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MAR 6 2000

Mr. Gene Jablonowski, Remedial Project Manager
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DOE-0465-00

Mr. Tom Schneider, Project Manager
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Dear Mr. Jablonowski and Mr. Schneider:

OPERABLE UNIT 4 DRAFT REVISED FEASIBILITY STUDY/PROPOSED PLAN FOR SILOS 1 AND 2 (ADDITIONAL CHANGE PAGES)

- References:
- 1) Letter, T. Schneider to J. Reising, "Comments on the Draft Revised Silos 1 and 2 Feasibility Study/Proposed Plan," dated January 31, 1999.
 - 2) Letter, G. Jablonowski to J. Reising, "U.S. Environmental Protection Agency Review of Revised Feasibility Study for Silos 1 and 2 Response to Comments," "Revised Feasibility Study Report for Silos 1 and 2," and "Revised Proposed Plan for Remedial Actions at Silos 1 and 2," dated February 22, 2000.

The purpose of this letter is to transmit additional replacement pages for the draft Revised Feasibility Study/Proposed Plan (FS/PP) incorporating resolutions to comments submitted by the Department of Energy, Ohio Field Office (DOE-OH) on March 1, 2000. Specifically, the changes were made in the Appendix D (National Environmental Policy Act (NEPA) Supplemental Analysis). To assist with your review of the revised FS/PP documentation, DOE has enclosed a log of the additional changes made to the draft Revised FS/PP for Silos 1 and 2.

MAR 6 2000

Mr. Gene Jablonowski
Mr. Tom Schneider

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

Sincerely,



Johnny W. Reising
Fernald Remedial Action
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FEMP:Akgündüz

Enclosure:

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Agency / Significant Changed Pages Log

	Section/ Appendix	Page No.	Line No.	Original Data	Revised Data/Change	Originator	Organization	Date Change Made
FS117	Appendix D	D-1-3 & d-i (Table of Contents)	14-18	Section "D.1.2 Relevant Regulations" deleted.	Text revised to discuss NEPA compliance.	DOE OHIO	DOE OHIO	3/2/00
FS118	Appendix D	D-3-1	2-9	"As required under the DOE NEPA regulations, . . ."	Paragraph revised: "DOE has conducted this Supplement Analysis to determine whether a SEIS needs to be conducted . "	DOE OHIO	DOE OHIO	3/2/00
FS119	Appendix D	D-1-1	5	"...National Environmental Policy Act (NEPA) evaluation required for the action."	"required" to "needed"	Ed Skintik	DOE Fernald	3/2/00

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CHANGE PAGES TO
THE REVISED FS
DECEMBER 1999, DRAFT REV. A

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ACRONYMS & ABBREVIATIONS

CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
COC	constituents of concern
DOE	U.S. Department of Energy
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
FS/PP-EIS	Feasibility Study/Proposed Plan-Environmental Impact Statement
NEPA	National Environmental Policy Act
NTS	Nevada Test Site
OU	operable unit
ROD	Record of Decision
SEIS	Supplemental Environmental Impact Statement

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1 **D.1.0 NEPA SUPPLEMENT ANALYSIS**

2 **D.1.1 Requirements for Conducting a Supplement Analysis**

3 This appendix provides an evaluation of the alternatives being considered for the remediation
4 of the Silos 1 and 2 material and a recommendation as to the appropriate level of National
5 Environmental Policy Act (NEPA) evaluation needed for the action. The remediation of the
6 Fernald silos was evaluated in the Operable Unit 4 (OU4) Feasibility Study/Proposed
7 Plan-Environmental Impact Statement (FS/PP-EIS) (FEMP 1994).

8 The FS/PP-EIS evaluated the following alternatives for Silos 1 and 2:

- 9 • No action;
- 10 • Removal, vitrification, on-property disposal of Silos 1 and 2 material;
- 11 • Removal, cement stabilization, on-property disposal of Silos 1 and 2 material;
- 12 • Removal, vitrification, and off-site disposal at the Nevada Test Site (NTS) for
13 Silos 1 and 2 material; and
- 14 • Removal, cement stabilization, and off-site disposal at the NTS for Silos 1 and 2
15 material.

16 The FS/PP-EIS was approved by the U.S. Department of Energy (DOE) and the U.S.
17 Environmental Protection Agency (EPA) through the issuance of a Record of Decision (ROD),
18 which identified vitrification followed by off-site shipment and disposal at the NTS as the
19 selected remedy, on December 7, 1994 (EPA 1994).

20 After issuance of the ROD, it was determined that a modest cost savings could be achieved
21 by shipping material for disposal via truck as opposed to the combination of rail/truck
22 evaluated in the OU4 FS/PP-EIS. Therefore, a Supplement Analysis (FEMP 1995) to the
23 original EIS was prepared and approved on January 9, 1996 by DOE concluding that
24 preparation of a full Supplemental Environmental Impact Statement (SEIS) was not required.

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2 The post-ROD treatability studies determined that the implementability of the vitrification
3 technology is more difficult than originally anticipated. Although the studies indicated that
4 vitrification of the Silo 3 material is technically feasible, they also demonstrated that
5 continuous processing of the Silo 3 material by vitrification is hindered by the high
6 concentrations of sulfates in the material. In addition, data from the pilot-scale studies and
7 other post-ROD information indicate that the cost estimate for implementation of vitrification
8 for the Silos 1 and 2 material has substantially increased compared to the cost estimate
9 presented in the OU4 FS/PP-EIS.

10 As a result of the above findings, the EPA and DOE agreed to (1) select a treatment
11 technology other than vitrification for the remediation of the Silo 3 material, and (2) to
12 re-evaluate vitrification against other remediation technologies, with an emphasis on
13 implementation costs, for the Silos 1 and 2 material. In addition, during the reevaluation of
14 the path forward for remediation of OU4, it was identified that accelerating the waste
15 retrieval portion of the Silos 1 and 2 remedial alternative could potentially result in significant
16 programmatic and environmental benefit.

17 Accordingly, a Supplement Analysis evaluating the Silo 3 remediation alternatives was
18 prepared and approved by DOE on August 20, 1996 (FEMP 1996), and a Supplement
19 Analysis for the Accelerated Waste Retrieval of the Silos 1 and 2 material was approved
20 March 3, 1998 (FEMP 1998).

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1 This fourth Supplement Analysis to the OU4 FS/PP-EIS also serves as a revised FS for
2 consideration of alternatives for the remediation of the Silos 1 and 2 material. The alternatives
3 evaluated in the revised FS are similar to those evaluated in the original FS/PP-EIS; they involve
4 treatment of the Silos 1 and 2 material by either vitrification or chemical stabilization followed
5 by off-site shipment and disposal at the NTS. The following alternatives are evaluated in the
6 revised FS:

- 7 • Removal, On-site Vitrification — Joule-heated, Off-site Disposal at the NTS;
- 8 • Removal, On-site Vitrification — Other, Off-site Disposal at the NTS;
- 9 • Removal, On-site Chemical Stabilization — Cement-based, Off-site Disposal at the
10 NTS; and
- 11 • Removal, On-site Chemical Stabilization — Other, Off-site Disposal at the NTS.

12 D.1.2 NEPA Compliance

13 This Supplement Analysis was prepared to address NEPA considerations for this action and
14 is being provided here for informational purposes only. In June, 1994, the Department of
15 Energy issued a NEPA policy that states that the Department of Energy will rely on the
16 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process
17 for the review of actions to be taken under CERCLA and will address NEPA values and public
18 involvement under the CERCLA process.

19 D.1.3 Evaluating Proposed Changes

20 Both the CEQ and DOE regulations require an agency to prepare a SEIS when the agency has
21 made a substantial change in a proposed action, or if there are new significant circumstances
22 in the proposed EIS action that are relevant to environmental concerns. The agency may also
23 prepare a SEIS if it determines that the purposes of NEPA would be furthered by the
24 supplement.

1 In addition, the DOE NEPA regulations require the preparation of a "Supplement Analysis"
2 where the decision to prepare a SEIS is unclear (10 CFR Part 1021.314). The Supplement
3 Analysis should discuss changed or new circumstances that are pertinent in determining
4 whether or not to prepare a SEIS. The discussion should therefore contain sufficient
5 information for DOE to determine that new NEPA documentation is not required, or that a SEIS
6 or new EIS is required.

7 D.1.4 Applying the "Rule of Reason"

8 It is inevitable that new information is learned after the finalization of an EIS; and, NEPA case
9 law confirms that an agency does not need to supplement an EIS every time new information
10 comes to light. The agency should, however, take a hard look at the environmental impacts
11 of its planned action. It should apply a "rule of reason" in deciding whether or not to prepare
12 a SEIS.

13 In applying this rule of reason, the agency should evaluate factors related to the new
14 information or circumstances for the action. These factors might include the environmental
15 significance and probable accuracy of the new information or circumstances, the care that the
16 agency used to evaluate the information and its impact, and the degree to which the
17 information supports the agency's decision of whether to prepare a SEIS.

18 D.1.5 Approval of a Supplement Analysis and SEIS by DOE

19 If a Supplement Analysis is developed for determination of whether to prepare a SEIS, this
20 information should be made available to the public. If the Supplement Analysis supports the
21 decision to supplement the original EIS, DOE must meet the same requirements for filing an
22 EIS (e.g., preparing a ROD). One exception here is that the public scoping requirements are
23 optional if the scope of the proposed action has not changed from the original EIS.

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D.3.0 CONCLUSION

2 DOE has conducted this Supplement Analysis to determine whether a SEIS needs to be
3 conducted prior to or in conjunction with the revision of the FS, which will amend the decision
4 on how to remediate the Silos 1 and 2 material. Based upon the results of this analysis, DOE
5 has determined that there is no new information regarding the proposed alternatives for
6 remediation of the Silos 1 and 2 material that would constitute a substantial change to the
7 project scope or would be considered 'significant, new information' related to the
8 environmental impacts from the original EIS alternatives. Therefore, a SEIS is not required in
9 order to amend the decision on remediation of the Silos 1 and 2 material.

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