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DEC 22 1998

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

DOE- 0286-99

Mr. Tom Schneider, Project Manager
Ohio Environmental Protection Agency
401 East 5th Street
Dayton, Ohio 45402-2911

Dear Mr. Jablonowski and Mr. Schneider:

TRANSMITTAL OF RESOURCE CONSERVATION AND RECOVERY ACT/COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT INTEGRATED CLOSURE IMPLEMENTATION DOCUMENT FOR THE TRANE INCINERATOR, UNH TANKS AND HOT RAFFINATE BUILDING

The purpose of this letter is to transmit to the U.S. Environmental Protection Agency (U.S. EPA) and Ohio Environmental Protection Agency (OEPA) the enclosed Resource Conservation Recovery Act/Comprehensive Environmental Response, Compensation, and Liability Act (RCRA/CERCLA) Integrated Closure implementation documents for Trane Incinerator (Hazardous Waste Management Unit (HWMU) No. 28) and Uranyl Nitrate Hexahydrate (UNH) Tanks, Hot Raffinate Building (HWMU No. 50). The performance of these closure activities under this accelerated remediation initiative will be reflected in the Plant 3 Complex Decontamination and Decommission (D&D) Implementation Plan.

In order to accelerate the RCRA/CERCLA closure process in advance of the Plant 3 Complex D&D contract and award, field work will be performed using the remediation support contractor.

The integrated closure report for HWMU No. 28 AND HWMU No. 50 will certify HWMU closure in accordance with the implementation documents and be submitted within60 days of field activity completion.

Resources have recently become available to accelerate this work, and it is the Department of Energy's (DOE) intention to begin these closure activities in January1999. Additionally, completion of these closure activities as planned for June 1, 1999.

If you have any questions, please contact John Trygier at (513) 648-3154.

Sincerely,

Johnny W. Reising
Fernald Remedial Action
Project Manager

FEMP:Murphy

Enclosure

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RCRA/CERCLA INTEGRATED CLOSURE OF HWMU NO. 50 - UNH TANKS (HOT RAFFINATE BUILDING)

HWMU Description

Uranyl nitrate hexahydrate (UNH) tanks (HWMU No. 50) consists of four storage tanks. These tanks are located in two areas of the Hot Raffinate Building (Building 3E):

- Tanks F1-301, F1-302 and F1-303 are located within a 15 ft. x 52 ft. containment area along the eastern side of Building 3E. The three tanks are cylindrical, with a capacity of 3,066 gallons each. The tanks are surrounded by concrete walls. The floor is lined with acid brick and drains into a sump.

- Tank F1-308 is a cylindrical tank located along the south side of Building 3E. The tank has a capacity of 2,254 gallons and is surrounded by a concrete wall and a 12 inch high dike. The diked area measures 15 ft. x 52 ft. The floor is lined with acid brick and drains into a sump.

A figure identifying the location of these areas is provided as Attachment 2.

Remedial Tasks

Safe Shutdown Program has been completed in Building 3E. The two secondary containment areas are awaiting decontamination. No preparatory actions are required.

HWMU Decontamination

Purpose: The decontamination requirements needed to accomplish the remediation goals for the UNH tanks consistent with the RCRA/CERCLA Integration strategy are discussed in Section 3.5.3.3 of the OU3 Integrated RD/RA Work Plan.

Scope: The four UNH tanks in the Hot Raffinate Building were designated as a Hazardous Waste Management Unit (No. 50) because they stored waste uranyl nitrate hexahydrate, a characteristically hazardous waste, for greater than ninety days. Uranyl nitrate has been characterized as D002 (corrosive), D005 (barium), D007 (chromium), D008 (lead) and D009 (mercury).

Based on an evaluation of HWMU No. 50 conducted during remedial design, it was determined that no further decontamination of the storage tanks and associated piping was required. Under Removal Action Number 20, Uranyl Nitrate Hexahydrate Neutralization Project, the tanks were emptied and the UNH was treated to meet RCRA land disposal restriction requirements. The four tanks and associated piping were decontaminated in accordance with Ohio EPA closure guidance standards. The analytical results for the decontamination rinseates were provided in the Removal Action Number 20 Final Report.

As a result, the only remaining components which are required to be decontaminated to complete closure activities for this unit are the two secondary containment areas.

Decontamination will be achieved by rinsing these areas with a solution of potable water. The rinseate will be collected in sumps and analyzed for corrosivity (pH), barium, chromium, lead, and mercury. The analytical results will be used to demonstrate compliance with Ohio EPA Closure Guidance standards.

