



Department of Energy  
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Fernald Environmental Management Project  
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AUG 15 2002

Mr. Gene Jablonowski, Remedial Project Manager  
U.S. Environmental Protection Agency  
Region V, SRF-5J  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

DOE-0645-02

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:

**RESPONSE TO THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
DISAPPROVAL OF REMEDIAL DESIGN PACKAGE FOR SILO 3**

- References:
1. Letter, G. Jablonowski to J. Reising, "Disapproval of Remedial Design Package for Silo 3," dated July 16, 2002
  2. Letter, J. Reising to G. Jablonowski and T. Schneider, "Revised Draft of Silo 3 Remedial Design Package," dated May 13, 2002
  3. Letter, C. Gertz to S. McCracken, "Disposal of Fernald Silos Waste Materials at the Nevada Test Site," dated June 20, 2002

In Reference 1, the United States Environmental Protection Agency (USEPA) notified the Department of Energy, Fernald Environmental Management Project (DOE-FEMP) of its disapproval of the Remedial Design (RD) Package for Silo 3 (Reference 2).

The USEPA disapproval letter requests that the DOE-FEMP submit a revised Silo 3 milestone strategy. This strategy is to include 1) a summary of the revised remedy for Silo 3 to be recommended in revised Proposed Plan (PP) currently being prepared, and 2) proposed milestones for submittal of the revised PP, the Record of Decision (ROD) Amendment, and the draft Final RD Package. This letter provides DOE's response to the USEPA disapproval letter.

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The design reflected in the draft RD Package is based upon the following technical approach for the remediation of Silo 3, consistent with the Silos Project Baseline:

- Initial pneumatic (vacuum) retrieval of Silo 3 material via man-ways on the silo dome;
- Cutting an opening in the silo side-wall for at-grade access by mechanical equipment;
- Continued vacuum retrieval and/or mechanical retrieval of Silo 3 material using remote controlled mechanical excavation equipment;
- Packaging of Silo 3 material for transportation to an off-site disposal facility; and
- Transportation by rail of packaged Silo 3 material to a Permitted Commercial Disposal Facility (PCDF). Transportation to the Nevada Test Site (NTS) via inter-modal transportation would also be feasible.

A draft PP recommending revision of the remedy for Silo 3 is currently undergoing review by Fluor Fernald and DOE-FEMP. The revised remedy proposed in the draft PP consists of:

- Treatment to stabilize characteristic metals, only if required to meet the Waste Acceptance Criteria (WAC) of the intended disposal facility; and
- Off-site disposal at either the NTS or an appropriately-permitted commercial disposal facility, in accordance with WAC, which have been reviewed and approved as protective by the regulatory agency with jurisdiction over the disposal facility.
- The proposed revised remedy will specify that shipment of untreated Silo 3 material is allowable only if pretreatment and/or packaging, in accordance with Department of Transportation (DOT) requirements, results in a risk to the public during routine transportation less than  $1 \times 10^{-6}$ , as specified by the current remedy for off-site treatment.

As discussed in detail in the Introduction section of the draft RD Package, a key aspect of the design is the flexibility to ensure the ability to implement the design independent of the outcome of the ongoing remedy modification and disposal facility licensing processes.

The technical approach used as a basis for the RD Package (Disposal of Untreated Silo 3 Material at Envirocare) is contingent upon 1) approval of the PP/ROD Amendment; 2) completion of current efforts to formalize Nuclear Regulatory Commission (NRC) concurrence with disposal of the material in an NRC-licensed 11(e)(2) cell; and 3) modification of Envirocare's Engineering Plan for the 11(e)(2) cell to allow bulk placement of the soft-sided containers in the 11(e)(2) cell.

In accordance with the most recent revision to the WAC of the NTS and the Department of Energy, Nevada Operations Office (DOE-NV), the design reflected in the RD Package could also be implemented with disposal of untreated Silo 3 material at the NTS. A letter

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documenting the DOE-NV position is provided as an enclosure to this letter. Again, this is contingent upon approval of the PP/ROD Amendment.

