



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

MAY 22 1980

MEMORANDUM FOR: Ross A. Scarano, Chief
Uranium Recovery Licensing Branch

FROM: Hubert J. Miller, Section Leader
Uranium Recovery Licensing Branch

SUBJECT: MEETING MINUTES - EPA, TVA, HUD, NRC, STATE OF
SOUTH DAKOTA ON EDGEMONT OFF-SITE CONTAMINATION

Date and Place

HUD Headquarters, Denver, Colorado; May 14, 1980

Participants

A list of participants is Enclosure 1.

Purpose

The meeting was called by the State of South Dakota (R. Richardson, State Planning Commissioner) to sort out among involved agencies problems encountered in carrying out a radiological monitoring program of potentially contaminated structures in Edgemont, South Dakota.

Of most interest to the State, which has the lead in and is carrying out the monitoring program, was to get clarification from EPA and HUD about a monitoring protocol these agencies provided to the State. HUD, apparently with advice from EPA has required that before any federal mortgage money can be provided for sale of a structure in Edgemont, that the structure must be monitored and given a clean bill of health. This action has caused a very chaotic situation in Edgemont, nearly half the residents demanding that measurements be made in their homes. This has been exacerbated by EPA's hedging on validity of the monitoring protocol they previously provided.

The agenda circulated by the State before the meeting is Enclosure 2.

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Summary of Meeting

For the most part, the meeting turned out to be a three party meeting between HUD, EPA, and the State, the major discussion being between the latter parties. The State has made a relatively major commitment of their resources to the Edgemont monitoring program and dealt with Edgemont citizens based upon EPA and HUD guidance which now seems to be changing. The state grilled EPA throughout the meeting, feeling as though it has been lead out onto the branch to have it sawed off behind them. Given the nature of the meeting and our noninvolvement in the HUD matter, I participated in discussions only as related to monitoring strategies and as required to make clear NRC's role in the matter. The meeting was useful from a fact-gathering point of view, however.

Aside from consensus about general strategies for continuing the monitoring program described below, there was only one firm commitment made in the meeting. This was EPA committing to give the State within several weeks revised guidance on an acceptable monitoring program.

The following points summarize major meeting items:

1. Status of Monitoring - the following table describes results of sampling to date as best it could be pieced together from South Dakota provided information:

	<u>Anomalies</u>	<u>HUD Structures</u>
Number monitored (approximately)	~40	~100
Total to be monitored	63	~200
Percent Exceeding 0.015 WL (Grab Sample)	--	22%
Number Greater than 0.03 WL	← Total of 26 →	
0.05 WL	4	4

The State (Kurvinck of Health Department) indicated that the sampling of anomalies had essentially been taken as far as it could go. People in structures which have not been sampled yet would not grant permission for monitoring, the concern being that all it would do is identify a problem without funds to take care of it.

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2. J. Tell Tappan (ARIX, Inc., the major contactor for DOE and the State of Colorado in Grand Junction who was present as consultant to the State) emphatically stated that the gamma detecting method (detector in mobile van) has proven not to be a reliable way to find contaminated structures. This is seen clearly by Edgemont data. He confirms what Dick Kennedy told me previously about this matter and that in Grand Junction a house to house survey of nearly every home was required to assure the problem was cleaned up. The point is that, although the HUD/EPA program may have been mishandled, it has apparently uncovered some very high readings (i.e., >0.05 WL) and cannot be ignored. It appears twice as many homes were identified through the HUD program as were identified by the initial gamma detection programs of 1971-72 and 1978.
3. The next major action in Edgemont is that ARIX will begin monitoring and engineering assessment of individual structures in Edgemont. This is being done through funds (47K) provided by EPA under the Resource Conservation and Recovery Act, "Uncontrolled Hazardous Waste Sites Program." These assessments detail precisely where tailings are in a structure, what has to be done to clean it up and what it will cost. The monitoring program involves comprehensive gamma and radon measurements and borehole logging both inside and outside of structures to define location, total amounts and depth of tailings. I obtained an example of a report produced by ARIX for DOE. Based upon review of this and discussion with Tappan, I believe his work will be a big step forward in solving Edgemont problems.

Meeting participants agreed that Tappan should start with structures having the highest grab sample WL readings to date and work downward through the list as far as possible given funding constraints.

The costs for each assessment will be \$1890 per structure. Tappan told me that this compared with average costs for cleanup in Grand Junction houses of about \$4000-\$5000.

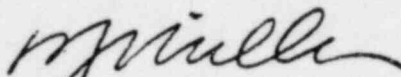
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4. The State showed a 15 minute tape of a television spot aired recently in South Dakota on Edgemont. It consisted in great part of interviews with local citizens. There is real concern and uncertainty in the town about the potential health effects of radon. More evident, however, was extreme bitterness about the bad publicity this has caused the community, the loss of business, and lowering of property values. The townspeople feel victimized by what one person called "arbitrary, bureaucratic action" (the HUD action) over something having uncertain health effects. They feel they have been unfairly singled out and have suffered when there are "dozens of other western mineral belt towns" where the same situations exists but people are allowed to lead "normal lives." They are bitter about the continued studies carried out over eight years without any remedial action being taken.

5. The major issue with monitoring program discussed in the meeting was over whether grab radon WL samples could be used to firmly confirm one way or the other that no action needed to be taken in a structure. I supported the position that presumptive levels set appreciably above and below the limits could be set to screen structures (i.e., above levels such as 0.03 - 0.05 WL, a structure could be said to have a problem, while below a level such as 0.01 WL the opposite could be said.) In the range near the limit more extensive monitoring (six RIPSU 100 hr measurements spread out over a year's time required at Grand Junction) would be needed. I informed the State of our efforts (the BPNL Contract), to find ways to abbreviate monitoring procedures in the range near the limit. Given experience at Grand Junction as relayed by Tappan and the likely large number of structures which will be involved in programs over the years to come, this is imperative. Also, I intend to pursue with EPA (Hendricks and Lichtman) and DOE a meeting sometime this summer of a handful of the countries experts on sampling methodologies, to establish on the basis of the best of what we know now from various cleanup efforts (at Butte, Montana, Salt Lake City, Grand Junction, Florida phosphate region and so on) an acceptable abbreviated monitoring protocol. I judge that much of the commotion in Edgemont is the result of what, to average citizens, is unconscionable quibbling by technical experts over fine aspects of monitoring programs--agreement of various agencies on what are acceptable procedures soon is important.

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6. In private discussion with Richardson, I informed him of our efforts to push DOE towards taking a direct assistance role in Edgemont. I again offered continued assistance of NRC within the limits of our resources. In connection with this, I consider that, taking it one step at a time, we should continue to pursue the possibility of having BPNL as a first step in their contract with us to help out at Edgemont.



Hubert J. Miller, Section Leader
Uranium Recovery Licensing Branch
Division of Waste Management

Enclosures:

1. List of Participants
2. Meeting Agenda

Meeting on Edgemont, South Dakota

May 14, 1980

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