



Department of Energy

**Ohio Field Office
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2554

OCT 13 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-0028-00

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 SEPTEMBER 1,
1999, THROUGH SEPTEMBER 30, 1999, AND QUARTERLY REPORT FOR THE PERIOD OF
JULY 1, 1999, THROUGH SEPTEMBER 30, 1999, INCLUDING REMOVAL ACTIONS
STATUS REPORT**

This letter transmits the Consent Agreement Monthly Report for the period of September 1, 1999, through September 30, 1999, and Quarterly Report for the period of July 1, 1999, through September 30, 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).

OCT 13 1998
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Mr. James A. Saric
Mr. Tom Schneider

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

Sincerely,



Johnny W. Reising
Fernald Remedial Action
Project Manager

FEMP:Reising

Enclosures

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

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/31
- B. Irvine, FDF/65-2
- R. McDonough, FDF/31
- T. Walsh, FDF/65-2
- ECDC, FDF/52-7

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY
STUDY/CONSENT DECREE MONTHLY REPORT SEPTEMBER 1 THROUGH 30, 1999, AND
QUARTERLY REPORT JULY 1, 1999 THROUGH SEPTEMBER 30, 1999 INCLUDING
REMOVAL ACTION STATUS REPORT**

Introduction

This report describes actions at the Fernald Environmental Management Project (FEMP) from July 1, 1999 through September 30, 1999. The monthly and quarterly reports have 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.

The Department of Energy - Fernald, has given direction to utilize the submittal of the Quarterly Integrated Environmental Monitoring Plan (IEMP) reports to satisfy the effluent radionuclide reporting requirements of the Consolidated Consent Agreement/Federal Facility Compliance Agreement/Federal Facility Agreement/Remedial Investigation/Feasibility Study/Consent Decree Quarterly Report.

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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
 - The Agencies continued review of RA Work Package deliverables
 - 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

- Enforceable Milestones Expected to be Completed
 - None
- Major Work Initiated/Continued/Completed
 - Received conditional approval of Remedial Action (RA) Work Package from the Agencies
 - Initiated Standard Start-up Review (SSR) for Pit Excavation on August 11, 1999, and Completed SSR on August 27, 1999
 - Initiated excavation and load out of material from Waste Pits
 - Initiated Construction Acceptance Testing/System Operability Testing (CAT/SOT) for process facilities
 - Finalized plans for the Dryer Operations SSR
 - Submitted final RA Package to the Agencies for final approval
 - Processed 11,634 tons of material from SP7 and Waste Pits
 - Shipped 102 railcars of material to Envirocare for disposal

September 1999

- Enforceable Milestones
 - None
- Work Initiated/Continued/Completed
 - Completed process facilities construction
 - Processed 12,012 tons of material
 - Shipped 100 railcars of material to Envirocare for disposal

CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY STUDY/CONSENT DECREE MONTHLY REPORT SEPTEMBER 1 THROUGH 30, 1999, AND QUARTERLY REPORT JULY 1, 1999 THROUGH SEPTEMBER 30, 1999 INCLUDING REMOVAL ACTION STATUS REPORT

October 1999 (Anticipated)

- Enforceable Milestones
 - None

- Work to be Initiated/Continued/Completed
 - Initiate and complete SSR for Dryer Operations
 - Declare readiness for Authorization of Full Operations
 - Process 12,800 tons of material
 - Ship 120 railcars of material to Envirocare for disposal

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

- 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

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- Completed draft of Pre-design 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

August 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
 - Completed construction of Cell 3 clay liner
 - Continued placement of impacted materials in Cells 1 and 2
 - Began construction of secondary geosynthetic liner in Cell 3
 - Presented evaluation report "Required Minimum Thickness of Intervening Horizon of Category 1 Impacted" to the Agencies on August 17, 1999