Dismantlement of the tanks, acid brick, and piping associated with HWMU No. 50 will be addressed in the Plant 3 Complex Implementation Plan. The acid brick will be dispositioned off-site in accordance with the OU3 ROD for Final Remedial Action. The other debris will be evaluated for disposition in the OSDF. The Soil Characterization and Excavation Project (SCEP) will determine if the Building 3E concrete floor meets WAC requirements for disposal in the OSDF. The integrated closure report for HWMU No. 50 will certify HWMU closure in accordance with this document and be submitted within 60 days of field activity completion.

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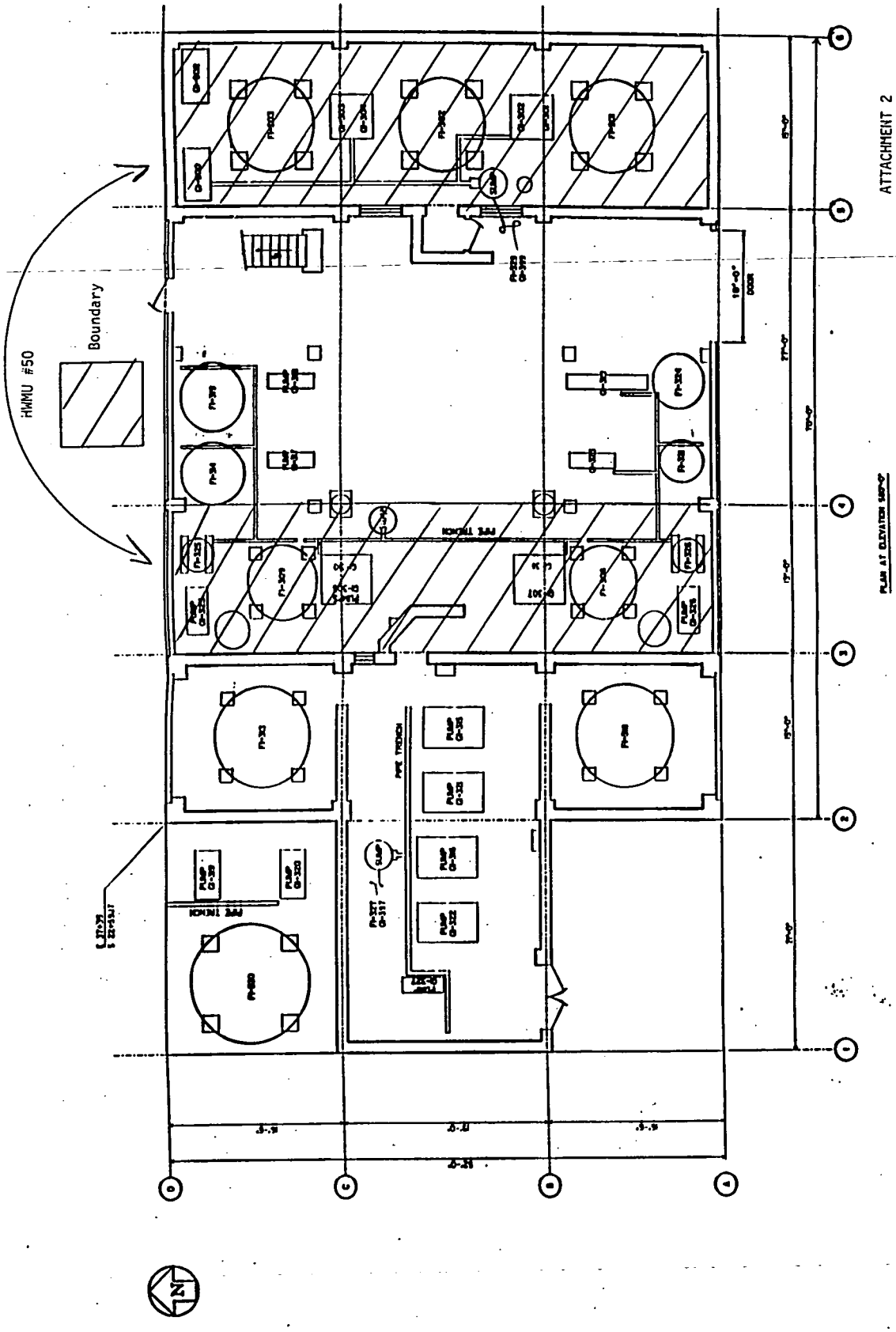

ATTACHMENT 2
UNH Tanks
HWMU #50 Boundary

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RCRA\CERCLA INTEGRATED CLOSURE OF HWMU No. 28 - TRANE INCINERATOR

HWMU Description

The Trane Incinerator (HWMU No. 28) began operation in 1982 and was used for the incineration of waste oil that potentially contained radionuclides. Table A identifies the HWMU components:

TABLE A

1. Oil/water separator located in the waste oil handling area (Building 39B);
2. Oil feed tank with oil feed pump and its appurtenances on the oil handling area pad (Building 39B);
3. Waste oil handling area pad with sump (Building 39B);
4. Incinerator feed tank with incinerator feed pump and its appurtenances in Building 39A;
5. Oil holding tank, F3E-406 and its appurtenances;
6. Two transfer pumps located at Tank F3E-406;
7. Combustion chamber with flue gas duct and its appurtenances in Building 39A;
8. Baghouse and exhaust stack in Building 39A;
9. Northeast corner floor of Building 39A housing the incinerator;
10. Storage pad with trench drains and sump (Pad 74W);
11. Waste oil drumming area with trench drain (outside northwest pad at Building 39A);
12. Acid brick pad area beneath Tank F3E-406.

