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SEP 30 2004

Mr. Gene Jablonowski, Remedial Project Manager  
United States Environmental Protection Agency  
Region V, SR-6J  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

DOE-0422-04

Mr. Tom Schneider, Project Manager  
Ohio Environmental Protection Agency  
401 East 5<sup>th</sup> Street  
Dayton, Ohio 45402-2911

Dear Mr. Jablonowski and Mr. Schneider:

**REVISED SILOS 1 AND 2 REMEDIAL ACTION WORK PLAN**

- References:
1. DOE Letter DOE-0311-04, W. Taylor to J. Saric and T. Schneider, "Draft Silos 1 and 2 Remedial Action Work Plan," dated June 29, 2004
  2. Letter, Gene Jablonowski to J. Reising, "Disapproval of the Remedial Action Work Plan for Silos 1 & 2 Remediation Facility," dated August 24, 2004
  3. Letter, T. Schneider to W. Taylor, "Disapproval - Draft Silos 1 and 2 Remedial Action Work Plan," dated August 24, 2004
  4. DOE Letter DOE-0365-04, W. J. Taylor to G. Jablonowski and T. Schneider, "Extension of Amended Consent Agreement Milestone for Initiation of Silos 1 & 2 Waste Retrieval Operations," dated August 31, 2004
  5. Letter, G. Jablonowski to J. Reising, "Extension of Amended Consent Agreement Milestone for Initiation of Silos 1 and 2 Waste Retrieval Operations," dated September 7, 2004

Enclosed for your review is a Response to Comments document addressing the comments accompanying disapprovals of the draft Remedial Action Work Plan (RAWP) for the Silos 1 and 2 Remediation Project (Reference 1) by the USEPA (Reference 2) and OEPA (Reference 3). Also enclosed is a revised RAWP incorporating the necessary revisions. In,

Mr. Gene Jablonowski  
Mr. Tom Schneider

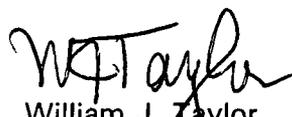
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response to a comment from the OEPA, documentation of the vendor inspection requirements for the Silos 1 and 2 waste disposal containers is enclosed for information.

In Reference 5, the USEPA requested technical justification for DOE's proposed milestone of October 1, 2005 for initiation of Silos 1 and 2 Remediation Facility operations (reference 4). According to the current schedule and project status the startup and readiness process to verify that the Silos 1 and 2 Remediation Facility is ready for operation is forecast for completion in December 2004. As you are aware, there is uncertainty regarding the ability to dispose silos materials at the Nevada Test Site (NTS) resulting from potential legal action from the state of Nevada. Because of the uncertain status of the NTS, it is anticipated that operation of the Silos 1 and 2 Remediation Facility would not be initiated until the availability of the NTS or an alternative disposition pathway had been confirmed. As was discussed at a September 8, 2004 meeting with DOE, Fluor Fernald, USEPA, and OEPA, alternatives to allow completion of the current Operable Unit 4 remedy are currently being evaluated in parallel with ongoing DOE efforts to resolve issues with the State of Nevada. In addition, DOE is working with USEPA and OEPA to prepare an Explanation of Significant Differences (ESD) to allow for temporary off-site storage of the silo material prior to final disposal. The October 1, 2005 milestone was proposed to ensure sufficient time to complete the evaluation of alternatives, preparation and review of an ESD, any necessary regulatory agency, stakeholder involvement, and other activities in order to confirm the availability of the most effective means of completing the Silos 1 and 2 remedy.

If you have any questions, please contact John Sattler at (513) 648-3145.

