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Level 2

Legacy Management Program Management Plan for Formerly Utilized Sites Remedial Action Program

April 2024

U.S. DEPARTMENT OF ENERGY | Legacy Management

This document has been designed for online viewing.

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Abbreviations

AEC	U.S. Atomic Energy Commission
AIM	Archives and Information Management (within LM organization)
AIMS	Assessment and Issue Management System
AR	Administrative Record
ARAR	applicable or relevant and appropriate requirement
ASER	Annual Site Environmental Report
ASEV	assistant secretary for the environment
ASNE	assistant secretary for nuclear energy
BCP	baseline change proposal
BNI	Bechtel National Inc.
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	*Code of Federal Regulations*
CSD	Considered Sites Database
CSL	Considered Sites Library
D&D	Decontamination and Decommissioning
DOE	U.S. Department of Energy
ECHO	Education, Communications, History, and Outreach
ECM	Enterprise Content Management
EGDM	Environmental and Geospatial Data Management
EJ	environmental justice
EM	Office of Environmental Management
EMS	Environmental Management System
EO	Executive Order
ERDA	U.S. Energy Research and Development Administration
ERF	*Environmental Review Form*
EVM	earned value management
EWDAA	Energy and Water Development Appropriation Act
FOIA	Freedom of Information Act
FRC	Federal Records Center
FUSRAP	Formerly Utilized Sites Remedial Action Program
FY	fiscal year
FYR	Five-Year Review

GEMS	Geospatial Environmental Mapping System
GIS	geographic information system
IC	institutional control
IM	Information Management (within LMS organization)
IWCP	Integrated Work Control Process
LCB	life-cycle baseline
LM	Office of Legacy Management
LMBC	LM Business Center
LMS	Legacy Management Support
LOA	letter of agreement
LTPR	long-term periodic review
LTS	long-term stewardship
MED	Manhattan Engineer District
MOU	memorandum of understanding
MSA	Mission Support Activity
MSL	Master Site List
NARA	National Archives and Records Administration
NCP	National Contingency Plan
NEPA	National Environmental Policy Act
NPL	National Priorities List
NRC	U.S. Nuclear Regulatory Commission
O&M	operations and maintenance
OpEx	Operating Experience
PL	Public Law
PMB	performance management baseline
PMP	Program Management Plan
QA	quality assurance
QAM	*Quality Assurance Manual*
QAPP	Quality Assurance Program Plan
RACI	Responsible, Accountable, Consulted, Informed
RAM	*Responsibility Assignment Matrix*
RCRA	Resource Conservation and Recovery Act
ROD	Record of Decision
RR-TCX	Rapid Response Technical Center of Expertise

SDSFIE	Spatial Data Standards for Facilities, Infrastructure, and Environment
SME	subject matter expert
SMRP	Site Management Requirements and Practices
SOW	statement of work
STEM	science, technology, engineering, and math
STP	Site Transition Plan
TO	task order
TOC	task order change
UMTRCA	Uranium Mill Tailings Radiation Control Act
USACE	U.S. Army Corps of Engineers
UU/UE	unlimited use and unrestricted exposure
WBS	work breakdown structure
WP	work package

1.0 Introduction

1.1 Purpose and Scope

On December 15, 2003, the U.S. Department of Energy (DOE) Office of Legacy Management (LM) was formally established as a new DOE office to provide a long-term, sustainable solution to the legacy of the Cold War. LM is responsible for ensuring that DOE's postclosure responsibilities are met and providing programs for long-term stewardship (LTS), records management, workforce restructuring, employee benefits continuity, property management, land use planning, and community assistance.

LM sites fall under a variety of regulatory and functional categories, one of which is the Formerly Utilized Sites Remedial Action Program (FUSRAP) (also referred to in this document as the program). FUSRAP was established by the U.S. Atomic Energy Commission (AEC) in 1974 to remediate sites where radioactive contamination remained from Manhattan Engineer District (MED) and early AEC operations. Later in 1974 and in early 1975, AEC was abolished, and its responsibilities were divided among the newly established U.S. Nuclear Regulatory Commission (NRC) that assumed AEC's licensing and regulatory roles, and the U.S. Energy Research and Development Administration (ERDA), which assumed other AEC responsibilities, including FUSRAP. ERDA and its successor agency, DOE, identified, characterized, and remediated 25 sites under FUSRAP until 1997, when Congress assigned characterization and remediation responsibilities to the U.S. Army Corps of Engineers (USACE). Over time, AEC, ERDA, and DOE evaluated hundreds of sites for their eligibility for inclusion in FUSRAP. Records of these evaluations were collected in DOE's Considered Sites Database (CSD).

This Program Management Plan (PMP) documents the DOE approach for managing and implementing its FUSRAP responsibilities. Furthermore, this document describes the systems, processes, procedures, and tools employed by LM and the Legacy Management Support (LMS) contractor to successfully meet DOE's obligations and reporting requirements at FUSRAP sites. LM coordinates closely with USACE, which executes remediation activities for FUSRAP in accordance with Engineer Regulation ER-200-1-4, *Formerly Utilized Sites Remedial Action Program* (USACE 2014). Roles and responsibilities between DOE and USACE are defined in a memorandum of understanding (MOU) and associated letters of agreement (LOAs), which are included in this plan as Appendix A.

This PMP is presented as follows:

- Section 1.0 provides FUSRAP background information and defines the scope and program goals and objectives.
- Section 2.0 defines how the program is managed within the LM and LMS organizational structures and describes the interfaces within and between the two organizations.
- Section 3.0 describes the management approach for planning and executing FUSRAP work under LM's authority.
- Section 4.0 describes the FUSRAP communication plan.
- Section 5.0 describes the FUSRAP risk and issue management processes.
- Section 6.0 describes the FUSRAP information management process.

- Section 7.0 provides information on environmental, safety, and health compliance.
- Section 8.0 describes emergency management, USACE rapid response support, and recommendations related to FUSRAP inaccessible materials.
- Section 9.0 describes asset management.
- Section 10.0 describes quality assurance.
- Section 11.0 presents the references and source documents used to prepare this plan.
- Section 12.0 provides links to relevant websites.

Appendixes include the March 1999 MOU between DOE and USACE (Appendix A); summary information related to FUSRAP sites (Appendix B); legislative history (Appendix C); USACE review and approval process (Appendix D); LMS contractor organization chart (Appendix E); long-term periodic review instructions (Appendix F); and responsibility and accountability charts (Appendix G).

This PMP incorporates controlling documents current as of August 2023. This plan will be updated periodically to reflect significant changes.

1.2 Background

The following subsections provide a summary of historical information on FUSRAP. Additional information is provided in *Description of the Formerly Utilized Sites Remedial Action Program* (DOE 1980) and other reference documents.

Figure 1 provides a timeline of key dates from the beginning of MED/AEC operations through the creation and history of FUSRAP. Figure 2 provides a current definition overview of FUSRAP sites (active, completed, and ineligible) as well as a summary of LM activities performed for each site type. Figure 1 and Figure 2 provide useful reference information when reviewing the historical information on FUSRAP presented in this subsection as well as subsequent sections of this PMP that discuss LM management of activities related to the FUSRAP sites.

1.2.1 Overview of MED/AEC Historical Activities

Concerned about the possibility of German advances into atomic energy and weapons research, physicist Leo Szilard in August 1939 enlisted Albert Einstein to call President Franklin Roosevelt's attention to the matter. Roosevelt created an advisory committee that met for the first time in October 1939; in 1941, it was reorganized as the S-1 Executive Committee.

In 1942, under the jurisdiction of the U.S. Army, USACE established MED (also known as the Manhattan Project) as the agency responsible for early atomic weapons research and development. In addition, the Metallurgical Laboratory at the University of Chicago, which ultimately produced the first self-sustaining nuclear reaction, was established. On January 1, 1947, in accordance with the Atomic Energy Act of 1946, all atomic energy activities were transferred to the newly created AEC. From 1942 to 1946, more than 10 contractors and several hundred subcontractors were involved in production, research, and development operations. AEC continued the MED practice of contracting with industry, private contractors, and academic institutions to perform many of the actual operations.

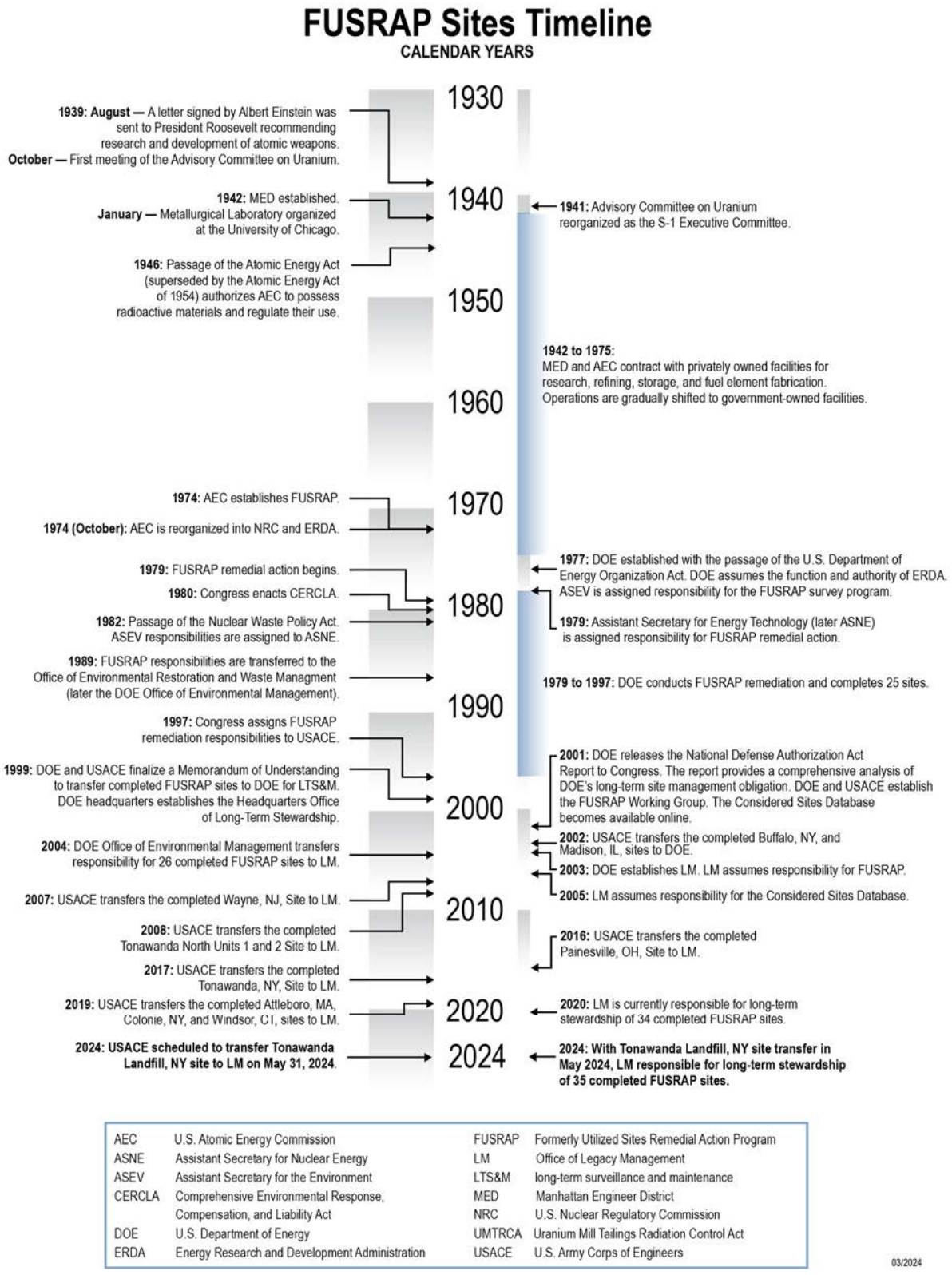


Figure 1. Key Dates for Historical MED/AEC and FUSRAP Activities

Subtask Management

- General management activities
- Supporting partner and stakeholder communications
- Maintaining and preserving institutional knowledge

Active Sites

Pre-transition for sites actively being remediated by USACE include the following:

- Researching and documenting future LTS impacts
- Supporting Interagency Working Groups
- Preparing draft and final Site Transition Charters
- Providing Litigation and Property Disposition Support

Transition for remediated sites include the following:

- Preparing draft and final Site Transition Plans and other transition tools
- Acquiring and preserving site records
- Ensuring remedy conformance with regulatory requirements
- Tracking transition actions and communicating with stakeholders
- Developing LM webpages and fact sheets
- Drafting and finalizing LTS Plans
- Developing and maintaining detailed life-cycle cost and schedule for transition and LTS periods

Category 1 Completed Sites

LTS consists of the following:

- Managing the site record collections
- Ensuring the compliance of the remedy
- Providing ongoing stakeholder support

Category 2 Completed Sites

LTS consists of the following:

- Performing routine inspections as applicable (e.g., site visit to verify integrity and compliance of remedy or current land use)
- Performing monitoring and maintenance
- Managing the site record collections
- Providing ongoing stakeholder support

Category 3 Completed Sites (There are no current Category 3 completed sites. There are two Category 3 active sites.)

LTS consists of the following:

- Performing operation and maintenance of active remedial action systems
- Performing LTS activities as listed for Category 2 Completed Sites

Ineligible Sites

Activities include the following:

- Performing eligibility determinations
- Maintaining the Master Site List (including annual updates)
- Maintaining the Considered Sites Database

Figure 2. FUSRAP Sites Definitions and Summary of LM Activities

Available sources of historical information about the early activities of the MED/AEC are the *Volume I A History of the United States Atomic Energy Commission, The New World 1939/1946* (Hewlett and Anderson Jr. 1962) and *A History of the United States Atomic Energy Commission. Atomic Shield* (Hewlett and Duncan 1972). Information about early atomic research and the Manhattan Project is available at: https://www.osti.gov/opennet/manhattan-project-history/. Additional historical references are in Section 10.0 of this document. The synopsis presented here of the procurement, storage, and processing of the raw materials containing uranium provides a general overview of the MED/AEC activities.

As shown in Figure 3, several operations were involved in the sequential development of historical atomic weapons. Work was performed generally in the northeastern, midwestern, and southwestern United States. Uranium ore was procured from African, Canadian, and domestic sources, and shipped to temporary storage and assay facilities. Ore materials were refined by grinding and crushing, then treating with acid to extract the uranium. MED/AEC facilities produced uranium in various forms (e.g., black oxide, brown oxide, green salt, powder) for use in further weapons development activities. Several sites also served as disposal locations for waste materials. To a lesser degree, thorium ore was also processed in MED/AEC facilities. In the 1950s and 1960s, uranium and thorium processing activities gradually shifted from private enterprises to government-owned facilities. At the termination of contracted MED/AEC activities, the sites involved were decontaminated according to the health and safety criteria and guidelines then in use. Because radiological criteria for releasing these sites for unrestricted use became more stringent over time, FUSRAP was established in 1974 to identify sites where radiological conditions exceeded the current protective environmental criteria and standards. Figure 3 shows the current list of active sites (FUSRAP sites under remediation by the USACE) and completed sites (those sites transferred to LM that are currently managed for stewardship). Figure 4 shows the locations of the 21 active sites and 34 completed sites. The Tonawanda, New York, Site called the Tonawanda Landfill in Figure 4 and Figure 5 as an active site, will transfer to LM in May, becoming the 35th completed site.

The assessment of site conditions and eligibility for FUSRAP relied upon the availability of historical contract and operational records. In many instances, documentation of the MED/AEC activities at these sites was destroyed in compliance with government records retention practices. Many of the radiological records documenting the extent of remediation were incomplete. Additionally, many of the sites changed ownership or industrial processes. In some cases, buildings were modified or demolished, and the earlier MED/AEC facilities were no longer present.

1.2.2 FUSRAP Activities Before 1997

In early 1974, AEC initiated the survey program to identify all formerly utilized sites involved with radioactive materials and to determine their radiological status. This survey program would later become FUSRAP. The responsibility for this survey was assigned to the AEC Division of Operational Safety. At that time, all divisions and field offices of AEC were required to search their files to identify any former government-owned or leased sites and facilities that had been used in the research or production activities of the MED and AEC. In addition, the files were searched for records identifying the radiological conditions at the termination of the MED/AEC activities or the transfer of custodial responsibility for such sites, the current radiological condition of the sites, and the land use and ownership data. This effort identified many additional sites for which pertinent information was lacking or was insufficient to determine their radiological conditions.

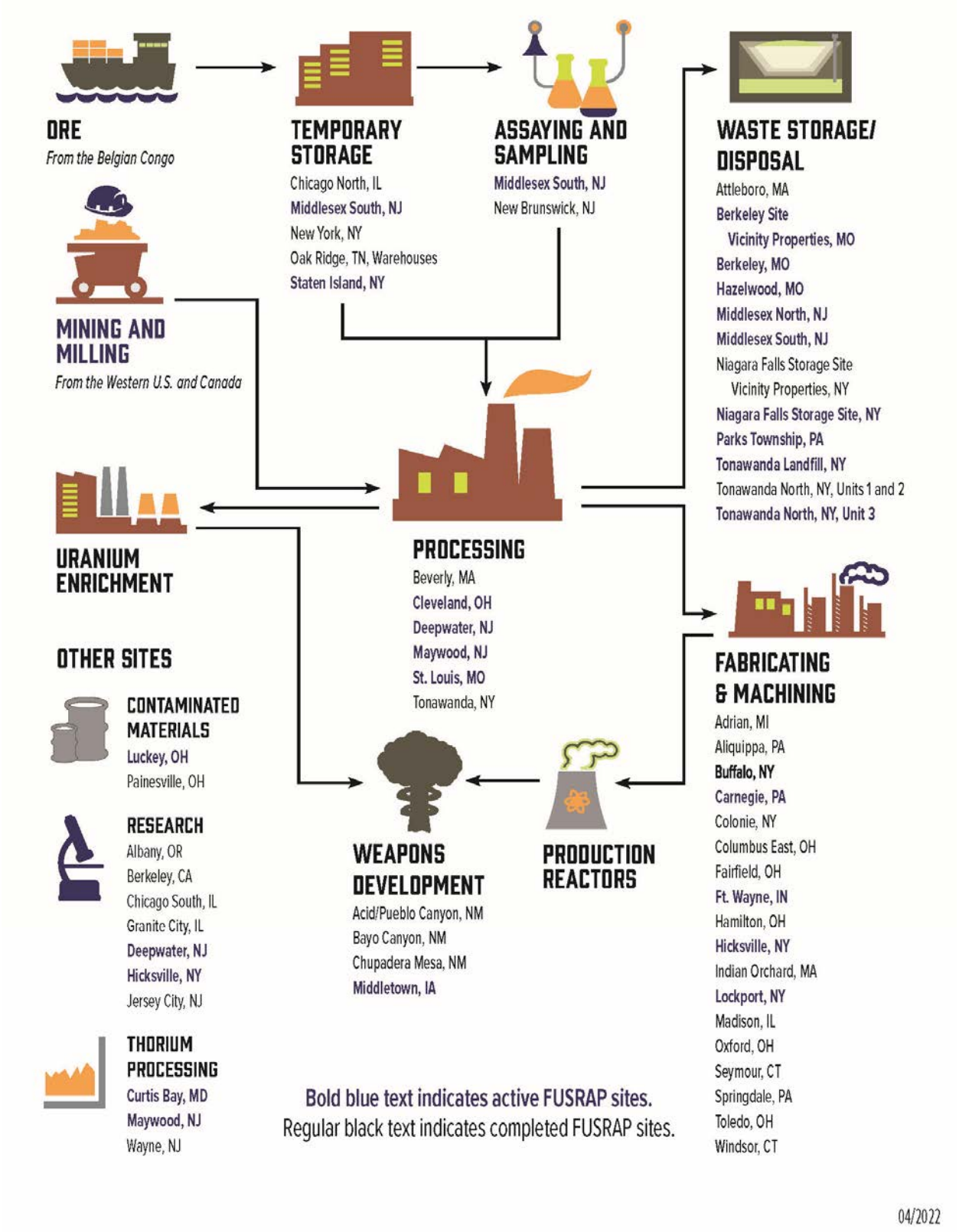


Figure 3. MED/Early AEC Operations with Associated FUSRAP Sites

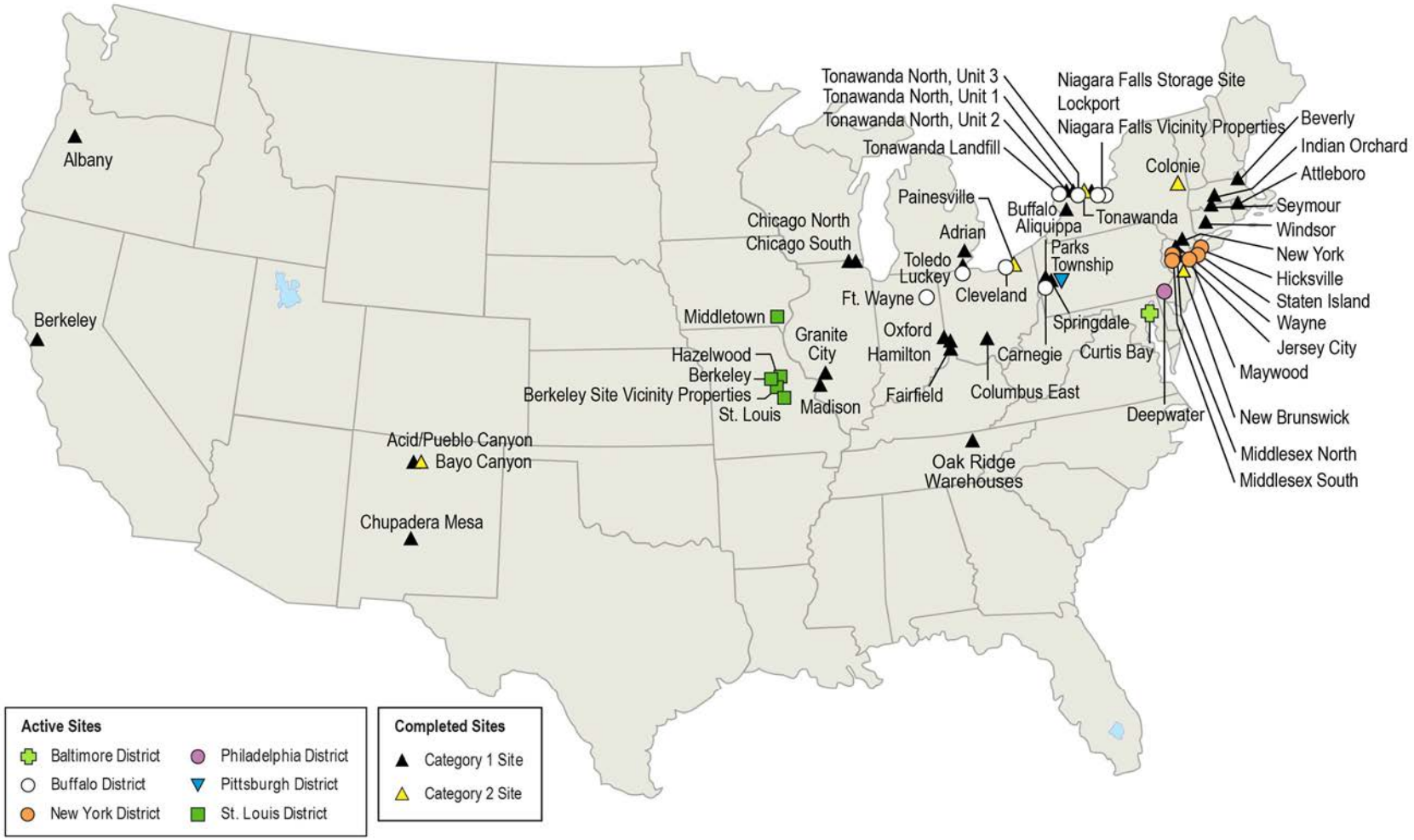


Figure 4. Locations of FUSRAP Sites

In October 1974 as part of the Energy Reorganization Act of 1974, AEC was abolished and its programmatic responsibilities transferred to ERDA, which continued the activities of the survey program. Contacts were made with former and current owners, and site visits were conducted under the direction of ERDA field offices to determine the need for radiological surveys. If radiological surveys were determined to be necessary, the permission of the site owners was obtained, and a press release was issued to inform the public of the survey work. Subsequent survey results were also issued in public press releases and were published in a radiological survey report that analyzed the significance of the findings with respect to the potential risks to the public health.

Pursuant to the DOE Organization Act of 1977, the functions and authority of ERDA were transferred to DOE. In DOE, the assistant secretary for the environment (ASEV) was assigned the responsibility for the site-survey program. The results of several site surveys clearly indicated that some remedial action would be needed, not only on the former sites, but also on vicinity properties[1] that had become contaminated from the original processing sites. Due to the importance of this effort, the ASEV formalized the survey program as FUSRAP and drafted a generic plan to identify all formerly utilized sites and to resolve any site radiological problems. With this generic plan as a guide, in mid-1979 responsibility for the FUSRAP activities was divided between the ASEV and the assistant secretary for energy technology (now assistant secretary for nuclear energy [ASNE]). The ASEV was responsible for identifying the sites, characterizing the radiological condition, determining the need for remedial action at the sites, and ultimately certifying the post-remedial action radiological condition of the FUSRAP sites. The ASNE was responsible for implementing the required remedial actions, including suitable disposal or stabilization of residual material.

During the initial records review, FUSRAP personnel assessed the radiological conditions at more than 600 sites that were potentially involved in early atomic weapons and energy activities and identified 46 sites as eligible for cleanup under FUSRAP. The remainder of the sites were deemed ineligible. DOE collected files that document the eligibility decisions into the Considered Sites Library (CSL). Additional sites were added to FUSRAP because of congressional action (e.g., the Energy and Water Development Appropriation Act [EWDAA] for 1984 and 1985) and because of transfer from DOE's Surplus Facilities Management Program.

DOE began remediating sites under FUSRAP in 1979. The initial remediation activities focused on sites where conditions were more straightforward in terms of size, nature, and extent of contamination than sites with more challenging and complex conditions where remediation extended for several years or decades (or may have been in progress). DOE implemented a multiphase approach to characterize sites, identify appropriate remedial activities, conduct remediation, and waste disposal, prepare a final report, and assemble materials for a certification docket.

[1] According to the 1999 MOU, the term "vicinity properties" means properties adjacent to or near eligible FUSRAP sites that have been contaminated by radioactive or chemical waste materials attributable to activities that supported the nation's early atomic energy program.

DOE established programmatic guidelines for the cleanup of residual concentrations of radionuclides in soil, concentrations of airborne radon decay products, external gamma radiation levels, surface contamination levels, and residual radionuclide concentrations in air and water (DOE 1987). The certification process was performed to verify that final site conditions met the cleanup objectives, to assemble and document the data used in final decisions, and to archive the documentation in a format that allowed for public availability (DOE 1990). Both the remedial action contractor (or subcontractor) and an independent verification contractor performed a review of final site radiological conditions to ensure that remedial objectives were achieved. To document completion of activities, a notice was typically placed in the *Federal Register*.

In 1982, the ASEV's responsibilities were transferred to the ASNE. Then, in 1989, these responsibilities were transferred to the newly created Office of Environmental Restoration and Waste Management, later renamed the Office of Environmental Management (EM). As of 1997, DOE completed remediation at 25 FUSRAP sites as noted in the March 1999 MOU (Appendix A) and had begun characterization or remediation at several other sites and vicinity properties. EM was responsible for LTS at these completed sites. Figure 5 shows the remediation time frames of the completed sites. (Note: During subsequent years, several of the original 25 sites were referred to USACE for additional remediation.) Appendix B provides a summary of key dates and additional information about the FUSRAP sites.

1.2.3 FUSRAP Activities After 1997

In 1997, Congress transferred responsibility for the administration and execution of FUSRAP remediation activities to USACE starting in the EWDAA of 1998. The *Memorandum of Understanding Between the U.S. Department of Energy and the U.S. Army Corps of Engineers Regarding Program Administration and Execution of the Formerly Utilized Sites Remedial Action Program (FUSRAP)* (DOE and USACE 1999), also called the March 1999 MOU, and two LOAs, defined the roles of each agency in administering and executing FUSRAP (Appendix A).

Under the March 1999 MOU and LOAs, DOE retains the responsibility for determining the potential eligibility of new FUSRAP sites (based on historical records search) and for the long-term care of sites after USACE completes remediation, described further in Section 3.0. After additional research and site characterization, USACE may designate a site for remediation. USACE performs remediation within the framework of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Oil and Hazardous Substances Pollution Contingency Plan (also called the National Contingency Plan [NCP]) codified at Title 40 *Code of Federal Regulations* Part 300 (40 CFR 300). USACE retains responsibility for the site for 2 years after cleanup and then transfers the site to DOE for long-term care. Following the signing of the March 1999 MOU, DOE and USACE provided further clarification on areas that are not specifically outlined in the March 1999 MOU. This information is captured in two LOAs between USACE and DOE issued in December 2001 and April 2002. In these letters, the agencies agreed to a three-step process by which USACE will transfer completed sites to DOE for LTS. Table 1 provides a summary of DOE responsibilities identified in the March 1999 MOU and LOAs. For the full description of the roles and responsibilities of DOE and USACE, refer to the March 1999 MOU and LOAs in Appendix A.

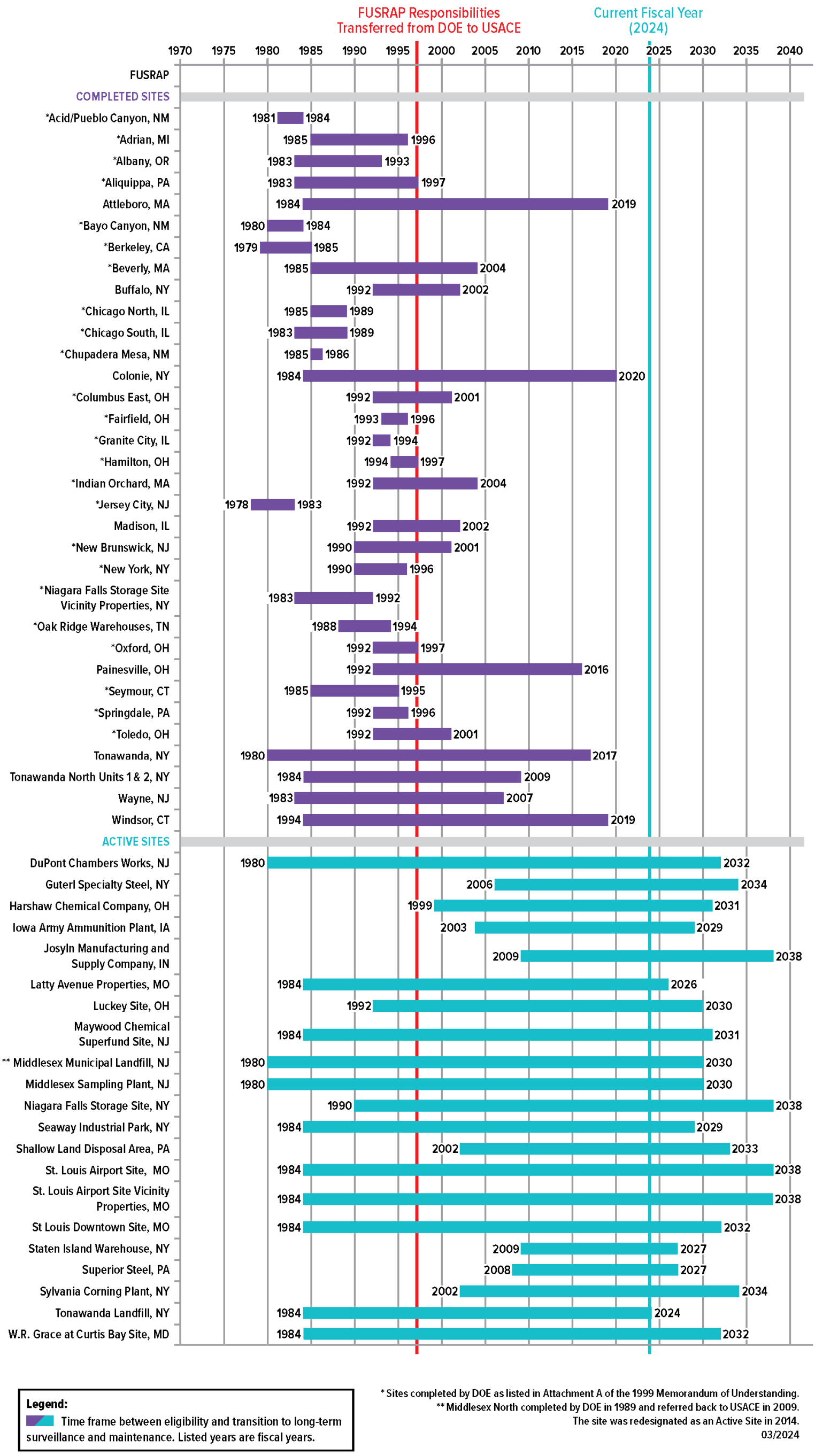


Figure 5. FUSRAP Site Remediation Timeline

Table 1. DOE FUSRAP Responsibilities

March 1999 MOU Citation	DOE Responsibility
Completed Sites	
III.B.1	• Maintain LTS and institutional control requirements; manage federally owned property and interests therein; and any other federal responsibilities, including claims and litigation. • Identify the need for additional cleanup actions; refer site back to USACE for additional cleanup. • Assume Federal Facility Agreement role. • Administer payments in lieu of taxes for federally owned lands.
Active Sites	
III.C.1	• Beginning 2 years after closeout, maintain LTS and institutional control requirements; upon closeout, accept the transfer of federally owned real property and interests. • Administer payments in lieu of taxes for any federally owned lands.* • Administer payment of claims by property owners for damages to property and personal injuries due to DOE's actions prior to October 13, 1997. • Maintain accountability for federally owned real property interests. • Make outgrants on federally owned property at the request of USACE.
FUSRAP Eligibility (New Sites)	
III.D.1	• Perform historical research and provide a FUSRAP eligibility determination.** • Refer eligible sites to USACE by providing historical processes at the site, the geographic boundaries of those activities, and the potential radioactive and chemical contaminants at the site. • Maintain records of determination of eligibility and other files, documents, and records associated with the site.
Additional DOE Responsibilities Outlined in Letters of Agreement	
2001 Letter (USACE to DOE)	• Evaluate potential new sites against the criteria in the MRPM, dated May 5, 1997, and refer to USACE for evaluation-only sites meeting the DOE eligibility criteria.** • Coordinate its new site designation activities with USACE to ensure that there is a smooth transition with minimal duplication of effort or lost time. Specifically, DOE will notify USACE as soon as an event occurs—a letter of inquiry, for example, that could result in an eligibility review and a referral to USACE—and provide USACE with copies of all documentation and historical records pertinent to its eligibility determination at the earliest opportunity.
2002 Letter (DOE to USACE)	• Evaluate the eligibility of sites for possible inclusion as new sites in FUSRAP against the criteria in the FUSRAP Summary Protocol-Identification-Characterization-Designation-Remedial Action-Certification (DOE 1986a; DOE 1986b), which is part of the MRPM (DOE 1997). • For privately owned FUSRAP sites where the LTS responsibility will be limited to recordkeeping, DOE supports the three-step transfer process outlined in the 2001 letter. For the sites that are currently federally owned, DOE will work with USACE to facilitate the transfer of title to those properties to private or local government ownership, or to transfer the real property interests to other federal agencies, as appropriate.

Notes:
Refer to the original March 1999 MOU and LOA text in Appendix A for definitions of terms for further interpretation.
* DOE LM does not administer payments in lieu of taxes for any of its currently owned FUSRAP sites.
** DOE criteria updated. Refer to *Prescreening Methodology for FUSRAP Eligibility Determinations* (LMS/S11541) and *Determining Eligibility for FUSRAP Sites* (LM-Procedure-3-22-7.0, LMS/PRO/S13050).

Abbreviation:
MRPM = *FUSRAP Management Requirements and Policies Manual* (DOE 1997)

Since 1997, USACE has conducted FUSRAP remediation in accordance with Engineer Regulation ER-200-1-4, *Formerly Utilized Sites Remedial Action Program* (USACE 2014) or predecessor documents. ER-200-1-4 sets USACE policy concerning USACE roles and responsibilities under FUSRAP in designating new sites, determining the scope of cleanup efforts, and seeking cost recovery for cleanup. In addition, Appendix F of ER-200-1-4 provides the USACE procedure for transfer of completed sites to DOE. Appendix G of ER-200-1-4 presents a document and activity review and approval authority matrix and notes specific documents to be issued to DOE for information or review.

There are two ways that sites can come to the USACE for designation in the FUSRAP eligibility designation process: (1) a site may be determined to be potentially eligible and referred by DOE, or (2) Congress can direct the site to be included in FUSRAP. USACE will determine whether a site becomes an active FUSRAP site (i.e., designated). DOE is responsible for evaluating sites against the eligibility criteria (i.e., eligibility determination), and USACE is responsible for designating sites. If new information about the site or changed site conditions are discovered, DOE may refer a site back to USACE for further consideration without a new eligibility determination. The eligibility determination process is based on the 1999 MOU (DOE and USACE 1999), subsequent correspondence between DOE and USACE, the 1986 protocol used by EM (DOE 1986a; DOE 1986b), and USACE's FUSRAP regulation (USACE 2014). All four of the following criteria must be met for a site to be eligible for referral to USACE under FUSRAP:

- There is evidence that MED or AEC work was performed at the site.
- Radioactive materials exist at the site above current guidelines, and there is credible, reasonable evidence that contamination resulted from the MED and/or AEC activities.
- The site is not addressed under another remedial action program, nor are its radioactive materials addressed under NRC or state license.
- DOE's authority to remediate the site is provided in existing laws, regulations, and guidance.

The USACE FUSRAP review and approval authority matrix is provided in Appendix D of this plan for reference. Section 3.0 provides additional discussion of LM's role in current site remediation activities.

Figure 5 lists the sites that have been part of FUSRAP. Other key information for sites being remediated by USACE is provided in the summary table in Appendix B.

1.3 Legislative Authority

Pursuant to the First War Powers Act of 1941 and the Atomic Energy Acts of 1946 and 1954, as amended, the MED and its successor, AEC, conducted a program to research, develop, process, and produce uranium and thorium. This program conducted during the 1940s and 1950s also included storing radioactive ores and processing residues, such as mill tailings. Most of this work was performed by private contractors for the government on land that was federally, privately, or institutionally owned.

Due to the urgency and magnitude of the early nuclear materials programs and the limited knowledge available regarding the radioactive characteristics of uranium and thorium ores and residual material from their processing, many of these sites became contaminated with radioactivity because of work performed for the government.

The survey program that would later become FUSRAP formally began in 1974. AEC and its successor ERDA conducted radiological surveys and other research work under the authority of the Atomic Energy Act of 1954, as amended. The intent of Congress when DOE was created, as expressed in the fiscal year (FY) 1978 DOE Authorization Act (Public Law 95-238) (PL 95-238) was that, at the completion of the survey program, DOE would seek additional legislative authority, pursuant to a congressional review of findings, for the undertaking of any required remedial action.

A survey of existing statutory authority determined that pursuant to the Atomic Energy Act of 1954, as amended, AEC was directed to protect public health and safety during the research and production operations. With those operations over which the government exercised ownership or control, DOE's existing authority has been interpreted to include the implied authority to decontaminate such sites through remedial actions undertaken at the conclusion of contract work.