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- Soil Characterization and Excavation Project (SCEP)
 - Area 1, Phase II
 - Received preliminary as-builts for Site Preparation Package
 - Completed excavation of RCRA and Above Waste Acceptance Criteria (AWAC) soils from sludge drying beds
 - Completed demolition and hauling of major structures
 - Continued work on deep excavation support systems
 - Initiated excavation and size reduction of underground utilities inside STP
 - Completed field activities in the A1PII Trap Range
 - Submitted Verification of Treatment Report(s) to Agencies showing that soil is no longer hazardous in both A2PI Firing Range and A1PII Trap Range
 - Area 2, Phase I
 - Received and commented on draft summary report showing stabilization results below toxicity characteristic levels
 - Completed Inactive Flyash Pile
 - Continued excavation of South Field stockpiles
 - Began excavation in South Field
 - Area 2, Phase II
 - Submitted Parts Two and Three of Project Specific Plan (PSP) to Agencies
 - Received Agency comments on Part One of the PSP and began to modify PSP, based upon the Agency comments
 - Area 2, Phase III
 - Completed field sampling, began data validation
 - Other Areas
 - Submitted Project Specific Plan for Area 3A/4A, "Sub-surface Predesign Investigation," to the Agencies on August 20, 1999
 - Completed real-time scanning in A7,PI
 - Conducted discussions with property owners for access in A9, PI
 - Real Time Program
 - Establishing QA/QC program for instrumentation
 - Continued construction of calibration pad for HPGe and NaI detectors

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- Continued development of methods and procedures for documenting the calibration pad process
- Continued to determine need for revision of RTRAK applicability Study
- Natural Resource Restoration
 - Dept. of Interior and the Ohio Attorney General's office continue to draft settlement
- Wetland Mitigation - Phase I
 - Project continues, being eighty percent complete
- Conservation Area OU4 Supplemental Environmental Project
 - US Army Corp of Engineers made final offer to land owners regarding land easements, which was rejected
- Ecological Research Projects
 - Subprojects consisting of
 - 1) Identification and Control of Invasive Species, continue to monitor growth of plants
 - 2) Monitoring of growth of A1PI and A8PI vegetation plots continues
 - 3) Ecological restoration case study by Texas Southern University is in progress, comments from FDF are being compiled on Draft Final Report
 - 4) American Chestnut Trees, growth continues to be monitored at Miami University - Middletown Campus
- Final Land Use
 - Continued to draft Master Plan for Public Use

September 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
 - Continued placement of impacted materials in Cells 1 and 2
 - Continue construction of secondary geosynthetic liner in Cell 3 :
 - Begin construction of primary geosynthetic liner in Cell 3

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- Await comments from Agencies regarding "Evaluating Required Minimum Thickness of Intervening Horizon of Category 1 Impacted Report"
- Soil Characterization and Excavation Project (SCEP)
 - Area 1, Phase II
 - Continued work on deep excavation support systems
 - Completed excavation and size reduction of underground utilities inside STP
 - Received approval of Treatment Report(s) to Agencies showing that soil is no longer hazardous in both A2PI Firing Range and A1PII Trap Range
 - Area 2, Phase I
 - Continued excavation of South Field stockpiles
 - Continued excavation in South Field
 - Area 2, Phase II
 - Submitted response to Agency comments on Part One of the PSP and continued to modify PSP, based upon the Agency comments
 - Area 2, Phase III
 - Continued data validation
 - Other Areas
 - Initiated work to create a single construction contract for the OSDF and Area 3A/4A excavation
 - Continued discussions with property owners for access in A9, PI
 - Real Time Program
 - Continued to establish QA/QC program for instrumentation
 - Continued construction of calibration pad for HPGe and NaI detectors
 - Continued development of methods and procedures for documenting the calibration pad process
 - Continued to determine need for revision of RTRAK applicability Study
 - Completed calibration of RSSII (a sodium iodide detection system on a second-stroller) data
 - Natural Resource Restoration
 - Dept. of Interior and Ohio Attorney General's office continues to draft settlements
 - Wetland Mitigation - Phase I
 - Project continues

