



Department of Energy

**Ohio Field Office
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2449

AUG 18 1999

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

DOE-1035-99

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

Dear Mr. Saric and Mr. Schneider:

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY
STUDY/CONSENT DECREE MONTHLY REPORT FOR THE PERIOD OF JULY 1, 1999,
THROUGH JULY 31, 1999**

This letter transmits the amended Consent Agreement Monthly Report for the period of July 1, 1999, through July 31, 1999. This report is formatted to reflect the proposal presented in the letter, DOE-0395-96, J. Reising to J. A. Saric and T. Schneider, "Phase VII Removal Actions and Reporting Requirements under the FEMP Legal Agreements," dated January 16, 1996, and agreed to by the U.S. Environmental Protection Agency (U.S. EPA) and Ohio Environmental Protection Agency (OEPA).

If you have any questions, please contact me at (513) 648-3139.

Sincerely,

Johnny W. Reising
Fernald Remedial Action
Project Manager

FEMP:Reising

Enclosures

Mr. James A. Saric
Mr. Tom Schneider

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cc w/enclosures:

N. Hallein, EM-42/CLOV
G. Jablonowski, USEPA-V, SRF-5J
D. Sarno, FCAB
V. Dastillung, FRESH
P. Dunn, FRESH
F. Barker, Tetra Tech
D. Carr, FDF/52-2
T. Hagen, FDF/65-2
AR Coordinator, FDF/78

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cc w/o enclosures:

A. Tanner, OH/FEMP
F. Bell, ATSDR
M. Schupe, HSI GeoTrans
J. Harmon, FDF/90
R. Heck, FDF/2
S. Hinnefeld, FDF/90
B. Irvine, FDF/28
T. Walsh, FDF/65-2
ECDC, FDF/52-7

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**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE
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STUDY/CONSENT DECREE MONTHLY REPORT JULY 1 THROUGH JULY 31, 1999**

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Introduction

This report describes actions at the Fernald Environmental Management Project (FEMP) from July 1, 1999 through July 31, 1999. The monthly report has been revised to reflect the proposal presented in the letter, DOE-0395-96, J. Reising to J.A. Saric and T. Schneider, "Phase VII Removal Actions and Reporting Requirements under the FEMP Legal Agreements", dated January 16, 1996, and agreed to by USEPA and OEPA.

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OPERABLE UNIT 1 - WASTE PITS REMEDIAL ACTION PROJECT

July 1999

- Enforceable Milestones Expected to be Completed
 - None

- Major Work Initiated/Continued/Completed
 - Continued review of RA Work Package deliverables by the Agencies
 - Continued construction of facilities needed for Pit Excavation
 - Continued to prepare for Pit Excavation SSR
 - Processed 10,780 tons of material from SP7, shipped 53 railcars of material for disposal at Envirocare

August 1999 (Anticipated)

- Enforceable Milestones Expected to be Completed
 - None

- Major Work to be Initiated/Continued/Completed
 - Complete facilities needed for Pit Excavation
 - Await approval from the Agencies of RA Work Package
 - Initiate and complete SSR for Pit Excavation
 - Complete excavation of material from SP7 and initiate excavation and load out of material from Waste Pits
 - Complete process facilities construction
 - Finalize plans for Dryer Operations SSR
 - Submit final RA package to the Agencies for final approval
 - Process 12,275 tons of material from SP7 and Waste Pits, ship 107 railcars of material for disposal at Envirocare

**OPERABLE UNIT 2 - ON-SITE DISPOSAL FACILITY AND SOIL CHARACTERIZATION AND
EXCAVATION PROJECT**
**Additional OU2 soils-related activities reported under OU5/Soils
Characterization and Excavation Project**

July 1999

- Enforceable Milestones
 - On-Site Disposal Facility (OSDF)
 - None
 - Soil Characterization and Excavation Project (SCEP)
 - None

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- Major Work to be Initiated/Continued/Completed
 - On-Site Disposal Facility
 - Completed processing clay for Cell 3 liner
 - Continued construction of Cell 3 clay liner
 - Began placement of impacted materials in Cell 1
 - Continued placement of impacted materials in Cell 2
 - Soil Characterization and Excavation Project (SCEP)
 - Performed walk-down on July 27, 1999 to status final punch list items in A1, PII, regarding the Site Preparation Package
 - Completed excavation and hauling of AWAC areas
 - Completed excavation of sludge cake from sludge drying beds
 - Initiated excavation of underground storage tank adjacent to the digester at the old STP Plant
 - Initiated demolition of structures/foundations
 - Initiated field activities in the Trap Range area
 - Began excavation of stockpiles within South Field and final excavation within Inactive Flyash Pile
 - Completed draft of Predesign Project Specific for sampling/measurement in A2,PII
 - Finalized Lockwood Greene Technologies (LGT) Task Order Plan (TOP)
 - Drafted variance to Project Specific Plan for real-time scanning and sampling within OU4 infrastructure construction area
 - Continued discussions with the property owners regarding access
 - Continued with Real-Time Program projects
 - Made Finding and Responsiveness Summary regarding Final Land Use available to the public
 - Natural Resource Restoration
 - Continued with ongoing projects
 - Continued to draft wetland mitigation settlement documents (Wetland Project is 80% complete)
 - Ecological Research Projects
 - Continued with projects
 - Continued to monitor growth in vegetation plots
 - Conservation Area OU4 Supplemental Environmental Project
 - U.S. Army Corp of Engineers has completed survey report and has made a final offer to land owners - land owner rejected the final offer and is not interested in further negotiations

