



**Department of Energy**

**Ohio Field Office  
Fernald Area Office**

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**2005**

FEB 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-0440-99

Mr. Tom Schneider, Project Manager  
Ohio Environmental Protection Agency  
401 East 5<sup>th</sup> 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 JANUARY 1, 1999,  
THROUGH JANUARY 31, 1999**

This letter transmits the amended Consent Agreement Monthly Report for the period of January 1, 1999, through January 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 Fernald Environmental Management Project 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,

FEMP:Reising

Johnny W. Reising  
Fernald Remedial Action  
Project Manager

Enclosure

2005

Mr. James A. Saric  
Mr. Tom Schneider

-2-

FEB 18 1999

cc w/enclosure:

N. Hallein, EM-42, CLOV  
G. Jablonowski, USEPA-V, SRF-5J  
R. Beaumier, TPSS/DERR, OEPA-Columbus  
D. Sarno, FCAB  
V. Dastillung, FRESH  
P. Dunn, FRESH  
F. Barker, Tetra Tech  
AR Coordinator, FDF/78

cc w/o enclosure:

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

2

**2005**

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE  
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY  
STUDY/CONSENT DECREE MONTHLY REPORT JANUARY 1 THROUGH 31, 1999**

**Introduction**

This report describes actions at the Fernald Environmental Management Project (FEMP) from January 1, 1999 through January 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.

2005

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE  
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY  
STUDY/CONSENT DECREE MONTHLY REPORT JANUARY 1 THROUGH 31, 1999**

**OPERABLE UNIT 1 - WASTE PITS REMEDIAL ACTION PROJECT**

January 1999

- Enforceable Milestones Expected to be Completed
  - None
  
- Major Work Initiated/Continued/Completed
  - Received comments on First Load Out Work Plan from OEPA
  - Continued review of First Load Out Work Plan by USEPA
  - Continued review of draft RA deliverables by OEPA
  - Continued to revise RA Deliverables to address USEPA comments
  - Continued construction of waste processing facility
  - Continued training of FAT&LC personnel for ARASA Operations
  - Continued Review of Rail Tender

February 1999 (Anticipated)

- Enforceable Milestones Expected to be Completed
  - Initiation of Operations prior to March 1, 1999, (an OU1 RAWP Milestone) to be met with First Load Out by February 28, 1999
  
- Major Work to be Initiated/Continued/Completed
  - Await conditional approval of First Load Out Work Plan from Agencies
  - Complete comment resolution and resubmit First Load Out Work Plan to Agencies as final
  - Continue review of draft RA deliverables by OEPA
  - Continue revision of RA Deliverables to address USEPA comments
  - Complete construction of facilities needed for First Load Out activities and continue with completion of remaining facilities
  - Complete training of First Load Out personnel
  - Continue training of FAT&LC personnel for full Operations
  - Initiate and complete SSR for First Load Out Activities
  - Issue limited authorization to operate to IT Corporation
  - Continue review of Rail Tender

2005

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE  
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY  
STUDY/CONSENT DECREE MONTHLY REPORT JANUARY 1 THROUGH 31, 1999**

**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**

January 1999

- Enforceable Milestones
  - On-Site Disposal Facility (OSDF)
    - None
  - Soil Characterization and Excavation Project (SCEP)
    - None
  
- Major Work to be Initiated/Continued/Completed
  - On-Site Disposal Facility
    - Placed crusting agent on exposed surfaces in accordance with the Surface Water and Erosion Control Plan
    - Continued to evaluate the amount of clay that can be derived from the Borrow Area
  - Soil Characterization and Excavation Project (SCEP)
    - Continued Precertification activities for Area 2, Phase III for Radiation Tracking System (RTRAK)
    - Continued construction of Site preparation facilities
    - Awarded mobilization contract to Severson Environmental Services in regard to the Trap Range
  - Natural Resource Restoration
    - Continued discussions with Natural Resource Trustees regarding settlement of Ohio's claim
    - Began to develop Findings and Responsiveness Summary regarding public comments received on the proposed final land-use at the FEMP
    - Continued project activities in the On-Property Public Access Habitat Area
    - Continue preparation of the Appraisal Report of the Conservation Area