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- Conservation Area OU4 Supplemental Environmental Project
 - Continue to determine path forward regarding land easements
- Ecological Research Projects
 - Subprojects consisting of 1) Identification and Control of Invasive Species, continue to monitor growth of plants
 - 2) Monitoring of growth of A1PI and A8PI vegetation plots continues
 - 3) Ecological restoration case study by Texas Southern University is in progress, comments from FDF continue to be compiled on Draft Final Report
 - 4) American Chestnut Trees, growth continues to be monitored at Miami University - Middletown Campus
- Final Land Use
 - Continued to draft Master Plan for Public Use

October 1999 (Anticipated)

- 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
 - Continue placement of impacted materials in Cells 1 and 2
 - Complete construction of primary geosynthetic liner in Cell 3
 - Begin construction of one foot of protective cover over Cell 3
 - Soil Characterization and Excavation Project (SCEP)
 - Area 1, Phase I
 - Await Agency approval of sampling results for Firing Range
 - Begin excavation of treated soil for placement in the OSDF
 - Complete stockpile excavation and continue excavation of South Field
 - Area 1, Phase II
 - Continue to work toward close out of project
 - Continue precertification activities and seed disturbed areas
 - Area 2, Phase II
 - Initiate request for proposal on ground penetrating radar through Technology Program group

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- Area 2, Phase III
 - Continue data validation
- Other Areas
 - Complete field activities for Area 3A/4A subsurface predesign investigation
 - Begin physical sampling in A7,PI
 - Continued to determine need for revision of RTRAK applicability Study
 - Continue construction of calibration pad
 - Continue to draft methods for calibration of NaI and HPGe tools on the calibration pad
 - Initiate revision to "Guidelines, Measurement Strategies, and Operational Factors for the Deployment of In-Situ Gamma Spectroscopy at the Fernald Site"
 - Submit documentation of Gator RSSII calibration to Agencies for approval
- Conservation Area OU4 Supplemental Environmental Project
 - Continue to determine a path forward for land easements
- Ecological Research Projects OU4 Supplemental Environmental Project
 - Continue to monitor all phases of project
- Natural Resource Restoration
 - Dept. of Interior and Ohio Attorney General's office continue to draft settlements
- Wetland Mitigation
 - Issue addendum to design with as-built drawings
 - Begin Fall planting

OPERABLE UNIT 3 - FACILITIES CLOSURE AND DEMOLITION PROJECT

July 1999

- Enforceable Milestones
 - None
- 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

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- 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

- Enforceable Milestones
 - None
- Major Work Initiate/Continued/Completed
 - Plant 5 D&D
 - Continue to conduct completion mobilization activities
 - Began cleaning Building 5E in preparation of demolition
 - Plant 6 - D&D
 - Review of contractor responses to Request for Proposal is being conducted
 - Miscellaneous Small Structures
 - Began field work on Building 63 D&D
 - Maintenance/Tank Farm Complex D&D
 - Continued D&D of Building 12A and the Pipe Bridge
 - Completed interior of the Pump House Building
 - Continued tie-ins to site utility systems
 - Continued Hydrostatic testing of underground piping for the Water Storage Tank

September 1999

- Enforceable Milestones
 - None
- Work Initiated/Continued/Completed
 - Facilities Shutdown
 - Continue work in General Sump area
 - Maintenance Tank Farm Complex D&D/Water Storage Tank Project
 - Continue activities to bring project to field completion
 - Plant 5 D&D
 - Completed Building 5E demolition
 - Began work area preparation in Buildings 5A and 5D
 - Continued submittal of safe work plans from Mactec to FDF for review

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- Plant 6 D&D
 - Awarded Plant 6 Demolition contract to NSC Energy Services on September 24, 1999
 - Issued Notice to Proceed (NTP) to NSC Energy Services

