

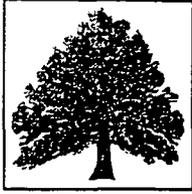
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**CLOSURE CERTIFICATION REPORT FOR HAZARDOUS WASTE
MANAGEMENT UNIT NUMBER 52 - NORTH AND SOUTH SOLVENT
TANKS**

04/30/96

DOE-0789-96
DOE-FN OEPA
35
CLOSURE CERT



Department of Energy

Ohio Field Office
Fernald Area Office

P. O. Box 538705
Cincinnati, Ohio 45253-8705
(513) 648-3155



APR 30 1996

DOE-0789-96

Mr. Donald Schregardus, Director
Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, Ohio 43266-1049

Dear Mr. Schregardus:

**CLOSURE CERTIFICATION REPORT FOR HAZARDOUS WASTE MANAGEMENT UNIT
NUMBER 52 - NORTH AND SOUTH SOLVENT TANKS**

Enclosed is the Closure Certification Report for Hazardous Waste Management Unit (HWMU) Number 52 - North and South Solvent Tanks (T-1S and T-2S). This Certification Report is submitted as the final requirement of the Closure Plan Information and Data (CPID) package approved on September 12, 1995.

Certification is provided that closure was completed in accordance with the approved CPID and the North and South Solvent Tanks met closure standards. The Department of Energy, Fernald Area Office (DOE-FN) will discontinue HWMU inspections 15 days after receipt of closure approval.

If you have any questions, please contact Mr. Robert Danner at (513) 648-3167.

Sincerely,

for Jack R. Craig
Director

FN:Danner

Enclosures: As Stated

000001

cc w/enc:

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Manager, TPSS/DERR, OEPA-Columbus
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Restoration Management Corporation

P. O. Box 538704 Cincinnati, Ohio 45253-8704 (513) 648-3000

Fernald Environmental Management Project
Letter No. C:OP:96-0240

Mr. Jack R. Craig, Director
Department of Energy
Fernald Area Office
P. O. Box 538705
Cincinnati, Ohio 45253-8705

Dear Mr. Craig:

CONTRACT DE-AC24-92OR21972, CLOSURE CERTIFICATION REPORT FOR HAZARDOUS WASTE MANAGEMENT UNIT NO. 52 - NORTH AND SOUTH SOLVENT TANKS

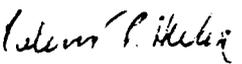
Reference: Ohio Administrative Code 3745-66-15 and 40 Code of Federal Regulations Part 265.115

Letter, Donald R. Schregardus, OEPA, to Jack R. Craig, U.S. DOE-FEMP, "Closure Plan Approval," September 12, 1995

Attached is the Closure Certification Report for Hazardous Waste Management Unit (HWMU) No. 52 - North and South Solvent Tanks. This report is submitted in accordance with the referenced regulatory citations (Reference 1) and is the final requirement of the approved Closure Plan Information and Data (CPID) package (Reference 2). DOE and FERMCO signatures are required on part of the certification (See Section 4).

Certification is being provided that closure of the North and South Solvent Tanks and its ancillary equipment meets closure standards and was completed in accordance with the approved CPID. Attached is a recommended letter to the Ohio Environmental Protection Agency (OEPA). If you have any questions, please contact Ken Kolthoff at 648-4051.

Sincerely,


John Bradburne
President

JCB:JRF:dln

Attachments: Recommended Letter to OEPA
Closure Certification Report

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Mr. Jack R. Craig
Letter No. C:OP:96-0240
Page 2

c: With Attachment

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Administrative Record
RCRA Operating Record
Engineering Document Control (113.26.3.1.1)
File Record Storage Copy 102.1

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FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

**Hazardous Waste Management Unit No. 52
North and South Solvent Tanks
Closure Certification Report**

April 1996

U.S. DEPARTMENT OF ENERGY

HWMU No. 52
North and South Solvent Tanks
Closure Certification Report

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PHOTOGRAPH

Photograph 1-1 North and South Solvent Tanks

ATTACHMENTS

Attachment A OEPA Notice of Deficiency, 11/29/94

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ACRONYMS AND ABBREVIATIONS

BTEX	Benzene, Toluene, Ethyl Benzene, and Xylene
CFR	Code of Federal Regulations
CPID	Closure Plan Information and Data
DAAP	di-amyl-amyl-phosphonate
DOE	Department of Energy
FEMP	Fernald Environmental Management Project
FMPC	Feed Materials Production Center
HEPA	High Efficiency Particulate Air
HWMU	Hazardous Waste Management Unit
LLW	Low-Level Waste
MSDS	Material Safety Data Sheet
NTS	Nevada Test Site
OAC	Ohio Administrative Code
OEPA	Ohio Environmental Protection Agency
PPE	Personal Protective Equipment
RCRA	Resource Conservation and Recovery Act
ROD	Record of Decision
TSCA	Toxic Substance Control Act
WWTS	Wastewater Treatment System