Finally, regardless of the outcome of the Silo 3 remedy modification process, the retrieval, packaging, and transportation design documented in the RD Package could be implemented in accordance with the current Silo 3 remedy, utilizing off-site treatment at a PCDF as allowed by the Silo 3 Explanation of Significant Differences (ESD).

The USEPA provided their general and specific comments from review of the draft RD Package with Reference 1. It is our understanding that the OEPA also plans on completing their technical review and providing the resulting comments to DOE. In order to expedite final approval of the RD Package after completion of the ROD Amendment process, it is recommended that:

1. A revised draft RD package incorporating comments from technical review by the OEPA and USEPA be submitted informally following the receipt of OEPA comments.
2. Responses to OEPA and USEPA comments be discussed and resolved in parallel with review and approval of the PP/ROD amendment.
3. The review cycle specified by Paragraph XII(G) of the Amended Consent Agreement (ACA) for submittal of a draft Final RD Package to the USEPA for approval be extended to allow formal submittal of the draft Final RD Package immediately following approval of the ROD Amendment, as proposed in the milestones identified below. The improvements in cost-effectiveness, short term effectiveness, and implementability potentially resulting from the revised remedy provide good cause, as defined by the ACA, for extension of the date for formal submittal of the draft Final RD Package for Silo 3.

In accordance with Reference 1, the following milestones are proposed for submittal to the USEPA and Ohio Environmental Protection Agency (OEPA):

Submittal of draft Revised Proposed Plan for Silo 3	August 30, 2002
Submittal of draft ROD Amendment for Silo 3	60 days after USEPA approval of the Revised Proposed Plan for Silo 3
Submittal of draft Final RD Package for Silo 3	30 days after USEPA approval of the ROD Amendment for Silo 3

The DOE believes that dates proposed above are appropriate given the recent position from the NTS (Reference 3) that Silo 3 material can be accepted for disposal at the NTS, without treatment, as 11(e)(2) by-product material.

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If you have any questions, please contact Nina Akgündüz at (513) 648-3110.

Sincerely,



Johnny W. Reising  
Fernald Remedial Action  
Project Manager

FEMP:Hall

Enclosure: As Stated

cc w/enclosure:

S. Robison, EM-31/CLOV  
N. Akgündüz, OH/FEMP  
G. Brown, OH/FEMP  
J. Hall, OH/FEMP  
J. Saric, USEPA-V, SRF-5J  
T. Schneider, OEPA-Dayton (three copies of enclosure)  
M. C. Wojciechowski, Tetra Tech  
M. Shupe, HSI GeoTrans  
R. Vandegrift, ODH  
AR Coordinator, Fluor Fernald, Inc./MS78

cc w/o enclosure:

R. Greenberg, EM-31/CLOV  
A. Tanner, OH/FEMP  
S. Beckman, Fluor Fernald, Inc./MS52-4  
D. Carr, Fluor Fernald, Inc./MS2  
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JUN 20 2002

Stephen H. McCracken, Director, FEMP, Cincinnati, OH

DISPOSAL OF FERNALD SILOS WASTE MATERIALS AT THE NEVADA TEST SITE  
(NTS)

This is to inform you that Fernald Silos materials, including the Silo 3 untreated material (all of which is statutorily exempt from the Resource Conservation and Recovery Act), may be accepted for disposal at the NTS as 11(e)(2) byproduct material following the successful completion of the NTS waste approval process.

If you have any questions regarding this letter, please feel free to contact Jhon T Carilli, of my staff, at (702 ) 295-0672.

Carl P. Gertz  
Assistant Manager  
for Environmental Management

WMD:JTC-240

cc:

S. A. Robison, DOE/HQ (EM-31)  
Cloverleaf

J. M. Sattler, DOE/Fernald,  
Cincinnati, OH

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