



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

FERNALD
LOG A-0743

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LIST

FEB 16 2000

Mr. Johnny Reising
United States Department of Energy
Feed Materials Production Center
P.O. Box 398705
Cincinnati, Ohio 45239-8705

REPLY TO THE ATTENTION OF

SRF-5J

-- 2811

RE: OSDF Enhanced Permanent Leachate
Transmission System

Dear Mr. Reising:

The United States Environmental Protection Agency (U.S. EPA) has completed its review of the United States Department of Energy's (U.S. DOE) enhanced permanent Leachate Transmission System (LTS) design package for the On-Site Disposal Facility (OSDF). The design package consists of drawings, specifications and calculations for the enhanced permanent LTS to be installed by the end of calendar year 2000.

U.S. EPA finds that the LTS generally conforms to standard engineering practice however, several comments are attached regarding the system's implementability. Therefore, U.S. EPA disapproves the LTS design package.

U.S. DOE must revise the LTS design package to adequately address U.S. EPA's comments.

Please contact me at (312) 886-0992 if you have any questions regarding this matter.

Sincerely,

James A. Saric
Remedial Project Manager
Federal Facilities Section
SFD Remedial Response Branch #2

Enclosure

cc: Tom Schneider, OEPA-SWDO
Bill Murphie, U.S. DOE-HQ
John Bradburne, Fluor Fernald
Terry Hagen, Fluor Fernald
Tim Poff, Fluor Fernald

Commenting Organization: U.S. EPA Commentor: Saric
 Drawing Sheet #: M-3 Sections #: F/M-2 and H/M-2 Detail #: NA
 Original Specific Comment #: 3
 Comment: These sections should include sediment traps to ensure proper operation of the flow meters and valves. The sections should be revised accordingly.

Commenting Organization: U.S. EPA Commentor: Saric
 Drawing Sheet #: M-4 Section #: NA Detail #: NA
 Original Specific Comment #: 4
 Comment: Specific comments on this drawing are as follows:

- Detail 70/M-2. The containment pipe should be equipped with a vent to prevent pressure buildup caused by temperature differentials.
- Detail 74/G11. This detail shows an exhaust fan with an air intake located approximately 16.5 feet above the valve house floor. As shown, the exhaust fan will short-circuit. The exhaust fan should be equipped with a duct extending downward to approximately 1.5 feet above the valve house floor in order to allow proper ventilation.
- Section 72/G-16. This section shows a 4-inch-diameter leachate transmission system pipe vent made of high-density polyethylene (HDPE) extending 7 feet above the finished grade. The 4-inch-diameter HDPE pipe vent will not be rigid enough to stand without support. The vent should be made of cast iron or steel, or a cast-iron sleeve should be installed around the pipe vent.
- Detail 76/M-2. The detail indicates that the fill line for the collection tank is located 2 feet, 9 inches above the tank bottom. If the ultrasonic level probe is used, the useful volume of this tank will be only about 50 percent of its capacity. The detail should be revised to employ a capacitance level probe in order to maximize the tank's storage volume. Additionally, the level recorder should be connected to the level transmitter.

SPECIFICATIONS

Commenting Organization: U.S. EPA Commentor: Saric
 Section #: 02605 Page #: 4 Parts #: 2.03 and 2.04
 Original Specific Comment #: 5
 Comment: Part 2.03 of this section requires the contractor to furnish HDPE pipes in standard laying lengths not exceeding 100 feet; however, Part 2.04 requires the contractor to