5

2005

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE  
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY  
STUDY/CONSENT DECREE MONTHLY REPORT JANUARY 1 THROUGH 31, 1999**

February 1999 (Anticipated)

- Enforceable Milestones
  - None
- Major Work to be Initiated/Continued/Completed
  - On-Site Disposal Facility
    - Continue to evaluate the amount of clay that can be derived from the Borrow Area
  - Soil Characterization and Excavation Project (SCEP)
    - Continue construction of Site preparation facilities
    - Receive construction bonds, and insurance certificate from Severson, then issue notice to Proceed in area of Trap Range
  - Natural Resource Restoration
    - Continue discussions with Natural Resource Trustees regarding settlement of Ohio's claim
    - Continue negotiations with land owners upon completion of appraisal report in Conservation Area

**OPERABLE UNIT 3 - FACILITIES CLOSURE AND DEMOLITION PROJECT**

January 1999

- Enforceable Milestones
  - None
- Major Work Initiate/Continued/Completed
  - Facilities Shutdown Projects
    - Continued activities
    - Completed removal of various material
    - Completed transfer of 99 drums of hold-up material from Plant 6 to Plant 1 pad
  - Facility Demolition/Supplemental Environmental Projects
    - Conducted Plant 6 EWC D&D Storyboard
    - Transmitted the Plant 5 Complex D&D Implementation Plan to DOE for submittal to the Agencies
    - Analyzed HWMU#50 - UNH Tanks, Building 3E/Hot Raffinate: Rinseate samples. Analytical results are well below RCRA limits for Barium, Chromium, Mercury and Lead, no further rinsing/sampling is required in Building 3E for HWMU #50. HWMU #50 Closure is in the process of being completed (Demobilization is in progress)

6

# 2005

## CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY STUDY/CONSENT DECREE MONTHLY REPORT JANUARY 1 THROUGH 31, 1999

- Began development of the Project Completion Report for the Thorium/Plant9 Complex D&D Project
- Finalized the D&D Project Completion Report for submittal to the regulatory agencies
- Conducted internal review of The Boiler Plant/Water Plant Project Completion Report
- Building 12 Relocation
  - Continued carpenter shop renovation activities in Service Building
  - Continued relocation of equipment from Building 12 to Building 30/45
  - Continued cleaning miscellaneous debris and trash in Building 12
  - Continued electrical test shop fabrication
- Technical Services
  - Poured concrete for R-Track Building
  - Issued Traveler for Plant 3 HWMU #28
  - Received conditional acceptance for Building 30/45 Maintenance Relocation
  - Completed field work for HWMU #50
- Boiler Plant/Water Plant/Thorium/Plant 9
  - Completed equipment decontamination
  - Began Draft Project Closeout Report
- Maintenance/Tank Farm D&D and Water Storage Tank Project
  - Suspended field activities for construction of new water storage tank because of severe weather and lack of approved submittals
  - Issued contractor notice to proceed for tank farm D&D and pipe bridge D&D.

### February 1999 (Anticipated)

- Enforceable Milestones
  - None
- Major Work Initiated/Continued/Completed
  - Facilities Shutdown Projects
    - Continue facility shutdown activities
  - Facility Demolition/Supplemental Environmental Projects
    - Submit the Boiler Plant/Water Plant Project Completion Report to the Agencies
    - Continue the Plant 6/EWC Implementation Plan
  - Building 12 Relocation
    - Complete carpenter shop renovation activities in Service Building
    - Complete relocation of equipment from Building 12 to Building 30/45
    - Complete cleaning miscellaneous debris and trash in Building 12
    - Complete electrical test shop fabrication
    - Begin installing paint booth adjacent to Building 30/45
    - Begin facility shutdown activities (draining fluids and oil from equipment, etc.)

2005

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE  
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY  
STUDY/CONSENT DECREE MONTHLY REPORT JANUARY 1 THROUGH 31, 1999**

- Technical Services
  - Complete east leg of the 13.2 KV Power System and power up feeder 2
  - Complete 480V power feed redistribution from Plant 6
  - Start and complete redistribution of RDA System at Plant 6
  - Continued installation of West Leg of 13.2KV System
  - Begin field work on HWMU #28
  - Continue erection of R-Track Building, electric, HVAC and fire protection equipment
- Boiler Plant/Water Plant/Thorium/Plant 9
  - Complete all equipment decontamination
  - Complete all punchlist items
  - Continue Draft Project Closeout Report for Plant 9
  - Complete and submit Draft Project Closeout Report to the Agency for the Boiler Plant
- Plant 5 Complex D&D Project
  - Continue and complete T-95 installation activities and T-131 relocation and installation activities
- Plant 6 Complex D&D and East Warehouse Complex D&D Projects
  - Complete planning of Plant 6 D&D and East Warehouse Complex D&D RFP package
  - Continue preparation of Plant 6 D&D Implementation Plan
  - Complete evaluation of control point alternatives
- Maintenance/Tank Farm D&D and Water Storage Tank Project
  - Continue field activities for construction of new water storage tank
  - Continue field activities for D&D of tank farm

**OPERABLE UNIT 4 - SILOS PROJECT**

January 1999

- Enforceable Milestones
  - None
- Major Work to be Initiated/Continued/Completed
  - Completed Trailer Upgrade portion of Silos Infrastructure Project
  - Silo 1 and 2 Project
    - Initiated internal FDF review of initial sections of Silos 1 and 2 FS revision in preparation for submittal to DOE
    - Responded to OEPA comments on the design package and Wetland Permitting Cross-walk for the Silos Infrastructure Project

2005

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- Observed 72-hour Proof of Principle demonstration tests at EnVitCo (vitrification-joule heated), Chem-Nuclear Services (chemical stabilization - other) and IT (chemical stabilization-cement based). Tests were also observed by DOE, USEPA, and Silo CAT team.
- Conducted kickoff meeting with Theta Engineering on VitPP Waste Disposition contract
- Silo 3 Project
  - Issued Notice to proceed to RMRS for Silo 3 remediation contract

February 1998 (Anticipated)

- Enforceable Milestones
  - None
- Major Work to be Initiated/Continued/Completed
  - Receive VitPP Waste Disposition Project Plan from Theta Engineering. Review and approve Project Plan and schedule readiness audit and electrical upgrade
  - 
  - Issue Notice to Proceed to Staver Group for the roads portion of the Silos Infrastructure Project
  - Award contract for Silos 1 and 2 Accelerated Waste Retrieval (AWR) Project

**OPERABLE UNIT 5 - AQUIFER RESTORATION AND WASTEWATER PROJECT**

January 1999

- Enforceable Milestones
  - Submitted monthly NPDES Discharge Monitoring Report to OEPA on January 14, 1999, covering the month of December
  - Submitted the NPDES Noncompliance Report to the OEPA on January 14, 1999 covering the month of December
  - Exceeded the OU5 established limit of 20 parts per billion (ppb) monthly average uranium concentration discharge in the FEMP effluent discharge to the Great Miami River. NOTE: The USEPA and OEPA were notified of the exceedance. The occurrence is being evaluated and will be discussed during the weekly conference calls in February.
- Work to be Initiated/Continued/Completed
  - Submitted the November 1998 Operating Report for the Re-Injection Demonstration on January 13, 1999 for transmittal to the Agencies (transmittal was made January 15, 1999)

2005

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STUDY/CONSENT DECREE MONTHLY REPORT JANUARY 1 THROUGH 31, 1999**

- Issued Notice to Proceed to the Staver Group to construct the Sludge Removal System on January 21, 1999
- Issued Certified for Construction Drawings on January 29, 1999 for AWWT Lab Expansion Project
- Initiated evaluation of resin regeneration process with respect to its role in maintaining compliance with FEMP's performance-based effluent uranium discharge limit of 20 parts per billion (ppb)
- Initiated evaluation of significant uranium contamination in the site's Sewage Treatment Plant
- Discussed December 1999 exceedance of discharge limit of 20 parts per billion to the Great Miami River during conference call, no specific actions will be required and an agreement was made to implement changes previously discussed in advance of revising the OM&MP plan

**February 1999 (Anticipated)**

- Enforceable Milestones
  - Submit monthly NPDES Discharge Monitoring Report
  - Submit the NPDES Noncompliance Report
  - 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
  - Work continues