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1.0 INTRODUCTION

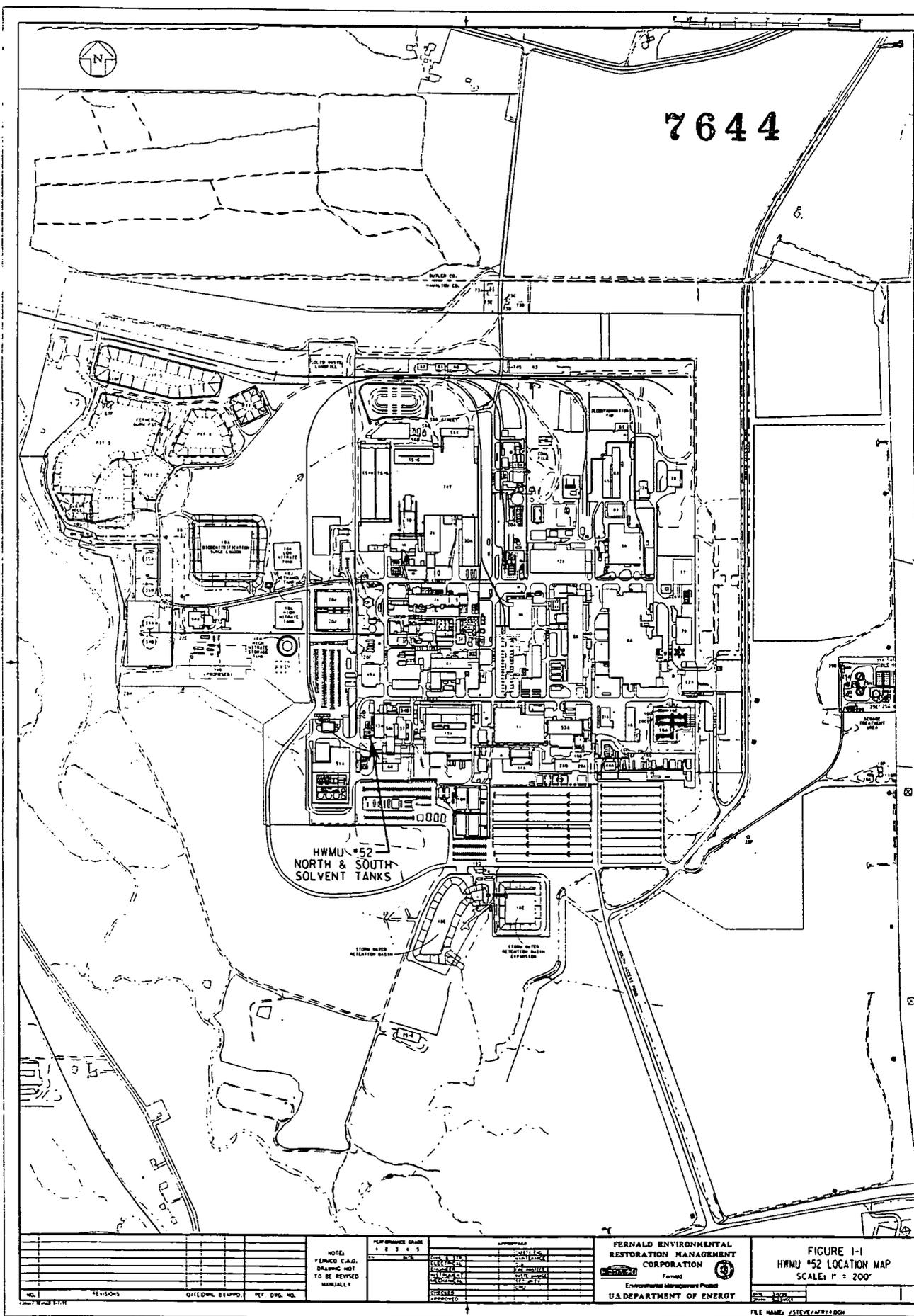
The Fernald Environmental Management Project (FEMP) is a U.S. Department of Energy (DOE) owned facility. The FEMP was formerly operated as the Feed Materials Production Center (FMPC). The FEMP site is located on 1,050 acres in a rural area in Hamilton and Butler Counties, Ohio, approximately 18 miles northwest of Cincinnati (Figure 1-1, Hazardous Waste Management Unit (HWMU) #52 Location Map). The FEMP production facilities are limited to an approximately 136-acre tract near the center of the site.

The facility was established to produce high-purity uranium metals and intermediate compounds from uranium ore concentrates or recycled uranium materials for use in government defense programs. Production operations began in the early 1950s and ceased in 1989.

The site began operation of the North and South Solvent Tanks in 1954 for storage of mixed extraction solvents. These solvents (di-amyl-amyl-phosphonate [DAAP], Solvesso 100™ and tributyl phosphate and/or kerosene) were stored in the tanks before processing through other systems for recovery or reuse of the usable solvent ingredients. The North and South Solvent Tanks were identified in the site Part A and Part B Resource Conservation and Recovery Act (RCRA) Hazardous Waste Storage Permit submitted to the Ohio Environmental Protection Agency (OEPA) in 1991.