October 1999 (Anticipated)

- Enforceable Milestones
 - None
- Work to be Initiated/Continued/Completed
 - Facilities Shutdown
 - Complete work in General Sump area
 - Maintenance Tank Farm Complex D&D/Water Storage Tank Project
 - Demobilization by subcontractor will begin due to project being field complete
 - Plant 5 D&D
 - Continue preparation of Building 5A and 5D
 - Begin preparation of Buildings 55A and 55B
 - Decontaminate and demolish Building 5G
 - Begin gross decontamination of Building 5A

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

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August 1999

- Enforceable Milestones
 - None

- Major Work Initiated/Continued/Completed
 - Initiated internal review of the Silos 1 and 2 Feasibility Study
 - Completed construction activities for the Silos Infrastructure Project
 - Completed Integrated Hazard Analysis team reviews for Silo 3 and Accelerated Waste Retrieval Projects

September 1999

- Enforceable Milestones
 - None

- Work Initiated/Continued/Completed
 - Presented update of the Preliminary Design for the Silo 3 Project for the Agencies on September 14, 1999
 - Submitted Draft Revised FS for Silos 1 and 2 to DOE. The Critical Analysis Team (CAT) and DOE Independent Review Team (DIRT) began conducting the review on September 24, 1999
 - Conducted over-the-shoulder review of Silo 3 Preliminary Design documentation during the month of September

October 1999 (Anticipated)

- Enforceable Milestones
 - None

- Work to be Initiated/Continued/Completed
 - Finalize contractor's schedule for the Accelerated Waste Retrieval Project
 - Conduct 50% review of Safety Basis Document (PHAR) and Preliminary Design Package for Silo 3 Project
 - Complete CAT, DIRT and DOE-FEMP review of the draft Revised Feasibility Study for Silos 1 and 2

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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

August 1999

- Enforceable Milestones
 - Submitted monthly NPDES Discharge Monitoring Report to the OEPA on August 13, 1999
 - Met 20 parts per billion (ppb) monthly average uranium discharge to Great Miami River as required by OU5 Record of Decision

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- **Work Initiated/Continued/Completed**
 - Submitted the May 1999 Operating Report for the Re-Injection Demonstration on August 16, 1999 to DOE for transmittal to the Agencies. DOE transmitted to the Agencies on August 20, 1999
 - Completed construction for the Sludge Removal System at the Stormwater Retention Basin (SWRB) and Biosurge Lagoon (BSL) in July, the System Operability Testing was completed on August 12, 1999
 - Awarded, to System Sales, Inc., construction to switch out the IX Control panel at the AWWT to the DCS System
 - Completed core Rotosonic drilling and began the cable tool drilling for the installation of the two new 12-inch diameter groundwater extraction wells in the South Field Area
 - Completed Standard Startup Review (SSR) of the Sludge Removal System on August 20, 1999
 - Installed four new monitoring wells; two on-property in the South Field Area and two off-property in the South Plume Area

September 1999

- **Enforceable Milestones**
 - Submitted monthly NPDES Discharge monitoring Report to the OEPA on September 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 June 1999 Operating Report for the Re-Injection Demonstration on September 10, 1999 to DOE for transmittal to the Agencies. DOE transmitted to the Agencies on September 15, 1999
 - Submitted to DOE responses to the Agency comments on the April 1999 Revision 1 Draft of the Operations and Maintenance Master Plan on September 3, 1999. DOE transmitted to the Agencies on September 14, 1999
 - Submitted responses to OEPA comments on the March and April 1999 Monthly Operating Reports for the Re-Injection Demonstration on September 17, 1999
 - Completed a one-year Groundwater Re-Injection Demonstration on September 2, 1999
 - Completed construction of AWWT Laboratory Expansion on September 2, 1999

