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Department of Energy
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Fernald Environmental Management Project
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SEP 30 2003

DOE-0521-03

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

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

Mr. Bill Kurey
United States Fish and Wildlife Services, Suite H
6950 Parkway
Reynoldsburg, Ohio 43068

Dear Mr. Saric, Mr. Schneider and Mr. Kurey:

TRANSMITTAL OF THE DRAFT OUTLINE OF THE INSTITUTIONAL CONTROLS PLAN

Reference: Letter DOE-0436-03, G. Griffiths to J. Saric and T. Schneider, "Institutional Controls," dated August 5, 2003

Enclosed for your review is the draft detailed outline of the Institutional Controls Plan (ICP). As stated in the referenced letter, the ICP will detail how the U.S. Department of Energy (DOE) will 1) maintain, monitor, enforce, and report on institutional controls, 2) maintain, monitor, and inspect the On-Site Disposal Facility (OSDF), and 3) manage OSDF leachate as outlined in the Post Closure Care and Inspection Plan and/or the OSDF Groundwater/Leak Detection and Leachate Monitoring Plan.

Aquifer Restoration operations and maintenance will not be included as part of the ICP as these activities are part of an ongoing remedial action governed by the Operable Unit 5 (OU5) Record of Decision (ROD). Post remedy completion groundwater monitoring requirements (if any) will be defined as part of the groundwater remedy certification.

Mr. Saric
Mr. Schneider
Mr. Kurey

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As proposed, the ICP will be a distinct component (Volume II) of the Comprehensive Legacy Management and Institutional Controls Plan, and as such will be the only plan submitted for review and approval resulting in enforceability. Aquifer restoration operations and maintenance will not be included in the plan as these activities are part of an ongoing remedial action governed by the OU5 ROD.

If you have any questions or require additional information, please contact Jay Jalovec at (513) 648-3122.

Sincerely,



Glenn Griffiths
Acting Director

FCP:Jalovec

Enclosure: As Stated

cc w/enclosure:

N. Hallein, EM-31/CLOV
J. Reising, OH/FCP
S. Smiley, OH/Springdale
E. Skintik, OH/FCP
G. Stegner, OH/FCP
T. Schneider, OEPA-Dayton (three copies of enclosure)
G. Jablonowski, USEPA-V, SRF-5J
D. Sarno, FCAB
D. Bidwell, FCAB
F. Bell, ATSDR
M. Cullerton, Tetra Tech
M. Shupe, HSI GeoTrans
R. Vandegrift, ODH
AR Coordinator, MS78

Mr. Saric
Mr. Schneider
Mr. Kurey

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cc w/o enclosure:

R. Greenberg, EM-31/CLOV
D. Pfister, OH/FCP
J. Byrne, Fluor Fernald, Inc./MS90
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D. Powell, Fluor Fernald, Inc./MS64
C. Tabor, Fluor Fernald, Inc./MS90
E. Woods, Fluor Fernald, Inc./MS65-2
ECDC, Fluor Fernald, Inc./MS52-7

INSTITUTIONAL CONTROLS PLAN TABLE OF CONTENTS

1.0 INTRODUCTION

- 1.1 Purpose and Organization of this Institutional Controls Plan – *The purpose of this plan is to outline the institutional controls that will be in place at the Fernald Closure Project (FCP) to ensure the continued protection of human health and the environment following closure of the site. The function of this Plan as an enforceable document for EPA to maintain Institutional Controls at the FCP will be discussed. This section will also discuss the relationship of this document with Volume I – Legacy Management Plan.*
- 1.2 What are Institutional Controls – *The Department of Energy defines institutional controls as mechanisms designed to appropriately limit access to, or uses of, land and facilities and maintain physical security of DOE facilities; to prevent or limit inadvertent human and environmental exposure to residual contaminants; preserve knowledge and inform current and future generations of hazards and risks; and protect cultural and natural resources. ICs established at the FCP will be defined as stated in the RODs or as required by the CERCLA remedy.*
- 1.3 Why Institutional Controls are Necessary – *This section will discuss the importance of institutional controls for the continued protection of human health and the environment.*
- 1.4 Agency Requirements for Institutional Controls – *This section will describe what EPA and DOE both expect to see established for institutional controls at the FCP. References to all appropriate guidance documents will be included in this section.*

2.0 CONTROLS ON DISTURBANCE AND USE OF THE FCP

- 2.1 FCP Site
- 2.1.1 Proprietary Controls and Points of Contact – *The federal government will maintain property ownership (OU2 ROD). Primary and secondary points of contact will be established to ensure authorized and emergency access. Points of contact will also be listed and updated in the Legacy Management volume of this plan.*
- 2.1.2 Governmental Controls – *The federal government will ensure that local zoning and permitting authorities remain aware of restrictions on the FCP property. The federal government will maintain property ownership; however if responsibility for any part of the property shifts to another Agency or organization in the future, the government will ensure control measures remain in place.*

2.1.3 Preventing Unauthorized Use of FCP

2.1.3.1 Informational Devices – *The methods to ensure that appropriate information is made available on site controls and restrictions will be discussed. Information will include postings and notices to convey restrictions related to the OSDF and any listings on state registries determined appropriate.*