Sincerely,

  
William J. Taylor  
Director

FCP:Sattler

Enclosures: As Stated

Mr. Gene Jablonowski  
Mr. Tom Schneider

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DOE-0422-04

cc w/enclosures:

G. Brown, OH/Springdale  
J. Sattler, OH/Springdale  
J. Saric, USEPA-V, SR-6J  
T. Schneider, OEPA-Dayton (three copies of enclosure)  
M. Cullerton, Tetra Tech  
M. Shupe, HIS GeoTrans  
R. Vandegrift, ODH  
AR Coordinator, Fluor Fernald, Inc./MS78

cc w/o enclosures:

J. Reising, OH/Springdale  
K. Alkema, Fluor Fernald, Inc./MS01  
S. Beckman, Fluor Fernald, Inc./MS52-4  
D. Carr, Fluor Fernald, Inc./MS77  
M. Cherry, Fluor Fernald, Inc./MS77  
D. Edwards, Fluor Fernald, Inc./MS84  
B. Fellman, Fluor Fernald, Inc./MS20  
J. Hughes, Fluor Fernald, Inc./MS20  
M. Jewett, Fluor Fernald, Inc./MS52-5  
C. Murphy, Fluor Fernald, Inc./MSMS01  
D. Nixon, Fluor Fernald, Inc./MS01  
J. North, Fluor Fernald, Inc./MS77  
D. Thiel, Fluor Fernald, Inc./MS52-2  
ECDC, Fluor Fernald, Inc./MS52-7



It is unclear how, where, and when the containers will be inspected. It would be beneficial to have them inspected before entering the remediation facility as it will be more difficult to detect a defect after it enters the facility via the conveyor system. Provide to Ohio EPA a comprehensive QA/QC plan that includes testing and inspection of the waste containers. The plan should include frequency of testing and the standards the containers must meet.

Response: The Fabrication Specification for the Silos 1 and 2 disposal containers specifies detailed QA/QC requirements for inspection of the containers prior to being released for shipment to the FCP. These requirements include inspection of welds by both visual and magnetic particle or liquid penetrant testing, dimensional testing, leak testing, and inspection of the container lid and interior.

The final on-site inspection in the Empty Container Staging Room is required by Fernald's NTS Waste Compliance Officer. Its purpose is to verify the condition of the container, lid, gasket, etc., immediately prior to releasing the container into the remediation facility to be filled, to ensure that any damage occurring during transportation is identified. The removal of a defective container at this point, if necessary, is easily accomplished

Action: An excerpt from the container fabrication specification, outlining the pre-shipment QA/QC requirements, is enclosed for information.

3. Commenting Organization: Ohio EPA                      Commentor: OFFO  
Section #: General Comment Pg #: na    Line #: na Code: C

Comment: This document is disapproved due to the lack of two milestones required by the September 2001, *Revised Remedial Design Work Plan for Operable Unit 4 Silos 1 and 2 Project*. The Remedial Action Work Plan must be revised to include milestone dates for 1) Submittal of the Draft RA package; and 2) Implementation of Silos 1 and 2 Remedial Action.

Response: Draft RA package milestone: as discussed in Section 3.1 of the draft RA Work Plan, each of the component documents previously identified for inclusion in an RA Package is either duplicated in an RD/RA document already submitted or required to be submitted for U.S. EPA and OEPA review and approval, or is no longer applicable to implementation of the Silos 1 and 2 remedy.

Implementation of Silos 1 and 2 Remedial Action milestone: in DOE letter DOE-0365-04, dated August 31, 2004 DOE proposed a milestone of October 1, 2005 for initiation of Silos 1 and 2 remediation facility operations, and provided information to support that date. In a letter dated September 7, the USEPA requested DOE to provide the proposed milestone along with a technical justification in the revised RAWP that addresses the comments in the USEPA letter of August 24, 2004.

