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March 7, 2003

Mr. Johnny Reising
U.S. Department of Energy, Fernald Area Office
P.O. Box 538705
Cincinnati, OH 45253-8705

Re: COMMENTS - Silos 1 and 2 Remediation Facility Draft remedial Design Package

Dear Mr. Reising:

Ohio EPA has reviewed DOE's submittal, "Silos 1 and 2 Remediation Facility Draft Remedial Design Package" received on December 20, 2002. Attached are our comments on the document.

If you have any questions, please contact me at (937) 285-6466.

Sincerely,

Thomas A. Schneider
Fernald Project Manager
Office of Federal Facilities Oversight

cc: Jim Saric, U.S. EPA
Terry Hagen, FDF
Mark Shupe, HSI GeoTrans
Michelle Cullerton, Tetra Tech EM Inc.
Ruth Vandergrift, ODH

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Ohio EPA Comments on
Silos 1 and 2 Remediation Facility
Draft Remedial Design Package
November 2002

General Comments:

1. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: na Pg #: na Line #: na Code: C
Original Comment #:
Comment: The design incorporates system redundancy in all areas except for the clarifier. Provide a contingency plan for how operations will be conducted in the event the clarifier fails.
Response:
Action:

2. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: na Pg #: na Line #: na Code: C
Original Comment #:
Comment: The design states that most of the tanks will remain 1/3 full during operations. Provide details on how the remaining heel will be removed during upset conditions, as well as, during D & D.
Response:
Action:

3. Commenting Organization: Ohio EPA Commentor: OFFO
Section #:General Comment Pg #: Line #: na Code: C
Original Comment #:
Comment: Several times throughout the document, several sumps and pumps will be used "to remove any leaks or spills." This gives Ohio EPA the impression that the facility is being designed for failure. Although it is prudent to develop contingency plans, DOE should place emphasis on keeping these leaks or spills from occurring.
Response:
Action:

4. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Pg #: Line #: Code: C
Original Comment #:
Comment: Several times throughout the document reference is made that the types of instruments to be used will be finalized based on the results of the cold loop tests. When are these results expected, and when will the instrumentation for this plan be finalized?
Response:
Action:

Specific Comments:

5. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 1.1 Pg #: 1 Line #: 24 Code: C
Original Comment #:
Comment: The text states that the ROD requires disposal at NTS. How and when will DOE change the ROD to allow disposal at a commercially permitted disposal facility.
Response:
Action:

6. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2 Pg #: 8 Line #: 6 - 8 Code: C
Original Comment #:
Comment: The text states that the stabilized product will shipped by rail to an appropriately licensed off-site disposal facility. The ROD currently states disposal at NTS. Also, there are currently NO, "appropriately licensed off-site disposal facility" other than NTS that can receive Silos 1 & 2 wastes. Contingency planning for disposal at NTS should be included in this design.
Response:
Action:

7. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.1 Pg #: 9 Line #: 3 - 7 Code: C
Original Comment #:
Comment: Will there be "clean-outs" for the slurry and auxiliary piping systems? Provide detail on how these will be incorporated into the design.
Response:
Action:

8. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.1.1.5 Pg #: 11 Line #: 16 - 17 Code: C
Original Comment #:
Comment: This section states that the transfer piping from the TTA to the Silos 1 and 2 remediation facility will be double-walled with sensors to detect leaks. Please provide piping drawings and specifications on what type of sensors will be used. Please also provide a contingency plan specifying the procedures to be followed in the event that a leak in the carrier pipe is detected, and how the piping will be fixed.
Response:
Action:

9. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.1.1.8 Pg #: Line #: Code: C
Original Comment #:
Comment: Are the flush pumps adequate to provide the necessary velocities to prevent the plugging as specified for process pumps?
Response:
Action:

10. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.1.3 Pg #: 14 Line #: 11-12 Code: C
Original Comment #:
Comment: Where will settled slurry from the clarifier be pumped to in the event of a power outage.
Response:
Action:

11. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.1.3.4 Pg #: 15 Line #: 40 Code: C
Original Comment #:
Comment: Are the cast iron pinch valves lined with the "elastomer sleeve" over all process exposed surfaces? Past projects have had significant problems with cast iron valves.
Response:
Action:

12. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.1.4.1.2 Pg #: 17 Line #: na Code: C
Original Comment #:
Comment: What industries use pneumatic conveyance for cement and fly ash at the volumes and life-cycle proposed for this remediation facility? Provide additional detail on the pneumatic conveyance system. This response should include details on dust control during hopper and bin loading.
Response:
Action:

13. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.1.4.1.3 Pg #: 18 Line #: na Code: C
Original Comment #:
Comment: How will humidity and environmental conditions be controlled in the cement and fly ash receiving bins and hoppers.
Response:

Action:

14. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.1.4.2.2 Pg #: 18 Line #: na Code: C
Original Comment #:
Comment: Revise the text to clarify how exhaust from the pneumatic conveying system will be treated. This section of the text is vague.
Response:
Action:

15. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.1.4.2.3 Pg #: 19 Line #: na Code: C
Original Comment #:
Comment: How will humidity and environmental conditions be controlled in the fly ash receiving bins and hoppers.
Response:
Action:

16. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.1.5.2 Pg #: 19 Line #: 33 Code: C
Original Comment #:
Comment: This plan only vaguely discusses flushing the product mixers. Will these mixers be flushed out after each transfer? Please provide a schedule for flushing the mixers and justification for the proposed schedule.
Response:
Action:

17. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.1.6 Pg #: 19 - 20 Line #: na Code: C
Original Comment #:
Comment: How will the settling of slurry spills be prevented in these overflow lines?
Response:
Action:

18. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.1.8 Pg #: 21 Line #: na Code: C
Original Comment #:
Comment: Provide a diagram indicating what equipment/rooms will not be vented to the RCS.
Response:
Action:

19. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.1.9 Pg #: 22 Line #: 8-9 Code: C
Original Comment #:
Comment: Please provide a list of everything that is dependent upon the treatability studies and AWR lessons learned, along with when each item will be completed. In what document will these final plans and equipment be included?
Response:
Action:

20. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.2.2.3 Pg #: 26 Line #: 16-18 Code: C
Original Comment #:
Comment: Please provide a detailed plan on how the decontamination of the containers will occur if product has dripped or splashed onto the container surface.
Response:
Action:

21. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.2.2.4 Pg #: 26 Line #: Code: C
Original Comment #:
Comment: How will the lid seal be tested after lid placement? Provide details on this test.
Response:
Action:

22. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.2.2.5 Pg #: 27 Line #: 12-15 Code: C
Original Comment #:
Comment: Samples from the fill chute should be removed mechanically outside the container fill area. This would be consistent with ALARA.
Response:
Action:

23. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.2.3 Pg #: 27 Line #: Code: C
Original Comment #:
Comment: Other transportation options need to be added to the design since there are currently no commercially permitted disposal facilities available.
Response:
Action:

24. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.3.1 Pg #: 28 Line #: na Code: C
Original Comment #:
Comment: The text states that the tank shield enclosures are sealed from personnel entry. What contingency plans are in place in case of a leak or malfunction in an area which is sealed?
Response:
Action:

25. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.4.1.3 Pg #: 33 Line #: na Code: C
Original Comment #:
Comment: The document states road improvements are to be determined. This statement doesn't provide enough detail. Please provide more information on what improvements are to be made and where they will occur.
Response:
Action:

26. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 3.3.1.3 Pg #: 42 Line #: na Code: C
Original Comment #:
Comment: Although Ohio EPA agrees in the concept of decreasing sampling frequency during treatment, DOE should increase sampling frequency when switching TTA tanks.
Response:
Action:

27. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 6.4.4 Pg #: 83 Line #: Code: C
Original Comment #:
Comment: Where will excavated soils be stockpiled prior to OSDF placement.
Response:
Action:

28. <u>Sampling and Analysis Plan:</u>
Commenting Organization: Ohio EPA Commentor: OFFO
Section #: TOC Pg #: iii Line #: na Code: E
Original Comment #:
Comment: Fix "Error! Bookmark not defined" message in TOC.
Response:
Action:

29. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 4.4 Pg #: 14-15 Line #: na Code: C
Original Comment #:
Comment: Provide list of analytes and methods for the stack monitoring portion of the SAP.
Response:
Action: