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**OPERABLE UNIT #3 INITIAL SCREENING OF
ALTERNATIVES REPORT DISAPPROVAL DISPUTE -
SUBMITTAL OF REPORT OUTLINE**

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LETTER**



Department of Energy

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MAR 22 1991
DOE-978-91

Ms. Catherine A. McCord
Remedial Project Director
U. S. Environmental Protection Agency
Region V - 5HR-12
230 South Dearborn Street
Chicago, IL 60604

Dear Ms. McCord:

**OPERABLE UNIT #3 INITIAL SCREENING OF ALTERNATIVES REPORT DISAPPROVAL
DISPUTE - SUBMITTAL OF REPORT OUTLINE**

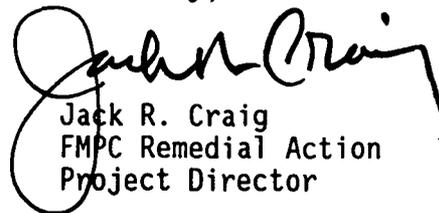
Reference: Letter, V. V. Adamkus to J. La Grone, "OU #3, Fernald, Ohio, 5RA-14," dated March 4, 1991

The enclosed outline is submitted for your review and approval. It is to be used for the preparation of a revised Operable Unit 3 Initial Screening Of Alternatives Report. It has been compiled consistent with the agreement defined in the referenced letter and OSWER Directive 9355.3-01, "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA." This outline addresses all buildings, waste, products, tanks, storage areas, etc. located in the production area and other suspect areas.

Please note that the outline was prepared using the November, 1990 Initial Screening of Alternatives Report as a starting point and that changes to that document are clearly indicated in the outline. Also note that this outline may require revision based on the results of current work on Operable Unit #3 RI Work Plan scoping.

If you have any questions, please contact Andy Avel at FTS 774-6161 or myself at FTS 774-6159.

Sincerely,



Jack R. Craig
FMPC Remedial Action
Project Director

DP-84:Avel

Enclosure: As stated

cc w/encl.:

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**OPERABLE UNIT 3
OUTLINE FOR REVISION TO
INITIAL SCREENING OF ALTERNATIVES REPORT**

Executive Summary

Modify as necessary in accordance with the revisions which follow.

1.0 Introduction

- a. Update Site Background information
- b. Add summary of current/planned removal actions
- c. Update description/definition of OU-3

2.0 Introduction to Screening of Alternatives

- a. Update Point of Compliance and preliminary (or final, if available) RAOs to conform to EPA/DOE agreements
- b. Add current remediation goals for contaminants of concern
- c. General Response Actions expanded to the following:
 - 1) No Action
 - 2) Containment/Control
 - 3) Treatment/Decontamination
 - 4) Removal
 - 5) Collection
 - 6) Demolition
 - 7) Disposal
 - 8) Discharge
 - 9) Disposition

3.0 Initial Screening of Technologies and Detailed Evaluation of Process Options

- a. Modify initial identification of technology types and process options to include:
 - 1) Capping
 - 2) Subsurface Barrier
 - 3) Facility Control Barrier
 - 4) Storm Water Management
 - 5) Perched Groundwater Extraction
 - 6) Perched Groundwater Treatment
 - 7) Physical/Chemical Treatment
 - 8) Packaging
 - 9) Thermal Treatment
 - 10) On-Site Waste Disposal
 - 11) Off-Site Transportation and Off-Site Waste Disposal
 - 12) Discharge
 - 13) Extraction of Source
 - 14) Facility Removal
 - 15) Solids Processing
 - 16) Metals Decontamination
 - 17) Stabilization/Vitrification
 - 18) In Situ Treatment

- b. Update the initial screening of technologies with the most current information on process options
- c. Add section for detailed evaluation of process options
 - 1) Only applies for process options that survive the initial screening of technologies
 - 2) Evaluation will focus on effectiveness, implementability, and cost as described in CERCLA guidance
 - 3) Process options will be deleted, retained for alternative development, or retained for further evaluation (if necessary, to further examine an innovative process option, or a special application of a process option)

4.0 Development of Alternatives

- a. Total rewrite from Nov 90 ISA
- b. Assemble/describe 23 alternatives already in work for "existing scope" of OU-3
 - 1) No Action
 - 2) Multilayer Cap
 - 3) Multilayer Cap, In Situ Vitrification
 - 4) In Situ Vitrification
 - 5) Mechanical Removal, On-Site Disposal
 - 6) Mechanical Removal, Off-Site Removal
 - 7) Mechanical Removal, Soil Washing, On-Site Disposal
 - 8) Mechanical Removal, Plasma Arc Incineration, On-Site Disposal
 - 9) Mechanical Removal, Soil Washing, Plasma Arc Incineration, On-Site Disposal
 - 10) Mechanical Removal, Soil Washing, Off-Site Disposal
 - 11) Mechanical Removal, Plasma Arc Incineration, Off-Site Disposal
 - 12) Mechanical Removal, Soil Washing, Plasma Arc Incineration, Off-Site Disposal
 - 13) Slurry Wall
 - 14) Slurry Wall, In Situ Vitrification
 - 15) Slurry Wall, Perched Groundwater Extraction, Perched Groundwater Treatment, Discharge
 - 16) Perched Groundwater Extraction, Perched Groundwater Treatment, Discharge
 - 17) Perched Groundwater Extraction, Selective Perched Groundwater Treatment, Discharge
 - 18) Demolition or Mechanical Removal, On-Site Disposal
 - 19) Demolition or Mechanical Removal, Off-Site Disposal
 - 20) Demolition or Mechanical Removal, Pelletized CO₂ Blasting, On-Site Disposal
 - 21) Demolition or Mechanical Removal, Pelletized CO₂ Blasting, Residue Treatment, On-Site Disposal
 - 22) Demolition or Mechanical Removal, Pelletized CO₂ Blasting, Off-Site Disposal
 - 23) Demolition or Mechanical Removal, Pelletized CO₂ Blasting, Residue Treatment, Off-Site Disposal
- c. Add/Modify above alternatives based on new technology developments and additional characterization information.
- d. Add new set of alternatives to address bulk waste, stored product, decontamination of facilities in place, and underground pipes/utilities remaining in service
- e. Paragraph c and d above may require adding technology types and/or process options to Chapter 3.0
- f. All alternatives will be assembled from process options

- 5.0 Alternative Screening Methodology
 - a. Add minor changes resulting from U.S. EPA and OEPA comments (e.g. acceptability/maintainability of off-site disposal facilities)

- 6.0 Screening of Alternatives
 - a. Add new areas to SUs, as necessary
 - b. Add new SU(s) to address tanks, bulk waste, stored product and/or in-service underground pipes/lines
 - c. Redefine Sus, for example:
 - 1) SU-U Subsurface Equipment/Utilities/Facilities
 - 2) SU-V Stored Product
 - 3) SU-W Stored Bulk Waste
 - 4) SU-X Soils
 - 5) SU-Y Facilities/Aboveground Contaminants
 - 6) SU-Z Perched Groundwater
 - d. Add details on cost estimates
 - e. Update areas of contamination to reflect RI information

- 7.0 General Summary
 - a. Delete chapter

References

Modify in accordance with preceding changes

Appendices

Add and/or modify as necessary

The November 1990 ISA is used as a starting point for this outline. The information above identifies new material to be added, changes in chapter format, and/or complete rewrites as necessary.