1.1 PURPOSE

This certification report summarizes the activities that were conducted to accomplish clean closure of the North and South Solvent Tanks. In accordance with the approved Closure Plan Information and Data (CPID); clean closure was achieved. This report completes the requirements for closure under Ohio Administrative Code (OAC) 3745-66-10 to 3745-66-15 (40 Code of Federal Regulation [CFR] 265.110 to 265.115). This certification report was prepared in accordance with the September 1993, Interim Final, Closure Plan Review Guidance for RCRA Facilities (OEPA Guidance).



afry4.m(2499.ws15) steve@ws15. Fri Mar 1 15:49:59 EST 1996

HWMU No. 52
North and South Solvent Tanks
Closure Certification Report

1.2 BACKGROUND

The initial draft of the CPID was submitted to the OEPA on December 23, 1993. A revision to the CPID was submitted on January 6, 1994. Subsequent to meeting with Ohio EPA on March 16, 1995, DOE-FEMP submitted the revised CPID on August 3, 1995. On September 12, 1995, OEPA approved the revised CPID. The field activities to implement the approved closure plan began on March 26, 1994, and were completed on July 18, 1995.

1.3 UNIT DESCRIPTION

The North (T-1S) and South (T-2S) Solvent Tanks are constructed of stainless steel. They are above ground and located in an uncovered, flat area outside on the west side of the Pilot Plant. These two tanks are vertical, cylindrical, and have conical bottoms. Both tanks have a maximum capacity of 2,200 gallons and measure 6'6" in diameter by 6'1" high. With support legs included, the tanks stand approximately 12'7" tall (Photograph 1-1). The top of each tank is equipped with a manway. Ancillary equipment includes spigots, sight glass, drain lines, valves, and one transfer pump.

Tanks T-1S and T-2S are stationed within a reinforced concrete secondary containment structure that is coated with an impervious, asphaltic material. The reinforced concrete containment structure is 14'0" W x 23'6" L x 2'2" H with a total capacity of approximately 4,500 gallons. Rainwater that accumulates in the secondary containment is pumped to the General Sump where it is tested and treated to remove radioactive contamination.

The solvent mixture stored in the tanks consisted of DAAP, Solvesso 100™ and tributyl phosphate and/or kerosene. A review of analytical information from the tank content samples taken in June 1991 indicated that the material demonstrated a flash point of 124°F, thereby making it characteristically hazardous for ignitability (D001). A flash point of 140°F is the regulatory limit. The contents of the tanks were analyzed again in March 1992 and January 1993 in preparation for disposal at the Toxic Substance Control Act (TSCA) Incinerator in Oak Ridge, Tennessee. Although these analyses indicated a flash point > 140°F, the tanks were managed in accordance with the first analyses as D001.

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North and South Solvent Tanks
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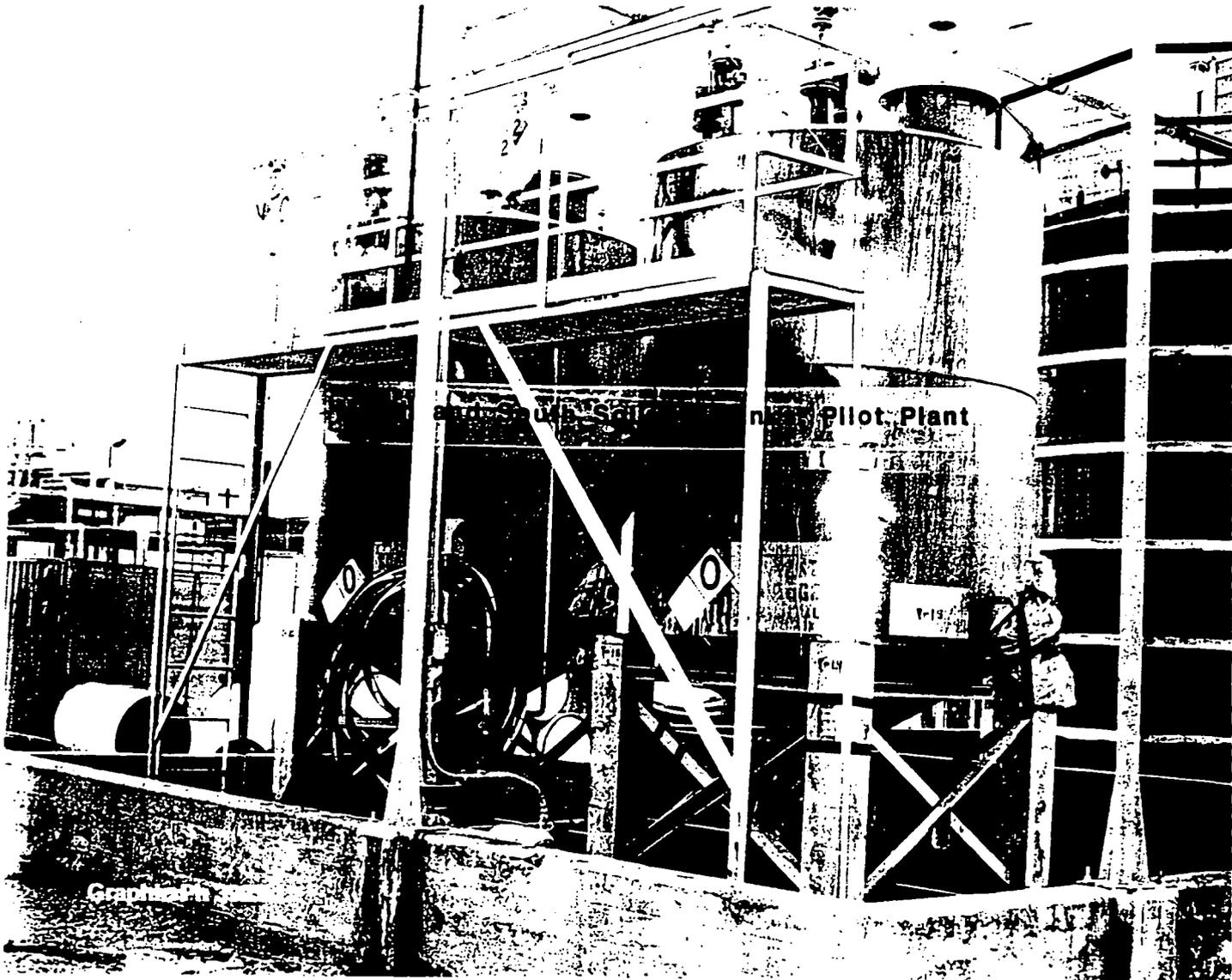
On April 21, 1993, the total volume of the waste stored in the North (800 gallons) and South (1,060 gallons) Solvent tanks was removed and transported to Oak Ridge, Tennessee for incineration at the TSCA Incinerator. The tanks were emptied, and inspection revealed that no solvent material existed in the process lines, no residues appeared on the walls or bottom of the tanks, no baffles were present inside the tanks and little or no solvent remained in the tanks.