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- Submitted Certified for Construction Design Package for Two Additional Groundwater Extraction Wells and Piping on September 20, 1999
- New Computer Control System at the AWWT established as Y2K ready on September 21, 1999
- Completed drilling and installation of Extraction Well #32446 on September 23, 1999
- Awarded construction subcontract to Staver for Two Additional Groundwater Extraction Wells/Piping on September 29, 1999
- Completed Conceptual Design of new Leachate Transmission System on September 16, 1999

October 1999 (Anticipated)

- Enforceable Milestones
 - Submit monthly NPDES Discharge Monitoring Report to the OEPA for the month of September 1999
- Work to be Initiated/Continued/Completed
 - Submit monthly 1999 Operating Report for the Re-Injection Demonstration to DOE for transmittal to the Agencies
 - Prepare a Project Specific plan to conduct pre-design geoprobing in the Waste Storage Area and the Plant 6 Area
 - Continue compiling and evaluating data collected during the Re-Injection Demonstration in preparation for the Re-Injection report
 - Give Notice to proceed to successful contractor for the two additional extraction wells and piping project
 - Complete drilling, installation, and development of extraction wells
 - Initiate Detail Design of new Leachate Transmission System

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.

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QUARTERLY REPORT JULY 1, 1999 THROUGH SEPTEMBER 30, 1999 INCLUDING
REMOVAL ACTION STATUS REPORT**

- 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)
 - 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

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QUARTERLY REPORT JULY 1, 1999 THROUGH SEPTEMBER 30, 1999 INCLUDING
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August 1999

- Enforceable Milestones
 - None

- Work Initiated/Continued/Completed
 - Neutralization/Precipitation/Deactivation/Stabilization (NPDS) Project
 - The project is complete. Crosswalk of surface areas and weights for PermaFix equipment to survey data for shipping calculations has been completed. Comments are being incorporated from Packaging & Shipping Compliance review of PT-0019
 - Thorium Legacy Waste Project (TLWP)
 - Repackaged 24 boxes of Low Level Waste (LLW) and 3 boxes of Mixed Waste (MW) for shipment to Nevada Test Site (NTS). Total boxes LLW repackaged to date is 347 and total MW boxes repackaged to date is 62
 - Completed the investigation into the Thorium Metal Fire that occurred on July 24, 1999, and issued the draft investigation report for review
 - Continued to repackage containers that have been determined to be free of the potentially hydrogen generating waste
 - RCI Solvent Extraction Project
 - Completed decontamination of remaining equipment
 - Completed identification of the equipment to be excessed by Property
 - Waste Minimization
 - Awarded Laserjet contract to LaserLife Inc. of Milford, Ohio
 - Liquid Mixed Waste Project
 - Shipped Batch 8, Shipment 5 tanker trailer, to TSCA Incinerator on August 4, 1999
 - Continued to evaluate newly generated waste streams for bulking into Batches 10, 11, and 12
 - Began developing MEF to allow for Batch 9 application to TSCA Incinerator

September 1999

- Enforceable Milestones
 - None

- Work Initiated/Continued/Completed
 - Neutralization/Precipitation/Deactivation/Stabilization (NPDS) Project
 - The project is complete
 - Completed radiological calculations for shipment

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REMOVAL ACTION STATUS REPORT**

