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**Department of Energy**
**Ohio Field Office**
**Fernald Environmental Management Project**
**P. O. Box 538705**
**Cincinnati, Ohio 45253-8705**
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OCT 16 2003

Mr. James A. Saric, Remedial Project Manager
United States Environmental Protection Agency
Region V, SR-6J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

DOE-0013-04

Dear Mr. Saric:

**REQUEST FOR CONCURRENCE WITH FERNALD CLOSURE PROJECT STRATEGY FOR SUBMITTING FINAL AND INTERIM REMEDIAL ACTION REPORTS**

The Department of Energy Fernald Closure Project (DOE-FCP) is obligated to complete remedial activities as defined in the five Record of Decisions (ROD). The current baseline being implemented on the project identifies that completion of the remedial actions will, with the exception of groundwater remediation being conducted under Operable Unit 5 (OU5), be complete by June 2006. With the completion of the individual remedies in sight, it is appropriate to consider the documentation that will be required to demonstrate and document the completion of remedial activities.

The completion and closure of a National Priorities List (NPL) site encompasses several milestones with specific documentation requirements at each milestone completed [OSWER Directive 9320.2-09A-P, "Close Out Procedures for National Priorities List Sites," January 2000 (i.e., OSWER Directive)]. These milestones begin with remedial action completion and ultimately end with deletion from the NPL and include:

- Remedial Action Completion (Final or Interim Remedial Action Reports)
- Construction Completion (Preliminary Closeout Report) – all construction complete, immediate threats addressed, long-term threats under control
- Site Completion (Final Closeout Report) – all clean-up goals met, all RODs completed, institutional controls in place, site is protective of human health and the environment
- Site Deletion from the National Priorities List (Notice of Intent to Delete)

It is planned that in June 2006, remedial action completion will have been achieved except for groundwater. The OSWER Directive defines that remedial action completion for an operable unit is achieved when the designated Regional Official of the United States Environmental Protection Agency (USEPA) approves in writing the Interim or Final Remedial Action Report.

Final Remedial Action Reports are used for remedies that include treatment and off-site disposal and containment remedies. The OSWER Directive lists the criteria for approving a Final Remedial Action Report:

- All construction activities are complete, including site restoration and demobilization
- All cleanup goals specified in the ROD have been achieved
- If containment, the remedy is operational and functional
- A contract final inspection or equivalent has been conducted
- The Final Remedial Action Report contains the information identified in Exhibit 2-3 of the OSWER Directive (detailed in Attachment 1)

Interim Remedial Action Reports are used for remedies that include ground or surface water restoration. The OSWER Directive criteria for their approval include:

- The remedy includes groundwater or surface water restoration with active treatment or monitored natural attenuation, to reduce contaminant concentrations to meet cleanup goals
- For active treatment, the construction of the treatment system is complete and the system is operational and functional
- A contract final inspection or equivalent has been conducted

The Interim Remedial Action information requirements are similar to that of the Final Remedial Action Report.

**Documentation Strategy**

In considering which report to prepare for each of the five FCP operable units, two assumptions are being made. First, it is desirable for DOE and the EPAs to emphasize final remedial action completion whenever feasible. However, from the EPAs' perspective, given that there will be additional groundwater remediation occurring beyond the DOE/Fluor Fernald contract, the second assumption is that sufficient regulatory authority remains in place to ensure sufficient progress. In light of these assumptions it is DOE's recommendation that a Final Remedial Action Report be prepared for OU1, 2, 3, and 4 and an Interim Remedial Action Report be prepared for OU5. The justification of this strategy is defined below.

- Operable Unit 1: This is a source OU, the footprint of which will be completely remediated and restored via treatment, off-site disposal and containment methodologies. However, in order to expedite the submission of the Final Remedial Action report an administrative modification to the OU1 ROD is being proposed. One of the components of the OU1 remedy is the excavation of the surrounding contaminated soils. The OU1 ROD identifies the disposition of these soils is to be made consistent with the OU5 ROD. DOE believes the excavation, disposition and certification of the soils in the waste pit area and the restoration of the waste pit area are appropriately OU5 activities and as such, should be completed and documented under OU5 through the OU5 Interim Remedial

Action Report (discussed below). With this modification, the OU1 Final Remedial Action Report can be submitted in early 2005.

