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**RESOURCE CONSERVATION AND RECOVERY ACT, COMPREHENSIVE
ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT
INTEGRATION STRATEGY IMPLEMENTATION**

05/03/94

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LETTER



Department of Energy
Fernald Environmental Management Project
P.O. Box 398705
Cincinnati, Ohio 45239-8705

MAY 03 1994

DOE-1571-94

Thomas J. Winston, District Chief
Southwest District Office
Ohio Environmental Protection Agency
40 South Main Street
Dayton, Ohio 45402-2086

Dear Mr. Winston:

**RESOURCE CONSERVATION AND RECOVERY ACT, COMPREHENSIVE ENVIRONMENTAL RESPONSE
COMPENSATION AND LIABILITY ACT INTEGRATION STRATEGY IMPLEMENTATION**

The Fernald Environmental Management Project (FEMP) is seeking to integrate the Hazardous Waste Management Unit (HWMU) closure activities and Closure Plans Information and Data (CPID) with the site Comprehensive Environmental Response Compensation and Liability Act (CERCLA) remediation efforts and documents. Integration will result in a more efficient and less costly site cleanup and yet still be protective of human health and the environment. It is estimated that the integration of the closure plans can save over \$1,000,000 in Fiscal Year 1994.

An integration strategy which has been discussed at several meetings with the Ohio Environmental Protection Agency (OEPA) focuses on dividing the inactive HWMU's into two groups. The first group consists of those HWMU's that are expected to be clean closed according to OEPA Resource Conservation and Recovery Act (RCRA) regulations and guidance. A CPID will be submitted for these units. The second group are those HWMU's which final closure will be attained through the implementation of response actions under the CERCLA process. Enclosure A lists the units to be closed under the integration process.

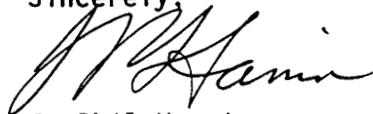
Closure related information for this latter group will be provided to the OEPA through submittal of documents prepared under the CERCLA process for the purpose for demonstrating compliance with OEPA closure plan submittal requirements. Enclosure B identifies those documents developed under the CERCLA process that will address the substantive requirements of a CPID. Enclosure C is an example of a cross reference index for identifying where closure information can be found in CERCLA documents.

During a meeting on February 1, 1994, OEPA indicated that an integration strategy could be implemented through a Director's Findings and Orders (DF&O). The FEMP wishes to further discuss this possibility and is requesting your support to begin work with OEPA to craft the language of the DF&O. We believe that a mutually agreeable strategy can be developed and implemented; you will

recall that the DF&O for the implementation of an integrated RCRA/CERCLA groundwater monitoring program was mutually and successfully developed by Department of Energy (DOE), Fernald Environmental Management Corporation (FERMCO), and OEPA.

If you have any questions or comments regarding this matter, please call John Sattler of my staff at 648-3145.

Sincerely,



J. Phil Hamric
Manager

FN: Sattler

cc:

G. E. Mitchell, OEPA/Dayton
P. D. Pardi, OEPA/Dayton
J. A. Saric, USEPA/Region V
K. A. Chaney, EM-424/TREV
W. J. Quaider, DOE-FN
J. W. Reising, DOE-FN
J. M. Sattler, DOE-FN
K. L. Alkema, FERMCO/65-2
D. J. Brettschneider, FERMCO/52-5
J. E. King, FERMCO/52-3
J. Theising, FERMCO/2

Enclosure A

Inactive Units Proposed To Be Closed Under CERCLA/RCRA Integrated Process

<u>Unit No.</u>	<u>Description</u>	<u>Reason for Delay</u>
1	Fire Training Facility	Soil contamination
10	NAR System Components	Large system and possible soil contamination
11	Tank Farm Sump	Soil Contamination
12	Wheelabrator *	Equipment better addressed under remediation
14	Box Furnace *	Possible soil contamination
15	Oxidation Furnace #1 *	Large Structure which would be better addressed under remediation
16	Primary Calciner *	Large structure which would be better addressed under remediation
17	Plant 8 East Drum Storage Pad	Soil Contamination
18	Plant 8 West Drum Storage Pad	Soil Contamination
22	Pilot Plant Sump	Soil contamination
25	Plant 1 Storage Building	Address under remediation
27	Waste Pit 4	Large volume of waste which would be better addressed under remediation
28	Trane Incinerator	Possible soil contamination
40	Biosurge Lagoon *	Large volume of waste better addressed under remediation
41	Sludge Drying Beds	Soil Contamination
42	Waste Pit 5	Large volume of waste which would be better addressed under remediation
46-50	UNH Tanks	Large system and possible soil contamination
51	Experimental Treatment Facility (ETF) *	Soil Contamination

* Undergoing HWMU re-evaluation. Will remain on list until evaluation is completed.