- Preparing shipment paperwork for NPDS thorium waste
- Thorium Legacy Waste Project (TLWP)
 - Total Low Level Waste (LLW) boxes repackaged to date is 347 and total Mixed Waste (MW) boxes repackaged to date is 62
 - Completed the investigation into the Thorium Metal Fire that occurred on July 24, 1999, and the final investigation report is being revised to incorporate comments from the ISRC
 - Performed Real Time Radiography (RTR) of 20 Thoria Gel boxes to support the Standard Startup Review (SSR) for shipping
- RCI Solvent Extraction Project
 - Completed decontamination of remaining equipment
 - Completed identification of the equipment to be excessed by Property
 - Completed walkdown for movement of portion of Organic Extraction Project (OEP) equipment in Building 80
- Waste Minimization
 - Awarded Rumpke second year option on current contract for recyclable paper, cardboard and solid waste
- Liquid Mixed Waste Project
 - Continue to evaluate newly generated waste streams for bulking
 - Submitted Batch 9 application for treatment to the TSCA Incinerator
 - Final evaluation are being conducted of Batches 10, 11, and 12 for possible Advanced Waste Water Treatment (AWWT)
- Hazardous Waste Project
 - Completed labpack shipment to Heritage Environmental Services in Indianapolis, Indiana
 - Completed shipment of photochemicals to Safety-Kleen in Sharonville, Ohio
 - Completed Vitrification pilot plant shipment of four sea/lands and 150 drums by Theta to Waste Control Specialists in Texas
- Mixed Waste Shipping
 - Continue radiological characterization of 143 containers of below-LDR mixed waste for shipment to Envirocare
- Organic Treatment Project (OTP)
 - Submitted requests for absorbent determination for remainder of OTP waste inventory

October 1999 (Anticipated)

- Enforceable Milestones
 - None

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REMOVAL ACTION STATUS REPORT

- Work to be Initiated/Continued/Completed
 - Neutralization/Precipitation/Deactivation/Stabilization (NPDS) Project
 - Continue to complete demobilization of equipment and repackaging efforts
 - Continue to prepare shipment paperwork regarding NPDS thorium waste
 - Thorium Legacy Waste Project (TLWP)
 - Complete cleanup of Building 65 Thorium metal fire
 - RTR boxes of Thoria Gel for shipment
 - Complete Occurrence Report for the Thorium Metal Fire (i.e. Lessons Learned, Corrective Actions, Root Cause, etc.)
 - RCI Solvent Extraction Project
 - Move remaining OEP equipment from Building 80 to storage area in Plant 2/3
 - Move OEP poly and steel tanks to Plant 1 Pad
 - Liquid Mixed Waste Project
 - Initiate activities to decontaminate Batch 7 and 8 Consolidation Tanks
 - Initiate Batch 10 bulking
 - Waste Minimization
 - Finalize Oil-Recycling Request for Proposal (RFP)
 - Hazardous Waste
 - Prepare shipment of AWWT chemicals
 - Prepare for shipment of electrical waste
 - Mixed Waste Shipping
 - Complete RTR on identified below-LDR MW candidate drums
 - Ship 143 candidate drums upon final determination of additional requirements for shipment of wastes to a permitted commercial disposal facility
 - Organic Treatment Project
 - Utilize results of RTR for First Article Testing containers to support absorbent determination and container requirements

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ATTACHMENT A & B

EFFLUENT AND RADON DATA
ARE NOW REPORTED IN THE IEMP SUBMITTAL

ATTACHMENT C

REMOVAL ACTION STATUS REPORT

Note: All Removal Action except 3, 9, 12, 17, 26 and 27 are completed and closed. Removal Action 3, 9, 12, 17, 26 and 27 are Programmatic Removal Actions and work continues under them. All documentation for work done this quarter under these Programmatic Removal Actions is located in the Post-Rod files. Gradually work performed under these actions is being phased out and being done pursuant to appropriate Remedial Actions.