**WASTE MANAGEMENT**

**January 1999**

- Enforceable Milestones
  - None
- Work to be Initiated/Continued/Completed
  - Mixed Waste Shipping
    - Continued to identify sampling and container requirements for waste materials determined to be candidate for shipment to a permitted commercial disposal facility. Upon this determination, 143 drums will be shipped to the permitted facility

# 2005

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- Liquid Mixed Waste Project
  - Continued TSCA Incinerator DOT certification activities
  - Continued to work toward obtaining a shipment date for the shipment of Batch 7 for treatment, shipment of Batch 8 will follow
  - Continued to evaluate newly generated waste streams for bulking into Batch 9, Batch 10 and Batch 11
  - Continued bulking of remaining 500 gallons of oils from Plant 6. This was not completed due to problems with viscosity of the oils
- Neutralization/Precipitation/Deactivation/Stabilization (NPDS) Project
  - This project is complete. A letter acknowledging concurrence from USEPA on the 61 drums of treated sodium sulfate was forwarded to DOE-FN and will be included in the waste stream profile for NTS review. No further container activities will be conducted until profiles are approved by NTS
- Thorium Legacy Waste Project
  - Finalized the root cause investigation of the December 11, 1998, Motor Vehicle Operator (MVO) off-normal occurrence when a HEPA unit was dropped from a fork truck; preventive actions are in place
  - Continued Integrated Safety Management (ISM) presentation preparation
  - Repackaged nine boxes for shipment to NTS, making total boxes repackaged to date 36
- RCI Solvent Extraction Project
  - Awaiting issuance of task order for the removal of the remaining waste from the OEP tanks to tote tanks to be bulked into Batch 9
  - Conducted task order walk down on January 29, 1999
- Organic Treatment Project (OTP)
  - Completed verification of MEF characterization files to data in SWIFTS for the Debris and PCB Solids subproject under OTP
  - Determined that Fire Training Facility wastes should go to OSDF after meetings with Waste Characterization, Waste Acceptance Organization, and Environmental Compliance. This will result in a significant cost savings
  - Completed technical review of Material & Energy Corporations's (M&EC) draft delivery order, which included verification of MEF characterization files to data in SWIFTS of all subprojects in the OTP
  - Conducted meeting with M&EC and FEMP personnel to discuss future analytical protocols for characterization of waste based on treatment, rather than disposal



2005

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STUDY/CONSENT DECREE MONTHLY REPORT JANUARY 1 THROUGH 31, 1999**

February 1999 (Anticipated)

- Enforceable Milestones
  - None
- Work to be Initiated/Continued/Completed
  - Evaluate possible amendment to the Site Treatment Plan to account for Fire Training Facility waste anticipated to be routed to the OSDF
  - Schedule meeting with OEPA to negotiate new milestone dates for newly identified/generated wastestreams
  - Mixed Waste Shipping
    - Ship 143 drums to the permitted facility upon determination by Waste Characterization of additional requirements to be met for transport of the materials
    - Liquid Mixed Waste Project
      - Finalize shipment date for the shipment of Batch 7 for treatment, shipment of Batch 8 will follow
      - Continue bulking of remaining oils from Plant 6
    - Neutralization/Precipitation/Deactivation/Stabilization (NPDS) Project
      - Obtain NTS waste acceptance of the 61 drums of sodium sulfate waste treated by PermaFix
  - Thorium Legacy Waste Project
    - Continue repackaging operation
    - Orchestrate movement of waste from the Quonset Hut to Building 64
    - Evaluate treatment options for mixed thorium waste
  - RCI Solvent Extraction Project
    - Complete removal of solids remaining in the two Building 80 RCI Solvent Extraction aqueous waste tanks
  - Organic Treatment Project (OTP)
    - Revise Statement of Work and schedule for the OTP to include LLW and NPDS inventory requiring treatment
    - Continue investigation of offsite treatment options and onsite treatment technologies
    - Continue efforts toward dispositioning of waste streams from Fire Training Facility meeting Waste Acceptance Criteria (WAC) through the OSDF rather than through treatment in the OTP, as a cost saving endeavor
  - Hazardous Waste/Recycling
    - Ship eight 5-gallon buckets of packaged nickel-cadmium batteries to Recyclights in Columbus, Ohio
    - Labpack over 60 gallons of unopened paint in preparation for Safe Shutdown remediation activities

12