Table B identifies the Trane Incinerator components being addressed in this accelerated RCRA/CERCLA closure document:

TABLE B

1. Incinerator feed tank in Building 39A;
2. Oil holding tank , F3E-406 and its appurtenances which includes the southern portion of the overhead transfer piping from disconnect at 102nd street to Tank F3E-406 along with interconnecting piping south of 102nd street in the Building 39A area;
3. Two transfer pumps located at Tank F3E-406;
4. Combustion chamber and its appurtenances in Building 39A;
5. Baghouse and exhaust stack in Building 39A;
6. Northeast corner floor of Building 39A housing the incinerator;
7. Storage pad with trench drains and sump (Pad 74W);
8. Waste oil drumming area with trench drain (outside northwest pad at Building 39A);
9. Acid brick pad area beneath Tank F3E-406.

HWMU closure of the remaining Trane Incinerator components (i.e., Building 39B oil/water separator, Building 39B oil feed tank, Building 39B oil feed pump, Building 39B waste oil handling area pad and the northern portion of the overhead transfer piping from disconnect at 102nd street) is being conducted in accordance with the Implementation Plan for the Miscellaneous Small Structures D&D project (Draft, DOE 1998).

Remedial Tasks

Safe Shutdown Programs has been completed on the Trane Incinerator awaiting HWMU closure, dismantlement and disposal. HWMU closure, dismantlement and disposal are described within this plan.

HWMU Decontamination

Purpose: The decontamination requirements needed to accomplish the remediation goals for the Trane Incinerator consistent with the RCRA/CERCLA integration strategy are discussed in Section 3.5.3.3 of the OU3 Integrated RD/RA Work Plan.

Scope: The Trane Incinerator was declared a HWMU because it was used to incinerate waste oil containing characteristically hazardous levels of lead (D008) and 1,1,1 Trichlorethane (F-listing). Oil/water separation was performed in the waste oil decant shelter (Building 39B). The oil was pumped from Building 39B directly to the oil feed tanks within Building 39A or to the oil holding tank (F3E-406 - capacity 5,800 gallons) via a 1-inch overhead transfer line. From Tank F3E-406, the waste oil was either pumped to the incinerator feed tank (for incineration) or pumped to the drum filling station (for off-site shipment).

A diagram of the incinerator is provided as Attachment 1, "Trane Incinerator Process Schematic". The combustion unit is a stationary vertical chamber. Emissions control equipment consisted of a baghouse placed after the burn chamber and before the point of emission from the stack. Particulates that were discharged from the burn chamber collected on the surface of the hanging bags in the baghouse. Particulates were then vibrated from the bags and collected in 55-gallon drums for storage. The exhaust gases then continued through the exhaust stack and were vented to the atmosphere.

Used to supply ambient air to the burn chamber, the air intake duct and two blowers (see Attachment 1) have not been exposed to the hazardous levels of lead (D008) or 1,1,1 Trichloroethane (F-listing). Therefore, these components do not require rinsing and will be removed in accordance with the Implementation Plan for the Plant 3 Complex D&D project.

The incinerator feed pump (see Attachment 1) and the flue gas duct (see Attachment 1)were removed during safe shutdown activities . These items are identified within MEF#3014, "Trane Incinerator Parts" and characterized as F-listing, D008 and low level radioactivity. The quantity of these items are contained within one white metal box that is planned for disposal at Envirocare. Also, these components do not require rinsing prior to disposal.

Decontamination of the Trane Incinerator will be achieved by rinsing the remaining components identified as Items 1 through 9 in Table B using a solution of potable water. Specifically, pumps shall be disassembled so each pump head may be rinsed. Rinseate will be collected for all other components listed in Table B and sampled for lead to verify decontamination in accordance with Ohio EPA Closure Guidance requirements. A total of seven samples will be collected. Two samples will be composites of Trane equipment and the pad surfaces. Since the rinseate may contain RCRA-listed wastes, it will be managed in

accordance with EP-0005, "Controlling Aqueous Discharges into Wastewater Treatment System."