The FY 1998 EWDAA (PL 105-62) transferred responsibility for the administration and execution of FUSRAP remediation from DOE to USACE. Provisions in the Appropriations Acts for FY 1999 and FY 2000 (PL 105-245 and PL 106-60, respectively) clarified congressional intent and required as a matter of law that USACE will conduct cleanup work at FUSRAP sites subject to CERCLA and the NCP. DOE had independent authority under the Atomic Energy Act to clean up sites under its control or jurisdiction. Congress did not extend that authority to USACE when it transferred responsibility for FUSRAP cleanups, but the relevant committees made it clear in report language (see H Rep 105-190, page 66 [Jul 21, 1997] and H Conf Rep 105-271 page 37 [Sep 26, 1997]) that USACE was to act, if possible, consistently with DOE's interpretations of its authority. In transferring the authority for FUSRAP execution to USACE, Congress conferred CERCLA lead agency authority on USACE for selection of remedies.

Appendix C provides a chronology of FUSRAP legislation history.

1.4 FUSRAP Alignment with the LM *2020–2025 Strategic Plan*

This PMP aligns with the LM's goals and objectives as defined in the LM *2020–2025 Strategic Plan* (DOE 2020a). The FUSRAP team will periodically review the goals and objectives and will reprioritize tasks to effectively accomplish the assigned FUSRAP mission. Table 2 provides a summary of the LM goals and objectives, and the FUSRAP performance strategies.

Table 2. LM Strategic Goals and Objectives, and FUSRAP Performance Strategies

LM Strategic Goal	Applicable LM Strategic Objectives	FUSRAP Performance Strategies
Goal 1: Protect human health and the environment	1. Comply with environmental laws and regulations related to radioactive and hazardous materials, to prepare for receiving sites into LM. 2. Reduce postclosure-related health risks in a cost-effective manner. 3. Improve the long-term sustainability of environmental remedies.	1. Collaborate with USACE and regulatory agencies to understand current and future LTS requirements for FUSRAP active sites. 2. Conduct LTS, as required, to ensure that sites' protective measures are operating in compliance with applicable federal, state, and local laws. 3. Evaluate and identify opportunities to optimize LTS and reduce risk and life-cycle baseline cost in a protective, effective, and safe manner. Including periodic independent programmatic reviews as necessary. 4. Interpret and execute DOE responsibilities identified by the 1999 MOU (DOE and USACE 1999). Continually review the March 1999 MOU and its addenda to identify challenges and develop creative solutions to resolve program incongruities.
Goal 2: Preserve, protect, and share records and information	1. Protect and maintain legacy records and information. 2. Make technology solutions more efficient, relevant, and accessible to the LM stakeholder and user communities.	1. Preserve and maintain FUSRAP-related records and information. 2. Improve the accessibility and availability of relevant FUSRAP information, such as Administrative Records, as available, on the LM public website. 3. Maximize use of technology and software and opportunities to improve where feasible.
Goal 3: Safeguard former contractor workers' retirement benefits	1. No completed sites or anticipated active sites that would contribute to this goal.	Not Applicable.
Goal 4: Sustainably manage and optimize the use of land and assets	1. Enhance sustainable environmental performance for facilities and personal property and address severe weather events. 2. Optimize the use of federal lands and properties. 3. Transfer excess real and personal government property.	1. Perform LTS in a manner that supports federal sustainability goals. 2. Ensure all DOE-owned real property interests are accounted for in a Facilities Information Management System and are tracked. 3. Conduct periodic reviews of real property assets and evaluate potential beneficial reuse opportunities for property and assets.

Table 2. LM Strategic Goals and Objectives, and FUSRAP Performance Strategies (continued)

LM Strategic Goal	Applicable LM Strategic Objectives	FUSRAP Performance Strategies
Goal 5: Sustain management excellence	1. Ensure LM sites are safe and secure for federal and contractor personnel, regulators, and the general public. 2. Develop and maintain high standards for planning, budget, acquisition, and project management. 3. Sustain a talented, diverse, inclusive, and performance-driven federal workforce. 4. Improve the quality, efficiency, and effectiveness of site management and business support action.	1. Evaluate and identify opportunities to optimize and streamline key FUSRAP processes and reduce risk and life-cycle baseline cost in a protective, effective, and safe manner. 2. Perform periodic independent programmatic reviews as necessary. 3. Align program procedures with applicable DOE orders and directives.
Goal 6: Engage the public, governments, and interested parties	1. Engage the public in our program, project, and site activities. 2. Work effectively with local, state, and federal governments and nonprofit organizations. 3. Consult, collaborate, and partner with tribal nations. 4. Support development of the Manhattan Project National Historical Park. 5. Implement Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,* within LM.	1. Document and respond to public, media, and stakeholder inquiries. 2. Build and sustain strong working relationships with USACE, communities, and regulatory agencies, when appropriate. 3. Identify and support opportunities for the development of the Manhattan Project National Historical Park. 4. Support environmental justice initiatives as needed.

Note:
Goals and objectives from LM's *2020–2025 Strategic Plan* (DOE 2020a).

2.0 Program Organization

This section describes the LM and LMS organizational structures and how the organizations interface and work as a cohesive team to ensure that the program is conducted in accordance with applicable requirements and that all program needs are met.

2.1 Program Structure

The following subsections describe the organization used by LM and the LMS contractor to execute FUSRAP activities. The LMS contractor supports LM with activities described in the detailed task order (TO) statements of work (SOWs).

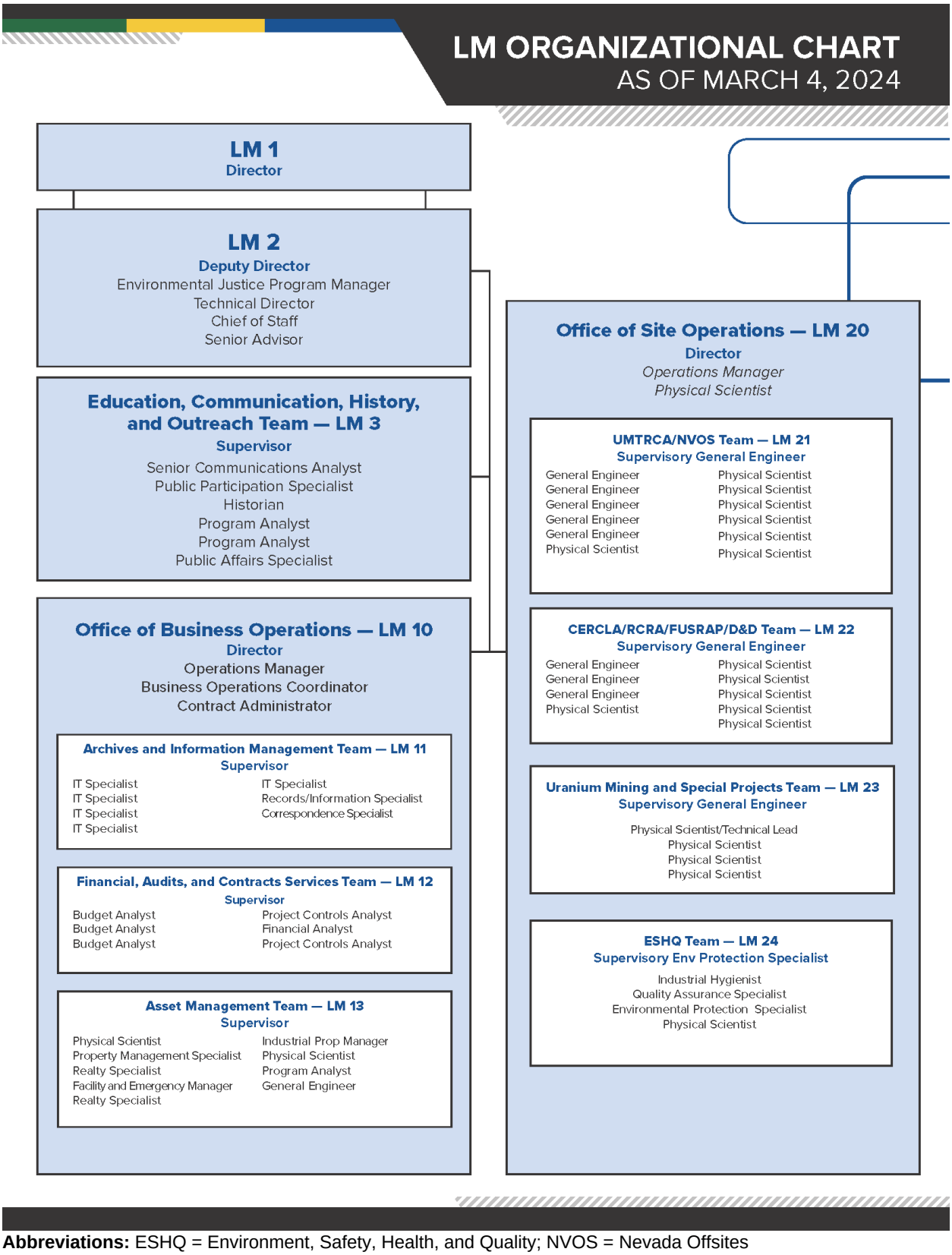
2.1.1 LM

Figure 6 shows the structure of the LM program. LM directors are in Washington, D.C.; other management and personnel are in offices geographically dispersed across the country, including Grand Junction, Colorado; Westminster, Colorado; Weldon Spring, Missouri; Fernald, Ohio; and Morgantown, West Virginia. The Office of the Director (LM-1) is supported by the Deputy Director team (including Environmental Justice, the program manager, a management analyst, and a technical director); the Executive Operations team; and Communication, Education, and Outreach Team. The LM organization has two primary operations branches, LM-10 and LM-20:

- LM-10, the Office of Business Operations, is responsible for records and information management and oversight of the pension plans and postretirement benefits for retired contractor workers formerly employed at closed sites no longer supporting a DOE mission. LM-10 manages the maintenance and disposition of real and personal property, including beneficial reuse plans. LM-10 also has responsibility for archives and information management, strategic planning, program integration, finance and budget, acquisition, and administrative support.
- LM-20, the Office of Site Operations, is responsible for implementing LTS at sites transferred to LM to ensure sustainable protection of human health and the environment. LM-20 also has responsibility for safety, quality assurance (QA), environmental management systems, and compliance with the National Environmental Policy Act (NEPA) and oversees operation of the Uranium Leasing Program and the Abandoned Uranium Mines program.

FUSRAP is executed by the LM-22 Resource Conservation and Recovery Act (RCRA)/CERCLA/FUSRAP/Decontamination and Decommissioning (D&D) team. The LM FUSRAP program manager serves as the LM FUSRAP TO8 Subtask 5 manager, and is supported by the LM-22 site managers, and subtask managers as required (Figure 7). Effective program management benefits are realized by sharing LM site manager resources among the RCRA/CERCLA/FUSRAP/D&D sites. The LM CERCLA/RCRA/FUSRAP team leader and LM FUSRAP program manager coordinate directly with the USACE FUSRAP national program manager.

LM manages staffing resources through various organizations programwide. LM's *Site Management Guide* (LM-Guide-3-20.0-1.0) tracks future site transition dates. This information supports LM's human capital plan for federal staff as well as LM's strategic plan—both of which are also effective for resource planning. LM's life-cycle baseline (LCB) process captures LMS contractor support.



Abbreviations: ESHQ = Environment, Safety, Health, and Quality; NVOS = Nevada Offsites

Figure 6. LM Organization

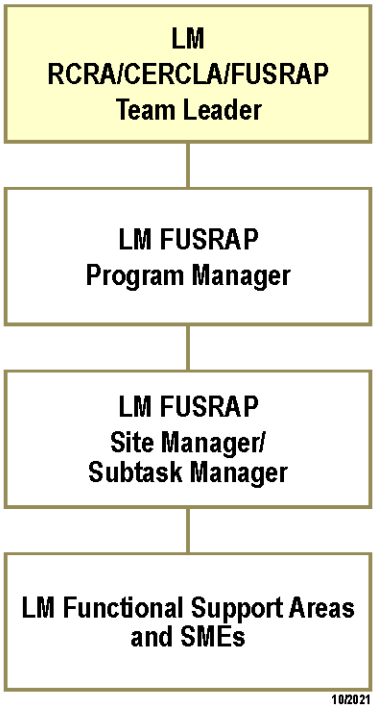


Figure 7. LM FUSRAP Organization

Functional support services such as records management, environmental information systems, geographic information systems (GISs), and asset management are integral to the FUSRAP scope; therefore, the LM FUSRAP team also communicates and integrates with designated subject matter experts (SMEs) and other resources within the Asset Management team (LM-13), the Archives and Information Management (AIM) team (LM-11), and the Uranium Mill Tailings Radiation Control Act (UMTRCA)/Nevada Offsites team/D&D (LM-21).

2.1.2 LMS Contractor

The LMS contractor is RSI EnTech, LLC, and fully integrated teaming partners Amentum Technical Services, LLC, and TFE, Inc., which compose the RSI Team. The RSI Team supports the mission of DOE under the LMS contract.

The LMS organization is detailed in Appendix E.

Figure 8 shows the LMS FUSRAP TO8 Subtask 5 organizational structure. The LMS FUSRAP manager is responsible for all aspects of the program and is the point of contact for the LM RCRA/CERCLA/FUSRAP team leader and LM FUSRAP manager. The LMS FUSRAP manager is supported by LMS site leads for (1) Active Sites, (2) Completed Sites, and (3) Ineligible Sites. In addition, specific FUSRAP sites may have assigned LMS site leads. Specific personnel assigned to FUSRAP are listed on the LMS *Responsibility Assignment Matrix* (RAM). The LMS contractor provides and maintains a RAM to help manage responsibilities and ensure effective collaboration on sites and projects. A current version of the RAM is maintained on the LM Portal.

For FUSRAP, as shown in Figure 8, the LMS contractor organization is designed for both project execution and ongoing LM program support functions, as required in the LMS contract. The FUSRAP TO8, Subtask 5 utilizes an Integrated Project team, with the FUSRAP TO manager (LMS FUSRAP manager) reporting directly to the LMS Site Operations manager, who is responsible for all LMS LTS projects. This Integrated Project team includes individuals assigned to the program as support from various program services, including resources from:

- Safety and Health
- Program Integration's Technical Services
- Services Integration's Information and Technology, Asset Management, and Business Services
- Quality Assurance
- Program Management's Program and Project Support, as well as Project Integration
- Education, Communications, History, and Outreach (ECHO)

The LMS FUSRAP manager has responsibility for overall technical, cost, and schedule performance for the FUSRAP TO8 Subtask 5 as defined by the contract, including the timeliness and quality of all milestones and deliverables. The LMS FUSRAP manager works with the LM FUSRAP manager to define the milestones and deliverables that should be included in the Performance Evaluation and Management Plan and SOW before work starts (Section 3.1). The LMS FUSRAP manager is also responsible for directing the FUSRAP Integrated Project team by obtaining resources from mission service organizations and providing specific scope, schedule, and budget of the task-specific work performed by these individuals. Each assigned individual is responsible for ensuring that his or her work is conducted in accordance with program-specific needs and requirements as directed by the LMS FUSRAP manager.

Each LMS site lead is assigned to a specific FUSRAP work breakdown structure (WBS) scope. Each LMS site lead is responsible for technical execution, cost, schedule performance and tracking, quality, and timeliness of all milestones, deliverables, and submittals associated within the WBS scope. Table 3 shows the roles and responsibilities for the FUSRAP team.

The FUSRAP TO8 Subtask 5 organization functions as an Integrated Project team and includes individuals who are assigned to the project from program services groups. These individuals are responsible for delivering functional support, knowledge, and expertise in accordance with the established and approved LM requirements documents for their defined subject area. These requirements documents define the approaches, processes, and procedures for a given subject area that are in compliance with applicable regulations, DOE orders, and contract specifications and are applicable across the LMS contract. LMS program services managers are responsible for training their staff and ensuring that these documents are kept current with any changes to requirements and incorporate best practices and lessons learned. FUSRAP-specific approaches, processes, and procedures are prepared for any program services support area function to address additional requirements and the specificity necessary for successful execution. Specific functional support personnel assigned to FUSRAP are also listed on the current version of the RAM maintained on the LM Portal. The assignment of functional support staff in the RAM ensures each program has sufficient support from each functional area. This maximizes efficiencies and better manages resources to achieve benefits not available by managing each program independently.

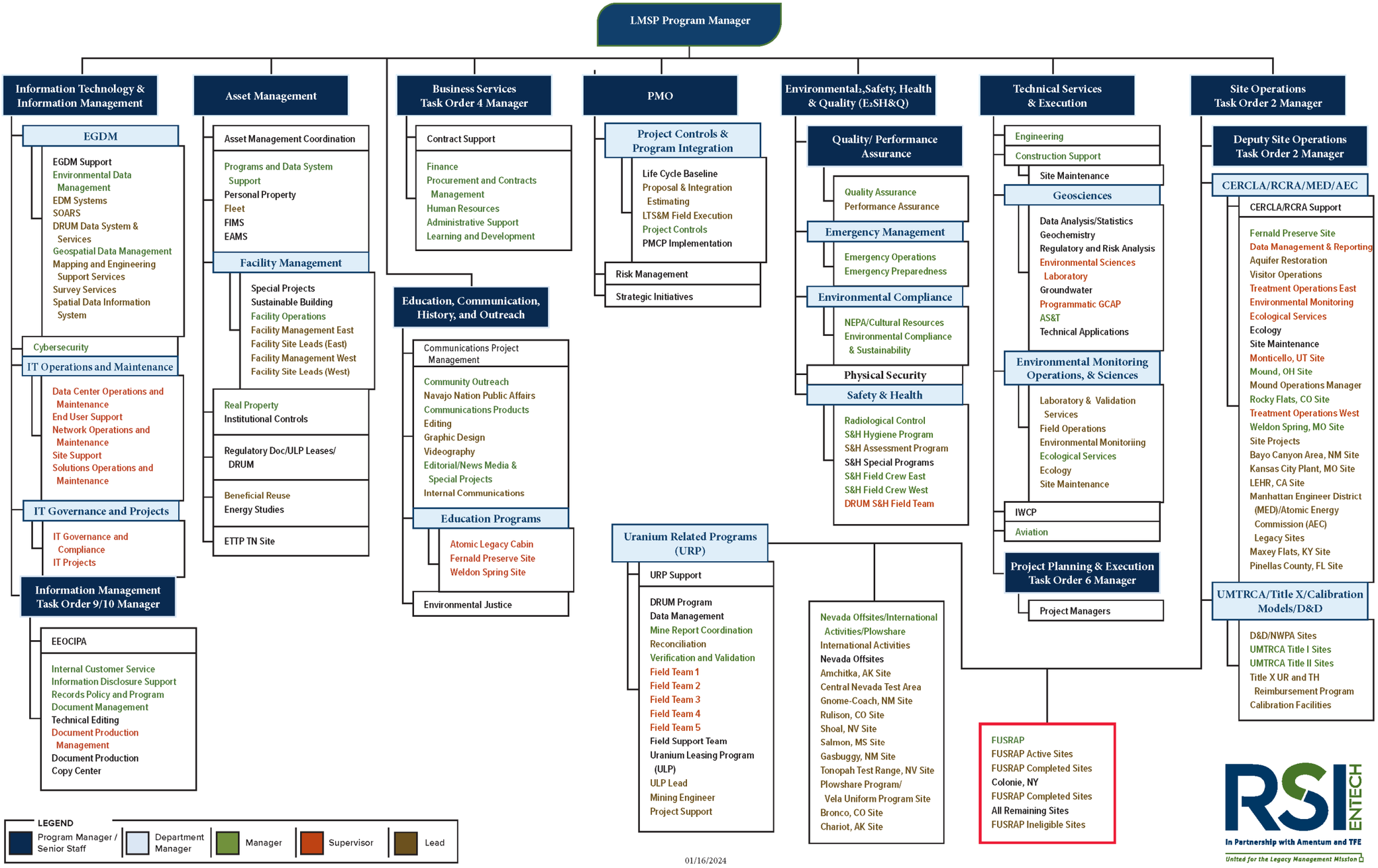


Figure 8. LMS FUSRAP Organization and Integrated Project Team Services

Table 3. FUSRAP Team Roles and Responsibilities

Personnel	Roles and Responsibilities	Authority
LM RCRA/CERCLA/ FUSRAP Team Leader	Program governance and sponsorship LM management of TO8 Subtask 5 scope, schedule, and budget Primary point of contact for interactions with USACE FUSRAP headquarters manager Primary point of contact for interactions with DOE senior management Identify program risk and ways to mitigate Approve life-cycle baseline BCPs and TO8 Subtask 5 TOCs Approve performance evaluation items for the LMS services contract Approve contractor performance assessment	Assign subtask leads Assign work under TO8 Subtask 5 Stop work due to unsafe work conditions
LM FUSRAP Program Manager	Coordinate program scope, schedule, and budget activities Coordinate overarching activities within FUSRAP Identify program risk and ways to mitigate Support development of performance evaluation items Coordinate input to the contractor performance assessment	Assign work under TO8 Subtask 5 Oversight of program performance Stop work due to unsafe work conditions
LM FUSRAP Site Managers and Subtask Managers	Management of scope, schedule, and budget Primary contact at site level with USACE Identify and resolve technical issues Identify program risk and ways to mitigate Provide information as required to functional support services Support development of performance evaluation items	Assign work under TO8 Subtask 5 Oversight of contractor performance Stop work due to unsafe work conditions
Other LM teams and SMEs (e.g., EGDM, Real Property and Records)	Oversee all applicable work in their respective subject area Coordinate to ensure that resources are available to support future scope Review FUSRAP-specific processes and procedures where necessary	Stop work due to unsafe work conditions

Table 3. FUSRAP Team Roles and Responsibilities (continued)

Personnel	Roles and Responsibilities	Authority
Contracting Officer Contracting Officer's Representative	Roles and responsibilities and authority of the Contracting Officer and Contracting Officer's Representative are provided in the *Contract Management Plan (CMP) for Office of Legacy Management Legacy Management Support Services Indefinite Delivery Indefinite Quantity (IDIQ) Contract Number – 89303020DLM000001* (Period of Performance November 9, 2020, through November 8, 2025)	
LMS FUSRAP Manager	Perform the scope activities under the task management subtask Develop staffing and work strategies that are cost-effective, compliant, and technically sound and that meet LM's needs Identify and manage support from mission services personnel assigned to the FUSRAP TO8 Subtask 5 Assign subtask work scope, ensuring that schedules and budgets are consistent with baseline commitments and with the funds obligated Manage TO8 Subtask 5 budgets and schedules Report monthly EVMS statistics Track and deliver milestones and deliverables Prepare accruals Manage all FUSRAP TOCs, and integrate new work into the existing schedule	Stop work due to unsafe work conditions Assign subtask leads and establish FUSRAP work teams Assign work assignments and charge numbers Approve all FUSRAP TOCs prior to submission to LMS senior management and DOE Sign FUSRAP deliverables
LMS FUSRAP Site Leads	Perform subtask work Ensure coordination and regular communication with LM FUSRAP site managers Understand project budgets and scope Understand the physical characteristics and the regulatory and remediation status of the sites under their responsibility Update monthly subtask EVMS inputs Support task order change and annual budget updates for work scope Ensure coordination and regular communication with relevant mission support groups related to the subtask work Coordinate meetings	Stop work due to unsafe work conditions Manage work assignments and charge numbers for subtask work scope Make recommendations for specific activities and requirements for sites within their subtask

Table 3. FUSRAP Team Roles and Responsibilities (continued)

Personnel	Roles and Responsibilities	Authority
Assigned Program Services personnel	Implement all applicable LMS processes and procedures in their respective subject area (see Table 4) Identify and prepare FUSRAP-specific processes and procedures where necessary As position requires, understand the physical characteristics and the regulatory and remediation status of the sites they are assigned to support	Stop work due to unsafe work conditions Timely and high-quality responses to assigned work scope

Abbreviations:
BCP = baseline change proposal
EGDM = Environmental and Geospatial Data Management
EVMS = Earned Value Management System
TOC = task order change

Table 4 identifies the program services functions that are used for the FUSRAP scope of work and their characteristics, such as the responsibility of the assigned resource, the applicable requirements documents, and the specific programmatic elements. Unless otherwise noted in the table, the requirements documents describe how the programwide functional area work is conducted for all tasks, including FUSRAP, and the details are not repeated in this plan. Additional FUSRAP-specific processes and procedures are identified in Section 3.0 through Section 10.0 of this plan.

Table 4. Programmatic Responsibilities and Requirements for FUSRAP

Program Support Area	Responsibility	Requirements and Documents	Programmatic Elements/Processes Applied to FUSRAP	FUSRAP Work Elements Supported
Business Services				
Administrative Support	Provide administrative services for the FUSRAP team	• *LMS Projects and Programs Manual,* LMS/POL/S05760	• Administrative functions	• Program Management
Contracts Services	Perform purchasing and subcontracting actions requested	• *Procurement Manual,* LMS/POL/S04334	• Purchasing supplies and services	• Program Management • Active Sites • Completed Sites
Project Controls	Plan for projects using Work Control Process Project Charter, Project Management Plan, or Work Plan, as appropriate, and review and approval process	• *LMS Projects and Programs Manual,* LMS/POL/S05760 • *Integrated Work Control Process Manual,* LMS/POL/S11763 • *Environmental and Spatial Data Management Operations Plan,* LMS/PLN/S18183	• Project scoping, planning, tracking • Technical, cost, and schedule development	• Program Management
	Manage project schedules, budgets and reporting requirements using the LMS EVMS system	• DOE Order 413.3B Chg 7, *Program and Project Management for the Acquisition of Capital Assets* • DOE Order 413.3-20 Chg 1, *Change Control Management Guide* • *Project Management Control Systems Manual*, LMS/POL/S04330 • *Integrated Risk Management Plan*, LMS/POL/S27671	• Technical, cost, and schedule PMB development • Cost and Schedule Performance and Reporting • EVMS • Baseline Change Control preparation • Risk evaluation process	• Program Management
	Lead the LMS life-cycle baseline update process	• Annual LM Life-Cycle Update Guidance	• Annual life-cycle baseline update • FUSRAP implements a detailed process and maintains thorough documentation for managing and updating the life-cycle baseline	• Program Management • Ineligible Sites • Active Sites • Completed Sites

Table 4. Programmatic Responsibilities and Requirements for FUSRAP (continued)

Program Support Area	Responsibility	Requirements and Documents	Programmatic Elements/Processes Applied to FUSRAP	FUSRAP Work Elements Supported
Stakeholder Engagement	Perform public outreach, response to public and media inquiries, and preparation and dissemination of materials to stakeholders	• *Public Dissemination of Information,* LM-Procedure-3-3-1.0 • *Public Affairs Manual*, LMS/POL/S11690 • *Communication Products Manual*, LMS/POL/S18461	• Public outreach event coordination (e.g., public meetings, site tours, or news conferences) • News release, informational brochure, and other stakeholder communication development and distribution • Stakeholder inquiry and response tracking • Stakeholder database maintenance	• Program Management • Ineligible Sites • Active Sites • Completed Sites
Document Management	Review, edit, and produce documents and deliverables	• *LMS Document Types, Processes, and Responsibilities*, LMS/POL/S32426 • *Document Management Services, Resources, and Procedures,* LMS/PRO/S32818	• Editing, document production • Document control • Posting documents to website	• Program Management • Ineligible Sites • Active Sites • Completed Sites

Table 4. Programmatic Responsibilities and Requirements for FUSRAP (continued)

Program Support Area	Responsibility	Requirements and Documents	Programmatic Elements/Processes Applied to FUSRAP	FUSRAP Work Elements Supported
Program Services				
Site Transition and Transfer	Follow established site transition and transfer process (discussed further in Section 3.0 of this PMP)	• March 1999 MOU Article III.C.1, "Active Sites," and in alignment with the LM Site transition and transfer policy and procedure • *LM Site Transition and Transfer,* LM-Policy-1-22-1.0 • *LM Site Transition and Transfer Procedure,* LM-Procedure-3-20-20.0, • *Site Transition Framework Checklist Template,* LM-Template-4-20-3.0 • *Site Transition Plan Outline,* LM-Template-4-20-4.0, • *Transition and Transfer of Guidance for FUSRAP Sites*, LM-Guide-3-22-3.0, LMS/PRO/45370 • *Joint U.S. Army Corps of Engineers and U.S. Department of Energy Office of Legacy Management Information Transfer/Transition Protocol for the Formerly Utilized Sites Remedial Action Program*, LMS/S20093	• Site pre-transition, transition (planning and execution), post-transfer • Project management • Closeout • Knowledge management • Environmental stewardship	• Active Sites
Operations and LTS	Perform site operations/fieldwork; responsible for safe and compliant operations/fieldwork execution (discussed further in Section 3.0 of this PMP)	• DOE Policy 454.1 Chg 1, *Use of Institutional Controls* • *Conduct of Operations Manual,* LMS/POL/S04374 • *Guidance for Institutional Controls for Long-Term Surveillance and Maintenance at DOE Legacy Management Sites,* LM-Guide-3-20-2.0, LMS/POL/S07617 • *Risk-Screening of Legacy Management Sites*, LMS/S31301	• Performance and safety objectives for all operational work • LTS Index, also called Site Risk Screening to include human health risk, stakeholder issues or concerns, regulatory risk, and IC risk	• Active Sites • Completed Sites
Eligibility Determinations related to Ineligible Sites	Perform eligibility determinations for eligibility to FUSRAP and referrals to USACE (discussed further in Section 3.0 of this PMP)	• *Prescreening Methodology for FUSRAP Eligibility Determinations*, LMS/S11541 • *Determining Eligibility for FUSRAP Sites,* LM-Procedure-3-22-7.0, LMS/PRO/S13050	• Determination of site eligibility for FUSRAP • Referrals to USACE	• Program Management • Active Sites

Table 4. Programmatic Responsibilities and Requirements for FUSRAP (continued)

Program Support Area	Responsibility	Requirements and Documents	Programmatic Elements/Processes Applied to FUSRAP	FUSRAP Work Elements Supported
Program and Project Management	Plan for projects using Work Control Process Project Charter, PMP, or Work Plan, as appropriate, and review and approval process (discussed further in Section 3.0 of this PMP)	• *LMS Projects and Programs Manual,* LMS/POL/S05760 • *Integrated Work Control Process Manual,* LMS/POL/S11763 • *Environmental Spatial Data Management Operations Plan,* LMS/PLN/S18183 • *Project Management Control Systems Manual*, LMS/POL/S04330 • *Quality Assurance Manual,* LMS/POL/S04320	• Project scoping, planning, tracking • Technical, cost, and schedule development • Operational enhancements • Risk-based decision making	• Program Management
Risk Management	Define the scope and process for the identification, analysis, and management of risks that could impact the implementation of the program and its projects	• DOE Order 413.3B Chg 7, Program and Project Management for the Acquisition of Capital Assets • DOE Guide 413.3-7A Chg 2, Risk Management Guide • *Integrated Risk Management Plan*, LMS/POL/S27671 • *Long-Term Stewardship (LTS) Screening Management Plan*, LMS/41354	• Project scoping, planning, tracking • Risk-based decision making • Risk Register • Risk Screening	• Program Management
Engineering and Construction Management	Perform detailed engineering designs and specifications in support of project needs; provide oversight of construction projects	• *Engineering Procedures Manual,* LMS/POL/S04340 • *Engineering Configuration Management Manual,* LMS/POL/S07793 • *Construction Procedures Manual*, LMS/POL/S04324	• Engineering • Construction oversight • Configuration control of systems • Processes may be applicable for FUSRAP sites transitioning over the contract period of performance	• Active Sites • Completed Sites
Environmental and Geospatial Data Management	Perform environmental data management and analysis	• *ESDM Environmental Data Management Team Work Procedures*, LMS/POL/S13473 • *Sampling and Analysis Plan for U.S. Department of Energy Office of Legacy Management Sites,* LMS/PRO/S04351	• Environmental data management (field and laboratory) • Import of selected FUSRAP data and metadata into EQuIS • Manage all LM-generated data	• Program Management • Active Sites • Completed Sites
	Perform geospatial analysis and mapping	• *Environmental and Spatial Data Management Operations Plan,* LMS/PLN/S18183	• Geospatial analysis and visualization	• Program Management • Active Sites • Completed Sites

Table 4. Programmatic Responsibilities and Requirements for FUSRAP (continued)

Program Support Area	Responsibility	Requirements and Documents	Programmatic Elements/Processes Applied to FUSRAP	FUSRAP Work Elements Supported
Environmental Sciences	Provide technical SME support for ecology, geology, and other disciplines	• *LMS Projects and Programs Manual,* LMS/POL/S05760	• Technical review	• Active Sites • Completed Sites
Environmental Monitoring Operations	Perform LTS field activities at specific sites	• *Sampling and Analysis Plan for U.S. Department of Energy Office of Legacy Management Sites,* LMS/PRO/S04351 • *Environmental Sciences Laboratory Procedures Manual,* LMS/PRO/S04343	• Sampling and analysis • Environmental monitoring • Subcontracted laboratory coordination	• Completed Sites
Emergency Management, Environmental Compliance, Safety, Health, and Quality Assurance				
Emergency Management	Protect life, property, and the environment including all natural disasters or human caused malevolent incidents	• *LM/LMS All Hazards Emergency Management Plan,* LM-Procedure-3-20-17.0, LMS/POL/S37643 • *LM/LMS Emergency Categorizations and Notifications EPIP,* LM-Procedure-3-20-14.0, LMS/POL/S30907 • *LM/LMS Worker Emergency Response EPIP,* LM/3-20-21.0, LMS/POL/S37549	• Emergency Management of all sites • Incident support • Evaluations of emergency incidents	• Program Management • Completed Site • Active Site
Emergency Management Rapid Response	Ensure rapid response to inaccessible FUSRAP materials that become accessible Support LM Rapid Response manager (LM Emergency Management program manager) with requesting USACE Rapid Response Technical Center of Expertise (RR-TCX), if needed	• *Requesting USACE Rapid Response Technical Center of Expertise (RR-TCX) Support for LM Sites and Facilities,* LM-Procedure-3-21-2.0	• Rapid response for time-sensitive needs for assessment and associated stopgap measures to minimize and mitigate risks to human health and the environment	• Completed Sites

Table 4. Programmatic Responsibilities and Requirements for FUSRAP (continued)

Program Support Area	Responsibility	Requirements and Documents	Programmatic Elements/Processes Applied to FUSRAP	FUSRAP Work Elements Supported
Environmental Compliance	Identify and develop plans that comply with regulatory requirements associated with the program	• DOE Order 436.1A, *Departmental Sustainability* • DOE Policy 451.1, *National Environmental Policy Act Compliance Program* • LM Policy 436.1C, LM *Environmental Policy* • *EMS Sustainability Teams Manual,* LM-Manual-3- 20.3-1.0, LMS/POL/S11374 • *Environmental Planning and NEPA Compliance Procedures,* LM-Procedure-3-20-4.0 • *Environmental Management System/Energy Management System Description*, LM-Procedure-3-20-12.0, LMS/POL/S04346 • *Environmental Protection Manual*, LMS/POL/S04329 • *Environmental Instructions Manual,* LMS/POL/S04338	• Environmental compliance • Environmentally related ICs; (all ICs tracked by Asset Management)	• Program Management • Active Sites • Completed Sites

Table 4. Programmatic Responsibilities and Requirements for FUSRAP (continued)

Program Support Area	Responsibility	Requirements and Documents	Programmatic Elements/Processes Applied to FUSRAP	FUSRAP Work Elements Supported
Safety and Health	Identify and mitigate hazards; oversee work activities, as required	• DOE Policy 450.4A Chg 1, *Integrated Safety Management Policy* • *Integrated Safety Management System Description for LMS in Support of DOE Legacy Management Sites,* LMS/POL/S14463 • *Worker Safety and Health Program (10 CFR 851),* LMS/POL/S14697 • *LMS Safety and Health Program,* LMS/POL/S20043 • *Issue Reporting,* LMS/POL/S28503 • *Issue Management,* LMS/POL/S28504 • *Integrated Work Control Process Manual,* LMS/POL/S11763	• Environmental hazards • Construction and maintenance safety • Fire protection • Hazard identification and control • Industrial hygiene • Occupational medicine • Motor vehicle safety • Electrical safety and hazardous energy control • Incident reporting • Emergency Management • Integrated Work Control Process • OSHA recordkeeping	• Program Management • Active Sites • Completed Sites
	Ensure that work is conducted in accordance with approved radiological controls; issue radiological work permits	• DOE Order 458.1 Chg 4, *Radiation Protection of the Public and the Environment* • *Radiation Protection Program Plan*, LMS/POL/S04373 • *Radiological Control Manual,* LMS/POL/S04322	• Radiation protection	• Program Management • Active Sites • Completed Sites
Quality Assurance	Support development of site-specific QA plans (if applicable); conduct assessments and surveillances; assist with developing and distributing lessons learned	• DOE Order 226.1B, Chg 1 *Implementation of Department of Energy Oversight Policy* • DOE Order 414.1D Chg 2, *Quality Assurance* • DOE Policy 226.2, *Policy for Federal Oversight and Contractor Assurance Systems* • *Quality Assurance Program Plan,* LM-Plan-1-10.0-1.0 • *LM Oversight,* LM-Procedure-2-20-5.0-3.0 • *Quality Assurance Manual,* LMS/POL/S04320	• QA plans and requirements • Assessments and surveillances • Lessons Learned • Contractor assessment and oversight reports	• Program Management • Active Sites • Completed Sites
Incident Reporting	Identify, categorize, and report incidents, including but not limited to safety-related and environmental incidents	• *Issue Reporting*, LMS/POL/S28503 • *Issue Management*, LMS/POL/S28504	• Incident reporting and notification	• Program Management • Active Sites • Completed Sites

Table 4. Programmatic Responsibilities and Requirements for FUSRAP (continued)

Program Support Area	Responsibility	Requirements and Documents	Programmatic Elements/Processes Applied to FUSRAP	FUSRAP Work Elements Supported
Learning and Development	Maintain training assignments; training completion database; provide training for selected courses	• *Learning and Development Policies and Procedures Manual*, LMS/POL/S15034	• All required reading and training	• Program Management • Ineligible Sites • Active Sites • Completed Sites
Archives and Information Management				
Records Management	Provide support for the transition, transfer, receipt, continued maintenance and use, storage, and disposition of USACE, LM, and LMS FUSRAP records	• DOE Order 200.1A Chg 1, *Information Technology Management* • DOE Order 243.1B Chg. 1, *Records Management Program* • *Records and Information Management*, LM-Policy-1-11-1.0 • *CERCLA Administrative Record and Post-Decision Document Management Procedure,* LM-Procedure-3-22-6.0, LMS/PRO/S33248 • *Information Technology Project Management,* LM-Procedure-3-10.2-1.0 • *Joint U.S. Army Corps of Engineers and U.S. Department of Energy Office of Legacy Management Information Transfer/Transition Protocol for the Formerly Utilized Sites Remedial Action Program*, LMS/S20093	• File management system • Records retention and disposition schedules • Records transition guidance • Preservation of FUSRAP records regardless of media • File plan creation and maintenance	• Program Management • Ineligible Sites • Active Sites • Completed Sites
Information Technology Projects	Provide support to the TO manager for development of project-specific software tools and databases	• *SharePoint Site Creation and Maintenance*, LMS/POL/S18768	• Software development and application	• Program Management • Ineligible Sites • Active Sites • Completed Sites
Asset Management				
Asset Management	Provide personal and real property asset management support	• DOE Order 430.1C Chg 2, *Real Property Asset Management* • *Real Property Management,* LM-Manual-3-13-3.0, LMS/POL/S04335 • *Facilities Information Management System (FIMS) Manual*, LM-Manual-3-13-5.0, LMS/POL/S32619 • *Request for Realty Services (RRS),* LM- Form-430.1D,	• ICs • Management of DOE real property assets • Property reuse • Condition assessments • Real estate documents and instruments (e.g., access agreements)	• Program Management • Active Sites • Completed Sites

Abbreviations: EQuIS = Environmental Quality Information System; EVMS = Earned Value Management System; ICs = institutional controls; JSA = job safety analysis; PMB = performance management baseline

2.2 Program Interfaces

The LMS direct line management structure for the FUSRAP TO8 Subtask 5 aligns to the LM organizational structure with the LMS FUSRAP site leads interfacing primarily with the LM FUSRAP site managers, the LMS FUSRAP manager interfacing primarily with the LM FUSRAP program manager, the LMS Site Operations manager interfacing with the LM RCRA/CERCLA/FUSRAP team leader, and the LMS program manager interfacing with LM and LM-20 senior management (Figure 9). This alignment supports clear lines of communication, responsibility, and authority within the LMS organization for execution of the FUSRAP TO8 Subtask 5. The managers of services functional groups supporting the LMS FUSRAP manager also interface with their counterparts in LM; however, the individuals supporting FUSRAP are directly accountable to the LMS FUSRAP manager for work on TO8 Subtask 5. Additional discussion regarding internal communication is provided in Section 4.0.