The North and South Solvent Tanks were identified as HWMU No. 52 based on containing solvents that demonstrated a flash point of 124° F and exceeding the 90-day storage limit for hazardous wastes (OAC 3745-51-04(C), 40 CFR 261.4(c)). As a result, a closure plan was prepared.

Table 2-1 lists the rinseate analytical results for benzene, toluene, ethyl benzene, and xylene (BTEX) analysis which demonstrated that the rinseate met clean closure standards as defined in OEPA 3745-66-15. Table 3-1 lists the waste volumes generated during closure.

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North and South Solvent Tanks
Closure Certification Report

Photograph 1-1



HWMU No. 52
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2.0 SUMMARY OF CLOSURE ACTIONS

The North (T-1S) and South (T-2S) Solvent Tanks closure actions accomplished the clean closure performance standards prescribed by OAC 3745-66-11 (40 CFR 265.111) by decontaminating the tanks and accomplishing the closure objectives described below.

- * The clean closure will eliminate the need for post-closure maintenance associated with the North (TS-1) and South (TS-2) Solvent Tanks by decontaminating the tanks and ancillary equipment.
- To the extent necessary to protect human health and the environment, the closure will control, minimize or eliminate the escape of hazardous waste, hazardous waste constituents, contaminated rainfall, or waste decomposition products to the ground, to surface waters or to the atmosphere.
- The closure will comply with the unit-specific closure requirements of OAC 3745-66-97 (40 CFR 265.197) for tanks.

Clean closure was accomplished by the following closure actions:

<u>Date</u>	<u>Closure Action</u>
11/93	Sampling and analysis of the soil in the area of the HWMU.
3/22/94	Prepare tanks and secondary containment for cleaning.
3/24/94	Disconnected process piping and flanges.
3/26/94 (Tank T-1S) 3/28/94 (Tank T-2S)	Steam rinse, verification rinse and visual inspection of tanks.
3/28/94	Ancillary equipment (piping, sight glass, spigots) placed in white metal box and sampled verification rinseate.

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- 3/29/94 Transfer pump removed and placed in white metal box with the balance of ancillary equipment.
- 3/31/94 Rinse and sample secondary containment.
- 6/18/95 Rinse Tank T-1S and Tank T-2S using a detergent wash. Verification rinse sampled.