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REMOVAL ACTION NAME	#	STATUS	CLOSURE DATE	SCOPE
Extraction of Water Under FEMP Buildings AKA: Plant 6 Contaminated Perched Water	1	Closed	September 13, 1995	Pump water from extraction wells underneath Plants 2/3, 6, 8, and 9. Treat extracted water for volatile organic chemicals and uranium removal before discharge
Waste Pit Area Runoff Control	2	Closed	July 2, 1992	Collect and treat contaminated storm water run-off from the waste pit area
South Plume	3	Closed, transferred to Post-ROD	May 22, 1997	Collect and treat contaminated storm water from waste pit area, Install new alternate water supply, pump and discharge groundwater from South Plume, Install and operate interim Advanced Waste Water Treatment System, Conduct groundwater monitoring and institutional controls, conduct groundwater modeling and geochemical investigation
Silo 1 and 2	4	Closed	May 17, 1994	Install bentonite cap to reduce and monitor radon emissions, provide follow-on monitoring
K-65 Decant Sump Tank	5	Closed	March 5, 1993	Periodically remove liquid from K-65 decant sump tank
Waste Pit 6 - Exposed Material	6	Closed	March 25, 1992	Eliminate potential airborne contamination by resubmerging exposed pit material
Plant One Pad Continuing Release	7	Closed	February 16, 1995	Implement run-on/off control, install new pad, and upgrade existing Plant 1 Storage Pad
Inactive Flyash Piles/ South Field Area	8	Closed	December 23, 1991	Install plastic chain link barrier and post warning signs
Removal of Waste Inventory	9	Closed - Transferred to Post-ROD	May 22, 1997	Disposition of low-level waste off-site
Active Flyash Pile Controls	10	Closed	May 16, 1997	Complete interim surface stabilization and complete active Flyash pile controls
Pit 5 Experimental Treatment Facility (ETS)	11	Closed	April 22, 1992	Remove contents, structure, and filter material. Backfill and cap with clay cover
Safe Shutdown	12	Closed - Transferred to Post-ROD	May 22, 1997	Remove uranium and other material from former processing equipment and ship material and equipment off-site
Plant 1 Ore Silos	13	Closed	November 6, 1995	Dismantle fourteen ore silos and their support structures
Contaminated Soils Adjacent to Solid Waste Incinerator at the Sewage Treatment Plant	14	Closed	January 3, 1995	Isolate or remove and dispose of contaminated soils from the vicinity of the sewage treatment plant

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REMOVAL ACTION NAME	#	STATUS	CLOSURE DATE	SCOPE
Scrap Metals Pile	15	Closed	November 14, 1994	Disposition of LLW Ferrous/non-ferrous scrap metal, Containerize and dispose of scrap copper
Collect Uncontrolled Production Area Runoff - Northeast	16	Closed	May 22, 1997	Collect storm water run-off from the northeast perimeter of the former production area in the Storm Water Retention Basin
Improved Storage of Soil and Debris	17	Closed - Transferred to Post-ROD	May 22, 1997	Improve storage of existing and future generated soils and debris
Control Exposed Material in Pit 5	18	Closed	May 13, 1993	Eliminate potential airborne contamination by re-submerging exposed pit material
Plant 7 Dismantling	19	Closed	August 18, 1995	Dismantle and dispose of the Plant 7 structure
Uranyl Nitrate Neutralization Project	20	Closed	January 16, 1997	Neutralize, filter and package UNH inventory
Silo 3	21	Closed	February 24, 1993	Mitigate the potential release of hazardous waste material by covering and sealing dust collector hopper, removing dust collector, and capping and covering obvious release pathways
Waste Pit Area Containment Improvement	22	Closed	August 1, 1993	Stabilize south barrier of Pit 4; regarding drainage ditches along Pits 3, 4, 5, and 6; and resurface road between Pits 3, 4, 5, and 6
Inactive Flyash Pile	23	Closed	June 29, 1992	Conduct field investigation to identify locations requiring material removal
Pilot Plant Sump	24	Closed	January 14, 1994	Remove liquid and sludge from the sump
Nitric Acid Rail Car	25	Closed	November 12, 1993	Remove residual contents from tank car and decontaminate and dispose of tank car
Asbestos Removal	26	Closed - Transferred to Post-ROD	May 22, 1997	Mitigate the potential for contaminant and migration of asbestos fibers
Management of Contaminated Structures	27	Closed - Transferred to Post-ROD	May 22, 1997	Management of contaminated structures

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