

Comprehensive Legacy Management and Institutional Controls Plan, Revision 14, Draft

Significant Changes Summary

Section	Description of Modification	Driver/Technical Information
Volume I, Legacy Management Plan		
Executive Summary	No changes.	
Section 1.0	Incorporated the DOE LM goals into Section 1.3.3, <i>DOE Management of the Legacy Management Program</i> .	
Section 2.0	Revised Section 2.4.5, <i>Existing Infrastructure and Facilities</i> , with an update for the on-site workspaces which was completed in 2024 and a brief update on the review of the Visitor Center content.	
Section 3.0	No significant changes.	
Section 4.0	Revised Section 4.5, <i>Reporting Requirements</i> , to indicate that the Site Environmental Report is due in June of each year rather than specifically on June 1.	
Section 5.0	Added additional records storage locations to Section 5.3, <i>Records Storage Locations</i> .	
	Revised Section 5.4, <i>Public Access Requirements</i> , to include the Post-Record of Decision Index along with the CERCLA Administrative Record and update the phone number for staff assistance.	
Section 6.0	No changes.	
Section 7.0	No changes.	
Appendix A	Complete Revision of Appendix A.	
Volume II, Institutional Control Plan		
Executive Summary	No changes.	
Section 1.0	Table 1, <i>Controls on Disturbance and Use of the Fernald Preserve</i> , was updated to reflect the use of security cameras onsite.	
Section 2.0	Section 2.1.1, <i>Proprietary Controls and Points of Contact</i> , was updated to clarify emergency notifications will be through the 911 system and non-emergency issues will be addressed with local site personnel and security.	
	Revised Figure 5, <i>Fernald Preserve Site Configuration</i> with updated perimeter and interior access barriers.	

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Section	Description of Modification	Driver/Technical Information
Volume II, Institutional Control Plan (Continued)		
Section 2.0 (Continued)	Updated Section 2.1.3.3, <i>Routine Inspection of Property</i> and Table 3, <i>Controls to Minimize Human and Environmental Exposure to Residual Contaminants at the Fernald Preserve</i> , to modify the frequency of trail inspections from weekly to monthly and after high wind or significant weather events.	Quarterly frequency change recommended in the 2023 Site Environmental Report; updated to monthly based on regulator input.
Section 3.0	Section 3.2, <i>Fernald Preserve Inspections</i> , added "dense vegetation" as a reason that access for inspections may be limited.	
	Section 3.2, <i>Fernald Preserve Inspections</i> , modified the frequency of trail inspections from weekly to monthly.	Recommended in the 2023 Site Environmental Report.
	Table 4, <i>Controls to Minimize Human Health and Environmental Exposure to Residual Contamination at the On-Site Disposal Facility</i> , was updated to clarify site walkdowns may occur in late fall or winter.	
	Section 3.5.1, <i>OSDF Inspection and Maintenance</i> , was revised to 1) incorporate a recommendation for the frequency of the annual OSDF cap walkover as discussed with the regulators, 2) clarify the scope of OSDF inspections and 3) modify the reporting mechanism of vegetative cover data from the quarterly inspection report to the Site Environmental Report.	1) Recommended in the 2023 Site Environmental Report. 3) Variance 2024-01.
Section 4.0	Removed sentence concerning minor maintenance being documented on routine inspection forms issued to Ohio EPA and EPA in Section 4.1, <i>Unacceptable Disturbances or Use</i> .	Hard copy forms are no longer used.
	Revised Section 4.4, <i>Notification Process</i> , to clarify that DOE will notify the regulators of institutional control breaches that represent an imminent threat to human health or the environmental.	
	Revised Section 4.5, <i>Coordination with Other Agencies</i> , to include collaboration with Ohio Department of Natural Resources for enforcement assistance.	