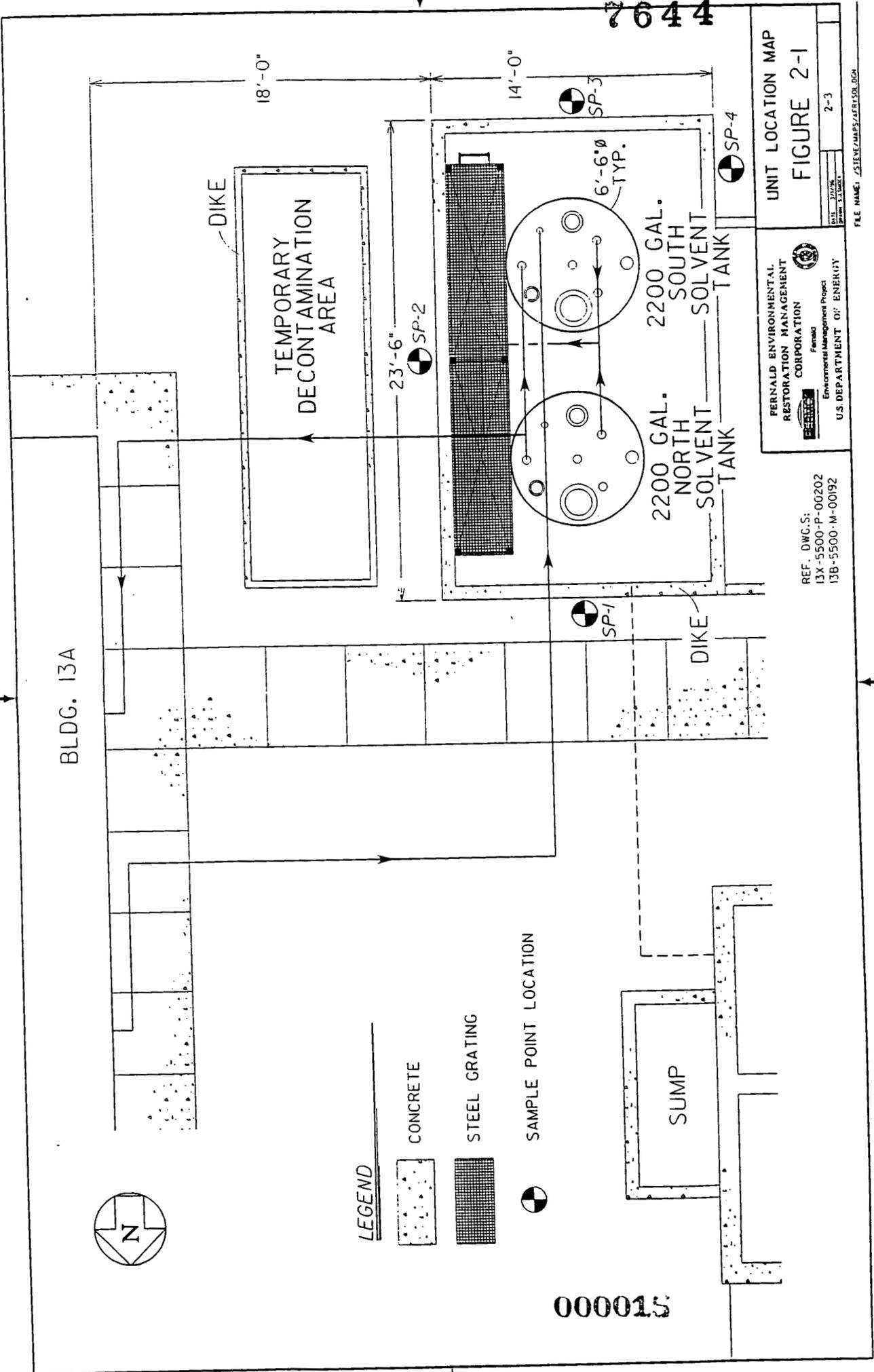
A summary of related closure actions taken and any deviations from the approved CPID are described below.

2.1 ANALYSIS OF THE SOIL SURROUNDING THE TANKS

The tanks were used for the storage of DAAP, Solvesso 100™ and tributyl phosphate and/or kerosene. Based on Material Safety Data Sheets (MSDS), Solvesso 100™ and kerosene were the main contributors to the tank contents ignitability. The Solvesso 100™ MSDS included a list of the hazardous ingredients or components found within Solvesso 100™. The kerosene MSDS did not provide this level of detail, but the components were verified through a discussion with a project engineer from Technical Services of British Petroleum (BP) Oil Company. The representative of BP Oil Company confirmed that BTEX were identified as indicator constituents to screen soil and rinseates for the presence of Solvesso 100™ and/or kerosene.

Since the tanks were used for the storage of DAAP, Solvesso 100™ and tributyl phosphate and/or kerosene, testing for BTEX of the nearby soil was conducted to see if any release to the soils had occurred (Figure 2-1, Soil Sample Locations). No spills outside the secondary containment structure were documented for these tanks, although diminimus process losses may have occurred during the transfer of product during operation. Analytical results for soil samples collected in November 1993 confirmed that BTEX was not present in the soils adjacent to the secondary containment area. Thus, there was no contamination from the HWMU in this area. (CPID, Appendix 5 for soil analytical results).

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FERNALD ENVIRONMENTAL
RESTORATION MANAGEMENT
CORPORATION
Fernald
Environmental Management Project
U.S. DEPARTMENT OF ENERGY

REF. DWG.S:
13X-5500-P-00202
13B-5500-M-00192

UNIT LOCATION MAP
FIGURE 2-1

DATE: 2/7/96
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2-3

FILE NAME: J:\SITE\MAPS\FRFR1501.DWG

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North and South Solvent Tanks
Closure Certification Report

2.2 PREPARING TANKS AND SECONDARY CONTAINMENT FOR CLEANING

The diking associated with the secondary containment system was visually inspected for potential routes of release. After visual inspection, all cracks were brushed to remove loose material and sealed with caulking material. The secondary containment system sump remained as a collection point. All piping to the tanks was disconnected and flanges were blanked off. The secondary containment was vacuumed which included the walls and base of the secondary containment as well as the equipment support pads, tank exterior, process piping and structural supports.

2.3 STEAM RINSE, VERIFICATION RINSE AND VISUAL INSPECTION OF TANKS

The interior of Tank T-S1 was rinsed using approximately 100 gallons of water and rinse water samples were taken (for sample results, see Table 2-1). After the first rinse, Tank T-S1 was steam cleaned. Next, a verification rinse was performed using approximately 100 gallons of water and verification rinse water samples were taken from TS-1. Rinseate samples were taken directly from the drain valve at the bottom of the tank (for sample results, see Table 2-1). This sampling procedure was a change from the sampling procedure described in the CPID, which stated that the rinseate would be containerized prior to sampling. This change proved to be more representative and maintained sampling integrity. Excess water from this rinse was transferred into appropriately labeled drums. The same clean/rinse procedure used for Tank T-S1 was followed for Tank T-S2 (for sample results, see Table 2-1).