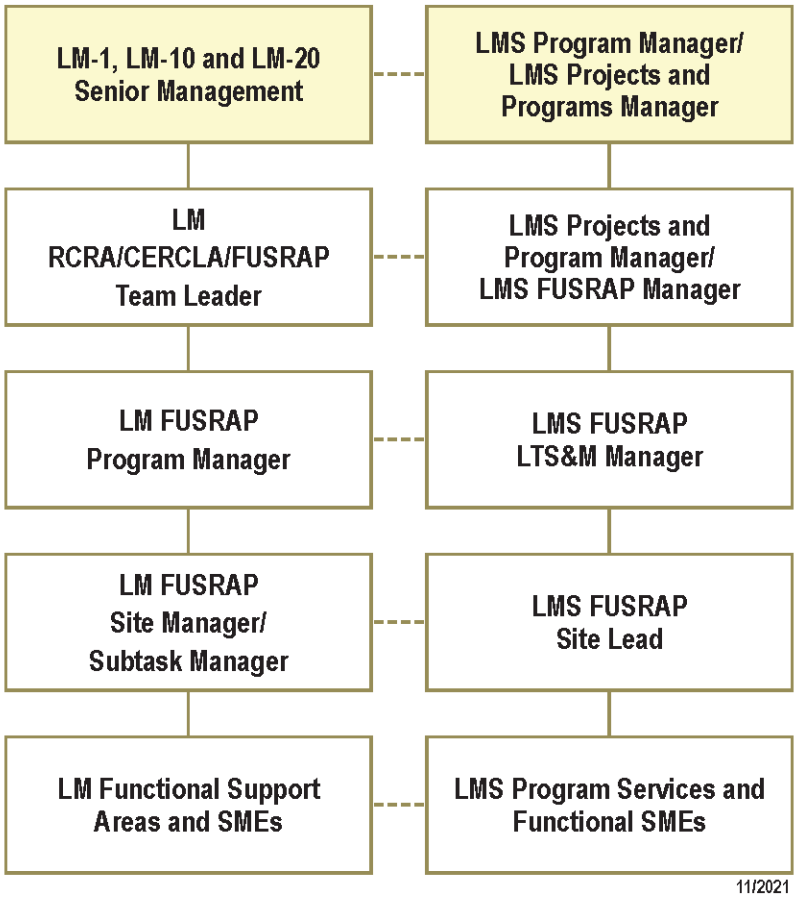


Figure 9. LM and LMS FUSRAP Interfaces

2.3 Lines of Authority

Frequent and effective communication between LM and LMS personnel is critical to the success of the program. LMS FUSRAP site leads and program services personnel maintain regular technical communication with their LM counterparts throughout the organizational structure. The LMS contractor recognizes the difference between technical direction and technical communication. While "communication" can be between all members of the team and is highly encouraged, "direction" requires line authority; therefore, communication is complementary to the strict lines of technical direction and contractual authority maintained between LM and the LMS contractor across the program. Contractual authority, including that for task order change (TOCs), is between the DOE contracting officer and contracting officer's representative and the LMS program manager. Contractual authority flows from the LM contracting officer and contracting officer's representative through the LM organization's line management structure to the LM RCRA/CERCLA/FUSRAP team leader and flows separately within the LMS organization from the LMS program manager, through the LMS organization line management, to the LMS FUSRAP manager. Additional discussion regarding contract management is provided in Section 4.0.

3.0 Program Management Approach

This section describes the management approach to be used to accomplish the objectives of DOE responsibilities for FUSRAP. LM implements a project control system based on the application of DOE Order 413.3B, *Program and Project Management for the Acquisition of Capital Assets*, and DOE Order 430.1C, *Real Property Asset Management*. A graded approach for the use of these DOE orders is applied to the FUSRAP work. In the following subsections, details regarding the overall FUSRAP program WBS, program planning activities, program execution, and monitoring and controlling are provided.

3.1 Work Breakdown Structure

FUSRAP success relies on thorough planning and seamless execution of the scope, schedule, and budget. A comprehensive WBS is developed on an annual basis to define all the features of work and provide a baseline for planning, execution, and performance monitoring and control. The WBS provides a consistent method to communicate all the FUSRAP outcomes and deliverables.

The WBS is important because it communicates a clear understanding of outcomes and the relationship among the work packages (WPs) and activities. More importantly, the WBS provides consistency in the planning and execution processes (e.g., LCB, LMS contract, and budget calculations) and facilitates the process of formally identifying and accepting completed deliverables.

Specifics of the lower WBS levels may change, but the general groups and control accounts and WPs (e.g., site management, technical support, LTS) are constant. This allows for consistency and integration between program planning (Section 3.2) and program execution (Section 3.3).

The FUSRAP WBS is structured as TO8, Subtask 5 (Level 3, 01.02.05) with the following structure: Group, Control Account, WP Element, and WP, with WBS charge codes opened as needed under individual WPs. Table 5 provides a summary of the Groups (five) within the FUSRAP WBS.

Table 5. FUSRAP WBS Summary for Groups (Level 4) and Example Levels to WBS Charge Code (Example Levels 5 through 8)

Task Order 8, Subtask 5	**03.08.05**	**FUSRAP**
Group	**03.08.05.00**	FUSRAP Oversight & Management
Control Account	03.08.05.00.01	FUSRAP Management Support (Subtask Management)
***WP Element Example**	03.08.05.00.01.01	FUS – Project/Program Management
***Work Package Example**	03.08.05.00.01.01.01	FUS – Management/Admin Support
*WBS Charge Code Example	03.08.05.00.01.01.01.FMG11A	FMG11A-Mgmt/Admin
Group	**03.08.05.01**	FUSRAP Active Sites
Group	**03.08.05.02**	FUSRAP Category 1 Completed Sites
Group	**03.08.05.03**	FUSRAP Category 2 Completed Sites
Group	**03.08.05.04**	FUSRAP Ineligible Sites

The five FUSRAP high-level groups, with a brief description of the associated WP elements, are as follows:

- **Oversight & Management** (WBS 03.08.05.00; Section 3.3.3.1): FUSRAP Management Support (Subtask Management) (Control Account) of program scope, schedule, and budget. WP Elements (with WPs listed) for FUSRAP Program Oversight & Management include:

  — *Project/Program Management (Manage Program)* (WP Management/Admin Support), which encompasses a broad range of activities and functions including:

    - Program and project planning; periodic updates to key FUSRAP and LM programmatic materials such as: Site Management Requirements and Practices (SMRP), Annual Site Environmental Report (ASER), communications playbook, action report, fact sheets, websites, and completed site videos; assisting LM site managers in customizing LCB costs for all FUSRAP sites listed in the current version of the *Site Management Guide*; maintaining core business processes and procedures to optimize scope, schedule, quality, and costs; maintaining historical program libraries as well as stakeholder, regulatory, and governmental communications; maintaining and tracking action items at a program level; attending, coordinating, and preparing materials for weekly update meetings; completing training; reviewing and updating programmatic documents periodically, as necessary; providing administrative support; and providing project controls, analysis, and earned-value management analysis support.

    - Providing records management support for LM and USACE; maintaining the CSD; maintaining and enhancing a Photo Library tool to efficiently manage historic and current program photos and videos; coordinating with the appropriate LMS organization to establish a corporate photo/video management tool as needed; performing records archive review and providing photo management self-assessment; updating and maintaining the FUSRAP Interactive Web Interface as part of operations and maintenance (O&M); supporting preparation of two FUSRAP web maps; and providing GIS Support to the interactive web interface.

  — External (Partner) and Stakeholder Communications (WP Stakeholder Engagement) including:

    - Recording and drafting public and interagency meeting minutes and providing them to LM within 20 business days of meeting; providing a minimum of two articles for the LM quarterly *Program Update* publication; updating LM FUSRAP Stakeholder Report (with primary focus on Completed and Ineligible Sites); tracking and reporting all FUSRAP public and government inquiries within 45 working days of the request.

  — *Conferences and Events* (WP Waste Management Symposium Support) that addresses Maintain Institutional Knowledge, including:

    - Developing and writing at least two technical papers for national conferences; presenting at least two presentations as part of attendance at national conference(s), typically involving the Waste Management annual conference.

- **Active Sites** (WBS 03.08.05.01; Section 3.3.3.2): Support for Pre-Transition Support and Transition tasks for sites being remediated by USACE in accordance with the March 1999 MOU Article III.C.1, *Active Sites* and in alignment with the *LM Site Transition and*

Transfer Policy and Procedure. Control Accounts and WPs include Pre-Transition Support (WPs Task Management, LM-USACE Meeting Support, Active Sites Site Visits, Active Sites Specific Site Tours, Pre-Transition Research, Specific Site Management, Specific Site Transition). Work Elements include planning for all LTS activities including Project/Program Management and Site Transition. Pre-Transition March 1999 MOU activities fall within the Transition Planning Phase 1 of LM's Site Transition and Transfer Process. Activities for sites in the March 1999 MOU Transition Stage fall within the Transition Execution Phase 2 of LM's Site Transition and Transfer Process.

- **Category 1 Completed Sites** (WBS 03.08.05.02; Section 3.3.3.3): Performance of LTS and associated activities, in accordance with the March 1999 MOU Article III.B.1, "Completed Sites." WP Element *Cat1 Project/Program Management* includes WPs for *CT1-Project/Program Management* and *CT1-Reporting* that include LTS work for sites designated as Category 1.
- **Category 2 Completed Sites** (WBS 03.08.05.03; Section 3.3.3.3): Performance of LTS and associated activities, in accordance with the March 1999 MOU Article III.B.1, "Completed Sites," for Category 2 sites. WP Element and WP *CT2- Consolidated Sites – Reporting (grouped together)* for the Category 2 Completed Sites include LTS work for sites designated as Category 2. There are also WP Elements and WPs for LTS activities at specific sites (e.g., the Colonie, New York, Site).
- **Ineligible Sites** (WBS 03.08.05.04; Section 3.3.3.5): Performance of Ineligible Sites Work Elements *INS-Project/Program Management* and *INS-Reporting* include WPs for eligibility determination and reporting for Ineligible Sites. Activities include:
  - Eligibility determination and referral, which is performed as needed; sites are evaluated for FUSRAP eligibility in accordance with *Determining Eligibility for FUSRAP Sites* (LM-Procedure-3-22-7.0, LMS/PRO/S13050).
  - Master Site List (MSL) update, which consists of the annual update of the MSL and its source lists, and annual risk analysis and ranking update.
  - Implementing recommendations to improve CSD and Ineligible Site document maintenance, which consists of (1) maintaining documents related to ineligible sites, (2) reviewing documents in response to public inquiries and providing summaries to LM as well as adding newly discovered documents to the FUSRAP collections, and (3) working with Information Technology to maintain the CSD webpages.

3.2 Program Planning

Planning is a key attribute of LM program support activities to ensure that LM's goals and objectives are achieved. The processes for managing the LCBs and for contract baselines (out years) are described in the following subsections.

3.2.1 Life-Cycle Baseline

In LM, LCB planning documentation is the starting point for input into the federal budget process. LM-10 staff members issue *Life-Cycle Baseline Planning Guidance* for each fiscal year, which establishes the schedule and deliverables required for the LMS contractor to complete the annual LCB planning and evaluation effort. FUSRAP LCB planning is conducted annually as part of the LM review, but periodic updates or revisions may be required throughout the fiscal year as new information is obtained or work priorities change.

The annual LCB planning approach includes a review of the following periods:

- **5-year period:** A review and update of the upcoming fiscal year plus a 5-year performance period is necessary to ensure that the most accurate data are used during the current budget formulation process. This is particularly important for active sites that may be entering a transition period within the next 6 years.
- **75-year period:** This review serves as the basis for the environmental liability 75-year LCB, which is required for completing LM-wide environmental liability estimates and Environmental Liability reporting.

The current fiscal year baselines (Section 3.2.2) are highly detailed and are used to fund project work and measure performance. The LCBs are used to project FUSRAP costs for 5 and 75 years to estimate future resource needs. Each fiscal year's LCBs are retained in accordance with LM's record management procedures, enabling access to past program costs. Also, the annual LCB updates include change control and approval process to document changes to LCB cost. Baselines include a scope statement to establish the technical baseline, a schedule to establish the schedule baseline, cost estimates to establish the cost baseline, associated assumptions, and a risk assessment. Ultimately, customization of the LCB of each active site is desired to provide the most accurate assessment of potential future liability for the program. FUSRAP currently updates 26 LCBs on an annual basis. For each, an LCB basis of estimate is developed that includes: (1) executive summary; (2) programmatic documentation; (3) fact sheet or site or activity summary; (4) technical baseline including subtask SOW and site SOW; (5) schedule baseline; (6) cost baseline including fully loaded cost baseline, near-term summary basis of estimate, and lifecycle basis of estimate 75-year activity baseline; (7) risk management with risk form(s); and (8) change control and approval with BCP form(s) and signoff form.

LM site managers and the LMS site leads are responsible for estimating LCB costs for active sites planned to transition to LM. Cost and schedule estimates are based on available documentation and other information collected for the site. Costs for long-term remedies, including institutional controls (ICs) and monitoring, may be estimated using historical information from other LM sites, estimates provided by USACE in the Record of Decision (ROD) or other documents, or other resources. Within the 5-year window, LCBs may be adjusted to incorporate new or updated information received from USACE on stakeholder communications requirements, frequency and duration of site maintenance needs, management of environmental easements and ICs, postclosure monitoring requirements, or other activities.

The technical, schedule, and cost baselines are compiled into a project baseline summary and are organized by the WPs described in Section 3.1. The project baseline summary describes the status of the site or activity and the anticipated end state. It also reconciles current-year planning with previous estimates and evaluates hazards to the projected baselines.

Key documents to be reviewed during LCB planning and evaluation include the following:

- Annual *Life-Cycle Baseline Planning Guidance*, issued by LM
- Annual *Project Execution Schedule*, issued by USACE
- Annual *Site Management Guide*, issued by LM
- Site-specific decision documents provided by USACE, including the ROD, Proposed Plan, Feasibility Study, and Remedial Investigation
- Current monitoring and O&M reports and cost estimates provided by USACE for sites within the transition stage
- Notes or updates to LCBs prepared throughout the prior year, including those from site visits, public meetings, LM meetings with USACE, lessons learned from other LM sites (such as UMTRCA sites), or other sources

Active FUSRAP sites and Category 2 Completed Sites currently have a site-specific LCB. After site transfer, when the site moves from management under the Active Site subtask to management under the Completed Site subtask, LCB planning for that site moves into the Completed Sites LCB. The estimate detail may provide some site-specific details where needed. As transitioning sites become more complex (such as anticipated Category 3 sites or more complex Category 2 sites), site-specific LCBs for those completed sites may be prepared.

3.2.2 Contract Baseline

In terms of planning, the contract baseline is established for each LMS contractual period of performance, which may occur on a fiscal year or other basis as dictated by the period of performance in the LMS contract. The LCB planning is the basis for the contract baseline, with revisions made as needed to reflect changes in site status or work priorities.

Information transferred from LCB to the contract SOW and proposed scope is reviewed by LM to verify that assumptions are consistent with current information. LCB estimates for costs associated with future regulatory oversight fees or grants are included within LM's Mission Areas. Because these costs are not paid through the LM support services contract, they are included in the LCB for Program Support and Mission Support Activities (MSAs), which is maintained separately from site LCBs. MSAs include such things as financial assistance agreements, grants, cooperative agreements, interagency agreements, work authorizations, simplified acquisitions, and property leases. For example, for the Colonie, New York, FUSRAP site, a grant has been issued to the New York State Department of Environmental Conservation for regulatory oversight of site activities. Example MSAs are outlined below:

Instrument No.	CID	Contract Entity/Description	Project Duration/Notes	LM Team
DE-LM0000468	LM0000468	New York Department of Environmental Conservation (Colonie)	End of Performance is 2023; will renew for another 5 years.	LM-22
—	TBD-NJDEP	State of New Jersey (NJDEP)	Anticipated to start in 2030	LM-22
GS-00F-195CA	89303019FLM400014	Oak Ridge Associated Universities, Inc. (FUSRAP)	This is between USACE and DOE; Active agreement, period of performance ends 9/30/2022	LM-22

3.3 Program Execution

3.3.1 Program Management Framework

FUSRAP's program management framework for value delivery incorporates nine program management leading practices (PMI 2017). These leading practices are combined with the integration of the management requirements identified in Table 4 (Section 2.1.2) to ensure successful execution of FUSRAP's performance strategies in support of LM's strategic goals and objectives identified in Table 2 (Section 1.4).

FUSRAP is managed as part of the LM Office of Site Operations and supported by the LMS contractor under a similar site operations value delivery structure. FUSRAP information and feedback are shared consistently among both organizations, keeping the program aligned with LM's strategic goals and objectives. Governance systems are in place within both organizations to ensure smooth workflow, issue management, program execution, and achievement of LM's goals and objectives.

The nine leading practices for effective program management applied to FUSRAP are summarized in Table 6 and include a crosswalk to relevant sections of this PMP. These leading practices are applied to the execution of FUSRAP projects and activities.

Figure 10 presents the FUSRAP roadmap identifying annual FUSRAP activities in support of FUSRAP's programmatic goals. Figure 11 presents FUSRAP's long-term horizon roadmap capturing the LCB process for FUSRAP sites in pretransition, transition, and LTS. These roadmaps form the basis for FUSRAP programmatic execution.

3.3.2 LMS Contract: TO8 Subtask 5 Management (Subtask Management)

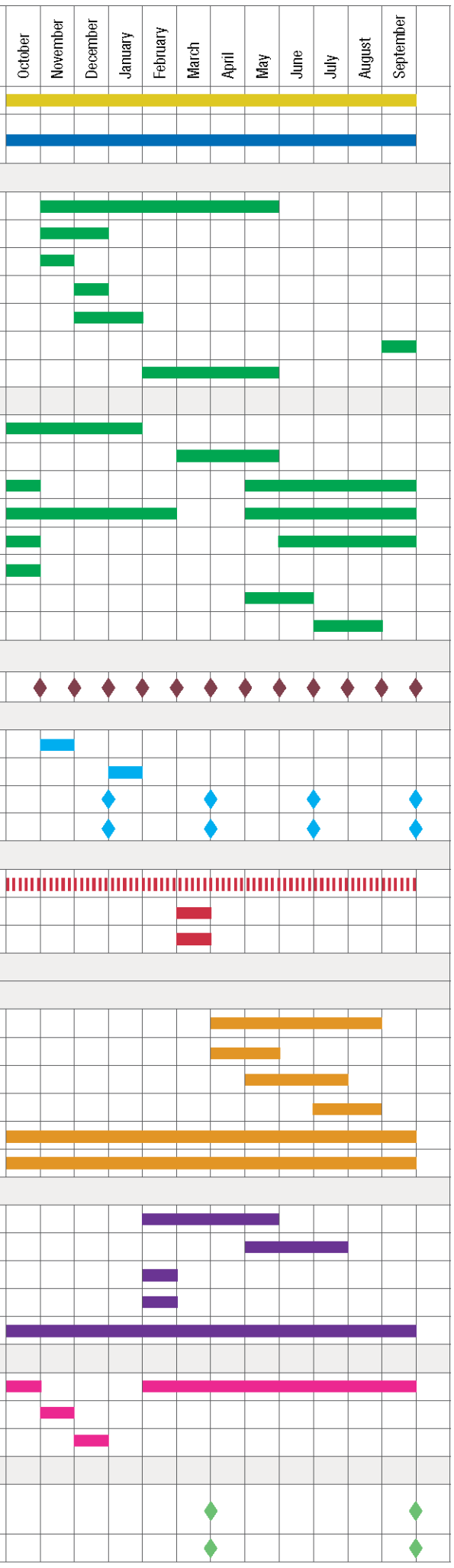
FUSRAP management operates within instructions, formats, and procedures established in the *LMS Projects and Programs Manual* (LMS/POL/S05760), *Integrated Work Control Process Manual* (LMS/POL/S11763), and other applicable technical standards and guidance documents (refer also to Section 2.0). The LMS FUSRAP manager is responsible for performance of the task management subtask and is supported as needed by LMS site leads, LMS senior management, and LMS program services staff. Stakeholders and primary contributors (1) agree on performance objectives and resource requirements; and (2) define the project scope, schedule, and cost baselines (including supporting cost and schedule data). The activities related to program execution that are performed under this subtask include program management, preparation of program deliverables, and task management. These activities are described in the following subsections.

Table 6. Program Management Leading Practices Addressed in the FUSRAP PMP

Program Management Leading Practices	FUSRAP Program Management Strategies	PMP Section
1. Plan and Roadmap: A program management plan and roadmap are in place and updated regularly.	• FUSRAP PMP—updated on an annual basis • FUSRAP Fiscal Year Roadmaps—part of FUSRAP PMP updated on an annual basis	• All sections of PMP • Section 3.3.1 Figure 10 and Figure 11
***2. Life-Cycle Cost Estimate*:** A reliable, integrated, comprehensive life-cycle cost estimate is in place and updated regularly.	• LCB Basis of Estimate—updated annually	• Section 3.2.1
3. Integrated Master Schedule: A reliable, integrated master schedule is in place and updated regularly.	• Contract schedule—performance baseline established on an annual basis at beginning of contract and updated monthly as part of EVM monthly reporting • LCB Schedule—part of annual LCB update • *Site Management Guide* schedule—part of annual update • USACE *Project Execution Schedule*—part of annual USACE site transfer schedule update	• Section 0 • Section 3.2.1
4. Life-Cycle Cost and Integrated Master Schedule Baseline Measurements: An approach is in place to measure against both the program's life-cycle cost and integrated master schedule baselines.	• LCB scope elements incorporated into contract baseline and schedule on an annual basis • LCB 75-year environmental liability estimates developed each fiscal year	• Sections 3.2.1, 0, and 3.3.2.4 • Section 3.2.1
5. Performance Reporting: Completing performance reporting and analysis in a way that provides a clear picture of program performance.	• EVM monthly reports (includes monthly financial reporting) • Monthly Technical Status Reports • Weekly meetings/reports to LM-22 Manager • Monthly TO managers meetings	• Section 3.3.2 • Sections 4.1.2, 4.1.3, and 4.1.4
6. Lessons Learned Database: A lessons learned database is in place.	• Operating Experience (OpEx) database	• Section 10.3
7. Risk Management: Program risk management is conducted throughout the life of the program.	• Risk Management—part of annual LCB Update • *Risk-Screening of Legacy Management Sites* (LMS/S31301)—updated every 3 years	• Section 3.2.1 • Section 5.1
8. Issue Management: The program is monitored and controlled, including conducting root cause analyses, and developing corrective action plans.	• Issue Management Process • EVM Reporting Process • Change Control and Approval Process of LCB Update	• Section 5.2 • Section 3.3.2 • Section 3.2.1
9. Independent Oversight: An independent oversight body is in place that conducts periodic reviews of the progress of the program in delivering its expected benefits.	• LM and LMS Quality Assurance Program	• Sections 10.9 and 10.10

Abbreviation: EVM = earned value management

Task Name	Start–Finish
FISCAL YEAR (FY)	
GOALS: Long-Term Stewardship, Preservation of Records, Beneficial Reuse, Management Excellence, Stakeholder Engagement	October–September
PROGRAM MANAGEMENT	
LCBs	November–May
Complete draft LCBs	November–December
Prepare LCB kickoff	November
Submit LCBs to LM	December
Conduct LM/LMS review	December–January
Review/update site risk (annual)	September
Prepare final LCBs	February–May
LM BUDGET AND LIABILITIES	
Budget planning	October–January*
Budget Workshop	March–May
Environmental Liabilities	May–October
Budget formulation	May–February
Contract baselines	June–October**
Final SOW (current FY)	October
Prepare SOW (for next FY)	May–June
Revise cost baseline (for next FY)	July–August*
EVM REPORTING	
Monthly EVM Reporting	Monthly
TASK MANAGEMENT	
Receive USACE project execution schedule	November
Update Site Management Guide	January
LM Quarterly contractor oversight	Quarterly
LM USACE/LM Quarterly National FUSRAP Program Manager	Quarterly
INELIGIBLE SITES	
Eligibility determination and referral	As needed
Master site list update and annual risk analysis	March
Considered sites database/other site maintenance	As needed
ACTIVE SITES	
PRETRANSITION/TRANSITION	
Site visits	April–August***
Prepare briefing packages****	April–May
Conduct site visits	May–July
Prepare trip reports and update photo matrix	July–August
Support LCB planning	October–September
Transition Planning/Transition Execution	October–September
COMPLETED SITES	
Update LTS plans for completed sites	February–May
Update fact sheets and websites	May–July
Desktop assessments	February
Protectiveness review (every 5 years)	February
LTS (ongoing)	October–September
WEB INTERFACE	
ESDM updates per IssueTrak	February–October
ESDM completion of content (annual)	November
Verification of ESDM updates (annual)	December
PHOTO LIBRARY/CONTENT MANAGER	
Update Sharepoint (after each site visit and, as needed, biannual review)	March, September
Upload files to Content Manager (biannual)	March, September



08/2023

Legend

AEC - U.S. Atomic Energy Commission
ESDM - Environmental and Spatial Data Management
LM - U.S. Department of Energy Office of Legacy Management
LCB - Life-Cycle Baseline
LMS - Legacy Management Support
LTS - Long-Term Stewardship
SOW - Statement of Work
USACE - U.S. Army Corps of Engineers
♦ - Discrete event
▬ - Typical duration of activity
▮▮▮▮▮▮▮ - Typical duration of activity

Please note that the start/finish times and associated durations are approximated based on historical averages.[1]

[1]Contract schedule baseline start/finish may differ slightly from the roadmap; the intent of the FUSRAP roadmap is to capture recurring annual LM scope elements.

* Active sites budget planning October to December, with LCBs updated in September.
** Three-year event for 2023.
*** Prepare as needed.
**** 30 days: 30 days prior to the visit submit draft and 15 days prior to the visit submit final.

Figure 10. FUSRAP Fiscal Year Activity Roadmap

LM's 75-Year Life-Cycle Baseline Roadmap for FUSRAP Sites																			
LM's Completed Sites in Long-Term Stewardship		**Category**	**FY24**	**FY25**	**FY26**	**FY27**	**FY28**	**FY29**	**FY30**	**FY31**	**FY32**	**FY33**	**FY34**	**FY35**	**FY36**	**FY37**	**FY38**	**FY39**	**FY2098**
Acid/Pueblo Canyon, NM; Adrian, MI; Albany, OR; Aliquippa, PA; Attleboro, MA; Berkeley, CA (Gilman Hall); Beverly, MA; Buffalo, NY; Chicago North, IL; Chicago South, IL; Chupadera Mesa, NM; Columbus East, OH; Fairfield, OH; Granite City, IL; Hamilton, OH; Indian Orchard, MA; Jersey City, NJ; Madison, IL; New York, NY; Niagara Falls Storage Site Vicinity Properties, NY; Oak Ridge, TN, Warehouses; Oxford, OH; Seymour, CT; Springdale, PA; Toledo, OH; Tonawanda North, NY Unit 1; Tonawanda North, NY, Unit 2; Wayne, NJ; Windsor, CT		1	29																
Bayo Canyon, NM; New Brunswick, NJ; Painesville,OH; Tonanwanda, NY		2 [1]	4																
Colonie, NY		2 *	1																
LM Active Site Name	**USACE Active Site Name**																		
Tonawanda Landfill, NY	Tonawanda Landfill, NY	2	FY24																
Hazelwood, MO	Latty Avenue Properties, MO	2 *			FY26														
Staten Island, NY	Staten Island Warehouse, NY	1				FY27													
Carnegie,PA	Superior Steel Site, PA	1				FY27													
Middletown, IA	Iowa Army Ammunition Plant, IA	2						FY29											
Tonawanda North Unit 3, NY	Seaway Industrial Park, NY	2						FY29											
Luckey, OH	Luckey Site, OH	2 *							FY30										
Middlesex North, NJ	Middesex Municipal Landfill, NJ	1							FY30										
Middlesex South, NJ	Middlesex Sampling Plant, NJ	2 *							FY30										
Cleveland, OH	Harshaw Chemical Company Site, OH	2								FY31									
Maywood, NJ	Maywood Chemical Superfund Site, NJ	2 *								FY31									
Curtis Bay, MD	W.R. Grace at Curtis Bay Site, MD (Bldg 23 in FY30, RWDA in FY32)	2									FY32								
Deepwater, NJ	DuPont Chambers Works, NJ	2 *									FY32								
St. Louis, MO	St. Louis Downtown Site, MO	2 *									FY32								
Parks Township, PA	Shallow Land Disposal Area, PA	1										FY33							
Hicksville, NY	Sylvania Corning Plant, NY	3											FY34						
Lockport, NY	Guterl Specialty Steel, NY	3											FY34						
Berkeley, MO	St. Louis Airport Site, MO	2 *															FY38		
Berkeley, MO VPs	St. Louis Airport Site VPs, MO	2 *															FY38		
Niagara Falls Storage Site,NY (includes VPs below)	Niagara Falls Storage Site and Vicinity Properties, NY	2															FY38		
Niagara Falls Storage Site Vicinity Properties, NY	Niagara Falls Storage Site Vicinity Properties, NY	1															TBD		
Fort Wayne, IN	Joslyn Manufacturing and Supply Company, IN	2 *															TBD		
	Current LM Completed Sites in Long-Term Stewardship		**34**	**35**		**36**	**38**		**40**	**43**	**45**	**48**	**49**	**51**			**55**		**55**

*Anticipated Groundwater monitoring (also radon monitoring for Hazelwood).

[1] Category 2 to be reclassified to Category 1 after 2024 Site Management Guide.

Catgeory 3 sites anticipated to include groundwater pump and treat systems.

Dates based on 2023 USACE Execution Schedule and 2024 Site Management Guide.

USACE has not set transfer dates for the Fort Wayne and Niagara Falls Storage Site Vicinity Properties sites yet.

For Life Cycle planning purposes, LM has assumed transfer in 2038.

Pre-Transition Planning

Transition Planning

Transition Execution

Transfer Year - Start of LM's Long-Term Stewardship

Figure 11. 75-Year Life-Cycle Baseline Roadmap for FUSRAP Sites

Management of the LMS contract is performed within the Project/Program Management Work Element. The following Project/Program Management activities are performed within this work element. They are executed and implemented as part of the overarching activities for FUSRAP.

The Project/Program Management scope is a broad range of activities and functions that provide direct program management support for LM program activities. Support includes, but is not limited to, program planning and analysis, project controls and earned-value management analysis, LCB planning and development (Section 3.2.1), budget formulation and execution, environmental liability reporting and analysis, performance measure analysis and evaluation, MSAs (interagency agreements), financial analysis and reporting, and other duties and special projects as requested by LM program analysts.

3.3.2.1 Contract Baseline

The contract baseline process establishes the performance management baseline (PMB) and is the basis for cost and schedule control and reporting in accordance with the *Project Management Control Systems Manual* (LMS/POL/S04330). The PMB is managed by the LMS project controls analyst for FUSRAP. Changes to the FUSRAP baselines (contract and life cycle) are managed through the TOC process described in Section 5.0 of the *Project Management Control Systems Manual* and in the *Change Control Management* (LM-Procedure-3-12-1.0); and through the risk management process described in Section 10.0 of the *Project Management Control Systems Manual* and in the *Integrated Risk Management Plan* (LMS/POL/S27671). The *Integrated Risk Management Plan* provides the process and tools to evaluate risk and manage uncertainties associated with achieving program objectives.

3.3.2.2 Statement of Work

The final TO8 Subtask 5 SOW serves as the guide for the contract technical baseline. The SOW provides an overview of typical support activities that are expected to occur over the period of performance and lists specific contract milestones and deliverables that may be required. Specific activities and assumptions listed in the SOW are used to develop the schedule and cost details for the contract and to establish the specific lower WBS levels that are used during the contract period of performance. The technical baseline allows work to be managed and monitored and work performance to be measured. The technical baseline can be modified only through formal change control. The technical work scope follows the WBS levels, depending on project risk, and is defined by the SOW.

3.3.2.3 Schedule Baseline

The schedule baseline is established at the beginning of each contract period and depicts all major activities and milestones associated with a task in support of this FUSRAP roadmap. A task's progress is measured against the approved schedule baseline. The baseline schedule will include recurring SOW scope items as well as any new scope activities and is updated as needed to address site- or contract-specific tasks, such as site-specific transition plans or LTS Plans. The schedule is developed using guidance from the *Project Management Control Systems Manual* that permits a detailed analysis of a project's progress, provides early warning of possible problem areas, and provides "what-if" capabilities for problem mitigation. The schedule, shown in either a logic network or a Gantt chart format, graphically depicts the integrated relationships

of project activities. The schedule also ties directly to other project documents such as the WBS, the technical baseline, and the cost baseline. No changes can be made to the schedule baseline without formal documentation and approval.

The FUSRAP schedule baseline is based on the WBS and incorporates milestones and deliverables. The schedule is fully resource-loaded and logic-tied and is part of the PMB for the FUSRAP TO8 Subtask 5. The basis for developing the schedule and resource loading varies by WBS. As part of the PMB, the schedule is maintained under configuration control and updated through the TOC process.

The most dynamic portion of the schedule is associated with Active Sites. The *Site Management Guide*, also maintained under configuration control, documents the planned transition dates for Active Sites. This document is updated annually and incorporates changes to the USACE completion schedule and dates. If a change to an active site schedule impacts the current PMB, it will be addressed via the TOC process; otherwise, the change is documented in the LCB update.

3.3.2.4 Cost Baseline

The cost baseline consists of a breakdown of labor hours and other direct costs, such as travel and subcontractors. Labor rates are based on standard categories for expected personnel. The budget baseline is based on historical costs. Costs for work budgeted as level-of-effort will be estimated based on an LM FUSRAP projected scope. Budgeting for discrete tasks relies on past costs for similar work and may require review of similar activities from other LMS TOs.

3.3.2.5 Subtask Management Activities

Subtask management activities are detailed in the TO8 Subtask 5 SOW and in the WBS (see Section 3.1). Typical task management activities include project management support for overarching activities to manage the program for excellence. It includes activity planning, controls, analysis, and work authorization; performance measure analysis and evaluation; maintaining core business processes and procedures to optimize scope, schedule, quality, and costs; earned-value management analysis support; maintaining historical program libraries as well as stakeholder, regulatory, and governmental communications; and direct program management support for site transition and LTS. Some of these key activities are described in the following paragraphs.

The FUSRAP scope is defined in the contract technical baseline and is reviewed to ensure that work performance is consistent with the baseline. Over the course of FUSRAP team meetings and discussions, issues and associated actions may be identified (Section 5.2). LMS contractor and subcontractor personnel shall perform only work that is authorized.

In accordance with the *LMS Projects and Programs Manual*, the LMS FUSRAP manager or the LMS site lead authorizes work activities only after verifying that the work activity is within the contractually approved scope, that the work has been adequately defined and planned, that appropriate work controls have been established, and that qualified personnel and necessary equipment are available to safely perform the work. Project managers will have a job title of LMS site lead or subtask assignment manager. For projects at the task management level, the project management responsibilities default to the task assignment manager. Appendix G

provides a Responsible, Accountable, Consulted, Informed (RACI) chart describing the work authorization process.

FUSRAP schedule review is performed to measure progress against the baseline and includes a steady-state analysis of activities such as program management, stakeholder outreach, and technical support. These activities are generally scheduled and budgeted as level of effort tasks. Activities scheduled as discrete tasks include pre-transition, transition, and LTS work. Planned transition dates are based on a site completion schedule that is updated annually by USACE.

Day-to-day FUSRAP activities are tracked in a separate working schedule that is maintained by the LMS FUSRAP manager and site leads. Changes to the working schedule are discussed and agreed upon within the team; if those changes do not result in changes to scope or cost, they do not require the TOC process.

Cost control is maintained using a validated project control system that incorporates earned value performance measurement; it is described in the LMS *Project Management Control Systems Manual*. Current contract and LCB costs are directly integrated with the schedule, the WBS, and the technical baseline. They are developed by using the schedule baseline as the guideline for planning task expenditures. No changes can be made to the cost baseline without formal documentation and approval.

For monthly progress analysis and reporting, the FY Planning Schedule identifies key reporting dates and deadlines within the fiscal month and year and is posted to the LM Portal. The LMS FUSRAP manager works with the LMS project controls analyst to review project schedule and cost. LM analyzes and reports performance monthly and updates schedule and cost estimates at the end of designated planning periods. Analysis can result in corrective action or baseline changes. Monthly progress updates are provided by LMS site leads or the LMS FUSRAP manager and are based on the schedule for level-of-effort activities or an estimated completion percentage for discretely budgeted tasks.

Monthly earned value management (EVM) reporting includes project cost and performance summaries, budgeted cost for work scheduled, budgeted cost for work performed, actual cost for work performed, schedule variance in dollars and percentage, cost variance in dollars and percentage, schedule performance index, and cost performance index. If variance thresholds are exceeded, monthly EVM reporting includes cost and schedule variance analyses to include identifying the issue, impact, and corrective action.

3.3.2.6 Program and Project Planning

Planning for FUSRAP and projects within FUSRAP is performed in accordance with planning requirements outlined in the following manuals, as applicable:

- *LMS Projects and Programs Manual*.
- *Integrated Work Control Process Manual*.
- *Quality Assurance Manual* (LMS/POL/S04320).
- *Environmental and Spatial Data Management Operations Plan* (LMS/PLN/S18183), hereafter called the ESDM Operations Plan: For FUSRAP projects that rely on EGDM support, project planning must also consider ESDM Operations Plan requirements.

Operational Planning and Control

Program and project planning within FUSRAP is conducted, as applicable, by the workflow processes identified in the *LMS Projects and Programs Manual*. Work is performed in compliance with technical procedures and administrative controls adopted to meet regulatory or contract requirements, as appropriate to FUSRAP. Location-specific work conducted at FUSRAP sites also complies with applicable state, local, and tribal regulations, as appropriate. FUSRAP planning also complies with requirements established by the Quality Management System in the *Quality Assurance Manual* (QAM).

Planning Work and Workflow Process

Planning is performed and documented to ensure that work is accomplished under suitably controlled conditions in accordance with the LMS Integrated Work Control Process (IWCP), as established in the *Integrated Work Control Process Manual*. Planning includes input from appropriate SMEs, including SMEs for safety and health, QA, procurement, environmental compliance, emergency management, information technology, asset management, and engineering.