According to the current schedule and project status the startup and readiness process to verify that the Silos 1 and 2 Remediation Facility is ready for operation is forecast for completion in December 2004. As you are aware, there is uncertainty regarding the ability to dispose silos materials at the Nevada Test Site (NTS) resulting from potential legal action from the state of Nevada. Because of the uncertain status of the NTS, it is anticipated that operation of the Silos 1 and 2 Remediation Facility would not be initiated until the availability of the NTS or an alternative disposition pathway had been confirmed. As was discussed at a September 8, 2004 meeting with DOE, Fluor Fernald, USEPA, and OEPA, alternatives to allow completion of the current Operable Unit 4 remedy are currently being evaluated in parallel with ongoing DOE efforts to resolve issues with the State of Nevada. In addition, DOE is working with USEPA and OEPA to prepare an Explanation of Significant Differences (ESD) to allow for temporary off-site storage of the silo material prior to final disposal. The October 1, 2005 milestone was proposed to ensure sufficient time to complete the evaluation of alternatives, preparation and review of an ESD, any necessary regulatory agency, stakeholder involvement, and other activities in order to confirm the availability of the most effective means of completing the Silos 1 and 2 remedy.

Action: Revise section 4 of the RA Work Plan to address the milestone for the Draft RA package and to incorporated the page change transmitted with DOE's August 31, 2004 letter.

U. S. EPA COMMENTS

**General Comments**

- 1. Commenting Organization: U.S. EPA                      Commentor: Jablonowski  
    Section #:na    Pg #: na    Line #: na  
    Original Specific Comment #: 1

Comment: U. S. EPA recognizes that there are currently issues and uncertainties regarding the disposal of Silo 1 and 2 waste. Therefore, consideration should be given in the Silo 1 and 2 Remedial Action Work Plan for U. S. DOE submittal of a Sampling and Analysis Plan for review and approval by U.S. EPA and Ohio EPA in the event that it becomes necessary to document any programs used to demonstrate compliance with the waste acceptance criteria of the disposal facility(s). The RA Work Plan should, at a minimum, include the possibility for testing to ensure the treated Silos 1 and 2 waste meets Universal Treatment Standards (UTS).

Response: As the OEPA and U.S. EPA are aware, DOE is currently evaluating potential contingency alternatives for disposal of the Silos 1 and 2 material. No off-site disposal alternatives have yet been identified which would require attainment of the Toxicity characteristic (TC) limits, Universal Treatment Standards (UTS) limits, or any other RCRA requirements, as part of the Waste Acceptance Criteria.

If compliance with the UTS rules were to be required for the Silos 1 and 2 material, demonstration would be required that the treated waste would meet the lower UTS level for lead measured by the TCLP analysis. No other metals are present in the untreated Silos 1 and 2 materials at sufficient levels to require analysis as underlying hazardous constituents. It is anticipated that this demonstration would be accomplished primarily through demonstration of the treatment recipe and analysis of feed batch and process control data with a minimum of treated waste analyses. The Silos 1 and 2 facility does, however, have the capability to obtain any necessary samples of treated waste.

Action: In the event that sampling and analysis were to be required to meet disposal facility WAC, the specific approach (data to be collected, sampling frequency, required analyses, etc.) would be developed based upon the specific WAC of the selected disposal facility(ies). This program would be documented in a treated waste Sampling and Analysis Plan and to the U.S. EPA and OEPA after being approved by the disposal facility.

## Specific Comments

2. Commenting Organization: U.S. EPA                      Commentor: Jablonowski  
 Section #: 2.1    Pg #: 3    Line #: 1  
 Original Specific Comment #: 1

Comment: The text states that "filled waste containers will be staged, both indoors and outdoors, before being shipped offsite for disposal." The text should be revised to state that the time for staging containers will consist only of the time needed to load the containers on railcars or trucks for shipment to the offsite disposal facility. Storage of filled containers of Silo 1 and 2 waste containers will not be allowed.

Response: The intent of the shipping program will be to maintain ongoing shipments of treated Silos 1 and 2 material to that NTS at a rate matched with the production rate of the remediation facility and with the disposal schedule at the NTS (currently planned at four days per week). Therefore, if both the remediation facility and the shipping program are maintaining their target rates, individual containers will be staged onsite for only the time required to prepare the associated documentation and release the shipments.