2.4 REMOVE, RINSE, VISUALLY INSPECT ANCILLARY EQUIPMENT (PUMP, PIPING, SIGHT GLASS, SPIGOTS) AND SAMPLE VERIFICATION RINSEATE

Electrical connections to all equipment were inspected and the electrical power was disconnected, tagged, and locked out. Lube oil in the secondary containment transfer pump was drained and containerized for future disposition. A white metal box was placed near the HWMU area on a Herculite™ pad with curbed edges. Ancillary piping and equipment (i.e., drain lines, miscellaneous valves, sight glass) were removed and placed in the white metal box. The secondary containment transfer pump and motor were disconnected from the base by hand. The pump and motor were lifted by a manlift and placed in the same white metal box. Contents of the white metal box were pressure rinsed until completely submerged.

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Characterization samples of the rinseate were taken directly from the white metal box via Coliwasa sampler (for sample results, see Table 2-1). After sampling, the rinseate was pumped from the white metal box into appropriately labeled drums.

2.5 RINSE AND SAMPLE SECONDARY CONTAINMENT

After verification that the drain valve in the secondary containment system was closed and that the integrity of seals at potential release routes were intact, the secondary containment was rinsed with approximately 100 gallons of FEMP process water using a pressure spray. The rinseate was pumped into appropriately labeled drums and is being stored pending disposition to the Wastewater Treatment System (WWTS).

After the surface of the secondary containment system had been allowed to dry, a verification rinse of approximately 100 gallons of water was performed in the same manner as the previous rinse. Verification rinseate samples of the secondary containment area were taken to verify that the secondary containment had been successfully decontaminated (for sample results, see Table 2-1). This sampling procedure was a change from the sampling procedure described in the CPID, which stated that the rinseate would be containerized prior to sampling. This change proved to be more representative and maintained sampling integrity.

2.6 RERINSE TANK T-1S AND TANK T-2S USING A DETERGENT WASH

In response to OEPA's concern regarding the nonsolubility of the stored wastes with water (Attachment A - CPID Correspondence, OEPA Notice of Deficiency, 11/29/94), Tank T-1S and T-2S were rerinsed using a detergent wash.

OEPA Closure Guidance specifies one of the methods to achieve closure is the chemical extraction method for nonporous surfaces only (i.e., Alconox detergent rinse). This method was selected because the chemical extraction method requires that the contaminants must be soluble to at least 5% by weight in the solution or 5% by weight in the emulsion, as applicable. The organic mixture of tributyl phosphate, DAAP, Solvesso 100™ and kerosene is soluble to 5% in the detergent wash water. Alconox detergent solution will emulsify greater than 5% by weight of an emulsifiable organic oil.

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After verification that all electrical connections were tagged out and that all process piping had been disconnected from the tanks and blanked off, a Herculite™ pad was placed under each tank. Drain valves were verified in the closed position. The tanks had previously been prepared for the detergent wash and the preliminary 100 gallon rinse for each tank had already been accomplished (see Section 2.3 for rinse description). Each tank was washed with 50 gallons of a one percent solution of Alconox (detergent) and water applied through the manway on top of the tanks with a pressurized spray nozzle. The waste water from this rinse was released through the drain valve and characterization samples were taken directly from the valve (for sample results, see Table 2-1). Each tank was then rinsed with 100 gallons of pressurized water similar to the detergent wash. Rinseate from this pressurized wash was collected and composited with the detergent waste water.

A final verification rinse of approximately 100 gallons was performed on each tank. Verification rinseate samples were taken directly from the drain valve at the bottom of each tank (for sampling results, see Table 2-1). This sampling procedure was a change from the sampling procedure described in the CPID, which stated that the rinseate would be containerized prior to sampling. This change proved to be more representative and maintained sampling integrity. Since the tanks had been visually inspected after the steam rinse described in Section 2.3 above, a second visual inspection of the tanks was not conducted. No visible stains were found during the first inspection of Tanks T-1S and T-2S. The change in the visual inspection is a change from the procedure described in the CPID. This eliminates the potential for any worker to accidentally fall from the tank while conducting the inspection.

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Table 2-1 Rinseate Analytical Results

Location	Rinse Description	Date Sampled	Benzene	Toluene	Ethyl Benzene	Xylene
Tank TS-1	Characterization	3/26/94	< 0.084 mg/L	< 0.084 mg/L	< 0.084 mg/L	< 0.17 mg/L
Tank TS-2	Characterization	3/27/94	< 0.025 mg/L	< 0.025 mg/L	< 0.025 mg/L	< 0.05 mg/L
Tank TS-1	Verification	3/26/94	< 0.025 mg/L	< 0.025 mg/L	< 0.025 mg/L	< 0.05 mg/L
Tank TS-2	Verification	3/27/94	< 0.025 mg/L	0.27 mg/L	< 0.025 mg/L	< 0.05 mg/L
Ancillary Equipment	Characterization	3/27/94	< 0.005 mg/L	< 0.005 mg/L	< 0.005 mg/L	< 0.01 mg/L
Secondary Containment	Verification	3/27/94	< 0.013 mg/L	< 0.013 mg/L	< 0.013 mg/L	< 0.03 mg/L
Tank TS-1 & TS-2 Composite	Alconox Rinse	7/18/95	< 50 ug/L	< 50 ug/L	< 50 ug/L	< 50 ug/L
Tank TS-1 & TS-2 Composite	Verification Rinse	7/18/95	< 5 ug/L	< 5 ug/L	< 5 ug/L	< 5 ug/L
Rinseate Allowable Concentration Level *	NA	NA	0.075 mg/l	1 mg/l	1 mg/l	1 mg/l