Enclosure B

RESPONSES FOR RCRA/CERCLA INTEGRATION OF
OEPA SUBSTANTIVE CLOSURE REQUIREMENTS

(Revised January 31, 1994)

1. Description/Detailed Drawing of Waste Management Unit(s) to be Closed -
(Closure Guidance Items 3.2 and 3.4)

CRU1 Remedial Investigation (RI) Report (Pits 4 and 5 only)

CRU3 Interim Remedial Design (RD) will address equipment. (structures, vessels, etc.)

CRU5 RI Report (media)

CRU5 RD will provide drawings on underground piping associated with HWMUs.

2. List of Hazardous Waste(s) Managed in Units(s) - (Closure Guidance Item 3.5)

CRU1 RI Report

CRU3 RI Report

CRU5 RI Report

3. Removal of Waste - (Closure Guidance Item 3.6)

CRU1 Feasibility Study (FS), RD

CRU3 FS, RD

CRU5 RD

4. Schedule for Closure - (Closure Guidance Item 3.7)

CRU1 RD/RA Work Plan

CRU3 Interim and Final Remedial Design/Remedial Action (RD/RA) Work Plans for structures and equipment, and

CRU5 RD/RA Work Plan for soils and groundwater.

Enclosure B

5. Health and Safety Issues - (Closure Guidance Item 3.9)

CRU1 RD/RA Work Plan

CRU3 Interim (& Final) RD/RA Work Plan for structures and equipment, and

CRU5 RD/RA Work Plan for soils and groundwater.

6. Decontamination Efforts - (Closure Guidance Item 3.10)

CRU1 RD for waste pit area

CRU3 RD for structures and equipment, and

CRU5 RD for soils and groundwater.

7. Remediation Standards for Soils and Groundwater - (Closure Guidance Items 3.11, 3.11.1, 3.11.2, and 3.12)

CRU5 Proposed Standards will be included in the Feasibility Study and the Proposed Plan (PP). CRU5 Record of Decision (ROD) will define final Remediation Standards.

8. Sampling Plan and Analytical Procedures - (Closure Guidance Item 3.13) - Includes sampling to define the extent of contamination and sampling to verify unit is clean.

CRU1 RI to describe nature and extent.

CRU5 RI to describe nature and extent. (The RD will discuss additional details on nature and extent).

CRU5 FS to offer options for treatability efforts.

CRU5 RD/RA verification of cleanup through sampling and analyses.

9. Description of Removal Efforts and Treatment Processes - (Closure Guidance Item 3.14)

CRU1 FS, RD

CRU3 FS, RD for structures and equipment

CRU5 FS will give preliminary discussions on treatability options.

CRU5 RD for soils and groundwater and associated equipment.

Enclosure B

10. Landfill Closure Requirements (if applicable) - (Closure Guidance Item 3.15)

CRU1 FS, PP, ROD

→ *CRU5 FS, PP, ROD*

Cleanup levels and approach will be determined in RODs.

11. Certification - (Closure Guidance Item 3.16)

CRU1 RA

CRU3 RA

→ *CRU5 RA*

(Verification sampling and possible legal agreement)

12. Status of Facility (or Unit) After Closure - (Closure Guidance Item 3.17).

CRU1 ROD will provide the final decision.

→ *CRU5 ROD will provide the final discussion.*

The status of the HWMUs will be determined as well as the site.

Enclosure C

WASTE PIT 5 HAZARDOUS WASTE MANAGEMENT UNIT

APPLI CABLE Y/N	RCRA CLOSURE PLAN CHECKLIST REQUIREMENTS AND CERCLA CROSS REFERENCE INDEX CITATION	CERCLA DOC	CROSS REFERENCE INDEX
	1. FACILITY DESCRIPTION		
	1.1 General description, size & location	OU1 RI	1.2.1.5, p. 1-21 1.2.25, p. 1-33
	1.2 Topographic map	OU1 RI	Fig 1-10, p. 1-62, Fig 1-11, p. 1-63 Fig 1-16, p. 1-68 3.3, pp. 3-8 & 3-9
	1.4 Hydrogeological information	OU1 RI	
	Ground water and soil conditions Ground water monitoring conditions		3.4.1.6 - pp. 3-18 to 3-28 2.9.2, pp. 2-41 to 2-44

Enclosure C

APPLI CABLE Y/N	RCRA CLOSURE PLAN CHECKLIST REQUIREMENTS AND CERCLA CROSS REFERENCE INDEX CITATION	CERCLA DOC	CROSS REFERENCE INDEX
	<p>1.5 Surface impoundment description Wastes managed</p> <p>List of hazardous wastes, including radioactive components, Listed and Characteristic Include names of materials, not just waste codes Estimates of inventory to be removed</p> <p>Procedures for handling removed inventory Capacity, number and size of containers Secondary containment design containers Liner systems and leachate collection systems Run on and run off control systems (see section 5)</p>	<p>OU1 RI</p> <p>OU1 FS</p> <p>OU1 RD/RA OU1 RD/RA OU1 RD/RA</p> <p>OU1 RI</p>	<p>4.25, pp. 4-53 to 4-58 Table 1-11, 1-12</p> <p>See above See above Table 2-1, p. 2-4</p> <p>1.2.15, p. 1-21 3.3.4.1 & .2, pp. 3-11 to 3-12</p>
	<p>2.0 CLOSURE PROCEDURE</p>		
	<p>2.1 Maximum quantity of inventory (by waste type) to be removed Pumpable wastes in the impoundment</p> <p>Bottom sludges/residues in the impoundment</p>	<p>OU1 FS</p>	<p>Table 2-1, pp. 2-4 & 2-5</p>
	<p>2.2 Procedures for handling removed inventory by quantities, waste type and methods, including waste minimization and recycling On site treatment/disposal Transportation distance off site Off site treatment/disposal</p>	<p>OU1 RD/RA OU1 RD/RA</p>	