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Volume II, Institutional Control Plan (Continued)		
Section 5.0	Section 5.1, <i>Protected Species</i> , and Figure 10, <i>Potential Habitat of Threatened and Endangered Species</i> , was extensively updated with current federally and state-protected species known to be onsite or potential habitat exists.	
Section 6.0	Minor change to 6.1.3, <i>Reporting</i> , to indicate that the Site Environmental Report is due in June of each year rather than specifically on June 1.	
Section 7.0	Updated references.	
Appendix A	No changes.	
Appendix B	No changes.	
Volume II, Attachment A - Operations and Maintenance Master Plan		
Section 1.0	No changes.	
Section 2.0	No changes.	
Section 3.0	Updated entire section to include information pertaining to RW-6A and RW-7A which were operational in March 2024.	
	Updated Figure 2, <i>Aquifer Restoration and Wastewater Treatment Timeline</i> , to reflect 2022 estimated modeling predictions which were implemented in 2024.	
	Updated Figure 7, <i>Percent Treated and Average Monthly Uranium Discharge Concentration versus Time (January 2004 through December 2023)</i> .	
	Updated Figure 8, <i>Monthly Average Concentration in the Effluent to the Great Miami River through December 2023</i> .	
Section 4.0	Updated Section 4.1, <i>Groundwater</i> , with updated combined modeled target pumping rate.	
	Revised Section 4.2, <i>OSDF Leachate</i> , with updated leachate volumes.	
	Updated Section 4.3, <i>Other Flows</i> , with updated flow volumes.	

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Section	Description of Modification	Driver/Technical Information
Volume II, Attachment A - Operations and Maintenance Master Plan (Continued)		
Section 4.0 (Continued)	Updated Table 2, <i>2022 Modeling Target Extraction Rate Schedule</i> , with the updated well configuration (RW-6A and RW-7A).	
Section 5.0	Updated Table 3, <i>Well Field Operational Objectives</i> , to reflect operation of new wells RW-6A and RW-7A.	
	Added a paragraph to Section 5.4, <i>Well Field Operational Objectives</i> , with updated information related to shutdown of RW-4 and RW-6A and RW-7A becoming operational.	
Section 6.0	Removed the requirement for a standard operating procedure for measuring soluble uranium by kinetic phosphorescence analyzer in Section 6.1.2.2, <i>Standard Operating Procedures</i> .	Uranium analysis will be completed by offsite, subcontracted laboratories.
	Updated Section 6.2.1.1, <i>South Plume Extraction Wells</i> , with RW-6A and RW-7A and wells that will not be operational in 2025.	
	Updated Figure 8, <i>Monthly Average Concentration in the Effluent to the Great Miami River through December 2023</i> .	
	Updated Figure 9, <i>South Plume Module Extraction Well Installation Detail</i> , by removing wells that are no longer operational and adding RW-6A and RW-7A	
	Updated <i>Table 4, Planned Outages</i> , and Section 6.2.3.1, <i>Maintenance of Pumps, Piping, and Controls</i> , to incorporate frequency of performance testing and changes to amperage checks.	Variance 2024-02R1
	Updated Section 6.2.3.1, <i>Maintenance of Pumps, Piping, and Controls</i> , with information related to well pipe cleaning.	
	Updated Section 6.3.1, <i>Treatment Facilities Performance Monitoring</i> , to clarify that total uranium is not analyzed daily, but that samples are collected daily for analysis and that routine uranium analysis is no longer completed at the laboratory within CAWWT, but is completed by a subcontracted laboratory.	Quick turnaround analysis is no longer needed due to the decrease in discharge concentrations.

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Section	Description of Modification	Driver/Technical Information
Volume II, Attachment A - Operations and Maintenance Master Plan (Continued)		
Section 6.0 (Continued)	Updated 6.4, regulatory issues with results of the peracetic acid testing which may be considered on newly-installed wells in the future.	
Section 7.0	No changes.	
Section 8.0	Updated references.	
Volume II, Attachment B - On-Site Disposal Facility Post-Closure Care and Inspection Plan		
Section 1.0	No changes.	
Section 2.0	No significant changes.	
Section 3.0	Updated Section 3.4 <i>OSDF Baseline Photographs</i> , with information presented in the 2023 Site Environmental Report concerning the 2023 lidar survey.	Changes were proposed in the 2023 Site Environmental Report.
	Updated Section 3.5, <i>OSDF Inspection Photographs</i> , to incorporate changes related to discontinuing taking OSDF quarterly inspection photographs (i.e., cell cap side slopes and associated drainages) except those required in Table 5 and presenting required photographs in the Site Environmental Report.	
Section 4.0	Updated LM contact phone number in Table 7, <i>Points of Contact</i> .	
Section 5.0	No changes.	
Section 6.0	Updated information presented in the 2023 Site Environmental Report concerning the frequency of the entire cap walkover in Section 6.2.1.1, <i>Frequency and Timing of Inspections</i> as discussed with the regulators.	
	Minor update in Section 6.2.2, <i>Conduct of OSDF Inspections</i> , and Section 6.2.3, <i>OSDF Inspection Field Procedures</i> , to remove forms references contained in Appendix D, which no longer exists.	
Section 7.0	No changes.	
Section 8.0	No significant changes.	
Section 9.0	No changes.	
Section 10.0	No changes.	