In the event of a temporary interruption in the shipment program, onsite staging may be required in order to maintain operation of the remediation facility until shipments can resume. The capacity of the onsite staging areas is estimated to be sufficient to absorb one to two weeks of containers, depending upon the remediation facility production rate, until shipments are resumed. Prolonged onsite staging or storage of filled containers of treated Silos 1 and 2 material would require reevaluation of procedures and controls and revision of the Transportation and Disposal Plan.

Action: The above text has been added to Section 2.1 of the Remedial Action Work Plan

3. Commenting Organization: U.S. EPA                      Commentor: Jablonowski  
 Section #: 3.1    Pg #: 21    Line #: 4  
 Original Specific Comment #: 2

Comment: A Gross decontamination Plan should be a Silos project component separate from the D&D Implementation Plan for the Silos 1 and 2 complex. The RA Work Plan should include a milestone date for U.S. DOE submittal of the Gross decontamination Plan for review and approval by U.S. EPA and Ohio EPA.

Response: The procedures and methods for gross decontamination of the Silos 1 and 2 remediation facilities and associated structures will be defined in the D&D Implementation Plan for the Silos 1 and 2 Complex. An existing enforceable milestone, defined by the OU3 Integrated RD/RA Work Plan, requires this document to be submitted to the U.S. EPA for review by December 16, 2004.

Action: The existing milestone for submittal of the D&D Implementation Plan for the Silos 1 and 2 Complex, including the procedures and methods for gross decontamination of the Silos 1 and 2 remediation facilities and associated structures, has been added to the referenced table.

4. Commenting Organization: U.S. EPA                      Commentor: Jablonowski  
Section #: 3.2    Pg #: 21    Line #: 7  
Original Specific Comment #: 3

Comment: The text states that "filled waste containers will be staged, both indoors and outdoors, before being shipped offsite for disposal." The text should be revised to state that the time for staging containers will consist only of the time needed to load the containers on railcars or trucks for shipment to the offsite disposal facility. Storage of filled containers of Silo 1 and 2 waste containers will not be allowed.

Response: The intent of the shipping program will be to maintain ongoing shipments of treated Silos 1 and 2 material to that NTS at a rate matched with the production rate of the remediation facility and with the disposal schedule at the NTS (currently planned at four days per week). Therefore, if both the remediation facility and the shipping program are maintaining their target rates, individual containers will be staged onsite for only the time required to prepare the associated documentation and release the shipments.

In the event of a temporary interruption in the shipment program, onsite staging may be required in order to maintain operation of the remediation facility until shipments can resume. The capacity of the onsite staging areas is estimated to be sufficient to absorb one to two weeks of containers, depending upon the remediation facility production rate, until shipments are resumed. Prolonged onsite staging or storage of filled containers of treated Silos 1 and 2 material would require reevaluation of procedures and controls and revision of the Transportation and Disposal Plan.

Action: The above text has been added to Section 2.1 of the Remedial Action Work Plan

5. Commenting Organization: U.S. EPA                      Commentor: Jablonowski  
Section #: 4.0    Pg #: 21    Line #: 14  
Original Specific Comment #: 4

Comment: The table on this page states that the milestone for initiation of Silos 1 and 2 Remediation Facility operations is "TBD pending resolution of issues with the State of Nevada." The text in the table should be revised to at least specify the milestone date when Silos 1 and 2 Remediation Facility operations are expected to begin.

Response: In DOE letter DOE-0365-04, dated August 31, 2004 DOE proposed a milestone of October 1, 2005 for initiation of Silos 1 and 2 Remediation Facility operations, and provided a change page to incorporate the proposed milestone into the RA Work Plan.

Action: The page change transmitted with DOE's August 31, 2004 letter has been incorporated into the enclosed revised RA Work Plan for the Silos 1 and 2 Remediation Facility.