* Limits as required per the Ohio Closure Plan Guidance Document

HWMU No. 52
North and South Solvent Tanks
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3.0 MATERIALS AND WASTES GENERATED FROM CLOSURE ACTIVITIES

Rinse water from the project was characterized as nonhazardous RCRA Low-Level Waste (LLW) and is being stored pending disposition to the WWTS. The decontaminated ancillary piping was placed in white metal boxes and is awaiting disposition as LLW. Tanks TS-1 and TS-2 are awaiting disposition under the OU3 Record of Decision (ROD).

Table 3-1 Waste Volumes Generated During Closure of Tanks

Material	Quantity	Contaminants	Disposition
Ancillary Piping	1 White Metal Box 109 Ft ³	Radiological	Storage on-site pending disposition to the Nevada Test Site (NTS).
Rinseate *	2,536 gallons	Radiological	Stored pending disposition to the Wastewater Treatment System.
Tanks TS-1 and TS-2	Capacity: approx. 2,000 gallons	Radiological	Disposition under the OU3 ROD.
Trash and Vacuum Residues	< 1 gallon	Radiological	Discarded with High Efficiency Particulate Air (HEPA) bag to the NTS.
PPE and Equipment	10 Drums (55-gallon) or 80 Ft ³	Radiological	Storage on-site pending disposition to the NTS.

* Includes 1% Alconox solution rinseate

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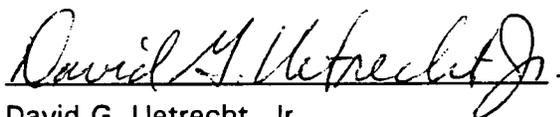
4.0 CERTIFICATION STATEMENTS

The following pages are the FEMP closure certification statements (following the format in OAC 3745-50-42 (D)) and a Professional Engineer's (P.E.) certification statement documenting that HWMU No. 52, the North and South Solvent Tanks, was closed in accordance with the approved closure plan as required under OAC 3745-66-15.

HWMU No. 52
North and South Solvent Tanks
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INDEPENDENT ENGINEER'S CERTIFICATION STATEMENT

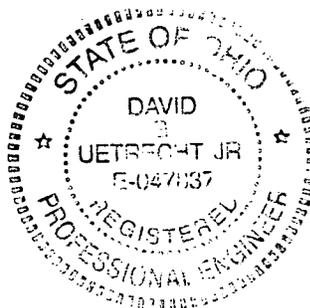
Based on observations in the field and information provided, I hereby certify that the North and South Solvent Tanks, Hazardous Waste Management Unit No. 52, at the Department of Energy (DOE) Fernald Environmental Management Project (FEMP) has been closed in accordance with the specifications in the September 12, 1995, OEPA-approved Closure Plan Information and Data (CPID) package. Changes are documented and discussed in Sections 2.3 and 2.6 of the Certification Report. Closure activities were initiated and completed based on the approved CPID. Copies of correspondence concerning this matter are included in Attachment 1.



David G. Uetrecht, Jr.

Ohio Registration No. E-47837

ADENA Utilities Engineering, Inc.



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HWMU No. 52
North and South Solvent Tanks
Closure Certification Report

CERTIFICATION OF OWNER AND OPERATOR

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Glenn Duffin
U.S. Department of Energy, Fernald Area Office
Owner and Operator

4/30/96
Date Signed

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HWMU No. 52
North and South Solvent Tanks
Closure Certification Report

CERTIFICATION OF CO-OPERATOR

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Calvin P. Hechler

Fernald Environmental Restoration
Management Corporation, Co-Operator

4/11/96

Date Signed

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HWMU No. 52
North and South Solvent Tanks
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ATTACHMENT A - CPID CORRESPONDENCE

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State of Ohio Environmental Protection Agency ENV. ENG. SDS DEPT

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149
(614) 644-3020
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George V. Voinovich
Governor
Donald R. Schregardus
Director

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NOTICE OF DEFICIENCY

CERTIFIED MAIL

November 29, 1994

RE: CLOSURE PLAN
U.S. DEPARTMENT OF ENERGY
FERNALD ENVIRONMENTAL
MANAGEMENT PROJECT
OH6 890 008 976
05-31-0681

ENV. ENG. SDS DEPT
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Mr. J. Phil Hamric
Site Manager
Fernald Office
U.S. DOE-FEMP
P.O. Box 398705
Cincinnati, Ohio 45239-8705

Dear Mr. Hamric:

On December 27, 1993, Ohio EPA received from U.S. Department of Energy Fernald Environmental Management Project a closure plan for the North and South Solvent Tanks which are identified as Hazardous Waste Management Unit (HWMU) No. 52. located at 7400 Willey Road, Fernald, Ohio.