- Operable Unit 2: This OU consists of several source units (waste units) and includes the construction and operation of the On-Site Disposal Facility (OSDF). The footprints of the waste units will be completely remediated and restored via treatment, off-site disposal and containment methodologies. However, in order to expedite the submission of the Final Remedial Action report an administrative modification to the OU2 ROD is being proposed. DOE believes it advantageous to address the OSDF through the OU5 Interim Remedial Action Report. While the construction and operation of the OSDF is within the province of OU2, the OSDF is integral to the other OUs, in particular OU5 as it was discussed in both the OU5 Feasibility Study and OU5 Proposed Plan. Further, the OU2 ROD identifies a 30-year monitoring requirement of the OSDF and the long term monitoring and care of the facility is already an OU5 remedy component (Section 9.1.7 of the OU5 ROD). Addressing the OSDF in this way allows the OU2 remedy to be completed with the completion of the Solid Waste Landfill project in March 2004.

- Operable Unit 3: This is a source OU. All Decontamination and Dismantlement (D&D) activities of all former production-related facilities will be complete at contract completion. The D&D of structural debris associated with the remediation facilities constructed under OUs 1, 2, 4, and 5 are also within the scope of OU3 activities as defined in the OU3 ROD (Section 2.3). The D&D of these remedial action facilities will also be complete at contract completion. However, the groundwater remedy being conducted under OU5 will extend beyond the completion of the other remedies and will require the excavation and D&D of all remaining groundwater infrastructure (treatment facilities and pumping systems) when completed. As the only remaining D&D activities are associated with this groundwater infrastructure it is appropriate to move these activities to the OU5 remedy via an administrative modification to the OU3 ROD.

- Operable Unit 4: This is a source OU, the footprint of which will be completely remediated and restored via treatment, off-site disposal, and containment methodologies of silo wastes, followed by D&D and disposal of resultant debris. No administrative modifications are proposed.

- Operable Unit 5: An interim remedial action report is appropriate for OU5 as final groundwater remediation will not be achieved and final remediation levels of surface water and sediment cannot be certified at contract completion. In addition, there will be

several areas where soil certification cannot be completed because of the remaining groundwater infrastructure. In addition to the standard informational requirements (described in the attachment), the interim remedial action report for OU5 will contain:

- Statement/documentation that the groundwater remediation system is operating "properly and successfully"
- Description of activities necessary to maintain the effectiveness and integrity of the groundwater remediation system
- Statement/documentation that the OSDF and leachate collection system is operating "properly and successfully"
- Description of activities necessary to maintain the effectiveness and integrity of the OSDF
- An indication of the location of the soils that have been certified and those areas that have not been certified.

The contents of these reports, the strategy for addressing the OUs, and the mechanism to accomplish the administrative modifications described above were discussed in the meeting with USEPA on September 16, 2003 in Chicago. It is DOE's position that the mechanism to accomplish these modifications would be a simple amendment to the Amended Consent Agreement pursuant to Section XXXIII. This amendment would include a re-definition of the five OUs currently defined in Section X.C. of the ACA. Alternatively, the individual RODs could be amended with the preparation of Fact Sheets. Because the actual remedies are not being changed or altered in any way, either of these mechanisms would be appropriate. We request your comments as to the preferred approach.

We are requesting your concurrence with this strategy (including the administrative modifications) as well as the informational content of the final and interim reports identified in the enclosure to this letter. We understand that the guidance on which the informational requirements are based may change. Your concurrence will be sought again if any significant change in the guidance does in fact occur.

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

Sincerely,

Johnny Reising

for Glenn Griffiths
Acting Director

FCP:Skintik

Enclosure: As Stated

cc w/enclosure:
D. Kozlowski, OH/Springdale
J. Reising, OH/FCP
T. Schneider, OEPA
T. Hagen, Fluor Fernald, Inc./MS1
M. Jewett, Fluor Fernald, Inc./MS52-5
F. Johnston, Fluor Fernald, Inc./MS52-5
AR Coordinator, Fluor Fernald, Inc./MS78

cc w/o enclosure:
K. Johnson, OH/FCP
ECDC, Fluor Fernald, Inc./MS52-7

**Attachment**
**Remedial Action Report Contents**

**I Introduction**

- Brief description of the location, size, environmental setting, and operational history of the site
- Description of the operations and waste management practices that contributed to contamination of the site
- Describe the regulatory and enforcement history of the site
- Describe the major findings and results of the site RI
- Describe prior removal and remedial activities at the site
- Describe the other OUs at the site and introduce the OU for which the RA report applies

**II Operable Unit Background**

- Identify and discuss any ROD amendments, ESDs etc.
- Summarize requirements in the operable unit decision documents including cleanup goals, institutional controls, monitoring requirements, O&M requirements, and other parameters applicable to the design, construction, operation, and performance of the RA
- Describe the basis for determining the clean-up levels for the OU including future planned land use
- Summarize the remedial design including any significant regulatory or technical considerations or events occurring during the preparation of the remedial design

**III Construction Activities**

- Provide a step by step summary description of the activities undertaken to construct and implement the RA (mobilization, site preparation, construction of systems, environmental controls and emission points, system operation and monitoring, sampling activities)

