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TRANSMITTAL OF RESPONSE TO COMMENTS AND REVISED CLOSURE PLAN INFORMATION AND DATA FOR THE HYDROFLUORIC ACID TANK CAR

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LETTER

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DOE-0278-94

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TRANSMITTAL OF RESPONSE TO COMMENTS AND REVISED CLOSURE PLAN INFORMATION AND DATA FOR THE HYDROFLUORIC ACID TANK CAR

Reference: Letter, Donald R. Schregardus to Raymond J. Hansen, "Notice of Deficiency", RE: Closure Plan, U.S. Department of Energy - Fernald Environmental Management Project, dated October 4, 1993.

Enclosed are responses to specific Notice of Deficiency comments and a copy of the modified Closure Plan Information and Data (CPID) for the Hydrofluoric Acid (HF) Tank Car, Hazardous Waste Management Unit No. 38 at the Fernald Environmental Management Project (FEMP). The CPID document Revision 2 was prepared to replace the previous CPID Revision 1 document submitted to the Ohio Environmental Protection Agency (OEPA) on May 28, 1993.

Specific comment 3 requests results from the bench scale testing necessary to safely achieve the required neutralization. The bench scale testing is not as yet completed. When finished, DOE will provide those results in the form of a modified section for inclusion in the CPID. The current schedule is to complete this testing in December 1993 and a modified section to the CPID will be provided as soon as possible thereafter, but no later than January 15, 1994.

Also discussed with the staff at the Southwest District Office during the October 27, 1993 bi-monthly technical interchange meeting, DOE will provide an amended CPID to OEPA if an alternative other than lime slurry elemental neutralization will be used to achieve the desired results. At this time, the lime slurry neutralization option is anticipated to be the best process.

Sincerely,

for J. Phil Hamric
Manager

FN:Sattler

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Enclosure: As Stated

cc w/enc:

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OHIO EPA COMMENT DISPOSITION

HF Tank Car CPID - Revision 2

GENERAL COMMENTS

1. The closure plan was reviewed based upon the use of elementary neutralization (lime slurry) as the chosen neutralization process; however, the submittal letter that accompanied the closure plan indicates that three alternative methods for neutralizing the hydrofluoric acid are still under consideration. If the bench scale tests indicate that an alternate neutralization agent should be used, the U.S. DOE-FEMP must submit an amended CPID to the Ohio EPA. Changes within the amended plan would be subject to additional comment by the Agency.

   DISPOSITION - As indicated in the disposition of Specific Comment No. 3 below, the results of the bench scale tests will be provided to Ohio EPA prior to initiating neutralization operations. In the event that the bench scale tests indicate that an alternate neutralization agent should be used, the FEMP will submit an amended CPID to the Ohio EPA.

SPECIFIC COMMENTS

1. Section 3.2, page 9 - The closure plan fails to provide detailed information regarding the transportation of the tank car to the secondary containment area. The following information must be provided in accordance with OAC 3745-66-12(B)(3):

   a) Detailed procedures for moving the tank car.
   b) Precautions taken to avoid leaks or spills.
   c) Safety equipment available in case of a leak or spill.

   DISPOSITION - Page 9 of the CPID, Section 3.2, Item 1) has been revised to reference new Attachment D, HF Tank Car Transportation Safety Plan. Attachment D describes the specific steps to be taken prior to, and during movement of the tank car.

2. Section 3.1.1, page 9 - The closure plan indicates that the clean levels for soil will be 2.0 to 12.5. Please revise the closure plan to indicate that the clean level for soils will be 4.7 to 9.0 as per the Closure Plan Review Guidance Document (page 33). This information must be provided in accordance with OAC 3745-66-12(B)(4).

   DISPOSITION - Page 9 of the CPID, Section 3.1.1, has been revised to reflect the pH range 4.7 to 9.0 and reference the Closure Plan Review Guidance Document.

3. Section 3.1.1, page 10 - The closure plan fails to provide the bench scale test results that confirm that the proposed design will safely achieve the required neutralization. Please amend the closure plan to include a copy of the appropriate bench scale test results. This information must be provided in accordance with OAC 3745-66-12(B)(3).

   DISPOSITION - Page 10 of the CPID, Section 3.2, item 3), has been revised to indicate that bench scale tests are being conducted in accordance with the schedule provided in Section 5.0 of the CPID, and that results of the bench scale tests will be provided to Ohio EPA prior to initiating neutralization operations.

4. Section 3.2, page 12, number 7 - The closure plan states that the filter cake will be tested to determine if it fails TCLP for metals; however, the plan does not indicate how it will be managed if the results of the TCLP exceed the regulatory limits. Please amend the closure plan to include provisions for dealing with the filter cake if it is determined to be a hazardous waste. This information must be provided in accordance with OAC 3745-66-12(B)(4).

   DISPOSITION - Page 12 of the CPID, Section 3.2, has been revised to incorporate provisions for on-site storage in a RCRA warehouse or Plant 1 Pad of the filter cake in the event that it is determined to be a hazardous as well as radioactive waste.

5. Sampling and Analysis Plan, Section 2.5, page A-7 - The closure plan describes the methods for decontamination of the sampling and decontamination equipment but fails to indicate that the equipment used in the neutralization process (i.e., Reactor A and B, ancillary equipment, etc.) will also be decontaminated when neutralization is completed. Revise the closure plan to indicate that the equipment used in the neutralization process will be decontaminated in a manner consistent with Section 2.5 of the Sampling and Analysis Plan. This information must be provided in accordance with OAC 3745-66-12(B)(4).

   DISPOSITION - Section 2.5 of the Sampling and Analysis Plan has been revised to incorporate decontamination of the neutralization process equipment (tanks, piping, pumps, etc.). Neutralization system piping and equipment will be decontaminated and rinsed in-place by pumping decon and rinse waters through them. Decon and rinse waters will be collected in Reactors A and B. The two reactors will be decontaminated using the equipment and procedures as described on page 11, Section 3.2 of the CPID.