This closure plan was submitted pursuant to Rule 3745-66-12 of the Ohio Administrative Code (OAC) in order to demonstrate that the U.S. Department of Energy Fernald Environmental Management Project's proposal for closure complies with the requirements of OAC Rules 3745-66-11 and 3745-66-12.

The public was given the opportunity to submit written comments regarding the closure plan in accordance with OAC Rule 3745-66-12. The public comment period extended from January 17, 1994 through February 2, 1994. No public comments were received by Ohio EPA.

Pursuant to OAC Rule 3745-66-12(D)(4), I am providing you with a statement of deficiencies in the plan, outlined in Attachment A.

Please take notice that OAC Rule 3745-66-12 require that a modified closure plan addressing the deficiencies enumerated in Attachment A be submitted to the Director of the Ohio EPA for approval within thirty (30) days of the receipt of this letter.



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DATE: 11-29-94
REVISION DATE: -

Mr. J. Phil Hamric
U.S. DOE-FEMP
Page Two

The modified closure plan shall be in accordance with the following editorial protocol or convention:

1. Old language is over-struck, but not obliterated.
2. New language is capitalized.
3. Page headers should indicate date of submission.
4. If significant changes are necessary, pages should be re-numbered, table of contents revised, and complete sections provided as required.

The modified closure plan should be submitted to: Ohio Environmental Protection Agency, Division of Hazardous Waste Management, Attention: Tom Crepeau, Data Management Section, P.O. Box 1049, Columbus, Ohio 43216-1049. A copy should also be sent to: Mark Metcalf, Ohio EPA, Southwest District Office, 401 East Fifth Street, Dayton, Ohio 45402-2911.

Upon review of the resubmitted plan, I will prepare and issue a final action approving or modifying such plan. If you wish to arrange a meeting to discuss your responses to this Notice of Deficiency, please contact Mark Metcalf at (513) 285-6357.

Sincerely,


Donald R. Schregardus
Director

DRS/MWM

cc: Tom Crepeau, OEPA, DHWM Central File
Ed Kitchen, OEPA, DHWM
Section Chief, Ohio Permit Section, USEPA, Region V
Mark Metcalf, OEPA, Southwest District Office

ATTACHMENT ADEPARTMENT OF ENERGY
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
NORTH AND SOUTH SOLVENT TANKS

OH6 890 008 976

1. Section 1.5.2 Ancillary Equipment- The closure plan fails to clearly delineate the boundaries of HWMU No. 52. Please revise the closure plan with a detailed drawing which shows the tank system and ancillary equipment that is addressed by this closure plan. This information must be submitted in accordance with OAC 3745-66-12(B)(2) and 3745-66-97(A).
2. Section 1.5.4 Waste Managed- The closure plan indicates that the waste from the North and South Solvent Tanks were shipped off-site with wastes from other tanks. This information was offered to address why the manifest which accompanied the wastes off-site also indicated that the waste stream was hazardous for lead. However there were no analyticals for the other wastes sent off-site with the North and South solvent Tanks. Please provide the analysis for tanks 17a,b and 5b.
3. Section 1.5.5 Soil Characterization- This section refers to a Figure 1-3 which indicates from where the four soil samples were taken, however this figure was not included in the closure plan. This information must be provided in accordance with OAC 3745-66-12(B)(4).
4. Section 2.3.1.1 The Tanks- This section fails to provide information addressing the solubility of the wastes stored in the tanks with the water used to decontaminate the tank system. Please provide information which indicates that water is the proper material for decontaminating the tanks. If water is not appropriate, revise the closure plan to include a solution which is appropriate to decontaminate the tank system. This information must be provided in accordance with OAC 3745-66-12(B)(4).
5. Section 2.3.1.3 Secondary Containment Structure- This section fails to provide information addressing the estimated volume of water that will be used to decontaminate the secondary containment structure. This information must be provided in accordance with OAC 3745-66-12(B)(4).

6. Section 2.3.1.2 Ancillary Equipment- This section fails to provide detailed information regarding the decontamination of the ancillary equipment. Please provide a drawing indicating the location of the decontamination area. Revise this section to address visual inspection of the equipment after it has been rinsed to ensure that any gross contamination has been removed. Also revise part 2 of this section to indicate that the ancillary equipment will be handled as a hazardous waste until it can be demonstrated that it does not meet the definition of hazardous waste. This information must be provided in accordance with OAC 3745-66-12(B)(4).

In Section 2.3.1.1 the plan indicates that flash point and BTEX will be used to determine if the decontamination of the tanks is successful. However, for the ancillary equipment, TCLP benzene and flashpoint will be used. Please explain the discrepancy between the criteria used to determine if the ancillary equipment has been decontaminated verses the tanks.

7. Section 3.3 Milestone Chart- This section fails to show a detailed schedule for the closure activities. Major activities should be listed separately and estimated time-frames for start-up and completion of each activity should be provided. This information must be provided in accordance with OAC 3745-66-12(B)(4).
8. Section 1.5.3 Secondary Containment- This section indicates that no cracks are evident in the secondary containment area. Please provide photographs that show the condition of the secondary containment area. This information must be provided in accordance with OAC 3745-66-12.