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Section	Description of Modification	Driver/Technical Information
Volume II, Attachment B - On-Site Disposal Facility Post-Closure Care and Inspection Plan (Continued)		
Section 11.0	No changes.	
Section 12.0	Updated References.	
Volume II, Attachment C - Groundwater/Leachate Management Plan		
Section 1.0	No significant changes.	
Section 2.0	No significant changes.	
Section 3.0	No significant changes.	
Section 4.0	No changes.	
Section 5.0	No significant changes.	
Section 6.0	Updated site contact phone number.	
Section 7.0	Updated References.	
Appendix A	No changes.	
Appendix B	Removed the specific Ohio EPA email contact for filtering.	Email notification to the regulators is still required.
	Corrected reference to Tables 1 and 2 in Section 3.7, Data Management.	
	Updated References.	
Appendix C	Updated References.	
Appendix D	Updated Section 2.0, <i>Basic System Operation</i> , with current LDS configuration information related to the change out of larger tanks for smaller tanks as flow has decreased.	
	Updated Table 1, <i>Post-Closure OSDF Leachate Management System Inspection and Maintenance Activities</i> with updated valve house configuration as flow has decreased.	
	Updated Table 2, <i>Determination of the Number of Days Required to Reach the 1 ft Level (8,623 gallons)</i> , with 2023 information which increases the days required to reach the accumulation limit from 156 days to 211 days.	
Appendix E	No changes.	

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Section	Description of Modification	Driver/Technical Information
Volume II, Attachment D - Integrated Environmental Monitoring Plan		
Section 1.0	No significant changes.	
Section 2.0	Updated Figure 2, <i>Fernald Preserve Site Configuration</i> with updated perimeter and interior access barriers.	
Section 3.0	Updated multiple sections and figures with current data, updated modeling information and historical information related to the aging infrastructure and installation of the two new South Plume extraction wells which became operational in 2024.	
	Updated Table 3, <i>Groundwater FRL Exceedances based on Samples and Location Since IEMP Inception (August 1997 through 2023)</i> .	
	Removed the requirement for weekly arsenic sampling in Section 3.6.1.4 <i>Property/Plume Boundary Monitoring</i> , which has never been instituted.	South Plume wells have never required an increased pumping rate to invoke the required sampling.
Section 4.0	Relocated note associated with Table 10, <i>Fernald Preserve Surface Water and Treated Effluent Monitoring Program Regulatory Drivers and Actions</i> , to become a table footnote.	
	In Table 12, <i>Summary of Surface Water and Treated Effluent Sampling Requirements by Location</i> , updated the frequency of sampling at SWD-09 from semi-annually to quarterly and clarified the daily total uranium sampling requirement at PF4001 is based on the Operable Unit 5 ROD and not the NPDES permit.	Variance 2024-03
	Updated Figure 14, <i>Comparison of Average Total Uranium Concentrations in Paddys Run at Willey Road Sample Location SWP-03</i> , with current data.	
	Updated Section 4.3.2.6, <i>Fulfill NPDES Requirements</i> , with current permit information.	

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Section	Description of Modification	Driver/Technical Information
Volume II, Attachment D - Integrated Environmental Monitoring Plan (Continued)		
Section 5.0	No changes.	
Section 6.0	Updated site contact and Geospatial Environmental Mapping System information in Section 6.3.1, <i>LM Website</i> .	
Section 7.0	Updated References.	
Volume II, Attachment E - Community Involvement Plan		
Section 1.0	No changes.	
Section 2.0	No changes.	
Section 3.0	No changes.	
Section 4.0	Updated Section 4.0, <i>Community Profile</i> , to update population data and to clarify that data presented is from the 2020 census.	
	Revised Section 4.1, <i>History of Community Involvement</i> , to include the post-Record of Decision documents along with the CERCLA Administrative Record.	
Section 5.0	Updated Table 1, <i>Matrix of Public Participation Activities</i> and Section 5.5, <i>Public Access to Information</i> , to include the post-Record of Decision Index.	
Section 6.0	Updated References.	
Appendix A	Updated Contact List; additional changes to elected officials in the contact list will be made to the final document to reflect the 2024 election results.	Variance 2024-04