The *LMS Projects and Programs Manual* guides a project lead through the following workflow phases:

1. **Define the Scope of Work:** Work scope is identified, defined, and planned as a discrete work activity or a set of related work activities.
2. **Categorize the Work and Develop Work Controls:** The work activity is categorized in accordance with the IWCP, and requisite work controls are identified and developed.
3. **Identify Hazards and Develop Mitigations:** Line management and workers identify and assess safety hazards and environmental impacts of the work scope. Refer also to the *Integrated Work Control Process Manual*.
4. **Obtain Work Authorization:** Work activities are authorized by the LMS site lead when work scope is adequately defined, work controls and hazard mitigations are ready for implementation, and available resources and site conditions permit the safe and successful performance of the work. Document the work authorization in a *Project Charter* form (LMS 1050).
5. **Perform Work Within Established Controls, Provide Oversight, and Obtain Worker Feedback:** Work activities are performed by qualified individuals in accordance with established work, safety, and environmental controls.
6. **Feedback and Project Closeout:** Project leads and line managers gather worker feedback throughout the work planning and execution process. A formal lessons-learned document may be needed to record positive and negative lessons learned.

Section 5.2 of the ESDM Operations Plan, describes the EGDM project workflow process, including requirements for project execution and an EGDM project plan for certain projects. These requirements might need to be considered when determining project planning requirements for certain FUSRAP projects (e.g., FUSRAP Interactive Web Interface).

As described in the *LMS Projects and Programs Manual*, the SOW, schedule, and basis of estimate constitute the project baseline, which is developed in conjunction with LM. Development of the baseline involves defining project work, estimating the resources (labor and other direct costs) required to perform that work, developing a schedule, and identifying any milestones that are crucial to the specific work scope. This is a summary of what is outlined in Section 2.0, "Baseline Development," in the *Project Management Control Systems Manual*. A Project Controls analyst from the Business Services group is assigned to each task assignment and subtask assignment manager to help manage the baseline.

Project Charter Form

The project charter in the *LMS Projects and Programs Manual* is the responsibility of the project lead. The expectations of the project, including the project baseline, are recorded on the *Project Charter* form for stakeholder alignment and customer buy-in. Task assignment management and planning for resources will be based on specifications provided in the project charter.

Project Management Plan

Depending on the parameters of the project, a project management plan, work plan, or project plan may be developed. The requirement for a project management plan, work plan, or project plan is identified in the project charter. The elements of this plan may vary, depending on the project. An example of a project management plan is provided in Appendix C of the *LMS Projects and Programs Manual.* Section 5.2 of the ESDM Operations Plan describes requirements for an EGDM project plan for certain projects. These requirements might need to be considered when determining project planning requirements for certain FUSRAP projects (e.g., FUSRAP Web Interface).

Resource Planning

Resource planning for FUSRAP is accomplished primarily through the budget process as described in the following manuals:

- *LMS Projects and Programs Manual*
- *Project Management Control Systems Manual*
- *Procurement Manual* (LMS/POL/S04334)
- *Finance and Accounting Manual* (LMS/POL/S04342)

FUSRAP LMS elements consider proposed work based on the LMS contract requirements for the upcoming year; determine what resources, both internal and external, are required to accomplish the work; and address identified risks and opportunities.

3.3.3 Technical Subtasks for FUSRAP Sites

The technical subtasks performed as part of FUSRAP consist of five categories of sites that are currently part of the WBS and SOW: Subtask Management, Active Sites, Category 1 Completed Sites, Category 2 Completed Sites, and Ineligible Sites.

3.3.3.1 Subtask Management

Contract deliverables and milestones for Subtask Management are identified by the WBS and are determined annually as part of the SOW and baseline development process. Specific delivery dates for each milestone and deliverable are maintained under configuration control in the FUSRAP PMB schedule.

Typical deliverables (organized by the three Subtask Management areas) include:

Manage Program

- Conduct periodic updates to key programmatic materials such as: SMRP, ASER, communications playbook, action report, fact sheets, websites, and completed site videos.
- Assist LM site managers in customizing LCB costs for all FUSRAP sites listed in the current version of the *Site Management Guide*.
- Maintain historical program libraries as well as stakeholder, regulatory, and governmental communications.
- Maintain and track action items at a program level.
- Attend, coordinate, and prepare materials for weekly update meetings.
- Review and update programmatic documents periodically, as necessary, such as this PMP and *Prescreening Methodology for FUSRAP Eligibility Determinations* (LMS/S11541).

Partner and Stakeholder Communications (External Stakeholder Engagement)

- Record and draft public and interagency meeting minutes and provide to LM within 20 business days of meeting.
- Provide a minimum of two articles for the quarterly LM *Program Update*.
- Update the LM FUSRAP Stakeholder Report (with primary focus on Completed and Ineligible Sites).
- Track and report all FUSRAP public and government inquiries within 45 working days of request.
- Develop and write at least two technical papers for national conferences.
- Present at least two presentations as part of attendance at national conference(s).

Maintain Institutional Knowledge

- Maintain and enhance a FUSRAP Photo Matrix tool to efficiently manage historic and current program photos and videos.
- Perform records archive review and provide photo management self-assessment.
- Update and maintain the FUSRAP Interactive Web Interface as part of O&M.
- Support preparation of two FUSRAP web maps.
- Provide GIS support to the FUSRAP Interactive Web Interface.

Records Archiving. The FUSRAP team maintains two network storage locations for working files. The FUSRAP file share was used as the primary location for storing legacy working files and reference copies of archived records. The team has shifted to using the FUSRAP webpages on the LM Portal, which provide improved collaboration for current working files. The team also performs a biannual records archive and photo library self-assessment, including archival of approved records when 5 years old. Archiving includes capturing record content, deleting unneeded working files, and eliminating reference copies.

Photo Library. The FUSRAP Photos and Videos Tool consists of the FUSRAP Photos & Videos Library (Library) that contains FUSRAP photos and videos consolidated from multiple sources, as well as links to FUSRAP photos and videos in other locations, including the LM network, the LM Enterprise Content Management (ECM) system, the Library of Congress, and the National Archives and Records Administration (NARA). The FUSRAP Photos and Videos Tool includes the Library Job Aid that helps users manage photos and videos for the FUSRAP team and provides basic navigation, metadata guidelines, and guidance on adding new photos and videos, adding and editing metadata, and searching and archiving photos and videos.

Records Archiving and Photo Management Self-Assessment. The FUSRAP team conducts a records archive and photo management self-assessment twice a year. The assessment includes (1) updating the photo matrix to include new photos and videos, (2) assessing the completeness of the matrix, and (3) archiving records older than 5 years to LM's ECM repository.

A change control process is implemented to ensure appropriate configuration controls on key program documents, such as this PMP. The RACI chart describing this process is provided in Appendix G.

3.3.3.2 Active Sites

For sites still in the custody of USACE (active sites), DOE responsibilities include pre-transition, transition planning and transition execution, and post-transfer activities (as outlined in Figure 12 and Table 7). This LMS support is performed through the Active Sites subtask of the FUSRAP SOW.

FUSRAP site transition and transfer activities address both (1) the requirements identified in the *LM Site Transition and Transfer Procedure* (LM-Procedure-3-20-20.0), for the preplanning, Phase 1, Phase 2, and Phase 3 stages, (2) the requirements identified in the December 2001 LOA for the pre-transition and transition stages, and (3) *Transition and Transfer Guidance for FUSRAP Sites* (LM-Guide-3-22-3.0, LMS/PRO/45370).

LM Site Transition and Transfer Process

The LM Five-Year Site Transition and Transfer Process (designed to address all LM Program site transfers, including FUSRAP) is shown in Figure 12. Table 7 summarizes the preplanning, Phase 1 transition planning, Phase 2 transition execution, and Phase 3 post-transfer activities outlined in the *LM Site Transition and Transfer Procedure.*

December 2001 LOA Three-Step FUSRAP Site Transition and Transfer Process

Figure 13 summarizes the three-step site transfer process, outlined in the December 2001 LOA, that occurs during the LM transition planning and transition execution phases for active sites.

These activities are summarized in the following subsections. In accordance with the March 1999 MOU, as indicated in Figure 13:

- Step 1 of the formal transition process starts with the signing of the ROD.
- Step 2 is the start of the 2-year transition period and begins once USACE (1) has completed remediation and demonstrates that the remedial action remedy is fully implemented and protective, (2) completes a Site Closeout Report and a declaration of response action completion, and (3) transmits the information to LM.
- Step 3 begins 90 days before the end of the transition period. In this step, USACE transmits the final site documents to DOE.

Transition Planning

Transition Planning, which corresponds to step 1 and the beginning of step 2, occurs as USACE performs remedial actions. The transition execution phase, which consists of steps 2 and 3, is the full 2-year period during which USACE performs the short-term O&M activities at the site. The post-transfer (i.e., LTS) phase starts when LM assumes programmatic site responsibility for performing long-term O&M at the site. Section 4.3.7 provides addition details related to LM/USACE communications during this three-step process.

Transition planning activities for sites actively being remediated by USACE (Figure 13) include planning meetings, status meetings and site visits. Information from these activities is used to further refine the LCB for that site. Sites with an anticipated Category 1 or 2 level of LTS effort are included within the Active Sites WBS level with pre-transition scope activities typically within 3 to 5 years of the transfer date. The schedule for pre-transition activities is based on the USACE execution schedule that is issued annually. To limit the impacts of unanticipated schedule delays, most pre-transition work is performed later in the pre-transition period when the schedule is more certain.

During Transition Planning, preparation of the *Site Transition Framework Checklist Template* (LM-Template-4-20-3.0) and draft Site Transition Plan (STP) will typically begin 1 year before receipt of the final Site Closeout Report from USACE, with the objective of having a complete draft document completed 6 months before the anticipated receipt of the Site Closeout Report. For more complex sites, the site-specific transition plan development may start earlier. The draft and final STP are prepared using available knowledge: *Site Transition Framework for Long-Term Surveillance and Maintenance* (DOE 2005), hereafter called the Site Transition Framework; *LM Site Transition and Transfer* (LM-Policy-1-22-1.0); and *LM Site Transition and Transfer Procedure*.

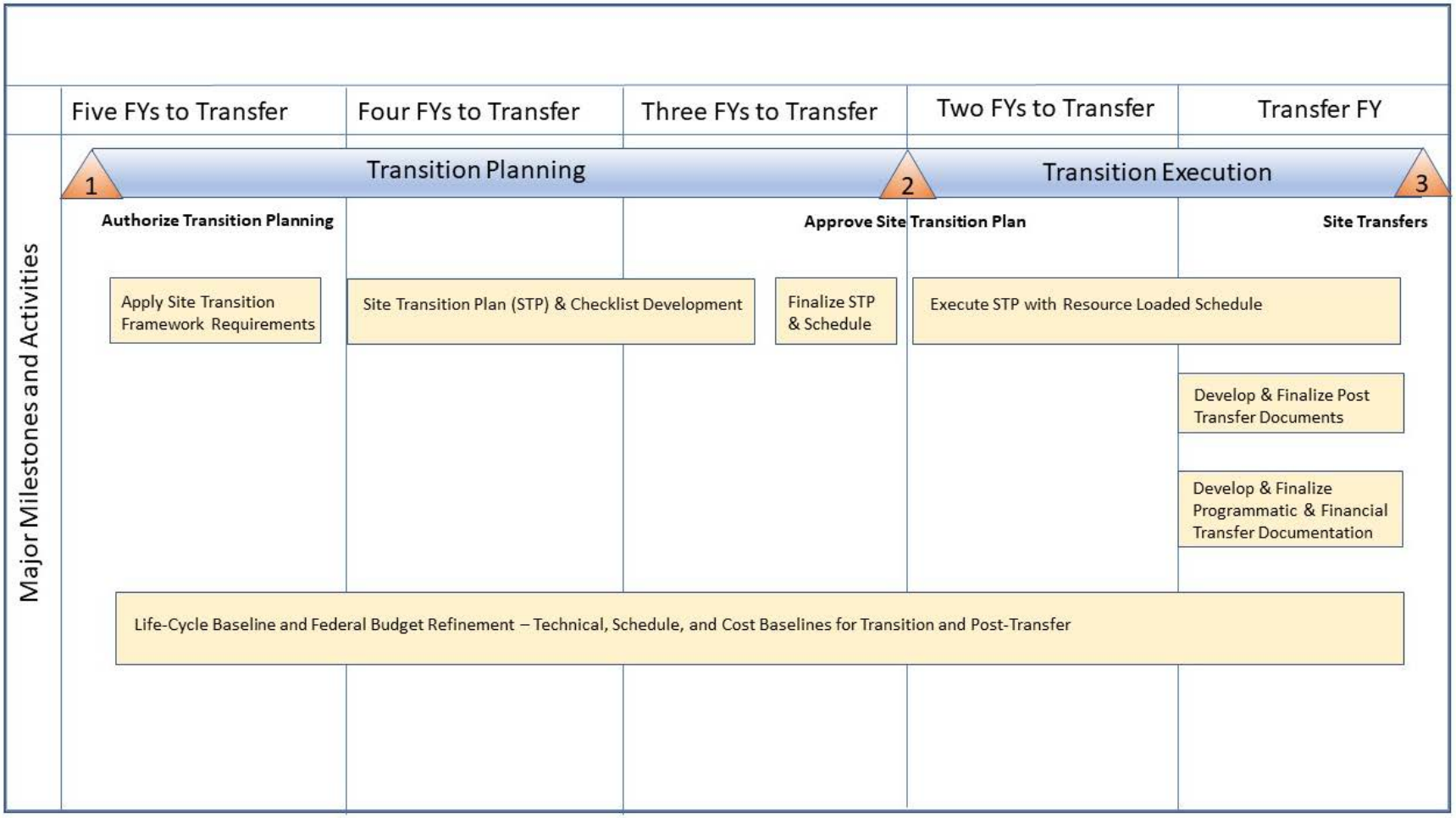
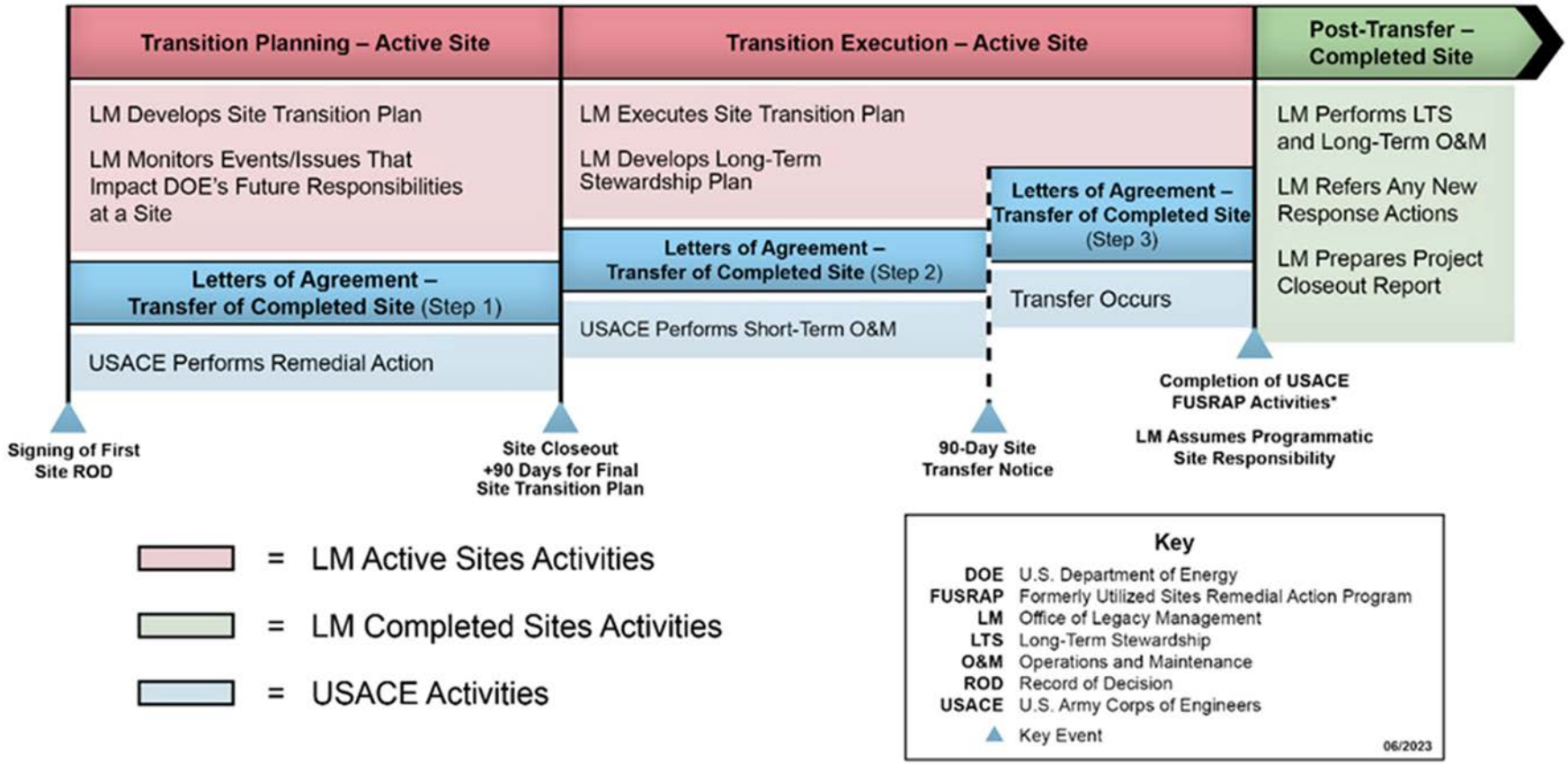


Figure 12. LM Five-Year Site Transition and Transfer Process

Table 7. LM Site Transition and Transfer Preplanning and Phases 1, 2, and 3

Preplanning Activities and Life-Cycle Baseline Planning	Phase 1 Transition Planning	Phase 2 Transition Execution	Phase 3 Post-Transfer (Completed Site or Long-Term Stewardship)
• Preplanning activities are conducted, including planning for the 75-year LCB. • Site transition lead (STL), also referred to as the LMS FUSRAP site lead in the LMS Organization Chart, prepares the Draft Transition Project Charter, to include, but not be limited to, information on anticipated major transition planning and execution tasks and a general schedule for accomplishing such tasks to achieve site transfer by the planned transfer date. • STL submits the Draft Transition Project Charter to the applicable LM team lead for review and dissemination to other LM team leads, applicable program manager(s) and other LM management personnel; and the team prepares the Final Transition Project Charter to incorporate comments received, submits Final Charter to LM management (LM team lead and the applicable program managers) for approval. • Approval of the charter represents the official start of the transition planning phase. The charter is typically an LM-internal document, but it may be jointly authored by LM and the transferring organization (i.e., USACE for FUSRAP).	• STL initiates a kick-off meeting between LM and the transferring organization (i.e., USACE for FUSRAP), including any SMEs. • Team identifies applicable transition requirements in the *Site Transition Framework for Long-Term Surveillance and Maintenance* (DOE 2005) and incorporates those requirements in the Site Transition Framework (STF) Checklist. • Team uses the information documented in the completed STF Checklist to prepare the draft Site Transition Plan (STP). The Team uses a RAM to identify and assign transition activities. • Team uses the RAM in conjunction with the STF Checklist and the transition project schedule to communicate and report progress. • LM-20 program manager reviews and approves the final STP and forwards it to LM-1 for approval. • Team identifies the scope and entities to provide LM mission support (e.g., federal grants may be needed for regulatory oversight and/or participation of site stakeholders with implementing long-term stewardship). • After approval of the STP, the team proceeds to Phase 2 Transition Execution.	• STL conducts a kick-off meeting with the transferring organization, LM team, and LM support service. If the transition conditions have not changed significantly from those described in the Final Transition Project Charter, the STL can elect not to have a kick-off meeting for the execution phase. • Team executes the approved STP according to the transition project baseline schedule, the STF Checklist, and the RAM (if applicable). • STL and team maintain and track the transition project schedule and document the reasons for any deviations from or revisions to the baseline schedule. • Team communicates progress against the transition schedule baseline to internal and external stakeholders. • STL and team add transition project-specific information to the LM Site Management Requirements and Practices. STL adds relevant transition project requirements and status for inclusion in the LM Executive Binder. • Team conducts a readiness assessment to verify completion of requirements defined in the STP and the STF Checklist. Depending on the complexity of the transition project, the team may prepare a formal Readiness Assessment Report. • Team finalizes the Long-Term Stewardship (LTS) Plan for the site (i.e., LTS Plan for FUSRAP). • Team conducts a closeout meeting with the applicable LM team leader and LM program manager, to ensure that all STF requirements and key activities/milestones in the STP have been met and the site is ready for transfer. • LM-20 team lead reviews and approves the transfer conditions in the STP. The LM-20 team lead forwards the transfer recommendation to LM-1 or equivalent for approval. The LM-1 or equivalent approves the transfer of the site into the LM organization. If applicable, formal memoranda between LM and the transferring organization may be required.	• Team develops lessons learned for the transition project. • STL documents lessons learned in accordance with the LMS *Quality Assurance Manual* or other means (e.g., white papers) to benefit future site transitions. • STL reports actual costs for each WBS level to better estimate future transition costs for similar sites. • Team submits Project Closeout Report and meets with the applicable LM-20 team lead and program manager to review the outcomes, lessons learned, and actual costs, and to confirm arrangements for any follow-up work and obtain approval of the report. • LM-20 team lead approves final transition Project Closeout Report. • STL (now the LM site manager) proceeds with implementation of the LTS Plan (i.e., LTS Plan for FUSRAP).



Source Documents:

1999 Memorandum of Understanding Between the U.S. Department of Energy and the U.S. Army Corps of Engineers Regarding Program Administration and Execution of the Formerly Utilized Sites Remedial Action Program (FUSRAP).

2001 Letter of Agreement from USACE to DOE and 2002 Letter of Agreement from DOE to USACE.

LM Site Transition and Transfer Procedure, LM-Procedure-3-20-20.0.

Figure 13. Overview of Three-Step Process and LM Site Transition Process

Transition Execution

Once LM receives the declaration of completion and Site Closeout Report from USACE, a site officially enters the Transition Execution Phase. During this time USACE continues to perform O&M activities while LM finalizes and executes the STP to adequately capture LTS requirements and perform due diligence. The transition of responsibilities from USACE to LM occurs mostly at the district level for USACE. Figure 4 in Section 1.2.1 shows the USACE districts involved with FUSRAP remediation. Transition activities identified in the STP and other guidance documents are designed to ensure that LM acquires essential knowledge for incorporation into LTS Plans and retention in FUSRAP records.

The March 1999 MOU prescribes a 2-year O&M period beginning with the issuance of the Site Closeout Report and the declaration of response action completion. USACE retains custody of the site during the O&M period and ensures that the remedy is operating successfully and will remain protective. USACE transitions the site to LM at the end of the O&M period.

During this phase, LM executes the STP and develops the as LTS Plan. The STP describes the elements of the Site Transition Framework that are applicable to the site; identifies information, data gaps, and risks associated with each element; and states action items to be addressed during the transition stage. Upon receipt of the Site Closeout Report from USACE, the final STP is developed and issued within 3 months, and a draft LTS Plan (referred to as Long-Term Stewardship Plan in the LM procedure) is prepared. At the end of the 2-year period, the LTS Plan is finalized.

The current LTS Plans for FUSRAP completed sites are: *Long-Term Stewardship Plan for Completed FUSRAP Sites* (DOE 2023a) and the *Long-Term Stewardship Plan for the Colonie, New York, Site* (DOE 2024). The LTS requirements described in the LTS Plans for each completed site are compiled in the *Summary of FUSRAP Site Management Requirements and Practices* (DOE 2023b).

The FUSRAP team will assemble personnel who represent all the disciplines needed to evaluate the various aspects involved in transitioning a given site. The team may draw on SMEs in a human health risk assessment, an environmental compliance and ecological risk assessment, hydrology and groundwater studies, remedial action verification, or other disciplines as needed to evaluate site conditions.

In general, the FUSRAP transition planning and execution phases involve:

- Acquiring and preserving site records to maintain a technical understanding of the final site conditions, remedial actions performed, and condition at site closure.
- Posting the Administrative Record (AR) to the LM Portal.
- Ensuring remedy conformance with any RODs and any other regulatory requirements.
- Tracking transition actions to completion and tracking progress through regular communication with the interested stakeholders, including, as appropriate, the private property owner.
- Developing an LM webpage and fact sheet, incorporating site information into the LM GIS, and conducting stakeholder outreach and support.

- Evaluating the final implementation of the remedy and confirming postclosure care requirements that are part of the remedy, including ICs. The findings are defined in the LTS Plan for the site.
- Developing and maintaining a detailed life-cycle cost and schedule estimate for the transition and LTS periods.

It is anticipated that as USACE and LM enter into transitions of more complex sites, transition support and LTS responsibilities will become more detailed and site-specific. As the two parties work together on a detailed approach to site transfers, LM STPs and LTS Plans may remain living documents for several years. USACE will transfer an active site to LM after the 2-year O&M period, when it will be deemed "complete," and LM will assume LTS responsibilities. The post-transfer (i.e., LTS) phase starts when LM assumes programmatic site responsibility for performing long-term O&M at the site. This phase is described under "Category 1 and Category 2 Completed Sites", Section 3.3.3.3.

Deliverables

Typical deliverables for the Active Sites work element include the following:

- Site Transition Project Charter
- Site Transition Schedule or RAM, or both
- Site Transition Framework Checklist Template
- Draft and final STP
- Draft and final LTS Plan (i.e., LM Long-Term Stewardship Plan)
- Draft and final site fact sheet and website
- Update to FUSRAP Interactive Web Interface
- Site transition team reporting documents (meeting minutes and other communication)
- Site transition readiness review or assessment reports
- LCB Documents (scope, schedule, and cost)
- Project Closeout Report

As part of the post-transfer process, the LMS site lead will prepare lessons learned for the transition project (in accordance with the LMS QAM or other documents, such as white papers) and meet with the appropriate LM FUSRAP program manager to review the outcomes, lessons learned, and actual costs, and to confirm arrangements for any follow-up work and obtain approval of the Project Closeout Report. The LM site manager will then proceed with implementation of LTS Plan for FUSRAP, as management of the site as a Completed Site (see below).

3.3.3.3 Category 1 and Category 2 Completed Sites

The Category 1 and 2 Completed Sites subtasks consist of implementation of the LTS requirements for the completed sites under LM stewardship. LM's primary mission is to maintain protectiveness, which LM accomplishes by maintaining the approved remedy and by

periodically evaluating the remedy performance. The means of verifying ongoing protectiveness is established at the time of transition and is documented in site-specific LTS Plans. Every site in the LM program is defined as a Category 1 or 2 site; each LTS category is listed in the *Site Management Guide* and is based on the actual or anticipated LTS activities associated with that site. The level of LTS responsibility expected for each site category and WP is described as follows:

- Category 1 site activities include records-related activities and stakeholder support. Currently, most FUSRAP sites are Category 1 sites, for which LTS consists of managing the site record collections, ensuring the compliance of the remedy, and providing ongoing stakeholder support. The *Long-Term Stewardship Plan for Completed FUSRAP Sites* (DOE 2023a) documents the specific LTS activities required at each Category 1 site. This document is updated when needed to incorporate new sites and ensure that LM continues to meet its LTS responsibilities.
- Category 2 site activities typically include routine inspections (i.e., any site visit needed to verify the integrity of engineered barriers, institutional restrictions, or current land use), monitoring and maintenance, records-related activities, and stakeholder support.

Individual LTS Plans are prepared initially for Category 2 sites; these plans may be consolidated into single programmatic Category 2 LTS Plans as appropriate.

LM's objectives for LTS at FUSRAP sites are to maintain protectiveness through the following actions:

- Managing the site records and information
- Making appropriate site information available to the public
- Providing requested stakeholder support
- Maintaining surveillance of any remaining inaccessible contamination
- Conducting inspections and monitoring to include evaluations of the monitoring results
- Performing periodic evaluations of site protectiveness (CERCLA Five-Year Review [FYR] reports or long-term periodic reviews [LTPRs] where appropriate)
- Establishing and maintaining durable and enforceable ICs, easements, or protective measures, if required

LTPRs, known as FYR reports for National Priorities List (NPL) sites, are prepared pursuant to CERCLA Section 121, consistent with the NCP (40 CFR 300.430[f][4][ii]). These reviews are required after CERCLA corrective actions where hazardous substances remain above levels that allow for unlimited use and unrestricted exposure (UU/UE). The CERCLA requirement is stated in 42 USC 9621(c), and the NCP requirement is found in 40 CFR 300.430(f)(4)(ii). The term "hazardous substance" is defined in CERCLA Section 101(14). These reviews are required every 5 years for as long as residual contamination remains above UU/UE conditions and ICs are in place. The purpose of the reviews is to evaluate the implementation and performance of the remedy to determine whether the remedy will continue to be protective of human health and the environment. The methods, findings, and conclusions of each review are documented in a LTPR report for non-NPL sites or FYR report for NPL sites that is submitted to the lead regulatory agency. LTPR preparation instructions for FUSRAP completed sites are presented in Appendix F.

Final site conditions will determine if LM can disposition a DOE-owned FUSRAP site for beneficial reuse after transfer is complete. During the pre-transition, LM's reuse team will begin evaluation of the transitioning site. The reuse team will work with LM site managers to ensure there is an accurate understanding of the final site conditions and to discuss viable options for reuse. If reuse potential does not exist at the time of transition, this will be documented and periodically reevaluated for potential reuses as the site remains in LTS. If reuse potential exists and such reuse can be performed in accordance with the regulatory requirements for closure, LM technical staff may incorporate reuse information into its evaluation of the LTS Plan with assistance from the reuse team. If federal real property is involved, CERCLA Section 120(h) is required for site disposition. Reuse actions are also evaluated for NEPA compliance.

As part of the Category 1 and Category 2 Completed Sites subtasks, LM may also conduct a desktop assessment to review new information about site conditions or changes in land use assumptions (such as inaccessible contamination becoming accessible) to determine if a change to LTS strategy is required or if there is potential eligibility for returning the site to active status. Desktop assessments are performed annually for (1) completed sites that have supplemental limits applied due to inaccessible areas of contamination and (2) sites requiring industrial land use or soil excavation restrictions.

The desktop assessments are a formal way to document the investigation of any change in land use, regulations, or stakeholder interest that may impact the remedy or disturb the current configuration of the inaccessible contamination. In 2019, the internal guidance document *Guidelines for Performing FUSRAP Completed Sites Desktop Assessments* was developed to formalize the steps required for the completion of desktop assessments. A copy of the guidance is available here: DesktopAssessment_Instructions20190304.pdf (doe.gov).

Supplemental limit areas or areas with residual contamination were determined to present minimal health risk to likely receptors.

- At five sites (Adrian, Michigan; Aliquippa, Pennsylvania; Chicago South, Illinois; Madison, Illinois; and Seymour, Connecticut), DOE applied supplemental limits to elevated levels of radiological contamination that exceeded the established cleanup standard under the archived DOE Order 5400.5 and were left in place in accordance with the *U.S. Department of Energy Guidelines for Residual Radioactive Material at Formerly Utilized Sites Remedial Action Program and Remote Surplus Facilities Management Program Sites* (DOE 1987). These supplemental limit areas were typically designated because of their inaccessibility beneath utility structures, railroads, or buildings. The designation of these areas was in compliance with the archived DOE Order 5400.5, Section 4, *Supplemental Limits and Exceptions*, for which the expense of remedial action for contaminated soils is unreasonably high relative to long-term benefits, and for situations in which the residual material does not pose a clear present or future risk after taking necessary control measures. For these five sites, that were released for unrestricted use and contain supplemental limits areas, LM conducts an annual desktop assessment to ensure that current land usage is consistent land use according to the remedy and to determine whether a site visit is necessary. A FUSRAP white paper (DOE 2018) summarized two technical workshops held in 2018 to discuss LM stewardship of sites with supplemental limits. The discussions focused on the basis for DOE establishing the supplemental limit, the current site status and use, the approved land use at the time of cleanup, the location of the inaccessible residual radiological contamination and its safe configuration, whether additional institutional controls (ICs) or protective measures were necessary, and the risk (if any) to LM.

- Desktop assessments are also conducted for three sites that were released for unrestricted use and do not contain supplemental limits (New Brunswick, New Jersey; Painesville, Ohio; and Tonawanda, New York sites). For the Painesville and Tonawanda sites, desktop assessments are conducted to verify that the site land use remains industrial as a protective measure. For the New Brunswick site, a desktop assessment is conducted to verify that a deed notice restricting excavation in one portion of the site remains in place.
- LM is also conducting an annual desktop assessment for the Colonie site to ensure protectiveness of the remedy for residual contamination in support of its annual LTS Plan update.
- Starting in fiscal year 2025, following the Tonawanda Landfill site transfer to LM in May 2024, an annual desktop assessment will be performed to assess any changes in protectiveness of the remedy for buried radioactive contamination remaining in the landfill and to verify the site conditions remain protective of human health and the environment.

Deliverables

Typical deliverables for the Category 1 and Category 2 Completed Sites work element include the following:

- Desktop assessments
- Updates to the LTS Plan(s)
- Updates to a site's fact sheet and website
- Site inspection reports (if necessary)
- LTPRs or CERCLA FYR reports, if necessary
- Update to FUSRAP Interactive Web Interface site-specific webpages

3.3.3.4 Category 3 Completed Sites—Currently Not Applicable to PMP and WBS

Note: This PMP and the current WBS do not address Category 3 sites, as there are currently no Category 3 Completed Sites identified within FUSRAP. Category 3 site activities include O&M of active remedial action systems in addition to all the LTS functions required for a Category 2 site. The objectives that apply to individual LTS Plans and deliverables for Category 1 and 2 sites also apply to Category 3 sites. Two Category 3 Active Sites have been identified to date. As these active sites near transition and transfer, this section of the PMP will be updated.

3.3.3.5 Ineligible Sites

Eligibility Determination and Referral

As noted in the March 1999 MOU Article III.D.1, "FUSRAP Eligibility (New Sites)," and in additional discussion in the LOAs, DOE responsibilities include the eligibility determination for sites. The initial eligibility determination is performed as part of the Ineligible Sites subtask. EM considered and eliminated the bulk of these sites (which were termed Considered Sites) prior to LM's formation in 2003. Documents related to the considered sites were collected in the CSL. The CSD is a subset of the CSL that is posted to the LM public website. In 2021, the CSD was migrated from an Ektron content management system to a SharePoint file repository with Drupal webpages that present information to the public.

When necessary, eligibility determinations and referrals to USACE are performed in accordance with *Determining Eligibility for FUSRAP Sites*. A site being considered by LM for eligibility in FUSRAP must meet all four of the following criteria:

1. Work was conducted in support of MED or AEC activities, or both.
2. There is a reasonable, credible expectation that the activities resulted in residual radioactive contamination (primarily uranium, radium, thorium, and their daughter elements) that exceed current cleanup criteria.
3. The site is not subject to remedial action under any other remedial action program nor is residual radioactive contamination addressed under an AEC, NRC, or state radioactive materials license.
4. The authority to request appropriations to perform remedial action activities at the site is prescribed within existing legislation and guidelines.

If LM determines a site to be potentially eligible, stakeholders will be notified (as needed), and the site will be referred to USACE. USACE's process to designate a site for remediation under FUSRAP is described in Engineer Regulation ER-200-1-4, *Formerly Utilized Sites Remedial Action Program* (USACE 2014) and includes data collection, site visits and surveys, analyses of the data, and formal documentation of the decision. When USACE formally designates a site for remediation under FUSRAP, it becomes an active site. If a site is determined to be eligible but is not designated for remediation, LM continues to provide stewardship of that site, which may include actions authorized under existing legislation such as the Atomic Energy Act of 1954.

MSL Update

In addition to eligibility determinations and referrals, maintenance of the MSL is performed under the Ineligible Sites subtask. The FUSRAP ineligible sites lead annually updates the MSL, which contains information for hundreds of sites that have been evaluated for FUSRAP eligibility or have a connection to DOE outside of FUSRAP. Beginning in 2014, sites on the MSL were evaluated to determine the relative potential for action to be required at sites that were previously unscreened or determined to be ineligible for FUSRAP. Higher risk sites were identified and addressed between 2015 and 2020. Risk screening is now included in the MSL update. In 2018, the risk screening methodology was revised to provide a prescreening methodology to help LM determine whether an eligibility determination should be performed for potential new sites or sites where significant new information has been found, in accordance with *Prescreening Methodology for FUSRAP Eligibility Determinations*.

In 2023 the MSL was reformatted and expanded to capture more information related to each site, and to better align with the CSD. Five categories of information are color-coded for easier reference: (1) CSD Site name and location, (2) Historical Information, (3) Source List, (4) LM Site information, and (5) Energy Employees Occupational Illness Compensation Program Act (EEOICPA) Site information. The new format also incorporates a VLOOKUP functionality to enable the user to view all fields associated with a site in one vertical list; the search function is a pull-down menu of all sites contained in the MSL.

The following general guideless are used for updating the MSL:

- Consistent verbiage should be used to the extent possible when applying updates and populating blank fields
- Source documents should be identified and referenced
- Changes are flagged in red text and summarized on the **Summary of changes** tab
- Red text should be changed to black after the annual MSL update deliverable

Ineligible Site Document Maintenance Including Improvements to CSD

The CSD is the publicly available collection of documents related to sites that were considered for FUSRAP but determined to be ineligible. During updates of the MSL and risk analysis and ranking, errors may be found in the CSD or new documents may be discovered to be added to FUSRAP document collections that support ineligible sites. These maintenance activities are performed as needed following annual updates. The following general guidelines are used for updating the CSD:

- **Alternate Name:** New aliases or legacy site names may be identified over time
- **Location:** Limit to city, county, and state, unless the street address information is already provided
- **New or Updated Content:** Consistent verbiage should be used to the extent possible when applying updates and populating blank fields
- **External Use:** The MSL may provide information for updates, but are intended for different purposes (internal versus external use) and should be evaluated for public consumption
- **Verify Documentation:** Source documents should be identified and referenced, and must be reviewed for classification and circulated for approval before posting on the public website

Changes to the CSD must be approved by LM and are tracked on the CSD and MSL change log.

Deliverables

Typical deliverables for the Ineligible Site Determination work element include the following:

- Updated MSL
- Eligibility referrals and packages completed upon request
- Maintain ineligible site documents, proposing, and implementing optimizations as requested

4.0 FUSRAP Communication Plan

Effective communication is essential for program success. Program communication creates a bridge between the LMS contractor and LM, USACE, and various stakeholders. The FUSRAP team is responsible for maintaining appropriate communications both internally (i.e., within the team and between the LM and LMS FUSRAP teams) and externally (i.e., with USACE, regulators, stakeholders, and media).

4.1 Internal Communications

The LM program manager defines and oversees key internal communication with the federal site managers and functional support teams as well as with LMS program managers, site leads, and functional support teams. The LM program manager is also the lead in communicating programmatic topics to the LM-22 team lead and LM management.

Internal communications are defined as those occurring within the LM or LMS organizations and those between LM and the LMS contractor. Routine communications occur between the LMS and LM FUSRAP teams. Additional internal communication occurs during the collaborative meetings attended by the LM and LMS FUSRAP staff. Ongoing and routine communication between LM and the LMS contractor is highly encouraged, as open communication between the LM and LMS organizations fosters a collaborative work environment that is essential to program success. Internal communications should occur in accordance with *Internal Communications Manual* (LMS/POL/S07641) and other applicable guidance.