**IV Chronology of Events**

- Provide a tabular summary that lists the major events for the OU, and associated dates of those events, starting with ROD signature.
- Include significant milestones and dates, such as, remedial design submittal and approval; ROD amendments; mobilization and construction of the remedy; significant operational events such as treatment system /application start-up, monitoring and sampling events, system modifications, operational down time, variances or non-compliance situations, and final shut-down or cessation of operations; final sampling and confirmation-of-performance results; required inspections; demobilization; and completion or startup of post-construction operation & maintenance activities.
- If an Interim RA Report, indicate when cleanup goals are projected to be achieved for the ground or surface water restoration.

**V Performance Standards and Construction Quality Control**

- Describe the overall performance of the technology in terms of comparison to cleanup goals.

- For treatment remedies, identify the quantity of material treated, the strategy used for collecting and analyzing samples, and the overall results from the sampling and analysis effort.
- Provide an explanation of the approved construction quality assurance and construction quality control requirements or cite the appropriate reference for this material. Explain any substantial problems or deviations.
- Provide an assessment of the performance data quality, including the overall quality of the analytical data, with a brief discussion of quality assurance and quality control (QA/QC) procedures followed, use of a quality assurance project plan (QAPP), comparison of analytical data with data quality objectives (DQOs).
- Discuss EPA's oversight activities and results with regard to analytical data quality.

**VI Final Inspection and Certifications**

- Report the results of the various RA contract inspections, and identify noted deficiencies.
- Briefly describe adherence to health and safety requirements while implementing the RA. Explain any substantial problems or deviations.
- If implemented, summarize details of the institutional controls (e.g., the type of institutional control, who will maintain the control, who will enforce the control).
- For RP-lead, describe results of pre-certification inspection.
- If applicable, certify that the remedy is operational and functional, along with the date this was achieved.

**VII Operation and Maintenance Activities**

- Describe the general activities for post-construction operation and maintenance activities, such as monitoring, site maintenance, and closure activities.
- Identify potential problems or concerns with such activities.
- If an Interim RA Report, describe the future ground water or surface water restoration activities to meet cleanup goals.

**VIII Summary of Project Costs**

- Provide the actual final costs and applicable year for the project. This is required for Fund-lead projects and should be provided whenever possible for PRP-lead projects. If actual costs are not available, provide estimated costs.
- Provide the costs previously estimated in the ROD for the selected remedy, including, as applicable, RA capital costs, RA operating costs, post-RA annual O&M costs, and number of years of O&M. Adjust the estimates to the same dollar basis year as the actual project costs, and provide the index used.
- Compare actual RA costs to the adjusted ROD estimates. If outside range of -30 to +50 percent, explain the reasons for differences.
- If the project is PRP-funded, include a summary of EPA oversight costs for RD and RA.
- For treatment remedies, calculate unit costs based on the sum of the actual RA capital and RA operating costs divided by the quantity of material treated.
- Refer reader to Appendix A for a detailed breakdown of RA and O&M costs.

**IX Observations and Lessons Learned**

- Provide site-specific observations and lessons learned from the project, highlighting successes and problems encountered and how resolved.

**X Operable Unit Contact Information**

- Provide contact information (names, addresses, phone numbers, and contract / reference data) for the major design and remediation contractors, EPA oversight contractors, and the respective RPM and project managers for EPA, the State, and the PRPs, as applicable.

**Appendix A Cost and Performance Summary**

- The specific parameters presented in Appendix A are in accordance with the "Guide to Documenting and Managing Cost and Performance Information for Remediation Projects," EPA 542-B-98-007. Regions are encouraged to use the recommended procedures outlined in this Guide for documenting cost and performance information as part of the RA Report.
- Identify the matrix characteristics and site conditions that most affected the cost and performance, the corresponding values measured for each characteristic or condition, and the procedures used for measuring those characteristics or conditions. These items include the soil type and particle size distribution, environmental setting, media properties, and quantity of materials treated.
- Identify the operating parameters specified by the remediation contractor that most affected the cost and performance, the corresponding values measured for each parameter, and the procedures used for measuring those parameters. These items include system throughput, pumping rate, flow rate, mixing rates, residence time, operating pressure and temperature, moisture content, and pH.
- Provide a detailed breakout of the actual RA capital costs, RA operating costs (costs to operate and maintain the treatment process)

**Appendix B Schematic of Treatment Systems**
**Appendix C HWMU Closures**
**Appendix D Removal Actions**
**Appendix E Identification of Legal Agreement Requirements Specific to the Operable Unit and their Disposition**
**Appendix F List of References and USEPA & OEPA Approved Documents**

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