G-000-709.15

3437

FEDERAL FACILITIES COMPLIANCE AGREEMENT DOCKET NO. V-W-86-C-020

12/30/86

USEPA/DOE-FN
3
LETTER

[redacted]

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

3437

REPLY TO THE ATTENTION OF:
5ME-14

30 DEC 1986

copy for
Dave
Dennis
B:11
Bob
rec'd

Mr. James Reafsnyder
U.S. Department of Energy
Feed Materials Production Center
P.O. Box E
Oak Ridge, Tennessee 37831

Re: Federal Facilities Compliance Agreement,
Docket No. V-W-86-C-020

Dear Mr. Reafsnyder:

The Region V Office of the U.S. Environmental Protection Agency (USEPA) has reviewed the Responses to Items G of the Clean Air Act (CAA) and Items B1-B5 of the Resource Conservation and Recovery Act (RCRA) Sections of the Federal Facilities Compliance Agreement for the Feed Materials Production Center (FMPC) in Fernald, Ohio. Based upon our review of the proposed groundwater monitoring system and air pollution control devices (90-Day Deliverable) submitted by the Department of Energy (DOE), several inadequacies were identified by our Agency that must be corrected to comply with USEPA regulations.

The Operation and Maintenance (O & M) procedures for air pollution control devices is thorough and should help FMPC in maintaining the source in continuous compliance. However, during meetings with FMPC, the USEPA was told that a survey of all plant ducting was to be performed in order to identify and correct air infiltration problems. The survey was designed to identify problems specifically affecting the air-flow and efficiency of the pollution control devices. A summary of this survey is needed as the minimization of air infiltration is part of any O & M procedure.

In regards to the proposed RCRA groundwater monitoring plan for Waste Pit #4, our Agency has specific requirements for well construction, well placement and sampling procedures. Requirements for wells are as follows:

- Due to seasonal fluctuations and possible mounding effects, an additional till well should be placed immediately northeast of Waste Pit #4. Additionally, past data suggests that well MW-22TP may not be located downgradient of the waste pit. Therefore, the addition of another till well northeast of Waste Pit #4 is essential to comply with 40 CFR 265.90 and 265.91.

- Based upon the regional flow data from wells completed in the sand and gravel, MW-22 is not located downgradient of Waste Pit #4. An additional well must be placed downgradient of the waste pit, possibly at the same location the additional downgradient till well will be constructed (immediately northeast of Waste Pit #4).

DEC 05 1987

- The proposed location of the upgradient well to monitor the sand and gravel is unacceptable. A new upgradient well should be located northwest of the waste pit area and completed in the sand and gravel.

- Before we can approve of the well design and construction of the TP well system (till wells), the analytical method used to calculate the volume of water to be purged prior to sampling must be submitted. This volume must be equal to the volume of water that is held in the enlarged sand pack (dimensions appear to be approximately 3' x 1.5' x 7'). The present proposed design for the TP well series is not consistent with current USEPA guidelines. Until information is provided that is in adherence to good operating practice, our Agency cannot accept this proposal.

- Mud rotary drilling was used to construct wells 12, 19s, 19d, 21s and 22s. The contractors must provide a detailed description of the development technique used to remove all traces of drilling mud from the produced water to assure that samples taken from the well are free of contaminants that may affect analytical results.

Inadequacies of the Sampling and Analysis Plan must be corrected to comply with the following stipulations:

- Well evacuation should be deemed adequate when the chemistry of the produced water has stabilized. Field measurements of pH and conductivity should be taken continuously until stabilization occurs. However, a minimum of one casing volume must be evacuated from low yielding wells and three casing volumes from wells with high yields.

- The decontamination procedures in the Sampling and Analysis Plan are inadequate. When inorganics are of prime concern, the following procedure should be practiced: clean with a non-phosphate detergent; and rinse with 0.1 N hydrochloric or nitric acid, tap water, then distilled water. When organics are of prime concern, the following procedure should be practiced: clean with a non-phosphate detergent; and rinse with tap water, distilled water, acetone, and pesticide quality hexane. These procedures should be used for cleaning both bailers and pumping equipment.

- A detailed description is needed for the types of sample bottles to be used for the various samples (i.e. samples to be analyzed for organic parameters must be stored in glass containers with Teflon lined caps). Additionally, the list of preservatives is too vague. Each RCRA parameter should be listed with its representative preservative and sample container (see RCRA Groundwater Technical Enforcement Guidance Document).

- Appendix VIII sampling and analysis should be implemented immediately. Additional wells yet to be installed will be sampled for Appendix VIII constituents at a later date.

- If submersible pumps are to be used, they must be positive displacement bladder pumps. Other types of pumps may volatilize any organics present in the groundwater.

DOE should submit a revised plan within thirty (30) days of receipt of these comments. If you have any questions concerning these comments, please contact Ms. Amy Blumberg of my staff at 312/886-7342.

Sincerely yours,

William D. Franz

William D. Franz, Chief
Environmental Review Branch
Planning and Management Division