4.1.1 Internal Meetings

All FUSRAP team members are required to keep the team informed of any matter that might impact the program. Issues that adversely affect scope, schedule, or budget (Section 5.2) must be raised promptly; routine matters can be discussed at the next LM/LMS management update meeting. The LMS FUSRAP manager is responsible for scheduling and conducting a series of scheduled, routine meetings as shown in Table 8.

4.1.2 Internal Reporting

For the management update meeting, the FUSRAP weekly update and look ahead meeting minutes provide a look ahead at the activities for the upcoming week. The meeting minutes identify communication opportunities, clarifications needed from DOE, issue management items that create impacts to the program scope, schedule, and budget, as well as key federal milestones along with the responsible lead, description of deliverable, due date, and completion date. A current FUSRAP Task Order Milestones list is also maintained as part of the FUSRAP weekly update and look ahead meeting minutes and is discussed during the management update meeting.

The **FUSRAP** webpage on the internal LM Portal is used as a collaborative tool for FUSRAP report development and other technical information. Meeting minutes are prepared, as needed, for routine and nonroutine meetings and saved to the FUSRAP folder on the LM Portal. Team members may upload documents or other files for sharing and review within the team. Meeting minutes are archived to ECM on an annual basis.

Table 8. FUSRAP Internal Routine and Nonroutine Team Meetings

Meeting	Frequency	Attendees	Key Purpose
LM/LMS weekly update and look-ahead meeting	Weekly	• LM FUSRAP program manager • LM site managers • LMS Functional Support Team • LMS FUSRAP manager • LMS site leads • LMS administrative support • LMS support staff	• Update management on FUSRAP activities • Identify and track open and new actions • Discuss current management issues • Discuss other special topics, as needed
LM/LMS site updates meeting	Weekly	• LM FUSRAP program manager • LM site managers • LMS FUSRAP manager • LMS site leads • LMS support staff, as needed	• Communicate status of each site • Discuss any near-term site transitioning • Ensure management and technical consistency across sites • Share experiences across sites to optimize processes • Discuss special topics, as needed
LM/LMS site/project meeting	As needed	• LM FUSRAP program manager • LM site managers • LMS FUSRAP manager • LMS site leads	• Discuss specific site or project activities and requirements based on site or project schedule
LM/LMS subtask and task order managers meetings	Weekly, as needed	• LM-22 manager • LMS Site Operations manager	• Discuss future activities and key forward-looking issues

4.1.3 Oversight Reporting

LM performs oversight activities as required by DOE Policy 226.2, *Policy for Federal Oversight and Contractor Assurance Systems*, and DOE Order 226.1B, *Implementation of Department of Energy Oversight Policy*. Oversight activities are performed by LM personnel to maintain sufficient operational awareness and evaluate contractor and DOE programs, assurance processes, facilities, operations, and management systems for implementation and effectiveness (including compliance with requirements). Oversight by LM federal employees may be performed on both LM contractors and their work activities, or on federal activities, to include self-assessments of programs over which the LM employee has responsibility. Oversight reporting is not meant to be a replacement for direct communication from LM employees to the contractor, but feedback from oversight efforts should be shared with the LM contractor counterparts by LM employees while using the oversight reporting process to address areas of noncompliance and risk, where applicable. For LM employees with oversight responsibilities listed in their performance plan, employees must submit at least two oversight reports each fiscal-year quarter, for a total of eight oversight reports each fiscal year (unless otherwise noted in an employee's performance plan).

4.1.4 Contractual Reporting

During FUSRAP weekly update and look ahead meetings, staff informally review the status of contractual milestones to ensure work and deliverables are on schedule. Formal review and reporting related to contractual performance is performed in accordance with the *Contract Management Plan* (DOE 2020b).

4.1.5 Internal Programmatic Communication

As a part of LM/LMS FUSRAP internal communications, the LMS FUSRAP team is responsible for tracking communications from regular meetings and projects in accordance with appropriate records management requirements. Internal programmatic communications include:

- **Meeting Minutes:** The LMS FUSRAP manager or designee takes minutes during every LM/LMS management look-ahead and update meeting. Coordination meetings with USACE and USACE public meetings with LM/LMS attendance are documented by meeting minutes by to designated attendees. Summaries of emerging issues or topics are elevated to LM-22 and LM-20, so senior management becomes aware of the issues and can prepare as needed.
- **Trip Reports:** Any site trip or tour conducted by LM or LMS staff is documented by a report at the conclusion of the trip. This report is drafted by the LMS FUSRAP site leads, reviewed by the LM FUSRAP program manager or designated LM site managers, and finalized by LMS for LM.
- **FUSRAP Geospatial Dashboard (also called FUSRAP Web Interface):** The FUSRAP Web Interface is an internal interactive management tool used to present a variety of program- and site-specific text, graphic, and data-driven content using classic Esri Story Maps and embedded web maps accessible through an ArcGIS Dashboard splash page and hosted within the LM Geoportal.
- **FUSRAP Photo Repository:** The FUSRAP Photo Repository contains FUSRAP photos and videos consolidated from multiple sources, as well as links to FUSRAP photos and videos in other locations. It also includes a link and a job aid to assist users in managing photos for the FUSRAP team. The repository is updated and maintained as part of the records archive and photo management self-assessment.
- **LM Portal Page:** The FUSRAP Portal Page serves as an internal repository of FUSRAP-related working documents to enable collaboration and reviews within the LM/LMS FUSRAP team. The Portal page and SharePoint folders are updated and maintained as part of the records archive and photo management self-assessment.
- **Weekly S-2 Submissions:** The LM FUSRAP program manager may request a weekly submission to LM S-2 about site news.
- **Executive Briefing Binder:** An annual document that supports FUSRAP site tours such as the USACE North Atlantic Division tour. The binder compiles applicable site update information gathered over the previous year. This binder is drafted by the LMS FUSRAP site leads, reviewed by the LM FUSRAP program manager and designated LM site managers, and finalized by LMS for LM.
- **LM Communications Playbook:** A collection of general summaries for completed sites and FUSRAP to include identification of any emergent issues that need to be communicated to LM senior management and tracked, as needed.

4.2 External Communications

FUSRAP external communication activities are intended to keep the public informed about FUSRAP, to provide consistent and accurate communications with other agencies (e.g., USACE) and stakeholders, and to respond to stakeholder and media inquiries. External communication is performed in accordance with the *Public Affairs Manual* (LMS/POL/S11690) and other applicable guidance. The strategies, processes, and tools used to implement external communication are described in the following sections and are summarized in Table 9.

Stakeholders may be any individuals, groups, host communities, and other entities in the public and private sectors that are interested in or affected by any of the DOE's activities and decisions. FUSRAP stakeholders include, but are not limited to, the following:

- FUSRAP site neighbors
- Private FUSRAP site owners
- Property owners and vicinity property owners affected by FUSRAP active site remedial activities
- Local or tribal governments
- State agencies
- Elected state officials
- Federal agencies
- Congressional delegations
- Local media (media inquiries are tracked separately from other stakeholder inquiries)
- Local educational institutions
- Local religious institutions
- Environmental organizations (national and local)
- Business owners
- Service organizations
- Other interested individuals

LM maintains an LM-wide stakeholder database that is organized by program and site name and contains available stakeholder information, including name, position, or organization, and contact details. LMS Public Affairs staff maintains the database and updates it at least annually as new stakeholder information is obtained. LM works with USACE during site transition to obtain additional stakeholder information that has been gathered by USACE during site remediation.

The LMS contractor also maintains two FUSRAP stakeholder inquiry logs to track public and media inquiries and responses. Stakeholder contact information from those who submit inquiries to the FUSRAP program is added to the database.

Table 9. FUSRAP External Communications

Interface	LM Roles and Responsibilities	LMS Support
LM and USACE LM interfaces with multiple organizational levels and personnel within USACE, including headquarters, divisions (Great Lakes and Ohio River, Mississippi Valley, and North Atlantic Division), districts (St. Louis, Buffalo, Pittsburgh, New York, Philadelphia, and Baltimore), and individual project managers.	• LM FUSRAP program manager and USACE FUSRAP national program manager coordinate on programmatic matters related to congressional requests, audits, budget reviews, and litigation support. Coordination is also performed at the site and district level. • LM FUSRAP program manager and USACE FUSRAP national program manager coordinate on establishing joint working groups for site transition. • Quarterly review meetings between LM and USACE. • LM site managers schedule site transfer kick off with USACE. • LM site managers or USACE project managers initiate site-specific meetings for issues that require LM/USACE coordination, including direct communication for USACE-LM/LMS functional leads (i.e., records management, data management). • LM coordinates the review of FUSRAP publications with USACE. • LM coordinates with USACE stakeholder inquiries, congressional requests, audits, budget reviews, and litigation support at the program, district, and site level, as needed. • LM FUSRAP program manager and LM site managers identify, monitor, and communicate any emergent issues to LM-22 and LM-20 senior management, as needed.	• The LMS FUSRAP manager is responsible for assigning communication requirements based on LM direction. • The LMS site leads are organized by USACE district to support LM in clear and consistent communication. • LMS program services personnel support site-specific transition of a specific element of the transition (e.g., records management, data). • The LMS contractor has a contractual milestone to provide interagency meeting minutes within 45 calendar days. • The LMS contractor supports LM site managers with summaries related to emergent issues.
LM and FUSRAP site-specific regulators and officials. LM interfaces with local officials, state regulators, and federal regulatory agencies such as NRC and the U.S. Environmental Protection Agency.	• LM site managers schedule and coordinate site-specific meetings for issues that require regulatory input. • LM FUSRAP team coordinates regulatory responses with USACE.	• Provide LM detailed technical and regulatory analysis and recommendations.

Table 9. FUSRAP External Communications (continued)

Interface	LM Roles and Responsibilities	LMS Support
USACE and FUSRAP site-specific property and vicinity property owners. LM and FUSRAP site-specific property and vicinity property owners. LM interfaces with numerous property owners.	• LM public affairs manager and USACE public affairs manager communicate as needed on emergent issues related to property and vicinity property owners. • LM site managers and USACE project managers communicate as needed on emergent issues related to property and vicinity property owners. • LM Asset Management negotiates and signs access agreements. • Determine required actions related to any land or property use changes. • LM site managers provide LTS data to site owners. • LM may send notifications to landowners or utility easement holders about an environmental easement.	• Prepare site access agreements. • Arrange direct contact with property owners for timing of site access in accordance with the access agreement. • Conduct annual verification of changes in land use and property ownership including check of deed restrictions. • Prepare LTS report. • Prepare list of utility easement holders and draft notification letters for LM. • Samplers notify landowners for access to wells and document notification using the Landowner/Stakeholder Notification Form, LMS 1013.
USACE and public stakeholders. LM and public stakeholders. LM interfaces with numerous public stakeholders and media representatives.	• LM public affairs manager coordinates with USACE public affairs manager on monthly basis. • LM site managers coordinate with USACE project managers, as needed, to monitor USACE and public stakeholders' communications. • LM site managers schedule and attend public meetings with summaries of meeting minutes provided to LM-22 and LM-20, as needed. • LM site managers review and approve responses to public inquiries. • LM public and intergovernmental engagement team reviews and approves responses to media inquiries. • LM site managers review and approve website updates and fact sheets.	• Support public meetings. • Prepare responses to public and media inquiries. • Update website and prepare fact sheets. • Track and maintain news and social media coverage and provide weekly summaries. • Maintain stakeholder inquiry log.

Notifications, as part of FUSRAP program execution activities, require preplanning and specific frequencies. The LMS contractor maintains a list of typical notifications, frequencies, and deadlines for activities in support of site transition and transfer and in support of the site-specific LTS Plan. Notifications are typically required during site transition and transfer, sampling, offsite access (vicinity property owners including railroads, and so on, as applicable), field work, and easements.

4.2.1 Public Inquiries

Inquiries may be received directly by FUSRAP team members; at the general phone number and email address for the Office of the Director at DOE Headquarters provided on the LM website; via the general phone numbers or email address for the LM Field Support Center at Grand Junction, Colorado; or other means. The process flow for public inquiries is outlined in Figure 14 and is described in more detail below. A RACI chart for responses to public inquiries is provided in Appendix G.

4.2.1.1 Response to Inquiries

A FUSRAP team member who receives a stakeholder inquiry will forward the inquiry to the FUSRAPinfo@lm.doe.gov mailbox, which is monitored by LMS FUSRAP Public Affairs staff. The LMS FUSRAP Public Affairs specialist will in every instance notify the LM site manager and LMS site lead. Other relevant parties will be notified, depending on the level of inquiry. Other relevant parties may include the LM FUSRAP program manager; the LMS FUSRAP LTS manager; the LM RCRA/CERCLA/FUSRAP team leader; the LMS ECHO team; and DOE Headquarters public affairs personnel. For all media inquiries, the LMS Public Affairs specialist will immediately inform the media contact that LMS personnel are authorized to provide only factual and background information that can be supported by publicly available documentation. The LMS Public Affairs specialist will then add the inquiry to the appropriate tracking log and, in consultation with the LM FUSRAP site manager, determine the appropriate response. The appropriate response will include identifying additional FUSRAP team notifications. Other considerations include the following:

- For FUSRAP inquiries that can be answered by publicly available information, the LMS Public Affairs specialist may respond directly after consultation with the LM FUSRAP site manager or the LM FUSRAP program manager.
- When information is needed but no direct LM response is required (i.e., LMS contractor staff may respond), the LMS Public Affairs specialist will work with the LMS site leads and LMS FUSRAP manager to obtain the appropriate information, draft a response, obtain internal LMS personnel review and approval, and provide the proposed response to the LM site manager for review and approval prior to responding.
- For more complex inquiries, for inquiries from state and federal elected officials that require a response from LM, or for a media inquiry that requests a direct LM quote, the LMS Public Affairs specialist will respond by replying that the inquiry or question is being addressed and LM will provide a full response as soon as possible. The LMS Public Affairs specialist will forward the inquiry to the LM FUSRAP program manager and LMS ECHO team and work with the LM site manager and the LMS site leads (and LM management as appropriate) to provide any supporting information, including any drafts LM needs to develop the response.

- In some cases, LM will identify individual media requests or topics that are to be directed to specific personnel for response. In these situations, the LMS Public Affairs specialist will acknowledge receiving the inquiry and inform the requester that his or her inquiry is being directed to the appropriate individual. The inquiry is then forwarded to the appropriate individual as well as to LM and LMS FUSRAP site leads (and LM management as appropriate). LM and LMS FUSRAP staff will assist as necessary with the response.
- If the LM director's office is required to respond to the inquiry, the inquiry will be directly sent to the LMS ECHO team. LM and LMS FUSRAP staff will assist as necessary with the response.

The public may also access FUSRAP information through Freedom of Information Act (FOIA) requests. LM provides responses to FOIA requests in accordance with LM *Processing Records Requests* procedure (LM-Procedure-3-11-5.0).

4.2.1.2 Inquiry Tracking

The LMS Public Affairs specialist maintains separate tracking documents for stakeholder inquiries and media inquiries on the FUSRAP website. The tracking log includes the inquirer's name, organization or media outlet, date of inquiry, inquiry summary, links to folders containing the email inquiry, summary of phone inquiry, name of the person who received the inquiry, name of the site being inquired about, the subject or topic of inquiry, and the inquiry's resolution. Inquiries should be entered into the appropriate tracking log within 24 hours of receipt, or the information should be provided to the LMS Public Affairs specialist to enter on the FUSRAP tracking log.

Email inquiries are saved in a folder in the Public Affairs library on the LM Portal and are archived in the messages folder in the FUSRAPinfo@lm.doe.gov mailbox. Emailed responses to inquiries should also include a copy to the FUSRAPinfo@lm.doe.gov mailbox so the "clean" response may be provided to records management. Phone inquiries are summarized and saved in the inquiry folder on the LM Portal. The LMS Public Affairs specialist will perform a final update to the tracking logs as the inquiry is finalized to include the action taken, the need for additional action, the final resolution date, and any comments. The LMS Public Affairs specialist will also forward the final response to records management.

4.2.2 Litigation Support

FUSRAP sites might be involved in litigation that requires a records hold. If that occurs, the following records procedure addressing litigation holds should be followed:

- *Legal Hold and Production Policy*, LM-Policy-1-11-2.0

FUSRAP sites also might be involved in litigation that requires LM to assist the DOE Headquarters General Counsel and the U.S. Department of Justice in litigation discovery research and possibly expert witness support. For litigation discovery research, coordination will be led by the LM site manager responsible for the site with support from the respective LMS site lead, the records litigation specialist, and other support staff as necessary. All litigation research materials will be managed in accordance with the following processes and procedures:

- *Records and Information Management*, LM-Policy-1-11-1.0

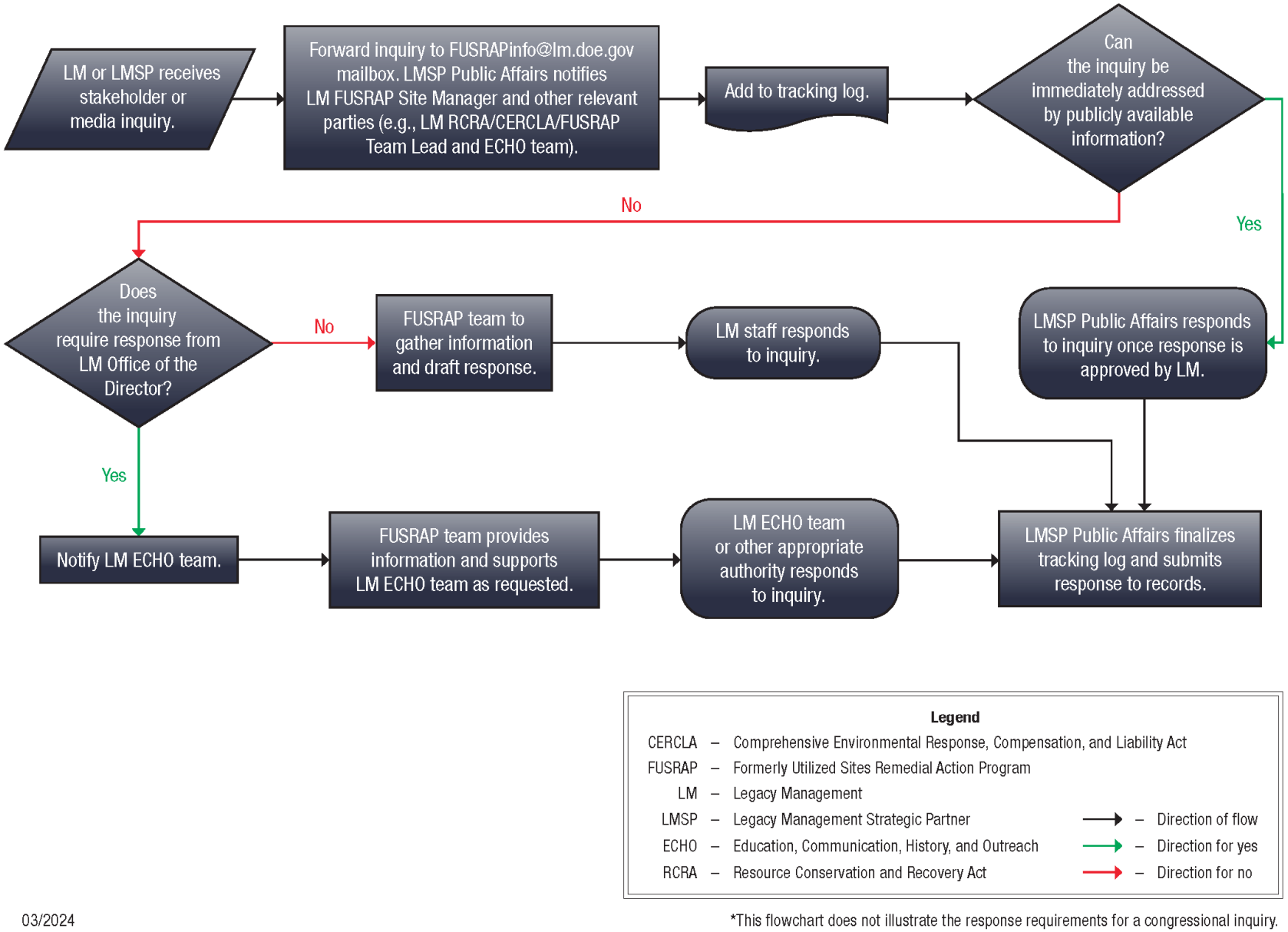


Figure 14. Public Inquiry Response Flowchart

The LM site manager and the LMS site lead will work with the records management specialist to determine the identification and protection requirements related to essential records (if applicable) generated during litigation support in accordance with the LM policy *Records and Information Management.* Work products prepared for DOE or the U.S. Department of Justice should be marked with the statement "ATTORNEY-CLIENT PRIVILEGED" at the head of the document. Work products generated as part of a litigation hold are also subject to litigation hold and cannot be destroyed unless the hold is released.

During litigation research activities, files will be stored in an appropriate location (e.g., the appropriate FUSRAP webpage folder) as determined during the identification and protection requirements process. Once litigation research is complete, all files generated will be stored in the site's designated section of ECM for permanent records storage. ECM is LM's official records and information management system. It allows LM to manage electronic and physical records in a NARA-approved system. Access to the litigation research folder will be evaluated and may require limiting access to key staff as appropriate.

4.2.3 Environmental Justice (EJ)

Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, requires that the federal government adequately address the health and environmental issues faced by communities disproportionately impacted by environmental hazards. In response to EO 12898, DOE, along with other federal government departments and agencies, has focused on working closely with DOE stakeholders and EJ communities to address EJ concerns.

Environmental justice is the "fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies."

Fair treatment means that no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental, and commercial operations or policies.

Meaningful involvement means that:
- People have an opportunity to participate in decisions about activities that may affect their environment and/or health.
- The public's contribution can influence the regulatory agency's decision.
- Their concerns will be considered in the decision-making process.
- The decision makers seek out and facilitate the involvement of those potentially affected.

DOE has established various programs, policies, activities, and partnerships that actively engage communities that have been disproportionately impacted by environmental hazards. DOE also implements best EJ practices within its agency. LM provides outreach to EJ communities through its grants programs including Community Leaders Institute and Teaching Radiation, Energy, and Technology, also known as TREAT, workshops and through science, technology, engineering, and math (STEM) learning and internship programs (including STEM with LM). LM maintains a public website for information access on LM sites and to inform the public on LM activities.

LM's current FUSRAP EJ efforts include collaboration with USACE partners for outreach opportunities related to FUSRAP sites undergoing investigation and remediation. As FUSRAP sites approach transfer, LM also performs comprehensive stakeholder engagement to broaden

target audiences beyond property owners to local governments; recent examples include Middlesex South site early transfer for beneficial reuse, and the Tonawanda Landfill site transition planning and coordination with the Town of Tonawanda. In addition, as part of transition planning for FUSRAP sites preparing for eventual transfer to LM for long-term stewardship, LM develops strategies for expanded community outreach, and forecasts funding for additional EJ activities that are captured in LM's annual LCB process. This funding aligns with DOE's expansion of EJ and community engagement within the LM sites for outreach and training efforts.

4.3 LM and USACE Communications

4.3.1 LM and USACE Communication Objectives

LM and USACE communication activities are intended to keep both teams informed about FUSRAP activities, as well as to enhance consistent and accurate communications with other agencies and stakeholders, and to provide complete responses to stakeholder and media inquiries. Additional benefits of effective communication and meetings between LM and USACE include the following:

- Collaborating to ensure that objectives of the MOU are achieved
- Collaborating to ensure effective communications and public relations related to emergent issues associated with FUSRAP active sites
- Reducing costs for the taxpayer through efficiencies in effective communication activities
- Reducing environmental liabilities for FUSRAP sites as appropriate
- Improving site transition activities
- Ensuring beneficial reuse for FUSRAP sites
- Ensuring effective maintenance of the remedy at each FUSRAP site

4.3.2 LM and USACE Programmatic Communications

LM and USACE ensure ongoing communications both internally and externally for effective FUSRAP planning and execution. The LM/LMS FUSRAP team together with the LM/LMS functional support teams are responsible for maintaining appropriate communications both internally (i.e., within the teams and between the LM and LMS FUSRAP teams) and externally with the USACE national FUSRAP program division program managers (as necessary) and district project managers. Programmatic communications between LM and USACE ensure the following:

- Ongoing knowledge and understanding of USACE active site activities for future planning of LM’s eventual LTS of FUSRAP sites
- Effective collaboration during site transfer and transition from USACE remediation and project closeout to LM LTS of FUSRAP completed sites
- Ongoing information exchange related to LM and USACE FUSRAP responsibilities and activities
- Effective collaboration on publications related to FUSRAP sites
- Effective collaboration during stakeholder inquiries and eligibility determinations and referrals

Table 10 summarizes several key definitions related to LM and USACE execution of FUSRAP responsibilities.

4.3.3 LM and USACE FUSRAP Meetings

Consistent and accurate communication between LM and USACE is essential during the site referral process and during the transition of remediated active sites to completed sites for LTS to ensure that correct and thorough information about site liabilities is understood and documented.

In support of these efforts, frequent meetings between LM and USACE are held (refer to Table 10) to discuss the program status and progress. These meetings take place quarterly or annually. Program-level teleconferences are held quarterly between the LM RCRA/CERCLA/FUSRAP team leader (supported by the LM FUSRAP team) and the USACE National FUSRAP program manager. In addition, meetings are held between LM and USACE at the USACE district or site level. These meetings are documented by meeting minutes, which are distributed to attendees and stored on the FUSRAP internal SharePoint webpage.

Face-to-face meetings between LM and USACE occur during site visits. In addition, the annual program-level meeting between LM and USACE provides high-level updates on current and future work. These meetings are useful to better understand site remediation status, transition timelines, and the sequence of events during transition.

Table 11 summarizes the LM/LMS FUSRAP meetings with USACE.

4.3.4 LM/USACE FUSRAP Site Tours

Periodically, LM will visit USACE sites based on USACE need and availability. Tours are generally planned on an as-needed basis to cover site progress and enhance stakeholder engagement. Site tours and site inspections are coordinated by the LMS FUSRAP site leads on behalf of the LM FUSRAP manager and site managers; tours include participation from USACE program and project managers and occur at periodic times and on an as-needed basis. Tours may also be conducted virtually, depending on specific circumstances.

An LM-1 tour is attended by the Director of Legacy Management, LM FUSRAP program manager, and USACE leadership for the specific district and other invited guests. LM-1 tours are planned as needed with at least one tour planned annually.

Table 14 presents a summary of FUSRAP USACE district site tours. These site tours are typically chosen during the annual planning activities or as the need arises and involve FUSRAP active sites.

4.3.5 LM and USACE Public Outreach

USACE and LM continue collaboration and encourage public input while providing opportunities for open, ongoing, two-way communication. USACE is responsible for public outreach and stakeholder inquiries for USACE active site remediation and site transition activities. LM is responsible for public outreach and stakeholder inquiries for LM LTS of completed and ineligible sites. LM supports public outreach efforts at the request of USACE. Table 12 summarizes the multifaceted levels of communication within DOE FUSRAP.

Table 10. Key Definitions Related to LM and USACE FUSRAP Collaboration

Active Site	Any eligible FUSRAP site that is undergoing or is programmed to undergo response actions by USACE or has been determined to require initial or additional response action in accordance with the March 1999 MOU[a] between USACE and DOE.
Administrative Record	The compilation of documents that form the basis for the selection of the site response action.
Completed Site	A site where programmatic responsibility has been transferred to LM for LTS of the site.
Eligible FUSRAP Site	A geographic area determined by DOE to have been used for activities in support of the nation's early atomic energy program or that has been placed into FUSRAP according to congressional direction.
Ineligible Site	A site that does not meet all the eligibility criteria is determined to be ineligible for FUSRAP.
Long-Term Stewardship (LTS) including Long-Term Surveillance and Maintenance (LTS)	Activities performed at LM sites that are grouped into three categories, defined by DOE's *Site Management Guide* as follows: • Category 1 activities typically include records-related activities and stakeholder support. • Category 2 activities typically include routine inspection (any site visit needed to verify the integrity of engineered or institutional barriers) and monitoring and maintenance, records-related activities, and stakeholder support. • Category 3 activities typically include O&M of active remedial action systems, routine inspection (any site visit needed to verify the integrity of engineered or institutional barriers) and monitoring and maintenance, records-related activities, and stakeholder support.
Permanent Record (PR)	The USACE term for the case file of records that document the onsite actions performed by USACE after acceptance of the ROD. PR documents may include construction-related documents, final status survey reports, post-ROD remediation data, and waste disposal information.
Record of Decision (ROD)	A public document that explains which cleanup alternatives USACE will use to clean up a site. It is based upon remedial investigation and feasibility study information combined with comments received from regulators and the public during the proposed plan process.
Referral	The act of submitting a site determined by LM to potentially meet the requirements for inclusion in FUSRAP to USACE for further consideration and potential investigation.
Site Closeout Report (SCR)	The LM document that defines the general scope, schedule, and cost for the transition project and presents general transition assumptions, key constraints, environmental liability information, and risk management information for the time from site closeout to the 90-day trigger date before the end of the 2-year O&M period.
Site Transition Plan (STP)	The LM document that defines the general scope, schedule, and cost for the transition project and presents general transition assumptions, key constraints, environmental liability information, and risk management information for the time from site closeout to the 90-day trigger date before the end of the 2-year O&M period.
Transfer	The time at which a FUSRAP stewardship responsibility changes from USACE to LM.
Transition	An overarching term referring to the overall process of changing the stewardship responsibility of a FUSRAP site from USACE to LM. LM manages FUSRAP transition in three phases: transition planning, transition execution, and post-transfer (LTS).
Vicinity Properties	According to the March 1999 MOU, the term "vicinity properties" means properties adjacent to or near eligible FUSRAP sites that have been contaminated by radioactive or chemical waste materials attributable to activities that supported the nation's early atomic energy program.

Sources: *Transition and Transfer Guidance for FUSRAP Sites* (LM-Guide-3-22-3.0, LMS/PRO/45370); *Determining Eligibility for FUSRAP Sites* (LM-Procedure-3-22-7, LMS/PRO/S13050).

Note:

[a] *Memorandum of Understanding Between the U.S. Department of Energy and the U.S. Army Corps of Engineers Regarding Program Administration and Execution of the Formerly Utilized Sites Remedial Action Program (FUSRAP)*, also called the March 1999 MOU (DOE and USACE 1999); refer to Appendix A.

Table 11. LM and USACE Routine Meetings

Meeting	Frequency	Attendees	Key Purpose
Buffalo District Sites Meeting	Quarterly	• LM FUSRAP program manager • LM site managers of the Buffalo District • Buffalo District USACE leaders • Other LM staff (as needed)	• USACE and LM leaders discuss current and upcoming projects in the Buffalo District • Identify and track open and new actions
St. Louis District Regulator Meeting	Monthly	• LM site managers of the St. Louis District • St. Louis District USACE leaders • Site regulators for the St. Louis District Site	• USACE, LM, and site regulators discuss current and upcoming projects in the St. Louis District • Identify and track open and new actions
National Program Meeting	Quarterly	• LM FUSRAP program manager • LM site managers • USACE leadership (two representatives)	• Communicate status of transitioning site(s) • Ensure programmatic consistencies with the MOU • Share programmatic experiences to optimize coordination. Discuss special topics relevant to the programs, as needed
National Joint Program Meeting	Annually	• LM FUSRAP program manager • LM leadership • LM site managers • LMS administrative support (as needed)	• Discuss status of USACE transfer sites • Discuss yearly Project Execution Schedule • Verify LCB and environmental liability assumptions
Interagency Working Groups	As needed	• LM FUSRAP program manager • LM leadership • LM site managers • LMS administrative support (as needed)	• Address specific topics related to the transition and transfer of active to completed FUSRAP sites • Formalize project charters with defined goals, scope, and outcomes • Issue joint publications

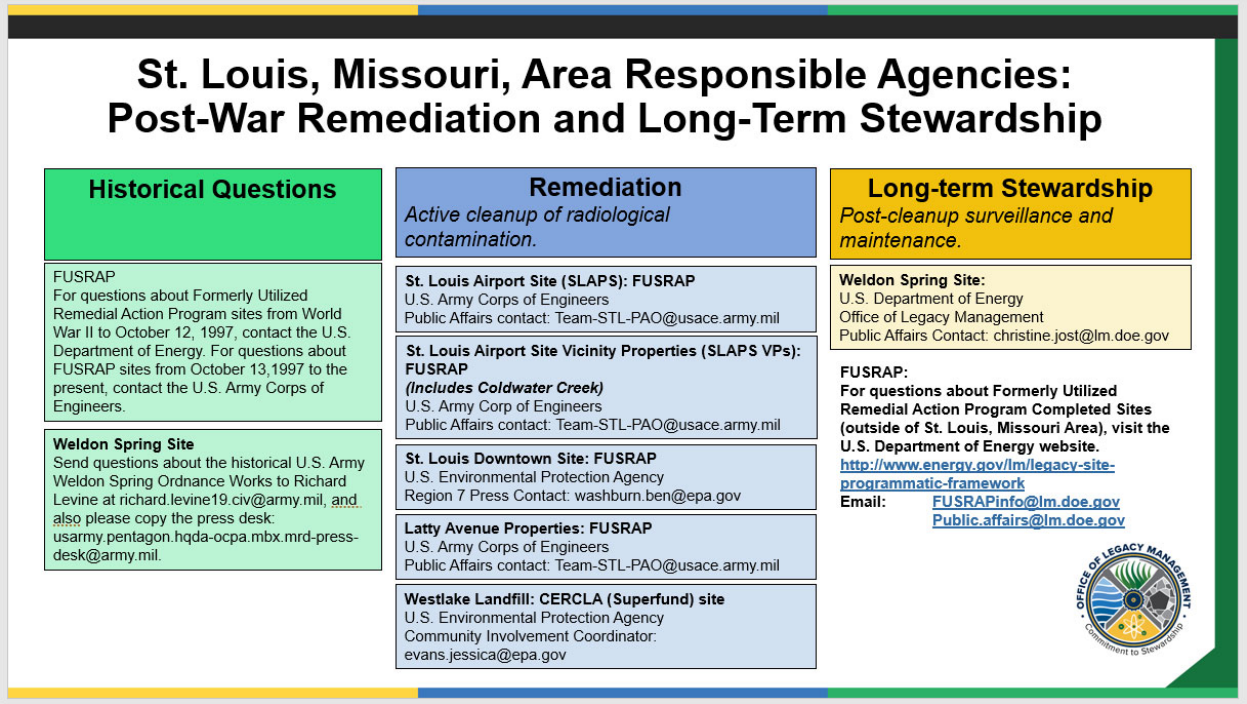
Table 12. Multifaceted Levels of Communication in DOE FUSRAP

FUSRAP	Executive	Departmental	LM Management	Interagency	Stakeholders
Active Sites	USACE	DOE	DOE	USACE	USACE
Completed Sites	DOE	DOE	DOE	DOE	DOE
Ineligible Sites	DOE	DOE	DOE	DOE	DOE
Lead Communicator	DOE Congressional and Intergovernmental Affairs (DOE CI)	LM Education, Communication, History, and Outreach (LM ECHO)/Front Office	FUSRAP Team	FUSRAP Team	FUSRAP Team/LM ECHO
	State Congressional Members	DOE Public Affairs (DOE PA)	LM Front Office (LM-1, LM -2, Chief of Staff)	USACE	Community Organizations
	State Officials	DOE CI	LM ECHO Team	EPA	Property Owners
	Federal Congressional Members	DOE HQ	LM FUSRAP Team	State Regulator	Local Residences
		Other DOE Offices	LMS FUSRAP Team	Local Municipality	Media

LM and USACE continue to collaborate and coordinate related to emergent issues, news and social media releases, and monitoring media responses to ensure effective responses to stakeholder inquires. DOE LM's public affairs manager communicates with USACE's public affairs manager on a monthly basis and more frequently as needed on emergent issues. LM's FUSRAP manager and USACE's national program manager communicate regularly and look for opportunities to continually improve processes for immediate collaboration on responses to inquiries. LM site managers coordinate with USACE project managers, as needed, to remain aware of USACE active site activities and public stakeholders' communications. LM site managers attend public meetings and prepare meeting minutes. LMS ECHO staff provide daily and weekly summaries of news and social media related to FUSRAP and other LM programs. The LM FUSRAP manager and site managers provide briefs to LM senior management (LM-22 and LM-20), as needed. LM-22 and LM-20 management elevate communications as needed to LM-2, LM-1, and DOE-HQ.

LM public outreach methods are described in Section 4.3.5. For local areas with multiple site activities, LM maintains listings of points of contact for responsible agencies related to stakeholder inquiries and public outreach. Table 13 provides an example of points of contact for the St. Louis Area that includes both FUSRAP active site and CERCLA site remediation as well as LM completed site long-term stewardship.

Table 13. Example of Local Area Listing for Stakeholder Inquiries and Public Outreach: Points of Contact for Responsible Agencies for the St. Louis, Missouri, Area



Source: LM/USACE Annual Meeting Presentation, October 2023

USACE's primary methods of providing information to the public are the USACE public Websites, organizational publications, and site-specific email distribution lists. The USACE website (https://www.usace.army.mil/Missions/Environmental/FUSRAP/) provides the primary means of public access to site information and includes links to the annual stakeholder reports, USACE FUSRAP Districts (Buffalo District, New York District, Philadelphia District, Pittsburgh District, and St. Louis District), DOE's CSD. USACE maintains a website for each active site that includes a project status, project background, site data, and relevant CERCLA documentation. USACE FUSRAP websites also include news releases, fact sheets, and a frequently asked questions section.

Table 14. LM and USACE Site Tours

Tours	Frequency	Attendees	Key Purpose
LM-1 tour	Dependent on LM-1 director's availability	• LM-1 director and management • LM site managers for LM-1 sites • LMS site leads for LM-1 sites • USACE national program and project managers • Other LM/LMS staff (as needed)	• Ensure programmatic consistencies with the MOU • Share programmatic experiences to optimize coordination • Understand status of active sites • Understand status of transitioning site(s) • Discuss special topics relevant to the programs, as needed
Buffalo District tour	As needed	• LM FUSRAP program manager • LM site managers of the Buffalo District • LMS site leads for Buffalo District sites • Buffalo District USACE program and project managers • Other LM/LMS staff (as needed)	• USACE and LM team members discuss current and upcoming projects in the Buffalo District • Identify and track open and new actions
NAD tour	Annually	• LM FUSRAP program manager • LM site managers for NAD sites • LMS site leads for NAD sites • NAD USACE program and project managers • Other LM/LMS staff (as needed)	• USACE and LM team members discuss current and upcoming projects in the NAD • Identify and track open and new actions
St. Louis sites tour	As needed	• LM FUSRAP program manager • LM site managers for St. Louis sites • LMS site leads for St. Louis sites • St. Louis Sites USACE program and project managers • Other LM/LMS staff (as needed)	• USACE and LM team members discuss current and upcoming projects in the St. Louis sites • Identify and track open and new actions
Site-specific tour	As needed	• LM FUSRAP program manager • LM site managers • USACE program and project managers • LMS administrative support (as needed)	• USACE and LM leaders discuss site-specific activities • Identify and track open and new actions

Abbreviation:
NAD = USACE North Atlantic Division

4.3.6 LM and USACE Working Groups and Joint Documents

LM and USACE collaborate on joint projects forming working groups to identify and address joint FUSRAP responsibilities or processes.