In the event that potable water rinsing does not achieve the results required for Ohio EPA closure, the use of soda blasting will be incorporated for decontamination of the Trane Incinerator. All piping will be cut open prior to soda blasting and metal surfaces will be visually verified to meet the clean debris standard.

The Trane Incinerator equipment and debris will be dismantled, containerized and disposed of in the OSDF in accordance the OSDF WAC. The acid brick underneath Tank F3E-406 shall be disposed of off-site as part of the Plant 3 Complex D&D project. The Soil Characterization and Excavation Project (SCEP) will determine if the Building 39A floor, Pad 74W and the waste oil drumming area with trench drain meet WAC requirements for disposal in the OSDF. The integrated closure report for HWMU No. 28 will certify HWMU closure in accordance with this document and be submitted within 60 days of field activity completion.

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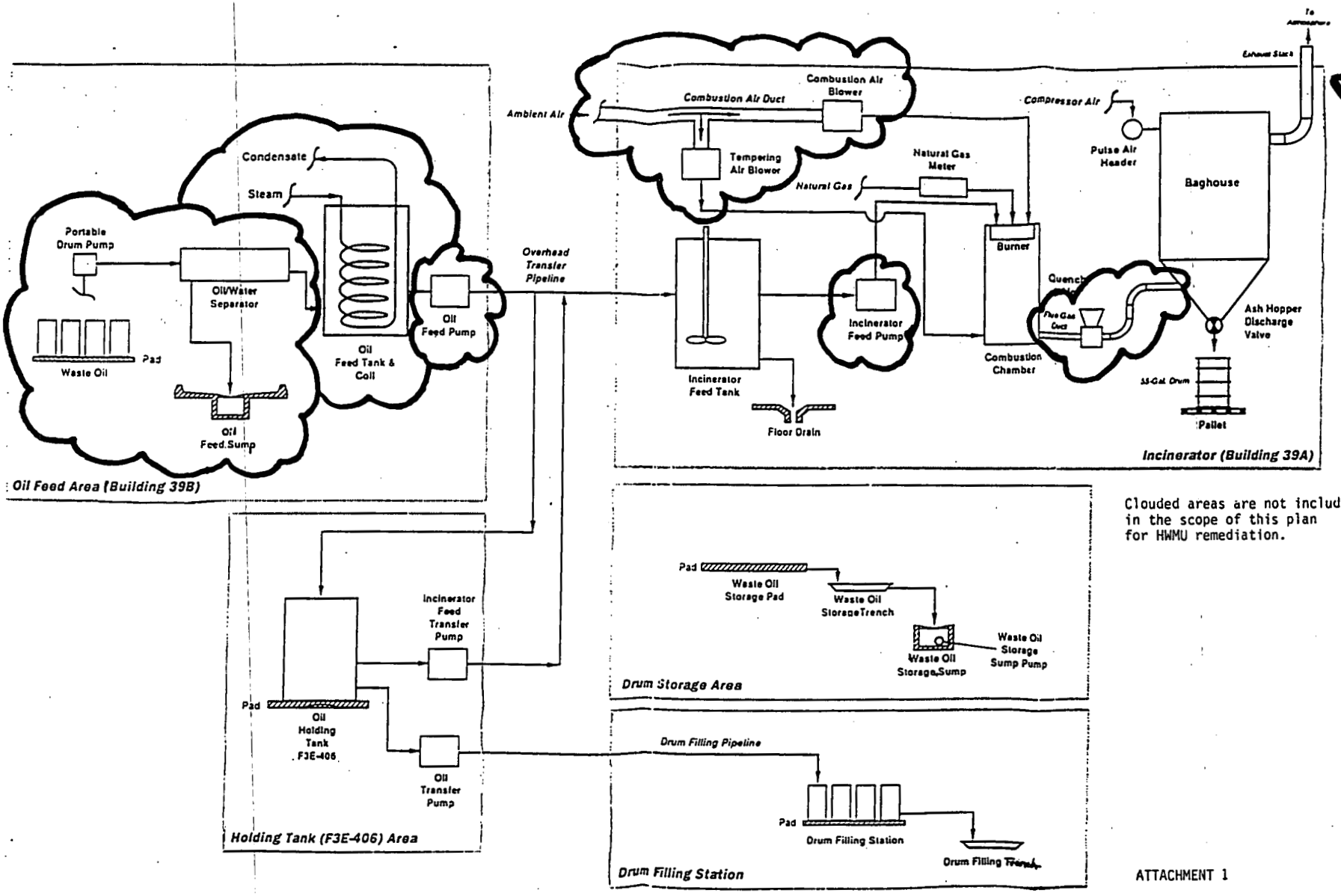

Clouded areas are not included in the scope of this plan for HWMU remediation.

ATTACHMENT 1

Trane Incinerator Process Schematic.