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August 1999 (Anticipated)

- Enforceable Milestones
 - None
- Major Work to be Initiated/Continued/Completed
 - On-Site Disposal Facility
 - Complete clay liner in Cell 3
 - Begin geosynthetic liner in Cell 3
 - Continue placement of impacted materials in Cell 1
 - Continue placement of impacted materials in Cell 2
 - Soil Characterization and Excavation Project (SCEP)
 - Complete final punch list items for Project Close-Out of Site Preparation Package, A1PII
 - Complete additional AWAC excavation of sludge drying beds
 - Complete demolition of structures/foundations
 - Initiate excavation and size reduction of underground utilities
 - Complete field activities in the Trap Range area
 - Submit Verification of Treatment Reports to Agencies for Trap Range and Firing Range
 - Excavate treated soil for placement in the OSDF
 - Complete excavation of stockpiles within South Field and Inactive Flyash Pile area
 - Submit PSP for A2PII (Parts Two and Three) to Agencies for review
 - Complete physical sampling and continue analysis of A2PIII (Part One) Certification
 - Submit Project Specific Plan for Area 3A/4A surface predesign investigation in A7PI
 - Continue with Real-Time projects
 - Natural Resource Restoration
 - Continue with ongoing projects
 - Ecological Research Projects
 - Continue with projects
 - Continue to monitor growth in vegetation plots

OPERABLE UNIT 3 - FACILITIES CLOSURE AND DEMOLITION PROJECT

July 1999

- Enforceable Milestones
 - None

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- Major Work Initiate/Continued/Completed
 - Facilities Shutdown Projects
 - Continue Installation of office trailers, training of personnel and development of Safe Work Plan by Plant 5 subcontractor (Mactec)
 - Continue dismantlement of Pipe Bridges
 - Continue to remove exterior transite, and structural dismantlement of Building 12
 - Maintenance/Tank Farm Complex D&D and Water Storage Tank Project
 - Continue with preparations to connect the Domestic Water HDPE pipe to the Domestic Water Service

August 1999 (Anticipated)

- Enforceable Milestones
 - None
- Major Work to be Initiated/Continued/Completed
 - Facilities Shutdown Projects
 - Continue projects in progress

OPERABLE UNIT 4 - SILOS PROJECT

July 1999

- Enforceable Milestones
 - None
- Major Work Initiated/Continued/Completed
 - Reviewed initial subcontractor submittals, including the Conceptual Design Package, Environmental Control Plan and Contractor's Schedule, for the Silos 1 and 2 Accelerated Waste Retrieval Project
 - Initiated paving for the Silos Infrastructure Project
 - Reviewed the RMRS submittals for the Silo 3 Project:
 - Design Basis Document and Conceptual Design Package
 - 30% Integrated Hazard Analysis
 - 30 % Hazard Category Calculations
 - 30 % Safety Basis Document

August 1999 (Anticipated)

- Enforceable Milestones
 - None

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- Major Work to be Initiated/Continued/Completed
 - Finalize contractor's schedule for the Accelerated Waste Retrieval Project
 - Initiate internal review of the Silos 1 and 2 Feasibility Study
 - Initiate waste shipment, treatment and disposal for the VitPP Waste Disposition Project
 - Complete construction activities for the Silos Infrastructure Project

OPERABLE UNIT 5 - AQUIFER RESTORATION AND WASTEWATER PROJECT

July 1999

- Enforceable Milestones
 - Submitted monthly NPDES Discharge Monitoring Report to the OEPA on July 14, 1999
 - Met 20 parts per billion (ppb) monthly average uranium discharge to Great Miami River as required by OU5 Record of Decision
- Work Initiated/Continued/Completed
 - Submitted the April 1999 Operating Report for the Re-Injection Demonstration on July 15, 1999 to DOE for transmittal to the Agencies. DOE transmitted to the Agencies on July 21, 1999
 - Completed construction for the Sludge Removal System at the Stormwater Retention Basin (SWRB) and Biosurge Lagoon (BSL) on July 23, 1999
 - Begin System Operability Testing
 - Implementation of actions for AWWT Distributed Control Systems(DCS) upgrade on July 27, 1999 were made by Procurement
 - Award was made to System Sales, Inc. for construction to switch out the Ion Exchange (IX) control panel at the AWWT to the DCS systems. Vendor is assembling panel.
 - Initiated preliminary design of additional extraction wells for the South Field Extraction System (SFES)
 - Completed design of piping changes at AWWT to reroute groundwater directly to the Phase I clarifier overflow tank.
 - Initiated construction planning to reroute backwash at AWWT directly to the SWRB
 - Completed design for additional extraction wells for the South Field on July 30, 1999
 - Prepared initial draft of project specific plan to install five monitoring wells
 - Presented On Site Disposal Facility (OSDF) Leak Detection System Volumetric Monitoring results to Agencies on July 27, 1999