The formation of working groups involves identifying key LM and USACE SMEs relevant to the specific topic, that meet, develop a project charter, and work together to achieve the outcomes identified in the project charter.

Examples of past working group collaboration include the FUSRAP Working Group for Real Property Transfers, Working Group for Data Management, and Working Group for Inaccessible Materials.

Table 15 summarizes recent working group project charter goals, scope, and outcomes.

Examples of the collaborative process include:

- The recent 2023 update to *Joint U.S. Army Corps of Engineers and U.S. Department of Energy Office of Legacy Management Information Transfer/Transition Protocol for the Formerly Utilized Sites Remedial Action Program* (DOE and USACE 2023), which was issued and jointly signed by the LM director and USACE Environmental Division Chief.
- The recent recommendations from the FUSRAP Inaccessible Materials Working Group described in Section 8.3 of this PMP.

For development of joint documents, both the DOE seal and USACE castle logos will be incorporated in the cover page of the document using applicable use protocols from each organization. Additionally, LM will coordinate with USACE on document reviews and appropriate signature levels where appropriate.

Table 15. Example LM and USACE Working Group Project Charter Goals, Scope, and Outcomes

FUSRAP Working Group for Real Property Transfers, December 2016–November 2019
Goals • Establish definitions for real property and real property interests and requirements as they apply to FUSRAP programmatic documents for site transition and transfer from USACE to LM. • Establish transition and transfer events and timing for real property documents. • Establish how documents deemed necessary for LTS and surveillance should be transitioned. • Formally document the outcomes of the Real Property Transfers Working Group and establish acceptable procedures for accomplishing the transfer between LM and USACE.
Scope • Identify and understand USACE and DOE real property roles and responsibilities described in the MOU between the USACE and DOE regarding program administration and execution of the FUSRAP—March 17, 1999 (and letters). • Identify and define real property terms related to the transition and transfer of completed sites. • Develop and distribute a DOE real property inventory list of all active FUSRAP sites. • Develop lessons learned from past FUSRAP site transitions and transfers. • Develop a DOE and USACE contact of agency resources that may assist (at some level) with the completion of the project goals as stated in this charter.

Table 15. Example LM and USACE Working Group Project Charter Goals, Scope, and Outcomes (continued)

Proposed Project Milestones

- Milestone 1. Sign project charter.
- Milestone 2. Team recommendations to champions (60 days after charter signature).
- Milestone 3. Champions (accept recommendations).
- Milestone 4. Real property and transfer documents to champions (60 days after acceptance of recommendations).
- Milestone 5. Champions sign real property and transfer documents (project complete).

FUSRAP Working Group for Data Management
March 2017 to Present

Goals

- Establish a common understanding of agency and district-specific data and records practices and requirements as they apply to FUSRAP programmatic documents for site transition and transfer from USACE to LM.
- Follow the MOU as it relates to the transfer of surveys, findings, decision documents, and access agreements for property not owned by the government, eligibility determinations, and closeout documents.
- Establish methods to ensure accurate transfer of data, or physical records from USACE to DOE.
- Develop an event timeline for data and records transfer.
- Establish a process to transfer environmental databases.

Scope

- Exchange and store for future reference, agency-specific data and records practices and requirements in a shared external file transfer environment capable of allowing transfer of contents related to FUSRAP sites in each USACE district and to LM.
- Identify and define site-specific database formats for a sample of sites related to the transition and transfer of completed sites.
- Review and jointly agree upon a generic list of data requirements and system constraints for transition to LM.
- Develop DOE and USACE contacts of agency resources that may assist (at some level) to the completion of the working group goals as stated in this charter.
- Formally document the recommendations of the data and records working group in a Data Management Transfer Procedures memorandum.

Outcomes

- Development of a joint Data Management Transfer Procedures memorandum to include data transition timelines, best practices, and constraints.
- Development of effective lines of communication between USACE and DOE concerning data management needs of FUSRAP sites.
- Potential for increased time and cost savings because the information resulting from this joint effort will be able to be applied consistently for FUSRAP site transition and transfers.
- USACE will provide an electronic redacted copy of the AR and an electronic (if available) unredacted copy of the Permanent Record.

4.3.7 LM and USACE Communications During Site Transition

Programmatic Communications During Site Transition and Transfer

Communication between USACE and LM throughout the transition process is frequent and deliberate. Previous site transitions have demonstrated that effective communication is important for a successful site transfer. Thus, it is recommended that LM and USACE project managers establish calls as needed to discuss pressing issues. In addition, site visits by LM are performed at pretransition and transition sites to allow for face-to-face meetings with USACE personnel or key stakeholders and collect information for LTS and LCB planning. LM staff may also attend public meetings held by USACE to obtain additional information about active sites and key stakeholders.

At the program level, the quarterly program meeting is utilized to discuss issues that may require collaborative resolution. Annually, both agencies meet to formally describe progress across FUSRAP, highlight significant accomplishments ranging from USACE remediation progress through LM stewardship initiatives, and exchange lessons learned.

Meeting minutes, trip reports, or other memoranda for the LM and USACE meetings or other interactions are generated, distributed to members from both agencies as applicable, and placed in LM records management systems. These documents may include action items and will highlight specific details that impact LCB planning.

Key elements of intra-agency transition process communications include the following:

- The USACE *Project Execution Schedule*.
- Ninety-day transfer letter.
- Site records as described in the *Joint U.S. Army Corps of Engineers and U.S. Department of Energy Office of Legacy Management Information Transfer/Transition Protocol for the Formerly Utilized Sites Remedial Action Program* (DOE and USACE 2023) and *Transition and Transfer Guidance for FUSRAP Sites*. More specifically to include an electronic redacted copy of the AR and an electronic file (if available) unredacted copy of the PR. FUSRAP electronic ARs will be available on the LM AR webpage and the LM sites' webpages. Key documents from the FUSRAP electronic PRs will also be posted to the LM sites' webpages.

LM and USACE Collaboration During the Three-Step Transfer Process

LM and USACE collaboration, including the three-step transfer process during site transition, is fully addressed in *Transition and Transfer Guidance for FUSRAP Sites*. The three-step transfer process and key notifications are summarized below.

In the March 1999 MOU and LOAs, USACE and DOE agreed to a three-step process by which USACE will transfer completed sites to DOE for long-term management. The actions and events that occur during the process described in the December 2001 LOA are summarized in Table 16.

- Before step 1, there will be early pre-transition planning and collaboration between LM and USACE in advance of the formal FUSRAP site transfer of responsibilities. As noted in the December 2001 LOA, USACE will provide DOE with informational copies of land use

controls and implementation plans. USACE will also keep DOE notified of changes in completion schedules and other issues that may impact future DOE stewardship of the site. This information may be provided at any time during the three-step process. Early transition planning may include early communication between the parties, sharing and review of decision documents, site visits, and attendance at public meetings.

- The transition planning phase, which corresponds to step 1 and the beginning of step 2, occurs as USACE performs remedial actions. In this stage, LM reviews available site-related documents and monitors events or issues that could impact LM's future responsibilities at the site. These activities increase when the site's scheduled transfer date enters the projected 5-year budgeting window. More details of activities performed during the transition planning stage are provided in Section 4 of the *Transition and Transfer Guidance for FUSRAP Sites*.
- The transition execution phase, which consists of steps 2 and 3, is the full 2-year period during which USACE performs the short-term O&M activities at the site. During this stage, LM executes the STP and develops the LTS Plan. More details of activities performed during the transition stage are provided in Section 5 of the *Transition and Transfer Guidance for FUSRAP Sites*.
- The post-transfer (LTS) phase starts when LM assumes programmatic site responsibility for performing long-term O&M at the site. A summary of the activities performed during the LTS phase is provided in Section 6 of the *Transition and Transfer Guidance for FUSRAP Sites*.

At all sites, 2 years after the SCR is submitted, USACE concludes all site responsibilities in accordance with the provisions of the March 1999 MOU. According to the MOU Article III, C(2)(o), USACE will "provide a copy of surveys, findings, decision documents, and access agreements for property not owned by the government, as well as close out documents, to DOE for the historical record." At the formal transfer date, the status of the site is changed from active to completed, and the site transfer to LM is complete.

During LTS, if LM identifies the potential need for further response or remedial actions at the site, LM will evaluate site eligibility in accordance with MOU Article III.D.1, "FUSRAP Eligibility (New Sites)" using the LM/LMS procedure *Determining Eligibility for FUSRAP Sites.* LM will refer eligible sites to USACE. USACE will determine whether further response is necessary (in accordance with Article I, Section F.13, of the MOU). If additional response is necessary, USACE will assume responsibility for only the portion of the FUSRAP site that is related to the new response, and LM will retain responsibility for all other areas of the original FUSRAP site.

Table 16. Three-Step Site Transfer Process (December 2001 LOA)

Step	Initiating Event	Actions
1	The ROD is signed.	USACE will provide LM with: • A copy of the ROD. • A general description of the site and remedial action goals. • An estimated remedial action schedule. • Anticipated LUCs. • O&M requirements.
2	USACE completes remedial activities at the site. The SCR is completed, and the declaration of response action completion is signed.	USACE will provide LM with: • A declaration of response action completion. • A copy of the SCR. • An estimate of annual out-year cost requirements. • A general description of the remedial goals. • A general description of any restrictions remaining on the property. As required and available, USACE will provide LM with: • Letters from regulators acknowledging that remedial action goals have been met. • O&M plans. • LUC implementation plans. USACE will also advise LM of the start and end dates for the 2-year short-term O&M activities that occur before final transfer.
3	At 90 days before the end of the 2-year O&M period.	USACE will provide LM with: • A copy of the AR. • Updated O&M plans. • Actual costs of O&M for the first 2 years. • A description of the long-term actions required by LM. • The effective date of transfer to LM for long-term O&M.

Abbreviations:
LUC = land use control
SCR = Site Closeout Report

4.3.8 LM and USACE Communications for Eligibility Determinations and Site Referrals

LM and USACE communications related to site eligibility determinations and site referrals are detailed in *Determining Eligibility for FUSRAP Sites* and the *Transition and Transfer Guidance for FUSRAP Sites*.

If a site is selected for an eligibility determination or referral evaluation, LM will notify USACE in writing that the site is under consideration for FUSRAP. This written notification will come from LM's Director to USACE's Environmental Division Chief. Similarly, if a site is determined by LM as eligible, LM will notify USACE in writing that the site is being referred to USACE for final determination. USACE will notify LM and stakeholders of the final determination decision in writing from the USACE Environmental Division Chief to the LM Director, and LM will add documentation of USACE's designation decision to its records and document collections.

5.0 FUSRAP Risk and Issue Management

5.1 Risk Management

Risk is evaluated during several stages of the program and in accordance with the *Integrated Risk Management Plan*. Programmatic risks, such as those that impact cost, schedule, and scope, are evaluated and documented during development of the LCB. The probability and consequences of the risk are evaluated, and a risk level is assigned to support assignment of contingency. Site risk, including human health and environmental risk, is also evaluated when the site is being transitioned into LM and routinely during LTS. Updated risk information may be obtained from working groups, site visits, quarterly meetings, and desktop audits and is incorporated into the LCB for that site to reduce unknowns and site risk. Typical sources of risk evaluated in the LCB process include management risks (e.g., funding uncertainties or errors and omissions in estimates), regulatory or environmental risks (e.g., undefined cleanup standards, additional releases, new or revised environmental regulations), and other risks (e.g., stakeholder concerns). These risks are evaluated in terms of probability of occurrence and severity of consequence to determine an overall site risk level, which is applied as contingency to the LCB estimate.

Outside of the LCB risk evaluation process, site risks are also evaluated by LMS teams monthly. The methodology used for calculating management reserve, otherwise known as contingency dollars for each site, is documented within the appropriate risk register. Risk owners are responsible for reviewing and updating their site or project risks at least monthly. Should an emergent risk be identified, the risk owner will consult with other knowledgeable SMEs as needed to both qualify and quantify these risks. Risks that have been resolved are closed out and the risk dollars reduced to zero for that risk item.

Site risk is also identified during the preparation of site-specific transition plans. Specific risks and proposed handling strategies are documented in site-specific transition plans, and these are carried forward into site LTS Plans. Specific risks may be monitored during annual site inspections and desktop assessment for changes in potential severity and handling strategies. For ineligible sites, programmatic risk is minimized by keeping ineligible site information up to date (e.g., updating the status of remediation at a non-LM site so public inquiries about a site are current).

LM conducts an annual risk screening of its more than 100 sites, including FUSRAP sites. The purpose of this evaluation is to help make better risk-based decisions on how to prioritize and manage its large number of diverse sites. The four major evaluation categories are human health risk, stakeholder issues or concerns, regulatory risk, and IC risk. Overall, FUSRAP sites have been ranked low compared to other sites within LM, which often have issues related to contaminated groundwater. This may change somewhat in the future as FUSRAP sites with contaminated groundwater transition to LM.

FUSRAP develops white papers and working groups, as needed to address relevant risk-related issues. Examples include white papers on vicinity properties and active sites anticipated to require O&M of groundwater pump-and-treat systems as part of future LM LTS. LM and USACE have developed working groups to address and mitigate risk related to information transfers and inaccessible materials.

5.2 Issue Management

Throughout the program, team members will identify findings, concerns, gaps, conflicts, and inconsistencies, nonconformances, or events that might have an impact (positive or negative) on project success. Potential or identified findings or nonconformances should be reported in accordance with the *Issue Reporting* procedure (LMS/POL/S28503). These may be in the form of a program or project issue. Any team member may identify and report an issue.

When an issue is reported, prompt notifications are sent to select members of the LM and LMS line management teams. Any reported issues are screened for classification, priority level, responsible manager, and categorization by the Issue Screen Team comprised of members from LM and the LMS contractor, along with members from the QA, Environmental Compliance, and Safety and Health organizations.

Once assigned, FUSRAP responsible managers evaluate the issues for their impacts to the program scope, schedule, and budget and document in the FUSRAP weekly update and look ahead meeting minutes (Section 4.1), along with any other nonreported issues, at the discretion of the LM FUSRAP program manager or the LMS FUSRAP manager after vetting through the FUSRAP team. The LMS FUSRAP manager performs a cause analysis to determine the root cause of an issue and then identifies corrective actions needed to address the identified root cause(s). Timely communication and discussion with relevant personnel (e.g., legal, contractual, technical) are essential to identify the root causes and the development of corrective action plans that are key to resolving issues. FUSRAP managers can use a white paper process or other action to articulate these issues and arrive at a consensus decision to resolve the issue. FUSRAP managers work with QA representatives to complete the corrective action plans in a timely manner. An effectiveness review is performed on issues 6–18 months after all corrective action plans have been closed either to ensure that corrective actions are effective at preventing reoccurrence of an issue or to identify additional corrective actions if the previous actions are determined to be ineffective.

6.0 FUSRAP Information Management

LM's management of FUSRAP records is conducted in accordance with *Records and Information Management Transition Guidance* (LM-Guide-4-10.2-1.0), which defines the transfer of data, information, and records from USACE to LM for remediated FUSRAP sites and the continued management of legacy FUSRAP records in LM's custody. All LM records (including those associated with FUSRAP) are created, managed, and dispositioned, in accordance with 36 CFR Subchapter B, "Records Management" (Parts 1220–1239), DOE Order 243.1C, *Records Management Program*, the LM policy *Records and Information Management*, and other applicable laws.

DOE was responsible for FUSRAP execution, including eligibility determinations, site inclusions, site assessments, remediation, closeout, and site stewardship until 1997, when Congress assigned responsibility for site inclusion, assessment, remediation, and closeout to USACE. DOE retains responsibility for determining site eligibility and LTS.

LM has custody of a large volume of historical FUSRAP site data, information, and records, and will continue to receive FUSRAP information as USACE transitions additional remediated sites for LTS. The *Joint U.S. Army Corps of Engineers and U.S. Department of Energy Office of Legacy Management Information Transfer/Transition Protocol for the Formerly Utilized Sites Remedial Action Program* (DOE and USACE 2023) provides specific details on FUSRAP information transfer requirements addressing the transfer of federal records, administrative and permanent records, environmental databases, and other information. DOE and USACE roles and responsibilities are defined in the 1999 MOU and LOAs, as described in Section 1.2.3. LM records include historical documents that describe operations conducted by MED and AEC at candidate FUSRAP sites. These documents establish the basis for whether a legacy site meets eligibility criteria for inclusion into FUSRAP. LM collections also include records of remedial actions conducted by DOE until 1997 and by USACE thereafter. The LM FUSRAP records collections are essential to LM achieving its LTS mission. The LM ECM system ensures that FUSRAP records are accessible and made available to program staff and that the information is preserved for use by future stewards. These records may be provided by LM to respond to questions from stakeholders about historical operations, current site conditions, and are used to demonstrate that FUSRAP sites were appropriately investigated and remediated, and that they remain protective of human health and the environment.

Information management during FUSRAP site transition and transfer follows the *Joint U.S. Army Corps of Engineers and U.S. Department of Energy Office of Legacy Management Information Transfer/Transition Protocol for Formerly Utilized Sites Remedial Action Program* (DOE and USACE 2023).

The following subsections provide additional details on the different types of FUSRAP information, as well as data accessibility processes used in FUSRAP.

6.1 Physical and Electronic FUSRAP Records

6.1.1 Physical Records

While the FUSRAP records in LM's custody were retrieved from various sources, they are now managed through a series of LM-controlled processes and procedures. The *FUSRAP Records Guidance* document (DOE 2014) identifies MED and AEC-era records not in LM's custody and maintained by NARA and its Federal Records Centers (FRCs). FUSRAP records maintained by NARA can be retrieved by the LMS Information Management (IM) team by submitting a request directly to NARA. LM-owned records maintained at FRCs can be retrieved via the LMS IM team. LM maintains the majority of its physical FUSRAP records at the LM Business Center (LMBC) at Morgantown, West Virginia. Physical records are digitized to be more accessible.

6.1.2 Electronic Records

LM's ECM system contains electronic FUSRAP records, as well as search aids to records that are maintained at the LMBC and NARA facilities. The ECM system can be accessed by federal and LMS contractor staff or by contacting a member of the LMS IM team. LM continues to input electronic site-related records into the ECM system.

Two primary collections of FUSRAP records are the CSL, which contains documentation for candidate FUSRAP sites and eligibility determinations for individual sites, and the Bechtel National Inc. (BNI) collection, which contains assessment and remediation records created by DOE. Both collections are in the ECM system and further described in the following subsections.

Additional information including geospatial and environmental data and drawings and figures are maintained in the FUSRAP collection, usually in electronic format.

6.1.3 Considered Sites Library

This collection of records was assembled by EM and predecessor agencies and represents the culmination of their research to evaluate the radiological conditions at more than 600 sites that had been potentially involved in early atomic weapon and energy activities. This task started in the 1970s and continued for two decades. The CSL includes records created by both the EM FUSRAP headquarters program and its Oak Ridge Field Office to identify candidate sites, determine FUSRAP eligibility, perform remedial action, and document that final conditions met cleanup standards and are protective.

6.1.4 BNI Remedial Action Records

This collection of records was created by BNI when they performed site characterization, remedial action consisting of soil excavation and removal, and final surveys of FUSRAP sites as the DOE prime remediation contractor. The records span from 1979 when remedial action first began through 1997, when Congress assigned responsibility for the remediation of FUSRAP sites to USACE.

6.1.5 Considered Sites Database

LM's online CSD provides stakeholder access to approximately 1500 key documents from the CSL. The database includes information about sites remediated under FUSRAP and the basis for determining that certain sites were ineligible for remediation under FUSRAP.

6.2 Environmental and Geospatial Data

The completion of remediation of FUSRAP sites may be supported by multiple types of data, including results from surface and subsurface sampling, sediment sampling, surface water and groundwater sampling, radiological surveys, and topographical surveys. The EGDM team manages historical environmental and spatial data from completed sites and recent data transferred from USACE for active sites during site transition.

The *Joint U.S. Army Corps of Engineers and U.S. Department of Energy Office of Legacy Management Information Transfer/Transition Protocol for the Formerly Utilized Sites Remedial Action Program* (DOE and USACE 2023) identifies the types of information required for a successful site transition from USACE to LM.

LM FUSRAP site managers will request that any available environmental and geospatial data be provided to LM at the time of site transition, if not before, including those data called for in the *Joint U.S. Army Corps of Engineers and U.S. Department of Energy Office of Legacy Management Information Transfer/Transition Protocol for the Formerly Utilized Sites Remedial Action Program* (DOE and USACE 2023). LM will make its USACE partner aware that the LM geospatial data standard is an adaptation of Spatial Data Standards for Facilities, Infrastructure, and Environment (SDSFIE), which includes Federal Geographic Data Committee (FGDC)-compliant metadata. USACE utilizes its own adaptation of SDSFIE, allowing for a smooth transition of geospatial data. For environmental data, LM uses EarthSoft's Environmental Quality Information System (EQuIS) database, and USACE is implementing the U.S. Air Force-derived Environmental Resources Program Info Management System (ERPIMS) database. The use of these two industry-standard environmental databases should also allow for a smooth transition of environmental data. LM's FUSRAP-specific data needs are documented in LM's *Records and Information Management Transition Guidance*.

Historical environmental sampling data (e.g., soil and groundwater data) used to certify the DOE cleanups are stored in the LM environmental data management system. Spatial data, including features used to create as-built drawings and other figures, are incorporated into, and stored in the enterprise geodatabase. Site certification data for the DOE-remediated sites are compiled into Site Certification Summaries, Data Summary worksheets, and Site Overview Maps, which are used to evaluate historical remediation activities and assess potential program risk.

Assessment and review of site data collected in support of regulatory-driven monitoring programs at FUSRAP active sites are key initial steps prior to the formal transition of responsibility from USACE to LM. To support these reviews and assessment needs, USACE data from active sites are migrated from site-specific data stores (electronic and hardcopy) and placed into the LM data systems. Site data are then accessed by the EGDM team, LMS site leads, and LM site managers to support site assessments and other site review requirements prior to formal transition of the site to LM. After transition, these data then become part of the complete record for that site.

Future FUSRAP LTS activities may require environmental sampling. Data collection will be performed in accordance with the *Sampling and Analysis Plan for U.S. Department of Energy Office of Legacy Management Sites* (LMS/PRO/S04351) and other programmatic or site-specific documents as applicable. Records that may be generated through sampling activities include chain of custody forms, analytical data reports, data validation reports, sample collection logs, and field maps. These records will be maintained in accordance with the LM policy *Records and Information Management*.

6.3 Data Accessibility

The following subsections describe how FUSRAP data may be accessed internally by FUSRAP staff and by members of the public.

6.3.1 Internal Access

The LM ECM system contains record material for the LM program and sites, including FUSRAP records and is directly accessible by all LM and LMS personnel.

The FUSRAP website is a platform that allows LM and the LMS contractor to collaborate on shared documents associated with short-term efforts and initiatives. Final records will be submitted to the ECM system and removed from the FUSRAP website to reduce confusion and redundancy.

A web-based application is also available through the LM Geoportal. The LM Geoportal provides a web interface of FUSRAP Site Information based on Esri Story Map Series with tabs for Site Conditions, Remedial Action, LTS Events, and Resources.

6.3.2 Public Access

The LM public website (https://www.energy.gov/lm/office-legacy-management) provides the primary means of public access to site documents and data. As noted in Section 6.1.5, the CSD is a subset of the CSL that was developed to provide information to the public about sites designated for remediation under FUSRAP and sites eliminated from further eligibility consideration. The CSD presents information about historical operations and the basis for FUSRAP eligibility determinations. Links are provided to historical documents related to ineligible sites. CSD documents for sites remediated by DOE, including FUSRAP sites, are included on the LM site webpages. The CSD provides links to these LM webpages. The CSD is accessible on the LM public website at https://www.energy.gov/lm/considered-sites.

For each completed FUSRAP site remediated since 1997, an AR is available for public access. The AR is a collection of documents that establish the basis for the selection of the remedy as governed by CERCLA. LM maintains a public AR website at https://www.energy.gov/lm/administrative-record-ar. The *CERCLA Administrative Record and Post-Decision Document Management Procedure* (LM-Procedure-3-22-6.0, LMS/PRO/S33248) describes the procedure for the posting of FUSRAP ARs to the public website.

In addition, an external version of the Geospatial Environmental Mapping System (GEMS) website (https://gems.lm.doe.gov/) can be accessed for public viewing via a link on the main LM

public website or through individual LM public website webpages. For FUSRAP completed sites, the external GEMS website allows the external user to review site location, groundwater monitoring well spatial data and logs, environmental data, and information and photographs from site inspections.

The public may also access FUSRAP information through FOIA requests. LM provides responses to FOIA requests in accordance with the LM *Processing Records Requests* procedure.

7.0 Environmental, Safety, and Health Compliance

LM is committed to protecting the public, its workers, and the environment by complying with applicable requirements, preventing pollution, and continually improving upon the work it conducts. Through its contracting mechanism, LM invokes all appropriate DOE orders, regulations, and practices to ensure worker protection, protection of human health and the environment, and quality products and services. LM supports environmental, safety, and health compliance for FUSRAP by following all applicable regulations, DOE orders, and contractor-specific protocols. The authorities for LM to conduct FUSRAP are addressed in Section 1.3.

7.1 Environmental Compliance

Environmental protection is conducted under the umbrella of the joint LM and LMS Environmental Management System (EMS). The EMS has two areas of focus: environmental compliance and environmental sustainability. Environmental compliance ensures that air, water, land, and other natural and cultural resources are protected, and environmental sustainability ensures that LM uses its finite resources wisely while minimizing waste and adverse environmental impacts. The LM/LMS EMS implementation strategy is in five documents:

- *Environmental Management System/Energy Management System Description* (LM-Procedure-3-20-12.0, LMS/POL/S04346)
- *EMS Sustainability Teams Manual* (LM-Manual-3-20.3-1.0, LMS/POL/S11374)
- *EMS Support and Project Teams Manual* (LM-Procedure-3-20-5.0, LMS/POL/S28895)
- *Environmental Protection Manual* (LMS/POL/S04329)
- *Environmental Instructions Manual* (LMS/POL/S04338)

LM and the LMS contractor perform work in accordance with all applicable federal, state, tribal, and local laws, regulations, guidance, orders, and policies. Actions at completed FUSRAP sites that have been remediated under CERCLA by USACE are subject to compliance with these laws and regulations. However, at completed FUSRAP sites remediated under CERCLA by USACE, compliance is generally accomplished through a site's applicable or relevant and appropriate requirements (ARARs); as a result, some compliance obligations such as permits may be waived. LM's environmental review process, as documented in the LM *Environmental Review Form* (LM-Form-4-20.3-4.0) and *Environmental Review Form Instructions*, LM-SOP-4-20-1, also called the ERF, is also not required for completed FUSRAP sites remediated under CERCLA by USACE if a proposed action is related to the site's CERCLA remedy.

Actions at FUSRAP sites not remediated under CERCLA (i.e., those completed before 1997) and actions not related to the CERCLA remedy at completed FUSRAP sites (e.g., a public road easement), are subject to permitting and all other requirements, including LM's environmental review process.

Major environmental laws applicable to work at FUSRAP sites and normally identified as ARARs include the following:

- NEPA requires federal agencies to evaluate and document potential impacts of their actions on the natural and human environment. LM's *Environmental Planning and NEPA Compliance Procedures* (LM-Procedure-3-20-4.0) and *Office of Legacy Management National Environmental Policy Act Handbook: Guidance on Applying the National Environmental Policy Act Process to Office of Legacy Management Actions* (LM-Guide-4-24-1.0, LMS/POL/S37618) describes the legal and policy requirements and considerations related to the NEPA and contains the information necessary to comply with and conduct sound environmental planning. Use a *NEPA Categorical Exclusion Determination Form* (LM-Form-4-20-2.0) and *NEPA Categorical Exclusion Evaluation (CXE) Form* (LM-Form-4-20-5.0), if applicable.

  LM uses an ERF to identify applicable environmental planning requirements and screen for potential environmental impacts (physical, cultural, social, and economic) of proposed actions early in the planning process. Completing the ERF results in the identification of site-specific environmental requirements, including a need for NEPA documentation, specific resource management plans, regulatory permits, and regulatory consultations.

  More specifically, the ERF serves as a screening tool to identify applicable environmental planning requirements and to screen for potential human and physical environmental impacts of proposed actions early in the planning process. All environmental requirements and potential impacts identified in the ERF must be addressed before the proposed action can proceed. Completing the ERF will result in identifying:

  — The anticipated level of NEPA review and documentation to be completed (Categorical Exclusion [CX], Environmental Review and Concurrence [ERC], Environmental Assessment [EA], Environmental Impact Statement [EIS]).

  — The need for environmental surveys and consultations (e.g., cultural resources, endangered species).

  — Other regulatory considerations (e.g., stormwater controls, management plans, permits).

  — Integration of environmental considerations into the project schedule and budget.

  An ERF is completed for LM proposed actions at all LM sites regardless of the regulatory framework. This includes CERCLA sites for which NEPA values were considered as part of the CERCLA process. Although an LM NEPA review would not be required for a proposed action at a CERCLA site that is determined to be covered by the CERCLA remedy, an ERF is still required to be completed to identify applicable environmental requirements and to verify that an LM NEPA review is not required. See "Exemptions from NEPA Review" in the *Office of Legacy Management National Environmental Policy Act Handbook: Guidance on Applying the National Environmental Policy Act Process to Office of Legacy Management Actions* (LM-Guide-4-24-1.0, LMS/POL/S37618) for more information on statutory conflict between NEPA and CERCLA.

  The ERF is reviewed and updated appropriately on an annual basis for routine site activities associated with the site's LTS Plan. If it is determined that any action is not already addressed under CERCLA, a separate NEPA review would be necessary.

Completion of the ERF is a collaborative effort between the LM site manager, LMS site lead, and the LMS EC point of contact. LMS SMEs and NEPA coordinators may provide additional support during the ERF process.

- The National Historic Preservation Act requires federal agencies to consult with state or tribal historic preservation officers to prevent or mitigate adverse impacts to cultural resources. LM's *Cultural Resource Management Plan* (LM-Plan-3-3-1.0, LMS/PRO/S07371) describes how cultural resources are managed at LM sites.
- Natural resources are protected by federal, state, tribal and local laws, and regulations such as the Endangered Species Act, Migratory Bird Treaty Act, and Clean Water Act. These laws require, as appropriate, that LM (1) implement avoidance or mitigation measures and (2) consult or seek permits with the states, U.S. Fish and Wildlife Service, USACE, or other agencies. LM's *Natural Resources Management Plan* (LM-Plan-3-20-15.0, LMS/PLN/S29563) describes how natural resources are managed at LM sites.
- Hazardous materials and hazardous wastes are managed under RCRA and other related laws.
- RCRA 3016 docket criteria currently do not apply to FUSRAP completed sites because LM does not own, and is not responsible for, any activities related to past hazardous waste/substance releases or hazardous waste management. The applicability of this criteria to FUSRAP is reevaluated on a biannual basis.

LMS Environmental Compliance staff review changes in environmental laws, regulations, guidance, and directives and summarize these changes on a quarterly basis. Applicability to all LM sites and programs, including FUSRAP, is evaluated in the quarterly compliance reviews.

FUSRAP site transition planning activities include a review of environmental compliance requirements and evaluation of environmental aspects. LM evaluates and documents typical proposed actions for FUSRAP sites, including those related to LTS or beneficial reuse options, prior to transition. Based on the proposed actions, LM will determine the proper level of environmental review, which will be reflected in the LTS Plan and supporting plans.

In alignment with the EMS environmental sustainability goals, proposed LTS activities will be assessed for environmental impacts and opportunities to improve environmental performance and use resilient environmental practices. Areas for consideration include reusing and recycling products, minimizing wastes, using environmentally preferable products (i.e., products with recycled content, products with reduced toxicity, and energy-efficient products), using alternative fuels, using renewable energy, and making ecosystem improvements.

7.2 Safety and Health

Protection of the safety and health of workers and the public is the prime consideration during all LM and LMS activities. The primary plans and procedures for LMS worker safety and health include the LMS *Worker Safety and Health Program (10 CFR 851)* (LMS/POL/S14697), the LMS *Integrated Safety Management System Description for LMS in Support of DOE Legacy Management Sites* (LMS/POL/S14463), and the *LMS Safety and Health Program* (LMS/POL/S20043), which implement the requirements of laws, regulations, orders, and standards applicable to LM activities. All employees shall adhere to the requirements of these procedures and other applicable safety and health guidance, regulations, and laws.

The LMS contractor incorporates safety and health concepts into work planning to identify the right actions to accomplish work and is responsible for confirming that workers are competent and qualified to perform scheduled work. All hazards that pose a risk to safety, the public, and the environment are identified during the site transition process or prior to any field activities and are appropriately addressed by tailoring the safety controls to the hazards identified. Once the hazards are identified, the work may proceed only if there are competent workers who understand the work, the associated hazards, and the measures needed to mitigate any risk. All workers have the responsibility and authority to pause/stop work immediately when the worker believes that a task or assignment presents unsafe conditions, could adversely affect the safe operation of equipment or cause property damage, or presents changed conditions that have not been fully evaluated. The FUSRAP team gathers information to measure its performance against expectations for a safe working environment and uses every opportunity to improve on processes used. Feedback on safety processes may be provided to LMS site leads, the LMS TO manager, or the LMS Safety and Health manager by use of lessons learned, trip reports, or other means to ensure continuous improvement.

Work activities are approved on a daily or weekly basis by the LMS site lead. Prior to field activities, training requirements will be determined and may consist of general or site-specific training. Before commencing physical work activities, site workers shall receive a briefing to the job safety analysis specific to the activity being performed. Daily briefings are required and are to include a discussion of the planned work, any changes in site conditions and controls, and lessons learned. FUSRAP safety and health needs are supported by the Emergency Management, Environmental Compliance, and Safety and Health team, which support operations designed to protect health and promote safety during the performance of work on the LMS contract.

8.0 Emergency Management, USACE Rapid Response Support, and Recommendations for FUSRAP Inaccessible Materials

8.1 Emergency Management

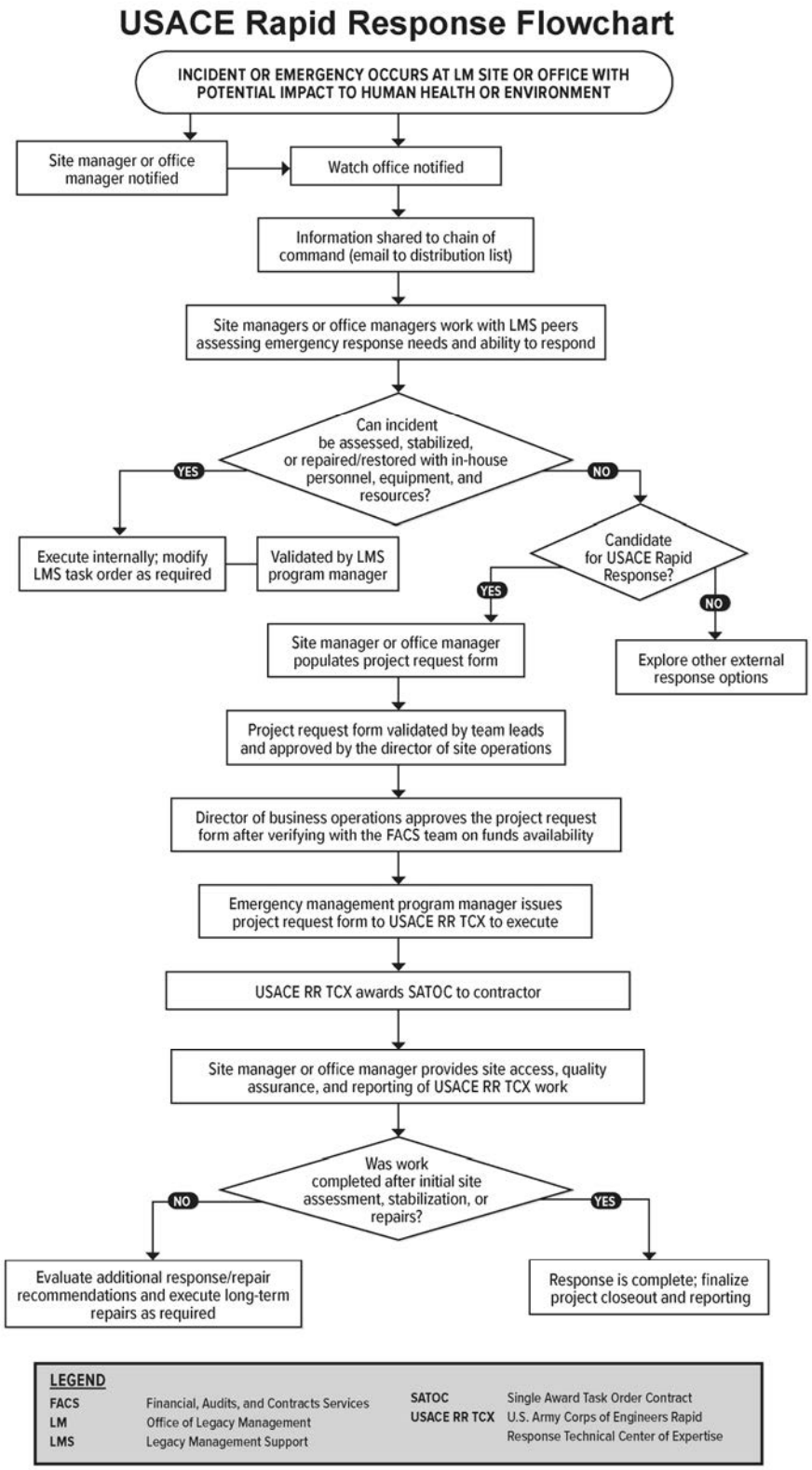
The primary purpose of emergency management is to protect life, property, and the environment by coordinating and integrating all activities necessary to build, sustain, and improve the capability to mitigate against, prepare for, respond to, and recover from threatened or actual natural disasters (e.g. tornadoes, wildland fires, flooding) technological hazards (e.g. an offsite hazardous materials release), or human-caused malevolent incidents (e.g. explosives, an active shooter, or a chemical attack). The primary plans and procedures for emergency management include the *LM/LMS All Hazards Emergency Management Plan* (LM-Procedure-3-20-17.0, LMS/POL/S37643) and *LM/LMS Worker Emergency Response EPIP* (LM-Procedure-3-20-21.0, LMS/POL/S37549).

The LMS contractor incorporates emergency management requirements into training for all employees and into planning for all sites, programs, and activities. Specific emergency response information for each site is contained in a *Supplemental Emergency Response Information (SERI)* form (LMS 1415). Emergency management requirements are reviewed before and periodically during the execution of site projects. Workers are trained that in an emergency, they must call 911 and then the LM Watch Office at (303) 404-6100. If the emergency does not require immediate first response from entities such as the fire department or law enforcement, the LM Watch Office should still be called.

The LM Watch Office takes all calls and based on the type of call, makes first notifications to LM and LMS management and stakeholders such as state, local, and tribal governments; DOE Headquarters; NRC; and others as appropriate. Additional evaluations of the emergency determine the required activation of an Emergency Operations Center for incident support and ongoing communications with stakeholders. Response to an incident at an LM FUSRAP site is determined in conjunction with the LM site manager and other technical FUSRAP SMEs. Based on the impact to an LM FUSRAP site, additional support may be requested from LM or a variety of other entities such as USACE Rapid Response Technical Center of Expertise (RR-TCX) as described in Section 8.2.

