely muddy conditions, and the fact that the soil sampling was not dependant on the particular event of the 4th, soil sampling was conducted on April 6, 1989. Eight soil samples were taken, based on cursory characterization of downhill and downstream soil from Manhole 177. The analytical data from the samples are provided by Attachment 2. Our onsite laboratory performed the analysis by x-ray fluorimetry techniques.

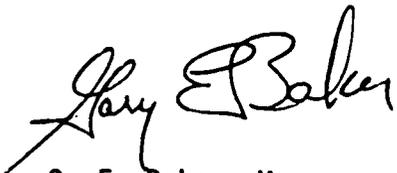
Based on these data, we recommend the following course of action:

1. Clear definition of the organizational responsibilities for all follow-up actions. We recommend that the investigation of the nature and extent of this past contamination be conducted by Impact Assessment as part of the RI/FS as the cleanup standards and schedule for cleanup will undoubtedly be tied with the Record of Decision.
2. Obtain permission from Mr. Knollman for additional sampling of the area. This permission needs to be obtained immediately to preclude planting of the field with produce crops.



- 3. Collect additional samples in the area to determine the nature and extent of contamination. Both the areal extent and the profile of vertical contamination should be quantified. This may require several sampling events so that progressive results may be used to define the contamination fully.
- 4. Consider the contingencies of purchasing access rights to the segment of the field for cleanup or initiation of cleanup efforts with Mr. Knollman's permission.
- 5. Discuss the situation and potential costs with Department of Energy relative to the need for funding and the timing of the cleanup.

This situation was reported to you (Bob Conner, Acting) on the day of the return of the analytical results from the soil sampling. It is important that timely reporting of such situations and prompt action be taken to preclude any possibility of community exposure to uranium contamination.



G. E. Baker, Manager
Solid Waste Compliance

cab

- c: S. L. Bradley
- H. D. Christiansen
- C. R. Conner
- M. J. Galper
- P. E. Mohr
- C. N. Spradlin

Central Files
SWC Files

	# Sample	Tot U	Tot. Th
MH 177	1	< 11 ppm	< 23 ppm
	2	61	< 23
	3	28	< 23
	4	12	< 23
	5	17	25
	6	127	< 23
	7	16	23
	8	27	< 23