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APPLI CABLE Y/N	RCRA CLOSURE PLAN CHECKLIST REQUIREMENTS AND CERCLA CROSS REFERENCE INDEX CITATION	CERCLA DOC	CROSS REFERENCE INDEX
	2.3 Procedures for decontamination/disposal	RD/RA	1*
	Equipment/structures decontamination (piping/pumps) (sampling protocol in section 5)	RD/RA	
	Cleaning agent/rinseate treatment of disposal (address quantities, waste types, and methods)	RD/RA	
	Containment systems (liners/dikes & other equipment) demolition and removal; quantities & methods	RD/RA	
	On site treatment/disposal		
	Off site treatment/disposal		
	Contaminated media removal (sampling protocol in 5)		
	List or drawing of potentially contaminated areas		
	Soil removal methods		
	On site treatment/disposal		
	Off site treatment/disposal		
	Protocol for determining clean closure (see section 4)	RD/RA RD/RA WP RD/RA	
	2.4 Ground water monitoring	RI	2.9.3, p. 2-42
	Procedures for ground water monitoring analysis	RI	see above
	Number, location, and frequency of samples		
	See section 5 for sampling plan & analytical procedures		

1OU1 - addresses waste

OU5 - addresses environmental media

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APPLI CABLE Y/N	RCRA CLOSURE PLAN CHECKLIST REQUIREMENTS AND CERCLA CROSS REFERENCE INDEX CITATION	CERCLA DOC	CROSS REFERENCE INDEX
	<p>2.6 Closure certification</p> <p>Activities to be conducted Testing and analyses to be conducted Criteria for evaluating adequacy Schedule of inspections Types of documentation</p>	RD/RA WP	*
	3.0 CLOSURE SCHEDULE		
	3.1 Expected year of closure	RD/RA WP	*
	3.3 Milestone chart showing time for: Removal, treatment or disposal of inventory Decontamination equipment/structures Equipment, structures demolition and soil removal/disposal Total time to close	RD/RA WP	*
	3.4 Request for extension to deadline for handling inventory or completing closure (see 1.7 also)	ROD RD/RA WP	*
	4.0 CLEANUP LEVEL DETERMINATION		
	4.3 Risk Assessment Cleanup Targets	RI	Appendix E*
	4.4 Summary of Risk Assumptions	RI	Appendix E*
	4.5 Risk Assessment Reference List	RI	Appendix E 6.0, p. ___ 6.2, p. ___*

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APPLI CABLE Y/N	RCRA CLOSURE PLAN CHECKLIST REQUIREMENTS AND CERCLA CROSS REFERENCE INDEX CITATION	CERCLA DOC	CROSS REFERENCE INDEX
	4.6 Toxicity Information	RI	6-6, p. Appendix E Table E 4-1, E 4-2, p. * *
	4.7 Listing of exposure limits for Appendix VIII constituents	FS & RD/RA WP	*
	4.8 Description of testing to determine if liner, equipment, etc. are hazardous	OU1 RD/RA WP	
	5.0 SAMPLING PLAN & ANALYTICAL PROCEDURES		
	5.1 Identify nature, rate, and extent of contamination	RI	4.0, pp. 4-1 to 4-16*
	5.2 Identify equipment, calibration, and experience of operators	RD/RA WP	*
	5.3 Procedures for ground water monitoring analysis	RD/RA WP	*
	5.4 Number, location, and frequency of samples	RD/RA WP	*
	6.0 AIR AND WASTEWATER MANAGEMENT PLAN		
	6.1 Control wind dispersal of particulates from unit	RI	1.5.4.5, p. 1-51*
	6.2 Control runoff from unit to surface water	RI	1.5.4.6, p. 1-52*

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APPLI CABLE Y/N	RCRA CLOSURE PLAN CHECKLIST REQUIREMENTS AND CERCLA CROSS REFERENCE INDEX CITATION	CERCLA DOC	CROSS REFERENCE INDEX
	6.3 Control rinseate runoff	RD/RA WP	*
	6.4 Control hazardous constituents from entering groundwater	RD/RA WP	*
	6.5 Wastewater treatment in POTW or FOTW	RD/RA WP	*
	7.0 PERSONNEL SAFETY AND FIRE PREVENTION PLANS		*
	7.1 Guidelines for Preparation of Health and Safety Plans	RD/RA WP	*
	8.0 STATUS OF UNIT AFTER CLOSURE (CLOSURE GUIDANCE 3.17)	ROD, O&M	*

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