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August 1999 (Anticipated)

- Enforceable Milestones
 - Submit monthly NPDES Discharge Monitoring Report to the OEPA covering the month of July
 - Meet 20 parts per billion (ppb) monthly average uranium discharge to Great Miami River as required by OU5 Record of Decision

- Work to be Initiated/Continued/Completed
 - Continue to geoprobe in South Field area
 - Continue construction of AWWT Laboratory Expansion
 - Begin drilling two new extraction wells in the South Field

WASTE MANAGEMENT

July 1999

- Enforceable Milestones
 - None

NOTE: Waste Treatment transmitted to DOE a notification letter for submittal to Ohio EPA of a need to amend the Site Treatment Plan (STP). The letter summarizes the changes from the reprogram change proposal as well as the change to off-site treatment. This notification is in accordance with the October 4, 1995 Director's Findings & Orders regarding the STP.

- Work Initiated/Continued/Completed
 - Mixed Waste Shipping (MWS)
 - Conducting DOT container review of radiological characterization information pertaining to 143 MWS candidate drums for shipment to Envirocare
 - Liquid Mixed Waste Project
 - Continue to evaluate newly generated waste streams for bulking into Batches 10, 11, and 12
 - Shipped Batch 8 shipments 2, 3, and 4 (approximately 11, 078 gallons) to the TSCA Incinerator
 - Neutralization/Precipitation/Deactivation/Stabilization (NPDS) Project
 - The project is complete. Completed crosswalk of surface areas and weights for PermaFix equipment to survey data for shipping calculations
 - Thorium Legacy Waste Project (TLWP)
 - Repackaged 5 boxes of Low-Level Waste (LLW) for shipment to Nevada Test Site (NTS) and 3 boxes of Mixed-Waste (MW) for treatment (Total LLW boxes repackaged to date is 347 and total MW boxes repackaged to date is 62)

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- Issued the SSR Plan for thorium low-level waste shipments
- Vented potentially hydrogen generating cans in the Quonset Hut
- Began investigation into thorium metal fire which occurred in a 5 gallon can on July 24, 1999 inside Building 65
- Met with the chemical analysis team to gain in-depth look at boxes already prepared for shipment containing potentially hydrogen generating material to determine if the inner containers require venting
- Continued repackaging efforts of containers that have been determined free of potentially hydrogen generating waste
- Received approval of the revised Thoria Gel Profile from NTS on July 19, 1999
- RCI Solvent Extraction Project
 - Continued decontamination and decommissioning
- Organic Treatment Project (OTP)
 - Submitted requests for absorbent determination for First Article Testing
 - Received radiological characterization and submitted request for absorbent determination for remainder of OTP waste inventory
 - Received Fernald Organic Waste Treatment Project Plan from Materials & Energy Corporation as specified in the contract

August 1999 (Anticipated)

- Enforceable Milestones
 - None
- Work to be Initiated/Continued/Completed
 - Upon receipt of OEPA determination on STP changes, (Revision VS. Amendment), incorporate changes to STP and related documentation
 - Mixed Waste Shipping
 - Continue to make final determination of additional requirements for shipment of wastes to a permitted commercial disposal facility for the 143 candidate drums
 - Liquid Mixed Waste Project
 - Ship Batch 8, Shipment 5 to TSCA Incinerator, completing Batch 8 shipments
 - Continue to prepare MEF for Batch 9 and submit application to for Batch 9 to TSCA Incinerator
- Neutralization/Precipitation/Deactivation/Stabilization (NPDS) Project
 - The project is complete. PermaFix is to disassemble and package contaminated equipment. Radiological characterization is to be completed and shipment is to be made by August 30, 1999

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- Thorium Legacy Waste Project
 - Develop a path forward for managing the inventory of thorium metal similar to that which caught fire on July 24, 1999, and complete the event investigation
 - Continue support for the SSR in shipping of LLW Thorium to NTS
- RCI Solvent Extraction Project
 - Complete decontamination and decommissioning activities
- Organic Treatment Project (OTP)
 - Begin drafting Project Execution Plan
 - Continue to await absorbent determination with regard to First Article Testing Material
 - Develop Task Order to perform Real Time Radioscopic (RTR) Examination of First Article Testing containers to support absorbent determination
- Hazardous Waste/Recycling
 - Acquire cost estimate from Heritage Environmental for bulk water treatment chemicals pickup, treatment, and disposal
 - Continue to prepare labpack shipment
 - Identify reutilization options for approximately 328 "clean" concrete shield blocks