2.1.3.2 Security of Site Facilities and Infrastructure – *Site facilities and infrastructure will be locked, or fencing constructed around them to prevent unauthorized access to ensure the protection of human health and the environment.*

2.1.3.3 Routine Inspection of Property – *Areas of the site outside of the OSDF buffer area will be inspected to ensure that protected natural resources (e.g., wetland, threatened and endangered species) are maintained in conjunction with applicable laws and regulations.*

2.2 OSDF

2.2.1 Proprietary Controls and Points of Contact – *The federal government will maintain property ownership (OU2 and OU5 RODs). Primary and secondary points of contact for the OSDF will be established to ensure authorized and emergency access. Points of contact will also be listed and updated in Table 4-2 of the PCCIP.*

2.2.2 Governmental Controls - *The federal government will ensure that local zoning and permitting authorities remain aware of restrictions on the FCP property.*

2.2.3 Informational Devices – *Methods to ensure that appropriate information on access restrictions and use restrictions on the OSDF will be addressed. Methods will include postings on the OSDF perimeter fencing and gates and notices to convey restrictions to appropriate government entities and authorities. Restrictions will also be listed on any state registries determined appropriate.*

3.0 CONTROLS TO PREVENT HUMAN AND ENVIRONMENTAL EXPOSURE TO RESIDUAL CONTAMINANTS

3.1 FCP Site

3.1.1 FCP Site Inspections – *The OSDF will be inspected as outlined in the Post Closure Care and Inspection Plan. Inspections of infrastructure related to the remedy (well houses, monitoring wells, etc.) will also be conducted to ensure they are secure and in proper working order. In addition, inspections of the site will be conducted to ensure there is no unauthorized use of the property (e.g., digging soil). Aquifer*

restoration operations and maintenance will not be included as part of the ICP as these activities are part of an ongoing remedial action.

3.1.2 Surface Water Discharge – This section will provide a description of the storm water drainage patterns that will exist post-remediation as well as the identification of the Parshall Flume monitoring point and GMR discharge location. It will attempt to characterize the residual contaminants and associated concentrations and provide an analysis of their status with respect to the surface water FRLs. Based on these contaminants and the fact that soil FRLs have been met, any additional controls required to maintain the CERCLA remedy and/or additional controls beyond security needs and physical protection of the Parshall Flume will be identified.

3.2 OSDF

3.2.1 OSDF Inspection and Maintenance – Inspections, maintenance and monitoring of the cap and final cover system, general support systems, leachate, groundwater, and other environmental monitoring will be conducted in accordance with the OSDF Post Closure Care and Inspection Plan in order to ensure continued protection of human health and the environment.

3.2.2 Leak Detection/Leachate Monitoring – This section will summarize the OSDF leak detection program as defined in the most current version Groundwater/Leak Detection and Leachate Monitoring Plan. It will include a description of the horizons monitored (LDS layer, LCS layer, Horizontal Till Well and Great Miami Aquifer) and the monitoring requirements for each of the horizons, by cell (monitoring requirements may differ for each cell depending on the age of the cell and the findings of previous monitoring).

3.2.3 Leachate Treatment – This section will describe OSDF post-closure treatment of leachate options. These options will be explored over the next year or so before a decision is made. The final decision on how post-closure leachate treatment will be handled will be made with input from the EPA. The FCP is currently evaluating passive treatment systems with the help of industry experts and it may be possible to truck the leachate to a metropolitan wastewater treatment facility after closure (similar to what occurs at the DOE Weldon Springs disposal facility).

3.2.4 Air Monitoring – This section will address the FCP's approach to air emission monitoring for the OSDF during the post-closure care period.

4.0 INFORMATION MANAGEMENT FOR FCP INSTITUTIONAL CONTROLS

4.1 FCP Site

4.1.1 Inspection Records – *Inspection records will include inspections of site infrastructure and general site inspections.*

4.1.2 Public Access to Information – *A means of public access to the inspection records will need to be established, maintained and monitored.*

4.2 OSDF Records and Data

4.2.1 Inspection Records – *Inspection records will include the cap and cover inspections, support area and infrastructure inspections, and leachate collection system inspections.*

4.2.2 Monitoring Data – *Monitoring data will include leachate monitoring, groundwater monitoring, and any other environmental monitoring.*

4.2.3 Public Access to Information – *A means of public access to the inspection and monitoring data will need to be established, maintained and monitored.*

4.3 Reporting - *This section will address reporting the results of monitoring and the status of Institutional Controls to the Agencies and Stakeholders.*

REFERENCES

ATTACHMENT A OSDF Post Closure Care and Inspection Plan (PCCIP) – *The PCCIP is being updated and will be submitted with the submittal of the draft ICP in November 2003.*

ATTACHMENT B Groundwater/Leak Detection and Leachate Monitoring Plan (GLD&LMP) – *This plan is scheduled to be updated later this calendar year. It is recognized that this plan will become part of this document by attachment in the future. The revision of the GLD&LMP will be issued for review under separate cover as soon as it has been revised.*