8.2 USACE Rapid Response Support

If an LM site becomes impacted by natural disasters, human interference, emergencies or other pressing situations, LM has established an agreement with the USACE RR-TCX to support reconnaissance, assessment, and subsequent stopgap measures to mitigate release of contaminants, stabilize infrastructure, and minimize impact to human health and the environment in situations that exceed LM's existing in-house capabilities. *Requesting USACE Rapid Response Technical Center of Expertise (RR-TCX) Support for LM Sites and Facilities* (LM-Procedure-3-21-2.0) applies to all LM staff charged with the need to quickly assess, stabilize, or minimize impacts to human health or the environment at their sites which exceed in-house LM capabilities or capacities and are potential candidates for support by the USACE RR-TCX. This process is presented in Figure 15.



Source: *Requesting USACE Rapid Response Technical Center of Expertise (RR-TCX) Support for LM Sites and Facilities* (LM-Procedure-3-21-2.0, Attachment 1).

Figure 15. USACE RR-TCX Request Process Flowchart

If an emergency or pressing need is identified that requires the support of the USACE RR-TCX, exceeding in-house LM/LMS capabilities or capacities, the LM site manager, with support from the LMS site lead, will populate the "Project Request Form" (Attachment 2 of the procedure) to include the following data fields: background; project description; site location information; proposed scope; customer contact information; justification for using the USACE RR-TCX; estimated project cost; proposed start date; and estimated project duration.

The LM Director for Site Operations and Director for Business Operations will jointly make the final determination and formally approve execution through Attachment 2 of *USACE Rapid Response TCX Project Request Form*. Approved "Project Request Forms" will be coordinated through LM's single point of contact, the LM Emergency Management program manager, to the USACE RR-TCX for execution. LMS site leads will assist the LMS Emergency Management team with drafting this form for the LM site managers and LM Emergency Management program manager's review. A TO for support will be assigned to the USACE RR-TCX, and the LM site manager and LMS site lead will also serve as the on-the-ground liaison for site access and assisting with any stakeholder or tribal concerns, engagement, and reporting. LM site managers, with support from the LMS site leads, will also review and assess reports, information, and recommendations generated by USACE in preparation for additional follow-on actions or contracting actions.

8.3 Management of FUSRAP Inaccessible Materials

The LM/USACE Inaccessible Materials Working Group has developed recommendations that will reduce government liabilities and improve management of inaccessible soils at FUSRAP sites. The recommendations listed in Table 17 are the LM-specific recommendations that were concurred upon between LM and USACE and approved for implementation by LM (DOE 2022). Implementation of these recommendations and continued coordination between LM and USACE will ensure a long-term strategy is in place to ensure management of inaccessible materials after transfer of FUSRAP sites from USACE to LM.

Specific processes for management of inaccessible materials will be established in the LTS Plan for each FUSRAP completed site. Appropriate notifications and coordination with property owners and utilities will be coordinated with LM/LMS Asset Management in accordance with *Real Property Management* (LM-Manual-3-13-3.0, LMS/POL/S04335).

For both planned and unplanned events, the LM/LMS FUSRAP team—in consultation with LM/LMS Asset Management and LM/LMS Emergency Management, as appropriate—will evaluate the extent of accessibility to FUSRAP contaminated materials and determine the best contract mechanism for response. Planned events involving projected accessibility of FUSRAP inaccessible materials will either utilize the LMS contract, utilize an interagency agreement with USACE, or may require referral of the site back to USACE for remediation under the MOU, depending on capabilities, capacity, and complexity. Unplanned events involving an emergency response for FUSRAP inaccessible materials that have become accessible will activate the USACE RR-TCX, utilize the LMS contract, if appropriate, or may require referral of the site back to USACE for remediation under the MOU, depending on the response requirements and complexity.

Table 17. FUSRAP Inaccessible Materials Working Group Recommendations

FUSRAP Inaccessible Materials Working Group Recommendations (DOE 2022)
➢ LM should use the USACE Rapid Response Support for LM Sites and Facilities agreement (RR-TCX) which will allow for a timely response by LM and USACE when inaccessible material is made accessible at a completed FUSRAP site.
➢ LM should maintain an interagency agreement with USACE to allow for characterization and disposal of any inaccessible materials that become accessible because of any utility support projects during site stewardship that does not warrant transfer of a FUSRAP site back to USACE.
➢ LM should develop a strategy to quantify potential inaccessible support costs for LCB and environmental liability estimates based on USACE experience.
➢ LM should send USACE a yearly update, reporting on completed FUSRAP sites, discussing any inaccessible areas that may be becoming accessible in the next 5 years.
➢ LM should have dose-risk assessments available, for completed FUSRAP sites, to provide to utility workers and property owners.
➢ LM should work directly with contacts at utility companies and utilize local notification systems that are associated with completed FUSRAP sites.

9.0 Asset Management

Asset management includes real property and real property assets. The real property assets for FUSRAP include monitoring wells and ICs. These assets will be managed by the appropriate DOE orders and LM/LMS controlled documents. As sites transfer into the FUSRAP program the assets will be appropriately managed to the applicable DOE processes and procedures.

9.1 Real Property

LMS Real Property supports LM with their acquisition, administration, and disposition of real property in accordance with DOE Order 430.1C, *Real Property Asset Management*, and applicable laws and regulations. LMS Real Property plans, manages, and executes real property actions, analyzes, and reports the status of real property projects, including tracking all requests for realty services and associated instruments for completing activities. LMS Real Property provides information supporting FUSRAP TO planning, scheduling, budgeting and performs general real estate support as needed. LM's *Real Property Management* provides the procedures and processes followed for all types of real property interests. As LM receives new FUSRAP sites through the transition process, Real Property supports this process. Real Property support activities associated with site transition begin approximately 2 years before LM starts LTS activities.

9.2 Institutional Controls

In support of its mission and goals, LM is committed to supporting and conducting LTS activities in accordance with the various laws, regulations, requirements, policies, and guidance that apply to these sites. More than half of the sites currently in LM's inventory (including some of the FUSRAP sites) do not allow unrestricted use, due to residual contamination from historical activities. LM and LMS IC specialists assist in the identification of ICs that are required to limit human and environmental exposures to residual contamination by controlling land use, restricting access to potential hazards, and making the public aware of potential dangers from the residual contamination. ICs include legal instruments (such as land use restrictions), physical or engineering controls (such as fences, signs, and disposal cells), and methods for providing information about a site's cleanup history, including information on the remedy and current LTS activities.

ICs must be tailored to site conditions, the anticipated future land uses, and the site-specific expected exposures and risks that may occur. ICs are usually in place before a site to LM's portfolio. ICs do evolve over time due to changing site conditions and potential human health and other environmental risks. LM's use, maintenance, and monitoring of ICs will continue to expand as more FUSRAP and other LM sites are transitioned into LM's inventory to ensure the long-term protection of human health and the environment at or near those sites.

LM's *Guidance for Institutional Controls for Long-Term Surveillance and Maintenance at DOE Legacy Management Sites* (LM-Guide-3-20-2.0, LMS/POL/S07617) provides further explanation on the laws, regulations and policies that are applicable to FUSRAP sites.

9.3 Beneficial Reuse

LM and LMS beneficial reuse specialists support implementation of federal, DOE, and LM initiatives for beneficial reuse and ecosystem management services to maintain LTS of LM-managed sites while reducing the DOE footprint. Beneficial reuse optimizes the use of lands and assets and fosters good land stewardship by protecting remedies and deterring vandalism.

Beneficial reuse considerations vary by the regulatory authority under which the LM site was cleaned up and the LTS activities that are being conducted. LM's *Beneficial Reuse Management Plan* (LM-Plan-3-13-1.0, LMS/POL/S15818) identifies, summarizes, and explains LM's beneficial reuse criteria, screening, and general procedures. The *Beneficial Reuse Management Plan* provides the framework for the Beneficial Reuse Management Program, including the goals, objectives, and matrix under which LM measures implementation of the program. Upon transfer of DOE-owned FUSRAP sites from USACE, LM evaluates whether the property can be transferred to a private owner or another government agency for beneficial reuse.

9.4 Facilities Information Management System (FIMS)

FIMS ensures that the acquisition and use of all LM assets are made with full consideration of economy, efficiency, current and future programmatic needs, and all applicable laws and regulations. The LMS contractor supports LM in accordance with *Facilities Information Management System (FIMS) Manual* (LM-Manual-3-13-5.0, LMS/POL/S32619), by reporting real estate actions and statistics and ensuring that all reporting is consistent with FIMS and other databases that serve as sources for real property asset tracking.

10.0 Quality Assurance

LM ensures a consistent and focused approach for quality in all endeavors by invoking all appropriate DOE orders and by compelling its contractors to maintain a QA program to meet this objective. The QA program provides process assurance that helps ensure the delivery of defect-free products and services on time and within approved budgets. At the same time, all activities must be accomplished in a safe and environmentally protective fashion.

Achieving quality in the activities and products dictates the establishment and implementation of a formal QA program. This program is a management system to ensure that quality standards are achieved throughout technical, administrative, and operational functions. The LMS contractor maintains the QAM to provide a QA management system to implement the requirements of the contract version of DOE Order 414.1D Chg 2, *Quality Assurance*.

QA program criteria and associated requirements apply to all activities within FUSRAP. The achievement of quality and continuous improvement is the responsibility of the people who manage and, most importantly, the people who perform the work. Each person is expected to do his or her job in accordance with policies, procedures, and other requirements. In the performance of the FUSRAP mission, all team members are expected to represent quality to themselves, to their customers, and to their suppliers. Specific FUSRAP requirements that correspond to the QAM and criteria in the contract version of DOE Order 414.1D Chg 2 are described in the following subsections.

10.1 QA Program

FUSRAP utilizes the QAM to implement the QA program. A separate QA plan has not been prepared. This PMP provides information on FUSRAP-specific QA elements.

10.2 Personnel Training and Qualification

FUSRAP staff are technically competent based on education and work experience in areas applicable to their responsibilities within FUSRAP. Personnel actively participate in the training process to identify needs and expand abilities and skills. As appropriate, FUSRAP staff maintain technical and professional credentials and memberships. Other SMEs that support FUSRAP have education, experience, and credentials commensurate with their roles and responsibilities.

10.3 Quality Improvement

FUSRAP uses the quality improvement process described in the QAM. Identified issues (findings, nonconformances, and events/issues) are evaluated and reported with the assistance of the LMS QA organization. The LMS Assessment and Issue Management System (AIMS) is used to maintain and track corrective actions associated with issues along with observations and opportunities for improvement. Where appropriate, issues are reviewed to determine whether reporting within the DOE Noncompliance Tracking System or the *Occurrence Reporting and Processing of Operations Information* document (LMS/PRO/S16419) is required. The QAM describes procedures for performance assurance, cause analysis, and corrective actions (both remedial and preventive), including the Operating Experience (OpEx) Program (for tracking lessons learned and noteworthy practices) and management oversight.

The OpEx Program is key to supporting FUSRAP because experience-based lessons provide a powerful method of improving work processes, operation, quality, safety, and cost effectiveness, and can help improve management decision-making and worker performance through every phase of a project.

FUSRAP routinely utilizes the OpEx process to learn from past activities for the continual improvement of work processes, facility or equipment design and operation, quality, safety, and cost-effectiveness, and to increase employee awareness of challenges routinely encountered during work activities. Participation in the OpEx Program also allows FUSRAP personnel to exchange feedback on projects with the larger DOE OpEx community. The LMS contractor maintains the OpEx repository on the LMS QA website. In addition, management oversight activities such as management assessments and site visits are used to review and observe work processes and identify personnel, equipment, technology, process, safety, or other issues that need management attention.

10.4 Control of Documents and Records

The QAM describes requirements for a Quality Assurance Program Plan (QAPP). FUSRAP is not anticipated to require a program specific QAPP. In addition, the QAM and the LM policy *Records and Information Management,* describe the requirements for records control. FUSRAP follows these requirements in addition to those listed in Section 6.0 of this PMP.

10.5 Work Processes

The work processes for review of materials such as deliverable documents are described in the QAM and apply to all FUSRAP deliverables.

10.6 Design Document Review

The requirements for review of design documents are described in the QAM. Typically, FUSRAP does not produce design documents.

10.7 Procurement Document Review

The responsibilities and activities performed during the review of procurement documents to evaluate the adequacy of the documents and to evaluate and assign QA requirements for suppliers and subcontractors are described in the *Engineering Procedures Manual* (LMS/PRO/S04340) and the QAM. The FUSRAP team will follow these requirements when procurements are required.

10.8 Inspection and Testing

This criterion is not currently applicable to FUSRAP.

10.9 Management and Independent Assessments

Management assessments, independent assessments, surveillances, and other assessment types are performed within the LM and LMS contractor organizations. Periodic assessments are performed throughout the LMS contractor organization (including FUSRAP) to evaluate staffing, operations, financial performance, safety, and customer relations. Independent assessments are performed periodically by LMS QA personnel, who are responsible for audit planning, performance, and reporting. FUSRAP staff support management and QA-lead assessments as appropriate.

10.10 Independent Oversight System

Oversight of LM's FUSRAP is maintained through a two-faceted assessment system. Overall oversight activities are conducted by LM. The LM FUSRAP manager regularly performs independent review of FUSRAP activities. When issues are identified by the LM FUSRAP manager, the issues are processed by LM QA personnel who then submits the issues into AIMS. The submitted issues are then managed through the LMS QA issue management process.

LM staff perform contractor oversight activities in accordance with the *LM Oversight* procedure, (LM-Procedure-2-20-5.0), which establishes and describes the processes, activities, and requirements LM implements to perform oversight activities as required by DOE Policy 226.2, *Policy for Federal Oversight and Contractor Assurance Systems*, and DOE Order 226.1B, *Implementation of Department of Energy Oversight Policy*. According to the *LM Oversight* procedure, oversight activities may be performed by any LM personnel to maintain sufficient operational awareness and to evaluate LMS contractor and DOE programs, assurance processes, facilities, operations, and management systems for implementation and effectiveness (including compliance with requirements).

The LMS QA group maintains a separate *Assessment Program* document (LMS/POL/S28474), which consists of methods to assess whether internal or external FUSRAP products and services have been planned, managed, and performed in a compliant and effective manner that achieves intended results. Assessments performed on FUSRAP activities are identified through a risk-informed process intended to identify issues that have a higher potential to prevent the FUSRAP group from achieving its objectives. The goal of these assessments is to identify issues and correct them before they can have a serious impact on FUSRAP operations.

11.0 References

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DOE (U.S. Department of Energy), 1997. *FUSRAP Management Requirements and Policies Manual*, Oak Ridge Operations, Rev. 2, May.

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DOE (U.S. Department of Energy), 2020a. *2020–2025 Strategic Plan,* DOE/LM-1488, Office of Legacy Management, January.

DOE (U.S. Department of Energy), 2020b. *Contract Management Plan*, U.S. Department of Energy (DOE) Office of Legacy Management for Office of Legacy Management Legacy Management Support Services Indefinite Delivery Indefinite Quantity (IDIQ) Contract Number 893030DLM000001, Period of Performance November 9, 2020–November 8, 2025.

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10 CFR 835, “Occupational Radiation Protection.”

10 CFR 851, “Worker Safety and Health Program.”

10 CFR 1021, “National Environmental Policy Act Implementing Procedures.”

36 CFR 1220–1239, “Records Management.”

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226.1B, *Implementation of Department of Energy Oversight Policy*, April 25, 2011.

226.2, *Policy for Federal Oversight and Contractor Assurance Systems*, August 9, 2016.

243.1B Chg 1, *Records Management Program*, February 7, 2022.

413.3B Chg 7 (LtdChg), *Program and Project Management for the Acquisition of Capital Assets*, June 21, 2023.

413.3-7A Chg 7A Chg 2 (LtdChg), *Risk Management Guide*, November 22, 2021.

413.3-20 Chg 1, *Change Control Management Guide*, October 22, 2015.

414.1D Chg 2, *Quality Assurance*, September 15, 2020.

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450.4A Chg 1, *Integrated Safety Management Policy*, January 18, 2018.

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Beneficial Reuse Management Plan, LM-Plan-3-13-1.0, LMS/POL/S15818

CERCLA Administrative Record and Post-Decision Document Management Procedure, LM-Procedure-3-22-6.0, LMS/PRO/S33248

Change Control Management, LM-Procedure-3-12-1.0

Cultural Resource Management Plan, LM-Plan-3-3-1.0, LMS/POL/S07371

Determining Eligibility for FUSRAP Sites, LM-Procedure-3-22-7.0, LMS/PRO/S13050

EMS Support and Project Teams Manual, LM-Procedure-3-20-5.0, LMS/POL/S28895

EMS Sustainability Teams Manual, LM-Manual-3-20.3-1.0, LMS/POL/S11374

Environmental and Spatial Data Management Operations Plan, LMS/PLN/S18183

Environmental Management System/Energy Management System Description, LM-Procedure-3-20-12.0, LMS/POL/S04346

Environmental Planning and NEPA Compliance Procedures, LM-Procedure-3-20-4.0

Environmental Review Form (ERF), LM-Form-4-20.3-4.0

Environmental Review Form Instructions, LM-SOP-4-20-1.0

Facilities Information Management System (FIMS) Manual, LM-Manual-3-13-5.0, LMS/POL/S32619

Guidance for Institutional Controls for Long-Term Surveillance and Maintenance at DOE Legacy Management Sites, LM-Guide-3-20-2.0, LMS/POL/S07617

Information Technology Project Management, LM-Procedure-3-10.2-1.0

Landowner/Stakeholder Notification Form, LMS 1013

Legal Hold and Production Policy, LM-Policy-1-11-2.0

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LM/LMS Emergency Categorizations and Notifications Procedure, LM-Procedure-3-20-14.0, LMS/POL/S30907

LM/LMS Worker Emergency Response Procedure, LM-Procedure-3-20-21.0, LMS/POL/S37549

LM Site Transition and Transfer, LM-Policy-1-22-1.0

LM Site Transition and Transfer Procedure, LM-Procedure-3-20-20.0

Natural Resources Management Plan, LM-Plan-3-20-15.0, LMS/PLN/S29563

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NEPA Categorical Exclusion Evaluation (CXE) Form, LM-Form-4-20-5.0

Office of Legacy Management National Environmental Policy Act Handbook: Guidance on Applying the National Environmental Policy Act Process to Office of Legacy Management Actions, LM-Guide-4-24-1.0, LMS/POL/S37618

LM Oversight, LM-Procedure-2-20-5.0

Processing Records Requests, LM-Procedure-3-11-5.0

Public Dissemination of Information, LM-Procedure-3-3-1.0

Quality Assurance Program Plan, LM-Plan-1-24-1.0

Real Property Management, LM-Manual-3-13-3.0, LMS/POL/S04335

Records and Information Management, LM-Policy-1-11-1.0

Records and Information Management Transition Guidance, LM-Guide-4-10.2-1.0

Request for Realty Services (RRS), LMF 430.1D

Requesting USACE Rapid Response Technical Center of Expertise (RR-TCX) Support for LM Sites and Facilities, LM-Procedure-3-21-2.0

Site Management Guide, LM-Guide-3-20.0-1.0

Site Transition Framework Checklist Template, LM-Template-4-20-3.0

Site Transition Plan Outline, LM-Template-4-20-4.0

LMS Forms, Plans, Policies, and Procedures

LMS contract implementing documents, continually updated, prepared by the LMS contractor for the U.S. Department of Energy Office of Legacy Management:

Assessment Program, LMS/POL/S28474

Communication Products Manual, LMS/POL/S18461

Conduct of Operations Manual, LMS/POL/S04374

Construction Procedures Manual, LMS/POL/S04324

Contractor Assurance System Program Description, LMS/POL/S13369

Document Management Services, Resources, and Procedures, LMS/PRO/S32818

Engineering Configuration Management Manual, LMS/POL/S07793

Engineering Procedures Manual, LMS/PRO/S04340

Environmental and Spatial Data Management Operations Plan, LMS/PLN/S18183

Environmental Data Validation Procedure, LMS/PRO/S15870

Environmental Instructions Manual, LMS/POL/S04338

Environmental Protection Manual, LMS/POL/S04329

Environmental Sciences Laboratory Procedures Manual, LMS/PRO/S04343

ESDM Environmental Data Management Team Work Procedures, LMS/PRO/S13473

Finance and Accounting Manual, LMS/POL/S04342

Integrated Risk Management Plan, LMS/POL/S27671

Integrated Safety Management System Description for LMS in Support of DOE Legacy Management Sites, LMS/POL/S14463

Integrated Work Control Process Manual, LMS/POL/S11763

Internal Communications Manual, LMS/POL/S07641

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Issue Reporting, LMS/POL/S28503

Learning and Development Policies and Procedures Manual, LMS/POL/S15034

LMS Document Types, Processes, and Responsibilities, LMS/POL/S32426

LMS Projects and Programs Manual, LMS/POL/S05760

LMS Safety and Health Program, LMS/POL/S20043

Occurrence Reporting and Processing of Operations Information, LMS/PRO/S16419

Operating Experience (OpEx) Procedure, LMS/POL/S28783

Prescreening Methodology for FUSRAP Eligibility Determinations, LMS/S11541

Procurement Manual, LMS/POL/S04334

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Project Management Control Systems Manual, LMS/POL/S04330

Public Affairs Manual, LMS/POL/S11690

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Radiation Protection Program Plan, LMS/POL/S04373

Radiological Control Manual, LMS/POL/S04322

Risk-Screening of Legacy Management Sites, LMS/S31301

Sampling and Analysis Plan for U.S. Department of Energy Office of Legacy Management Sites, LMS/PRO/S04351

SharePoint Site Creation and Maintenance, LMS/POL/S18768

Supplemental Emergency Response Information (SERI), LMS 1415

Transition and Transfer Guidance for FUSRAP Sites, LM-Guide-3-22-3.0, LMS/PRO/45370

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United States Code

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12.0 Relevant Website Links

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https://www.energy.gov/lm/doe-history

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Considered Sites Database at https://www.energy.gov/lm/considered-sites. Provides information with site-specific search capabilities.

FUSRAP Public Affairs at FUSRAPinfo@lm.doe.gov. Email address for stakeholder inquiries.

LM public website at https://energy.gov/lm/office-legacy-management. Provides access to general information about the Office of Legacy Management, including specific information about FUSRAP sites.

LM CERCLA AR Database, available at https://energy.gov/lm/sites/lm-sites: https://www.energy.gov/lm/administrative-record-ar

GEMS website: https://gems.lm.doe.gov/

Long-Term Surveillance and Maintenance Requirements at https://energy.gov/lm/sites/lm-sites. Provides summary of final site conditions and site-specific LTS requirements.

Site Management Guide, at https://energy.gov/lm/downloads/site-management-guide. Provides a list of all the sites in the LM inventory (including FUSRAP) and each site's LTS category as well as anticipated transition dates and LTS categories for site undergoing remedial action or reclamation.

USACE Headquarters homepage on FUSRAP at https://www.usace.army.mil/Missions/Environmental/FUSRAP.aspx. Provides basic USACE FUSRAP Program information.

USACE Formerly Utilized Sites Remedial Action Program (FUSRAP) Update for Fiscal Year 2023: at Formerly Utilized Sites Remedial Action Program Update - Fiscal Year 2023 (oclc.org), https://usace.contentdm.oclc.org/utils/getfile/collection/p16021coll11/id/5487. Provides a summary of activities related to the 21 active sites for FY 2023.

Appendix A

Memorandum of Understanding Between the U.S. Department of Energy and the U.S. Army Corps of Engineers Regarding Program Administration and Execution of the Formerly Utilized Sites Remedial Action Program (FUSRAP), 1999, and associated letters of agreement from 2001 and 2002

MEMORANDUM OF UNDERSTANDING BETWEEN THE U.S. DEPARTMENT OF ENERGY AND THE U.S. ARMY CORPS OF ENGINEERS REGARDING PROGRAM ADMINISTRATION AND EXECUTION OF THE FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM (FUSRAP)

ARTICLE I - PURPOSE AND AUTHORITY

A. This Memorandum of Understanding (MOU) is entered into by and between the U.S. Department of Energy (DOE) and the U.S. Army Corps of Engineers (USACE), ("The Parties") for the purpose of delineating administration and execution responsibilities of each of the parties for the Formerly Utilized Sites Remedial Action Program (FUSRAP).

B. USACE is administering and executing cleanup at eligible FUSRAP sites pursuant to the provisions of the Energy and Water Development Appropriations Act, 1998, (Title I, Public Law 105-62, 111 Stat. 1320, 1326), the Energy and Water Development Appropriations Act, 1999, (Title I, Public Law 105-245, 112 Stat. 1838,1843), and in accordance with, and subject to regulation under, the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (CERCLA), 42 U.S.C. 9601 et seq., and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 C.F.R., Chapter 1, Part 300.

C. DOE and USACE acknowledge that DOE does not have regulatory responsibility or control over the FUSRAP activities of USACE or USACE contractors.

D. This MOU addresses the responsibilities of the parties with regard to the 25 completed sites, listed in Attachment "A" hereto, where response actions were completed by DOE as of October 13, 1997, and the 21 active sites listed in Attachment "B" hereto, where response actions were not completed by DOE as of October 13, 1997.

E. This MOU also addresses the responsibilities of the parties for determining the eligibility of any new sites and vicinity properties for response actions under FUSRAP, determining the extent of response actions necessary at any eligible site, and dealing with other matters necessary to carry out this Program.

F. USE OF TERMS.

1. The term “accountability” in regards to real property refers to the obligation imposed by law or regulation to keep an accurate record of real property, regardless of whether the person or agency charged with this obligation has actual possession of the real property, or any control over activities occurring on the real property.

2. The term ”active site” means any “eligible FUSRAP site” which is undergoing or is programmed to undergo response actions by USACE, or which is determined to require initial or additional response action in accordance with the provisions of Article III, below.

3. The term “cleanup” means all response actions performed under FUSRAP.

4. The term “closeout” means the completion of cleanup and publication of notice in accordance with the provisions of CERCLA, the NCP and USACE procedures.

5. The term "completed site" means any site listed in Attachment “A”, or any site closed out by USACE as defined in paragraph 4, above.

6. The term “completion of FUSRAP activities” means the conclusion of USACE responsibilities at active sites in accordance with the provisions of this MOU.

7. The term “eligible FUSRAP site” means any geographic area determined by DOE to have been used for activities in support of the Nation’s early atomic energy program, or placed into FUSRAP pursuant to Congressional direction. (See Article III, section D, for designation of sites not part of FUSRAP on October 13, 1997).

8. The term “management” in regards to real property means the safeguarding of the Government’s interest in property, in an efficient and economical manner consistent with the best business practices, including administering applicable National Pollutant Discharge Elimination System (NPDES) permits, National Emissions Standards for Hazardous Air Pollutants (NESHAPS) reports, and other applicable administrative environmental requirements.

9. The term “protection” in regards to real property means the provision of adequate measures for prevention and extinguishment of fires, special inspections to determine and eliminate fire and other hazards, and necessary guards to protect property against thievery, vandalism, and unauthorized entry.

10. The term “response” shall have the same meaning as in CERCLA at 42 U.S.C. § 9601(25).

11. The term “vicinity properties” means properties adjacent to or near eligible FUSRAP sites which have been contaminated by radioactive and/or chemical waste

materials attributable to activities which supported the nation's early atomic energy program.

12. For purposes of this MOU, “active sites” become “completed sites” upon USACE determination that completion of FUSRAP activities has occurred with necessary regulatory approvals under CERCLA and the NCP.

13. For purposes of this MOU, “completed sites” become “active sites” upon USACE determination that further response action is necessary in accordance with Article III of this MOU.

ARTICLE II - INTERAGENCY COMMUNICATION

To provide for consistent and effective communication between DOE and USACE, each shall appoint a Principal Representative to serve as its headquarters-level point of contact on matters relating to this MOU.

ARTICLE III - RESPONSIBILITIES

A. PROGRAM MANAGEMENT AND FUNDING.

1. USACE shall manage all activities and prepare program estimates, funding requirements, and budget justifications for all FUSRAP activities for which it is responsible under the terms of this MOU. USACE shall request FUSRAP appropriations in the annual Energy and Water Development Appropriations Act for these activities. USACE shall respond to inquiries from public officials, Congressional interests, stakeholders, and members of the press regarding USACE activities under FUSRAP. Except as otherwise provided in this MOU, USACE is responsible for all response action activities at FUSRAP sites until two years after closeout.

2. DOE shall use resources appropriated to it to meet its responsibilities under the terms of this MOU. Except as otherwise provided in this MOU, DOE is responsible for any required activities at FUSRAP sites beginning two years after closeout.

B. COMPLETED SITES.

1. DOE:

a. Shall be responsible for: surveillance, operation and maintenance, including monitoring and enforcement of any institutional controls which have been imposed on a site or vicinity properties; management, protection, and accountability of federally-owned property and interests therein; and any other federal responsibilities, including claims and litigation, for those sites identified as completed in Attachment "A". Should it be necessary to undertake further administrative actions to finalize the completion of those sites in Attachment "A", DOE will identify the administrative actions to be taken, coordinate funding requirements for those actions with USACE, and upon receipt of funds from USACE, complete the necessary administrative actions to finalize completion of those sites;

b. Shall request USACE to conduct additional FUSRAP cleanup in a manner consistent with those procedures described in Article III section D, FUSRAP ELIGIBILITY (NEW SITES);

c. Shall be successor to USACE in Federal Facility Agreements for long-term surveillance, operation and maintenance, for which DOE is responsible under the provisions of this MOU;

d. Shall be responsible for administration of payments in lieu of taxes for any federally-owned lands held in connection with FUSRAP; and

e. Upon completion of FUSRAP activities by USACE, shall be responsible for: surveillance, operation and maintenance, including monitoring and enforcement of any institutional controls which have been imposed on a site or vicinity properties; management, protection and accountability of federally-owned property and interests therein; and any other federal responsibilities, including claims and litigation, not directly arising from USACE FUSRAP response actions.

2. USACE:

a. Shall assume no responsibility for the completed sites listed in Attachment "A" unless additional response actions are determined to be necessary under the provisions of Article III paragraph B.1.a. and Article III section D; and

b. In accordance with Article III section B.1.a., will provide funding to DOE for administrative actions required to finalize completion of the sites in Attachment "A".

Such funding will be requested in USACE FUSRAP budget requests, or provided through Congressionally-approved reprogramming actions.

C. ACTIVE SITES.

1. DOE:

a. Upon request from USACE, shall provide USACE with site designation decision documents and reports, contractual documents, program administration files, technical records, and documents related to federally-owned property, including associated financial records, cost estimates, schedules of program activities, and supporting data;

b. Hereby provides USACE with authorization for access to such lands or interests in land for which DOE has administrative accountability or to which DOE otherwise is authorized to provide access pursuant to statute, permit, license or similar agreement, to the extent that it may do so under the terms of any such agreements;

c. Upon request from USACE, to the extent permitted by law, shall acquire, using funds appropriated for FUSRAP activities, such additional real property and interests therein as may be required by USACE to execute the program, if USACE cannot otherwise accomplish the acquisition under its own authority;

d. To the extent permitted by law, hereby agrees to provide such authorization to USACE as may be required to terminate any existing leases, licenses, permits, or other agreements for access to, and the use of, land or facilities which USACE determines are no longer required to execute FUSRAP;

e. Beginning two years after closeout, shall be responsible for long-term surveillance, operation and maintenance, including monitoring and enforcement of any institutional controls which have been imposed on a site or vicinity properties, and, upon closeout, shall accept the transfer of federally-owned real property and interests therein, acquired by USACE for FUSRAP execution;

f. Shall be responsible for administration of payments in lieu of taxes for any federally-owned lands held by either USACE or DOE in connection with FUSRAP;

g. Shall be responsible, only after a determination of liability by a court of competent jurisdiction and exhaustion of applicable appeal rights, for payment of claims by property owners for damages to property and personal injuries due to DOE's actions prior to October 13, 1997, provided that:

i. This MOU does not alter or diminish the right of DOE to raise any defenses available under law, including sovereign immunity, in the case of any third party

claims, whether in an administrative or a judicial proceeding; and

ii. Nothing in this agreement shall be interpreted to require any obligation or payment of funds in violation of the Anti-Deficiency Act (31 U.S.C. § 1341);

h. Shall have accountability for federally-owned real property interests acquired by or transferred to DOE, including inventory reporting to the General Services Administration as may be required by that agency; and

i. To the extent permitted by law, hereby agrees to make such outgrants on federally owned real property interests, referred to in paragraph h. above, as may be requested by USACE in connection with the relocation of utilities and facilities or to otherwise facilitate FUSRAP execution.

2. USACE:

a. Shall be responsible for property management and response action activities at active FUSRAP sites, except for DOE's inventory reporting of federally owned real property interests related to FUSRAP under Article III paragraph C. 1.h. and as otherwise provided in this section;

b. Shall be responsible for site cleanup in accordance with its obligation to administer and execute FUSRAP imposed by Public Law 105-62; Public Law 105-245; any subsequent laws specifically relating to FUSRAP; CERCLA; and the NCP;

c. Shall accordingly be responsible for site closeout in accordance with CERCLA, the NCP, and USACE procedures;

d. During cleanup operations and for the first two years after site closeout, shall be responsible for surveillance, operation and maintenance, as required, and for management and protection of federally-owned real property in connection with FUSRAP;

e. Shall establish cleanup standards in consultation with federal, State and local regulatory agencies;

f. Within its authorities, may acquire real property and interests therein required for FUSRAP execution;

g. Shall maintain accountability for real property and interests therein which USACE

acquires under its authorities for FUSRAP execution, until such time as such real property and interests therein are transferred to DOE;

h. Shall be responsible, in cooperation with the Department of Justice, for identifying and for seeking recovery from Potentially Responsible Parties (PRPs) under CERCLA for response actions performed at eligible FUSRAP sites;

i. Shall accept responsibility as DOE's successor for all response actions required by Federal Facility Agreements executed between DOE and EPA at eligible FUSRAP sites;

j. Shall determine the need for response actions under FUSRAP of any vicinity property;

k. Shall conduct a technical review of the adequacy of USACE-selected remedies on the fifth anniversary of site closeout where necessary;

l. Shall execute and sign new FFA's and permits required for FUSRAP activities;

m. Shall coordinate with DOE as appropriate on issues relating to activities on:

i. DOE's inventory reporting of federally-owned real property referred to in Article III paragraph C. 1.h., above;

ii. Any DOE outgrants on federally-owned real property interests referred to in Article III paragraph C.1.i., above; and

iii. Changes to existing FFA provisions or to new provisions that relate to long-term surveillance, operation and maintenance by DOE referred to in Article III paragraphs C.2.i. and l. above;

n. Shall be responsible, only after a determination of liability by a court of competent jurisdiction and exhaustion of applicable appeal rights, for damages due to the fault or negligence of USACE or its contractors, and shall hold and save harmless DOE free from all damages arising from USACE FUSRAP activities to the extent allowable by law, provided that:

i. This MOU does not alter or diminish the right of USACE to raise any defenses available under law, including sovereign immunity, in the case of any third party claims, whether in an administrative or a judicial proceeding; and

ii. Nothing in this agreement shall be interpreted to require any obligation or

payment of funds in violation of the Anti-Deficiency Act (31 U.S.C. § 1341);

o. Upon completion of FUSRAP activities, shall provide a copy of surveys, findings, decision documents, and access agreements for property not owned by the government, as well as close out documents, to DOE for the historical record. This includes all sites determined eligible, whether or not any response action was taken.

D. FUSRAP ELIGIBILITY (NEW SITES).

1. DOE:

a. Shall perform historical research and provide a FUSRAP eligibility determination, with historical references, as to whether a site was used for activities which supported the Nation's early atomic energy program;

b. Shall provide USACE with the determination, a description of the type of processes involved in the historical activities at the site, the geographic boundaries of those activities. (as reflected by documentation available to DOE), and the potential radioactive and/or chemical contaminants at the site; and

c. Shall maintain records of determination of eligibility and other files, documents and records associated with the site.

2. USACE:

a. Upon receipt of DOE's determination and its description of the type of processes involved in the historical activities at the site and potential radioactive and/or chemical contaminants, shall conduct necessary field surveys and prepare a preliminary assessment in accordance with CERCLA and the NCP;

b. Shall determine the extent of FUSRAP-related contamination at the eligible site, at vicinity properties, and at other locations where contamination originated from the eligible site;

c. Shall determine if the contamination is a threat to human health or the environment;

d. Shall consult with DOE if USACE surveys, investigations, and data analyses are inconsistent with the DOE description of the potential radioactive and/or chemical contaminants and processes involved in the historical activities at the site;
e. Shall determine the extent to which response action under CERCLA is required to address FUSRAP-related contamination at the site; and

f. Upon completion of FUSRAP activities, shall provide a copy of surveys, findings, decision documents, and access agreements for property not owned by the government, as well as close out documents, to DOE for the historical record. This includes all sites determined eligible, whether or not any response action was taken.

ARTICLE IV – FURTHER ASSISTANCE

DOE and USACE shall provide such information, execute and deliver any agreements, instruments and documents, and take such other actions, to include DOE assistance with technical and waste disposal matters, as may be reasonably necessary or required, which are not inconsistent with the provisions of this MOU, in order to give full effect to this MOU and to carry out its intent.

ARTICLE V - DISPUTE RESOLUTION

A. Every effort will be made to resolve issues between USACE and DOE by the staff directly involved in the activities at issue, through consultation and communication or other forms of non-binding alternative dispute resolution mutually acceptable to the parties. If a mutually acceptable resolution cannot be reached, the dispute will be elevated to successively higher levels of management up to, and including, the Secretary of Defense and the Secretary of Energy.

B. In the event such measures fail to resolve the dispute, the parties shall refer the matter to the Office of Management and Budget (OMB) for resolution, unless the dispute involves questions of law, which shall be referred to the Office of Legal Counsel of the Department of Justice pursuant to Executive Order 12146.

ARTICLE VI - AMENDMENT AND TERMINATION

ARTICLE VI - AMENDMENT AND TERMINATION

This MOU may be modified or amended in writing by the mutual agreement of the parties. Either party may terminate the MOU by providing written notice to the other party. The termination shall be effective sixty (60) days following notice, unless a later date is agreed to by the parties.

ARTICLE VII - EFFECTIVE DATE

This MOU shall become effective when signed by authorized officials of DOE and USACE.

U.S. Department of Energy

James M. Owendoff

James M. Owendoff
Acting Assistant Secretary
For Environmental Management

Date: 3/17/99

U.S. Army Corps of Engineers

Russell L. Fuhrman

Russell L. Fuhrman
Major General, U.S. Army
Director of Civil Works

Date: 16 Mar 99

Attachments:
A. List of Completed Sites
B. List of Active Sites

Attachment A
Completed FUSRAP Sites

Site Name	City and State
Kellex/Pierpont	Jersey City, New Jersey
Acid/Pueblo Canyon	Los Alamos, New Mexico
Bayo Canyon	Los Alamos, New Mexico
University of California	Berkley, California
Chupadera Mesa	White Sands Missile Range, New Mexico
Middlesex Municipal Landfill	Middlesex, New Jersey
Niagara Falls Storage Site Vicinity Properties	Lewiston, New York
University of Chicago	Chicago, Illinois
National Guard Armory	Chicago, Illinois
Albany Research Center	Albany, Oregon
Elza Gate	Oak Ridge, Tennessee
Seymour Specialty Wire	Seymour, Connecticut
Baker & Williams Warehouses	New York, New York
Granite City Steel	Granite City, Illinois
Aliquippa Forge	Aliquippa, Pennsylvania
C.H. Schnoor	Springdale, Pennsylvania
Alba Craft Laboratory	Oxford, Ohio
HHM Safe Company	Hamilton, Ohio
Associate Aircraft	Fairfield, Ohio
B & T Metals	Columbus, Ohio
Baker Brothers	Toledo, Ohio
General Motors	Adrian, Michigan
Chapman Valve	Indian Orchard, Massachusetts
Ventron	Beverly, Massachusetts
New Brunswick Laboratory	New Brunswick, New Jersey

Attachment B
Active FUSRAP Sites

Site Name	City and State
Latty Ave. Properties	Hazelwood, Missouri
St. Louis Airport	St. Louis, Missouri
Vicinity Properties	Hazelwood & Berkley, Missouri
St. Louis Downtown Site	St. Louis, Missouri
DuPont	Deepwater, New Jersey
Maywood	Maywood, New Jersey
Wayne	Wayne, New Jersey
Middlesex Sampling Plant	Middlesex, New Jersey
Ashland 1	Tonawanda, New York
Ashland 2	Tonawanda, New York
Seaway Industrial Park	Tonawanda, New York
Linde Air Products	Tonawanda, New York
Niagara Falls Storage Site	Lewiston, New York
Colonie	Colonie, New York
Bliss & Laughlin Steel	Buffalo, New York
Luckey	Luckey, Ohio
Painesville	Painesville, Ohio
CE Site	Windsor, Connecticut
Madison	Madison, Illinois
Shpack Landfill	Norton, Massachusetts
W.R. Grace	Curtis Bay, Maryland

DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
WASHINGTON, D.C. 20314-1000

REPLY TO
ATTENTION OF:

DEC -4 2001

Programs Management Division
Directorate of Civil Works

Jessie Roberson
Assistant Secretary for Environmental Management
U.S. Department of Energy
1000 Independence Avenue, S.W.
Washington, D.C. 20585

Dear Ms. Roberson:

The Memorandum of Understanding (MOU), signed by the Department of Energy (DOE) and the U.S. Army Corps of Engineers in March 1999, defines the roles and responsibilities of both agencies in the management and execution of the Formerly Utilized Sites Remedial Action Program (FUSRAP). It also establishes a framework for the execution of FUSRAP. It does not specify the procedures that each agency shall follow to meet its responsibilities. The Corps and DOE have identified two areas where agreement on the procedures to be followed is needed in order to address issues currently facing both agencies. These two areas are the addition of new sites to FUSRAP and the transfer of completed sites to long term stewardship. This letter summarizes the understandings regarding procedures in these two areas that the Corps has reached with your staff.

Addition of new sites to FUSRAP. Corps authority for the cleanup of radiologically contaminated sites is limited to the authorities provided under the Energy and Water Development Appropriations Acts, 1998, 1999 and 2000 for the Corps to serve as the lead agency for the cleanup of FUSRAP sites under the Comprehensive Environmental Response, Liability and Compensation Act (CERCLA). In addition, we do not believe Congress intended to increase the scope of FUSRAP to include sites that did not meet DOE criteria when it transferred responsibility for the administration and execution of FUSRAP to the Corps. Accordingly, we request that DOE evaluate potential new sites against the criteria in the DOE FUSRAP Management Requirements and Policies Manual (MRPM), dated May 5, 1997, and refer to the Corps for evaluation only sites meeting the DOE eligibility criteria.

Generally speaking, these are sites where there is a potential for radiological contamination (i.e., releases of radioactive material into the environment in amounts unacceptable when measured against federal or state standards, permits or licenses) and where DOE has liability for radiological contamination through predecessor operations in support of the Manhattan Project or early Atomic Energy Commission activities. Sites where remaining radioactive material is not due to DOE predecessor operations in support of the Manhattan Project or early Atomic Energy Commission activities, or where another

governmental organization is responsible for the radiological material (as would be the case if the material were subject to a Nuclear Regulatory Commission (NRC) license), or where the material is being addressed under another remedial action program are not eligible.

We also request that DOE coordinate its new site designation activities with the Corps to ensure that there is a smooth transition with minimal duplication of effort or lost time. Specifically DOE would notify the Corps as soon as an event occurs, a letter of inquiry for example, that could result in an eligibility review and a referral to the Corps, and provide the Corps with copies of all documentation and historical records pertinent to its eligibility determination at the earliest opportunity.

Transfer of completed sites. In accordance with the general process in the MOU, the Corps will employ a three-step process for transfer of completed sites, beginning when the Record of Decision (ROD) is signed. The Corps will provide DOE with a copy of the ROD, a separate general description of the site and remedial action goals, estimated remedial action schedule, and anticipated land use controls and operations and maintenance requirements.

The second step will occur after the site closure report is complete and a declaration of completed action has been signed. At that time, in addition to a copy of the site closure report and declaration, the Corps will provide DOE with letters from regulators acknowledging that remedial action goals have been met, as well as operations and maintenance, and land use control implementation plans, as required and available. The Corps will also advise DOE of the dates when short-term maintenance starts and ends and provide an estimate of annual out-year cost requirement, and general description of the remedial goals and any restrictions remaining on the property.

The third step will occur when the Corps has completed all remedial activities at the site and ninety days before the end of the two-year short-term operations and maintenance for which the Corps is responsible. At that time the Corps will notify DOE of the effective date of transfer to DOE for long-term operations and maintenance. Accompanying this notification will be a complete copy of the administrative record, the operations and maintenance plans and the actual costs of operations and maintenance for the first two years, and a description of the long-term actions required by DOE.

In addition the Corps will provide DOE with informational copies of draft site specific land use controls and implementation plans being coordinated with regulators and other stakeholders, and keep DOE informed of changes in completion schedules and other events/issues that might impact DOE's future responsibilities at a site. Corps regional FUSRAP program managers have been encouraged to invite DOE to participate in public meetings, especially at sites that will require significant long-term operation and maintenance activities, and/or the maintenance of land use controls.

If the procedures described above are acceptable to the DOE, please notify me in writing. Once in place, these procedures will facilitate each agency's meeting its continuing FUSRAP responsibilities.

Sincerely,

Robert H. Griffin
Brigadier General, U.S. Army
Director of Civil Works

Mackenzie

Department of Energy

Washington, DC 20585

April 8, 2002

Brigadier General Robert H. Griffin
Director of Civil Works
U.S. Army Corps of Engineers
Department of the Army
Washington, D.C. 20314-1000

Dear General Griffin:

This is in response to your December 4, 2001, letter concerning procedures to be followed to meet our respective responsibilities under the Memorandum of Understanding (MOU) signed by the Department of Energy (DOE) and the U.S. Army Corps of Engineers (USACE) in March 1999. The MOU delineates the responsibilities of DOE and the USACE regarding program administration and execution of the Formerly Utilized Sites Remedial Action Program (FUSRAP). This letter summarizes the position of the Department regarding certain procedures that we propose to be followed regarding the addition of new sites to FUSRAP and the transfer of completed sites for long-term stewardship.

1. **Addition of New Sites to FUSRAP:**

   The Department will evaluate the eligibility of sites for possible inclusion as new sites in FUSRAP against the criteria in the FUSRAP Summary Protocol-Identification-Characterization-Designation-Remedial Action-Certification dated January 1986. This summary protocol is referenced and summarized in the DOE FUSRAP Management Requirements and Policies Manual dated May 5, 1997. Any site identified as a potential new site for FUSRAP will be referred to the USACE for further evaluation.

   My staff will continue their practice of immediately notifying your staff of any inquiry that would result in an eligibility review. Typically, an eligibility review is undertaken based on several inquiries or new pieces of information regarding a site, rather than a single specific request. To ensure that the USACE is aware of inquiries into sites that are being considered for eligibility for inclusion in FUSRAP, it has been my staff's practice for the past year to meet monthly with your staff and discuss FUSRAP activities. A portion of these meetings has been, and will continue to be, devoted to a discussion of any inquiries DOE or the USACE has received regarding FUSRAP.

2. Transfer of Completed Sites:

For privately owned FUSRAP sites where the long-term stewardship responsibility will be limited to record keeping, we support the three step transfer process outlined in your December 4 letter. For the number of sites that are currently Federally-owned, DOE would like to continue to work together with USACE at the staff level to facilitate the transfer of title to those properties to private or local government ownership, or to transfer the real property interests to other Federal agencies, as appropriate. Our two agencies have successfully coordinated the transfer of the New Brunswick FUSRAP site and the same procedure may be applicable for the remaining Federally-owned FUSRAP sites.

In addition, we will arrange a meeting so that our staffs have an opportunity to further discuss the 1999 MOU between our two agencies. I have designated Mr. James Owendoff, Deputy Assistant Secretary for Science and Technology as my representative for this effort.

If you have any further questions, please contact me at (202) 586-7710, or contact Jim Owendoff at (202) 586-6832.

Sincerely,

Jessie Hill Roberson
Assistant Secretary for
Environmental Management

Appendix B

Summary of FUSRAP Site Information

Appendix B, FUSRAP Site Summary

	LM Site Name	Pre-LM Name	MED/AEC Activity	Eligibility Determ.	RI	FS	ROD	FY Transfer Date[a]	Category[b]	Regulatory Framework[c]	Congress. Addition	NPL Site[d]	FFA Site[e]	DOE Owned
COMPLETED FUSRAP SITES														
1	Acid/Pueblo Canyon, NM	Acid/Pueblo Canyon	Weapons Development	1982				1985	1	AEA				
2	Adrian, MI	General Motors	Fabricating & Machining	1985				1996	1	AEA				
3	Albany, OR	Albany Research Center	Research	1983				1993	1	AEA				
4	Aliquippa, PA	Aliquippa Forge	Fabricating & Machining	1983				1997	1	AEA				
5	Attleboro, MA	Shpack Landfill	Waste Disposal	1984	2004	2004	2005	2019	1	CERCLA		NPL[f]		
6	Bayo Canyon, NM	Project Y Demolition Range; TA-10	Weapons Development	1980				1984	1	AEA				
7	Berkeley, CA	Gilman Hall, Univ of Cal.-Berkeley	Research	1979				1985	1	AEA				
8	Beverly, MA	Ventron/Metal Hydrides	Fabricating & Machining	1985				2004	1	AEA				
9	Buffalo, NY	B & L Steel	Fabricating & Machining	1992				2002	1	AEA				
10	Chicago North, IL	National Guard Armory	Research	1985				1989	1	AEA				
11	Chicago South, IL	University of Chicago	Research	1983				1989	1	AEA				
12	Chupadera Mesa, NM	Chupadera Mesa	Weapons Development	1985				1986	1	AEA				
13	Columbus East, OH	B & T Metals	Fabricating & Machining	1992				2001	1	AEA				
14	Colonie, NY	Colonie Interim Storage Site	Fabricating & Machining	1984	Groundwater 2003, Main site soil 2013, VPs 2016	Groundwater 2009, Main site soil 2014, VPs 2017	Groundwater 2010, Main site soil 2015, VPs 2017	2020	1	CERCLA	CA			
15	Fairfield, OH	Associated Aircraft Tool and Manufacturing Co.	Fabricating & Machining	1993				1996	1	AEA				
16	Granite City, IL	General Steel Industries	Fabricating & Machining	1992				1994	1	AEA				
17	Hamilton, OH	Herring-Hall Marvin Safe	Fabricating & Machining	1994				1997	1	AEA				
18	Indian Orchard, MA	Chapman Valve	Fabricating & Machining	1992				2004	1	AEA				
19	Jersey City, NJ	Kellex/Pierpont (Vitro)	Research	1978				1983	1	AEA				
20	Madison, IL	Spectrulite Consortium/Dow Chemical	Fabricating & Machining	1992				2002	1	AEA				
21	New Brunswick, NJ	New Brunswick Lab	Research	1990				2001	1	AEA				
22	New York, NY	Baker & Williams Warehouses	Temporary Storage	1990				1996	1	AEA				
23	Niagara Falls Storage Site VPs, NY	NFSS VPs	Waste Storage / Disposal	1983				1992	1	AEA				
24	Oak Ridge, TN Warehouses	Elza Gate	Temporary Storage	1988				1994	1	AEA				
25	Oxford, OH	Alba Craft Laboratory	Fabricating & Machining	1992				1997	1	AEA				
26	Painesville, OH	Diamond Magnesium Company	Contaminated Materials	1992	2003	2003	2006	2016	1	CERCLA				
27	Seymour, CT	Seymour Specialty Wire	Fabricating & Machining	1985				1995	1	AEA				
28	Springdale, PA	C.H. Schnorr & Company	Fabricating & Machining	1992				1996	1	AEA				
29	Toledo, OH	Baker Brothers	Fabricating & Machining	1992				2001	1	AEA				
30	Tonawanda, NY	Linde Air Products/Praxair	Processing	1980	1993	1993	Soils 2000, Building 14 2003, Groundwater 2005	2017	1	CERCLA				
31	Tonawanda North Unit 1, NY	Ashland Unit 1	Waste Disposal	1984	1993	1993	1998	2009	1	CERCLA				
32	Tonawanda North Unit 2, NY	Ashland Unit 2	Waste Disposal	1984	1993	1993	1998	2009	1	CERCLA				
33	Wayne, NJ	Rare Earths /Wayne Interim Storage Site	Fabricating & Machining	1983	EE/CA,1993 EE/CA,1998	n/a	2000	2007	1	CERCLA NRC-term.	CA	NPL[f]	FFA	
34	Windsor, CT	Combustion Engineering	Fabricating & Machining	1994	2000	2008	n/a	2019	1	NRC-term.				
ACTIVE SITES														
1	Berkeley, MO	St Louis Airport	Waste Disposal	1984	1994	2003	2005	2038	2	CERCLA		NPL	FFA	
2	Berkeley VPs, MO	St Louis Airport VPs	Waste Disposal	1984	1994	2003	2005	2038	2	CERCLA			FFA	
3	Carnegie, PA	Superior Steel	Fabricating & Machining	2008	FY22	NA	Expected FY25	2027	1	CERCLA NRC-term.				
4	Cleveland, OH	Harshaw Chemical Company	Processing	1999	2006 with revision in 2009	2012	OU-1 and OU-2, 2021	2031	2	CERCLA				
5	Curtis Bay, MD	W.R. Grace	Thorium Processing	1984	Building 23 2003, RWDA 2005	Building 23 2003, RWDA 2008	Building 23 2005, RWDA 2011	2032	2	CERCLA				
6	Deepwater, NJ	DuPont Chambers Works	Research, Processing	1980	2011	2013	2014	2032	2	CERCLA				
7	Fort Wayne, IN	Joslyn Manufacturing and Supply	Fabricating & Machining	2009	Expected FY24	TBD	TBD	2038	2	CERCLA	CA			
8	Hazlewood, MO	Latty Ave, MO	Fabricating & Machining	1984	1994	2003	2005	2026	2	CERCLA	CA	NPL[g]	FFA	
9	Hicksville, NY	Sylvania / Corning Plant	Research	2002	2010, Final 2021	TBD	TBD	2034	3	CERCLA		NPL	FFA	
10	Lockport, NY	Guterl Specialty Steel	Fabricating & Machining	2006	2010	2021	2023	2034	3	CERCLA				
11	Luckey, OH	Luckey, OH	Contaminated Materials	1992	2000	2003	Soil 2006, Groundwater 2008	2030	2	CERCLA				

Appendix B, FUSRAP Site Summary

	LM Site Name	Pre-LM Name	MED/AEC Activity	Eligibility Determ.	RI	FS	ROD	FY Transfer Date[a]	Category[b]	Regulatory Framework[c]	Congress. Addition	NPL Site[d]	FFA Site[e]	DOE Owned
12	Maywood, NJ	Maywood Chemical Company	Thorium Processing	1984	Soils and Buildings 1992, Groundwater 2005	Soils and Buildings 1992, Groundwater 2010	Soils and Buildings 2012, Groundwater 2010	2031	2	CERCLA NRC-term.	CA	NPL	FFA	DOE
13	Middlesex North, NJ	Middlesex Municipal Landfill	Waste Disposal	1980/ 2014[h]	2016	2019	2022	2030	1	CERCLA				
14	Middlesex South, NJ	Middlesex Sampling Plant	Temporary Storage, Assaying & Sampling	1980	Soil 2004, Groundwater 2016	Soil 2005	Soil 2005	2030	2	CERCLA		NPL	FFA	DOE
15	Middletown, IA	Iowa Army Ammunition Depot	Weapons Development	2003	2009	2011	2011	2029	2	CERCLA		NPL	FFA	
16	Niagara Falls Storage Site, NY	Niagara Falls Storage Site, NY (includes VPs E, E Prime, G, H Prime and X)	Waste Storage / Disposal	1990	2007, Addendum 2011	IWCS 2015	TBD	2038	2	CERCLA				DOE
17	Parks Township, PA	Shallow Land Disposal Area	Waste Disposal	2002	2006	2006	2007, Amendment 2015	2033	1	CERCLA NRC inact.	CA			
18	St Louis, MO	St Louis Downtown Site	Processing	1984	Accessible Soil OU 1994, Addendum 1995, Inaccessible Soil OU	Accessible Soil OU 1998 Inaccessible Soil OU 2013	Accessible Soil OU 1999 Inaccessible Soil OU 2014	2032	2	CERCLA		NPL	FFA	
19	Staten Island, NY	Staten Island Warehouse	Temporary Storage	2009			TBD based on TCRA	2027	1	CERCLA				
20	Tonawanda Landfill, NY	Tonawanda Landfill and Mudflats	Waste Disposal	1984	2005	1993, Mudflats Addendum 2009, Landfill OU 2015	Mudflats OU 2008 Landfill OU 2017	2024	2	CERCLA				
21	Tonawanda North, NY Unit 3	Seaway Industrial Park, NY	Waste Storage / Disposal	1984	1993	1993	2009	2029	2	CERCLA				
			Total FUSRAP sites	**55**										
REFERRED SITES - Eligible but Not Currently Designated by USACE for FUSRAP														
1	45 Reinhardt Road, Wayne, NJ	45 Reinhardt Road, Wayne, NJ	not yet designated	2023						CERCLA				
			Total plus Referred	**56**				**55**			**6**	**9**	**9**	**3**

Sites with Transfer Dates 2024-2028	**4**	Near term transition; within five years
Sites with Transfer Dates 2029-2038	**17**	Long term transition; scheduled transfer dates but outside of five year window
Sites with Transfer Dates TBD (assumed 2038)	**3**	Transfer date is to be determined per USACE schedule; assigned FY38 transfer date for planning purposes

Category 1 Sites	**38**
Category 2 Sites	**15**
Category 3 Sites	**2**

CERCLA Sites	**29**
AEA Sites	**26**
Sites that have /had NRC Licenses	**5**

Notes:

[a] Fiscal Year of Transfer Date. Transfer dates for the Completed Sites are from the 2024 *LM Site Management Guide.* Transfer dates for the Active Sites are those FYs reported in the 2023 USACE Project Execution Schedule. For dates noted as TBD by USACE, LM has established a 2038 transfer dated for planning purposes.

[b] Categories are those listed in the 2024 LM Site Management Guide.

[c] Regulatory Framework: Regulation under which the investigation and cleanup were performed. Also, sites that have/had US Nuclear Regulatory Commission (NRC) license are noted. “NRC-Inact.” indicates the license is inactive by agreement between USACE and NRC; “NRC term.” indicates a license has been terminated. (Sources: USACE Yearly Transition Schedule & CSD)

[d] NPL sites are remediated under the regulatory oversight of US Environmental Protection Agency.

[e] Federal Facility Agreement (FFA) Sites: An FFA is required for NPL sites; the agreements are binding documents between regulators and federal agencies designating agreements for oversight.

[f] De-listed NPL Site.

[g] Only a portion (Hazelwood Interim Storage Site and the Future Property) has been designated as an NPL site.

[h] Middlesex North, NJ, Site, originally designated in 1980 and certified in 1989, was referred back to USACE and redesignated in 2014.

Acronyms:

DOE: US Department of Energy
EE/CA: Engineering Evaluation / Cost Analysis
FFA: Federal Facilities Agreement
FUSRAP: Formerly Utilized Sites Remedial Action Program
LM: DOE Office of Legacy Management
NPL: National Priorities List
RI/FS: Remedial Investigation / Feasibility Study
ROD: Record of Decision
USACE: US Army Corps of Engineers
TBD: to be determined
RWDA: Radioactive Waste Disposal Area

Appendix C

FUSRAP Legislative History

FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM (FUSRAP):

A Legislative History

CHRONOLOGY:

March 1974

The Formerly Utilized Sites Remedial Action Program (FUSRAP) is established in the U.S. Atomic Energy Commission (AEC) under executive authority granted in the language of the Atomic Energy Act of 1954, as amended. The purpose was to evaluate and remedy as needed potential radiation at former sites that had been used by the Manhattan Project or by AEC and later sold. There was no authorizing legislation, nor was specific authorizing legislation ever passed, although in the early 1980's the U.S. Department of Energy (DOE) requested such authorization more than once.

October 1974

The Energy Research and Development Administration (ERDA) is established by the Energy Reorganization Act of 1974, combining AEC with the Office of Coal Research. ERDA becomes operational by Executive Order 11834 on January 19, 1975, bringing FUSRAP with it.

August 1977

The Department of Energy Organization Act folds ERDA into the newly formed DOE. FUSRAP continues in the new agency.

July 25, 1978

A bill is introduced by Sen. Charles Percy to establish a Nuclear Waste Office in DOE for the oversight of nuclear waste management and disposal. This bill is reported out of committee, but it does not reach a vote in Congress.

October 1, 1980

Public Law (PL) 96-367, Energy and Water Development Appropriation Act for 1981, is signed into law. It covers DOE for fiscal year (FY) 1981, and it has no FUSRAP language.

December 4, 1981

PL 97-88, Energy and Water Development Appropriation Act for 1982, is signed into law. It covers DOE for FY 1982, and it has no FUSRAP language.

July 14, 1983

PL 98-50, Energy and Water Development Appropriation Act for 1984, is signed into law. The conference report supporting PL 98-50 directs DOE to conduct decontamination research and development projects at the Latty Avenue Properties in St. Louis, the Maywood and Wayne sites in New Jersey, and the Colonie site in New York State. DOE assigns this work to FUSRAP.

July 16, 1984

PL 98-360, Energy and Water Development Appropriation Act for 1985, is signed into law. The conference report supporting PL 98-360 specifies details on FUSRAP work at the St. Louis Airport site.

July 19, 1988

PL 100-371, Energy and Water Development Appropriation Act for 1989, is signed into law. It covers DOE for FY 1989 and it has no FUSRAP language.

September 28, 1988

House Conference Report 100-1002 bans Albany waste from Tonawanda, New York. The report accompanies House Resolution (H.R.) 4781 and PL 100-463, Department of Defense Appropriations Act for 1989, which was signed into law October 1, 1988.

September 29, 1989

PL 101-101 is signed into law, Energy and Water Development Appropriations Act, 1990; covers DOE for FY 1990; no FUSRAP language.

November 5, 1990

PL 101-514 is signed into law. Energy and Water Development Appropriations Act, 1991; covers DOE for FY 1991; no FUSRAP language.

August 17, 1991

PL 102-104 is signed into law. Energy and Water Development Appropriations Act, 1992; covers DOE for FY 1992: no FUSRAP language.

October 2, 1992

PL 102-377 is signed into law. Energy and Water Development Appropriations Act, 1993; covers DOE for FY 1993; no FUSRAP language.

October 28, 1993

PL 103-126 is signed into law. Energy and Water Development Appropriations Act, 1994; covers DOE for FY 1994; no FUSRAP language.

August 26, 1994

PL 103-316 is signed into law. Energy and Water Development Appropriations Act, 1995; covers DOE for FY 1995; no FUSRAP language.

July 16, 1996

Senate Report No. 104-320 *(s.l959),* a bill authorizing appropriations for energy and water development for the fiscal year ending September 30, 1997. Recommendation includes funding to expedite the cleanup of the Wayne, New Jersey, Interim Storage Site under FUSRAP.

July 30, 1996

PL 104-206 is signed into law. Based on Senate Reports.

October 13, 1997

PL 105-62 is signed into law. Based on conference reconciliation of H.R. 2283 and Senate (S.) 1004, it provides $140 million in funding for the U.S. Army Corps of Engineers (USACE) to administer and execute FUSRAP. This provision effectively removes management of FUSRAP from DOE and attaches it to USACE. (As originally written, S. 1004 continued previous funding of FUSRAP under DOE).

PL 105-62, Energy and Water Appropriations Act for FY 1998, authorizes $140 million for FUSRAP activities by USACE, effectively moving FUSRAP from DOE. The law mandates that the USACE "administer and execute the Formerly Utilized Sites Remedial Action Program to clean up contaminated sites throughout the United States where work was performed as part of the Nation's early atomic: energy program." The law, which is the annual Energy and Water Development Appropriations law, is based on H.R. 2263, sponsored by Congressman Joseph McDade. The Senate equivalent, S. 1004, had funded FUSRAP through DOE, as in previous years. However, in bargaining that occurred in the House-Senate Conference on the bill, Sen. Peter Domenici, Chairman of the Energy and Water Development Subcommittee of the Senate Appropriations Committee (whose equivalent in the House was chaired by McDade), accepted the House language on FUSRAP, approving the transferal to USACE. Congress passed the bill in that form.

November 18, 1997

PL 105-85 is signed into law. This legislation served as an act to authorize appropriations for FY 1998 for military activities of the U.S. Department of Defense, for military construction, and for defense activities of the DOE Section 3170: Report on remediation under FUSRAP. Not later than March 1, 1998, the Secretary of Energy shall submit to Congress a report containing information responding to questions regarding FUSRAP.

Spring, 1998

An end date of 2002 is designated the term of an accelerated completion plan submitted by DOE in 1997. A similar completion date appeared in USACE's spring 1998 evaluation of sites, which estimated various remediation scenarios. According to that report, an additional $40 million per year would be needed to finish the project in 2002.

October 7, 1998

PL 105-245 appropriates $140 million for FY 1999 operations of the FUSRAP by USACE, based on H.R. 2605, sponsored by Congressman Ron Packard.

October 15, 1998

The Natural Resources Defense Council petitions the U.S. Nuclear Regulatory Commission (NRC) to bring USACE's remediation procedures under NRC environmental standards, based on the proposition that those standards applied to DOE; and DOE remains the owner of the sites; and that USACE was applying standards lower than NRC's, creating environmentally dangerous conditions in the clearing of radioactive materials at the Tonawanda site in upper New York State. The petition cited provisions of the Uranium Mill Tailings Radiation Control Act (UMTRCA) of 1978, which placed management of radioactive byproduct materials under the NRC. On March 26, 1999, the NRC denied the petition.

October 17, 1998

PL 105-261 is signed into law. Section 3162 expresses the sense of Congress that the U.S. Office of Management and Budget, beginning with FY 2000, should transfer the FUSRAP from the defense 050 budget function to a nondefense discretionary budget function.

March 17, 1999

Memorandum of Understanding Between the U.S. Department of Energy and the U.S. Army Corps of Engineers regarding program administration and execution of the FUSRAP is signed.

September 29, 1999

PL 106-60, the Energy and Water Appropriations Act for FY 2000, is signed, authorizing a budget of $150 million for FUSRAP in FY 2000. House Report 106-253, which listed the budget recommendation for FY 2000, states, "the [House Appropriations] Committee intended to transfer only the responsibility for administration and execution of clean-up activities at eligible sites where remediation had not been completed. It did not intend to transfer ownership of and accountability for real property interests that remain with the Department of Energy. The Committee expects the Department to continue to provide the institutional knowledge and experience needed to best serve the Nation and the affected communities in executing this program."

October 5, 1999

PL 106-65 is signed into law. Section 3131 says that USACE has no authority to use other than FUSRAP appropriated and/or authorized funds, for treatment, storage, and disposal operations after FY 2000.

March 29, 2000

H. R. 910 referred to Senate committee. This legislation served to authorize the Secretary of Army, acting through USACE and in coordination with other federal agency heads, to participate in the funding and implementation of a balanced, long-term solution to the problems of groundwater contamination, water supply, and reliability affecting the San Gabriel groundwater basin in California, and for other purposes.

October 2000

H. R. 4635, the Energy and Water Appropriations for FY 2001, is passed by Congress, vetoed by the president, but, with more than a two-thirds majority, the bill survived the veto. House Report 106-988, on the newly numbered H.R. 5483, specified funding of $140 million for FUSRAP in FY 2001, a reduction of $10 million. $5,000,000 was recommended to initiate remediation activities as appropriate at a new site at the Parks Township Shallow Land Disposal Area (SLDA), Parks Township, Armstrong County, Pennsylvania.

November 12, 2001

PL 107-66 is signed into law. H.R. 2311 specified funding of $140 million for FUSRAP in FY 2002.

January 20, 2002

PL 107-117, Section 8143, establishes that the Shpack Landfill in Attleboro, Massachusetts, and the SLDA in Parks Township, Pennsylvania, shall be remediated under FUSRAP, and USACE shall seek to recover costs for remediation of SLDA.

February 20, 2003

PL 108-7 is signed into law. H.R. 5431[107] is bundled with other appropriation bills to be passed (Consolidated Appropriations Resolution, 2003). H.R. 5431[107] specified funding of $145 million for FUSRAP in FY 2003.

November 18, 2003

PL 108-137 is signed into law. H.R. 2754 specified funding of $140 million for FUSRAP in FY 2004.

December 8, 2004

PL 108-447 is signed into law. H.R. 4614[108] is bundled with other appropriation bills to be passed (Consolidated Appropriations Act, 2005). H.R. 4614[108] specified funding of $165 million for FUSRAP in FY 2005.

November 19, 2005

PL 109-103 is signed into law. H.R. 2419 specified funding of $140 million for FUSRAP in FY 2006.

June 29, 2006

PL 109-274 is signed into law. H.R. 5427 specified funding of $130 million for FUSRAP in 2007. The Act specified: "to complete expeditiously its Site Ownership and Operational History review and continue its Remedial Investigation/Feasibility Study toward the goal of initiating any necessary remediation of the former Sylvania nuclear fuel site at Hicksville, New York, consistent with current CERCLA cleanup standards..... The Committee directs the Corps to continue ongoing cleanup efforts at the Former Linde Air Products, Tonawanda, New York, consistent with current CERCLA cleanup standards."

June 11, 2007

PL 110-185 is signed into law. H.R. 2641 specified funding of $130 million for FUSRAP in 2008.

July 14, 2008

PL 110-416 is signed into law. H.R. 3258 specified funding of $140 million for FUSRAP in 2009. The Act specified: "Corps…initiate cleanup expeditiously for the former Sylvania nuclear fuel site in Hicksville, New York."

October 28, 2009

PL 111-85 is signed into law. H.R. 3183 specified funding of $134 million for FUSRAP in 2010.

July 22, 2010

PL 111-228 is signed into law. H.R. 3635 specified funding of $130 million for FUSRAP in 2011. The Act specified: "directs the Corps of Engineers during fiscal year 2011 to complete the Remedial Investigation/Feasibility Study for the former Sylvania nuclear fuel site at Hicksville, New York, and to proceed expeditiously to a Record of Decision, if appropriate, initiate any necessary remediation in accordance with CERCLA."

December 23, 2011

PL 112-74 is signed into law. H.R. 2354 specified funding of $109 million for FUSRAP in 2012.

June 6, 2012

H.R. 5325 specified funding of $104 million for FUSRAP in 2013.

July 10, 2013

H.R. 2609 specified funding of $104 million for FUSRAP in 2014.

January 17, 2014

PL 113-76 is signed into law. H.R. 3547 specified funding of $103.5 million for FUSRAP in FY 2015.

April 24, 2015

H.R. 2028 specified funding of $104 million for FUSRAP in FY 2016.

December 10, 2016

PL 114-254 is signed into law. It specified continued funding of $104 million for FUSRAP through April 28, 2017.

April 26, 2016

PL 114-532 is signed into law. H.R. 5055 specified funding of $103 million for FUSRAP in FY 2017.

May 5, 2017

PL 115-31 is signed into law. H.R. 244 specified funding of $112 million for FUSRAP in FY 2017.

July 17, 2017

H.R. 3266 specified funding of $118 million for FUSRAP in FY 2018.

September 21, 2018

FY 2018: $150 million to remain available until expended. (Source: https://www.congress.gov/115/plaws/publ244/PLAW-115publ244.pdf)

January 29, 2020

The FY 2019 enacted appropriations measure included $150 million for FUSRAP. (Source: https://crsreports.congress.gov/product/pdf/R/R45708).

The FY 2020 enacted appropriations measure included $200 million for FUSRAP. (Source: https://crsreports.congress.gov/product/pdf/R/R45708)

December 27, 2020

H.R. 2960 signed into law. Provides appropriations of $155 million for FUSRAP in FY 2020 until expended.

Appendix D

Excerpt from *Formerly Utilized Sites Remedial Action Program,* ER 200-1-4, August 29, 2014 (Appendix G)

APPENDIX G

Revised Mandatory Review Requirements for the Formerly Utilized Sites Remedial Action Program

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
441 G STREET NW
WASHINGTON, D.C. 20314-1000

CECW-ZA

SEP 4 2007

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Revised Mandatory Review Requirements for the Formerly Utilized Sites Remedial Action Program (FUSRAP)

1. References

a. Memorandum ASA(CW), 21 Jul 1998, Subject: Delegation of Authority for Approval and Signature of Decision Documents, Including Records of Decision (RODs) and Agreements, for the Formerly Utilized Sites Remedial Action Program (FUSRAP)

b. Memorandum HQUSACE, CECW-BA, dated 19 November 2001, Subject: Revised Delegation of Approval Authorities Under the Formerly Utilized Sites Remedial Action Program

2. The purpose of this memorandum is to advise you that a change has been made to the Mandatory Review and Approval Authority Matrix for FUSRAP. The responsibility for the mandatory legal review is now delegated to MSCs rather than the Hazardous, Toxic, and Radioactive Waste Center of Expertise (HTRW-CX). This change allows the Legal Community of Practice to utilize all of its resources while still ensuring a quality product in a timely manner. Document approval and signature authorities remain unchanged.

3. Although the responsibility for conducting the mandatory legal review is transferred from the HTRW-CX to the MSCs, the MSCs still have the option to utilize the HTRW-CX or other resources to perform the legal review as the MSC Counsel deems appropriate.

4. The attached matrix has been revised to show an "RT" for mandatory technical review, an "RL" for a mandatory legal review, and an "RP" for a mandatory policy review. The RT, RL, and RP are the mandatory review responsibility for the HTRW-CX, the MSCs, and HQ respectively.

5. I commend your effective use of the horizontal and vertical project management teams in the past and encourage you to continue this practice. I remind you that Districts must provide justification if they decline to accept significant recommendations of the HTRW-CX or HQUSACE FUSRAP teams.

6. The change in the approval matrix mandatory legal review responsibilities is effective immediately.

Encl

DON T. RILEY
Major General, US Army
Director of Civil Works

CECW-ZA

SUBJECT: Revised Mandatory Review Requirements for the Formerly Utilized Sites Remedial Action Program (FUSRAP)

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CDR, US ARMY ENGR DIV, GREAT LAKES & OHIO RIVER, ATTN:
CELRD-PDM (Church)
CDR, US ARMY ENGR DIV, MISSISSIPPI VALLEY, ATTN: CEMVD-RB-M (Sandles)
CDR, US ARMY ENGR DIV, NORTH ATLANTIC, ATTN: CENAD-MT (Orgel)

10 Aug 07

FUSRAP REVIEW AND APPROVAL AUTHORITY MATRIX

Document/Activity	MSC	HTRW-CX Technical	HTRW-CX Legal	HQ	DOE
Determination of Site Eligibility					D
Addition/Elimination of Eligible Site to/from FUSRAP	D	I	I	A	I
Determination and Designation of Vicinity Property	D, A	I	I	I	
Preliminary Assessment/Site Inspection	D, A, RL	RT	I	I	
Remedial Investigation	D, A, RL	RT	I	I	
Non-Time Critical Removal (EE/CA) Documents:					
- $5M and less	D, A, RL	RT	I		
- Over $5M	D, A, RL	RT	I	RP	
Time Critical Removal Document	D, A, RL	RT	I	I	
Feasibility Study	D, A, RL	RT	I	RP	
Proposed Plan	D, A, RL	RT	I	RP	
Record of Decision/Decision Document	D, A, RL	RT	I	RP	I
Disposal Strategy	D, A, RL	RT	I		
Land Use Implementation Plan	D,A, RL	RT	I	RP	I
Federal Facility Agreement	D, A, RL	RT	I	RP	
Declaration of Response Complete	D, A, RL	RT	I	I	I
Site Closeout Report	D, A, RL	RT	I	RP	I
No Further Action (NOFA)	D, A, RL	RT	I	RP	I
Regulatory Manifests	D, A				
Grants and Cooperative Agreements	D, A		I	I	
Operation and Maintenance (O&M) Plan	D, A, RL	RT		I	I
O&M Records/Reports:					
- First 2 Year O&M	D, A				
- Year 3 and On	I				D
- 5 Year Reviews before Transfer to DOE	D, A	RT	I	I	R
- Second 5 Year Review and On					D
Project Coordination/Transmittals to DOE	D,A	I	I	I	I

Concept: FUSRAP functions with vertical and horizontal teams. This table identifies responsibilities of vertical team members and assumes that the HQ, MSC and HTRW-CX are involved throughout the process with the district during project execution and the development of documents. The MSC may delegate the mandatory legal review to the HTRW-CX or other appropriate legal resource, but the MSC remains responsible ensuring for the legal review is accomplished and for the quality of the overall document.

Legend:
A – Approval/Signature
D – Develop/Execute
I – Information Copy
RT - Mandatory Technical Review; RL - Mandatory Legal Review; and RP: Mandatory Policy Review.
FUSRAP – Formerly Utilized Sites Remedial Action Program
MSC – Major Subordinate Command (included the Regional Integration Team and the districts)
HTRW-CX – Hazardous, Toxic and Radioactive Center of Expertise
HQ – HQUSACE
DOE – Department of Energy

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
WASHINGTON DC 20314-1000

REPLY TO ATTENTION OF

CECC-E

17 Jan 2011

MEMORANDUM FOR CENAD-OC, CELRD-OC, CEMVD-OC

SUBJECT: FUSRAP Approval Authority Matrix

The latest FUSRAP Approval Authority Matrix (Enclosure 1, dated 4 Sep 07) was changed to delegate the responsibility for Mandatory Legal Reviews to the MSCs rather than to the CX. That change was made due to a lack of counsel resources at the HTRW-OC. The memo provides that the change "allow[ed] the Legal Community of Practice to utilize all of its resources while still ensuring a quality product in a timely manner."

I retain the focus on ensuring a quality product in a timely manner, however, since that Matrix was adopted, the HTRW-CX was merged with another CX and reformed as the Environmental and Munitions Center of Expertise (EM CX) under the management of the Huntsville Center. This new CX has a new charter and substantial legal resources dedicated to it. FUSRAP is a core part of that charter. I want to ensure that we fully exploit the benefit of the expertise currently present at the fully staffed CEHNC-CX. Therefore, and consistent with the prior Approval Authority Matrix (Enclosure 2, dated 19 Nov 2001), while the responsibility for the Mandatory Legal Reviews remains with the MSCs per the 2007 matrix, CEHNC-CX-OC should review all FUSRAP documents prior to HQ Legal review and MSCs should resolve all comments prior to that HQ review.

Divisions are to ensure that adequate funds are provided to the EM CX to accommodate this review and this memorandum has been coordinated with both CEMP-IS (Ms. D'Arcy) and CECW-IN (Ms. DaCosta-Chisley). Although this review is not focused on monetary considerations, I note that review by the EM CX will result in greater efficiency by ensuring all FUSRAP documents are reviewed by the same lawyer.

I can be reached at (202) 761-8536 for questions and/or comments.

Chris Carey

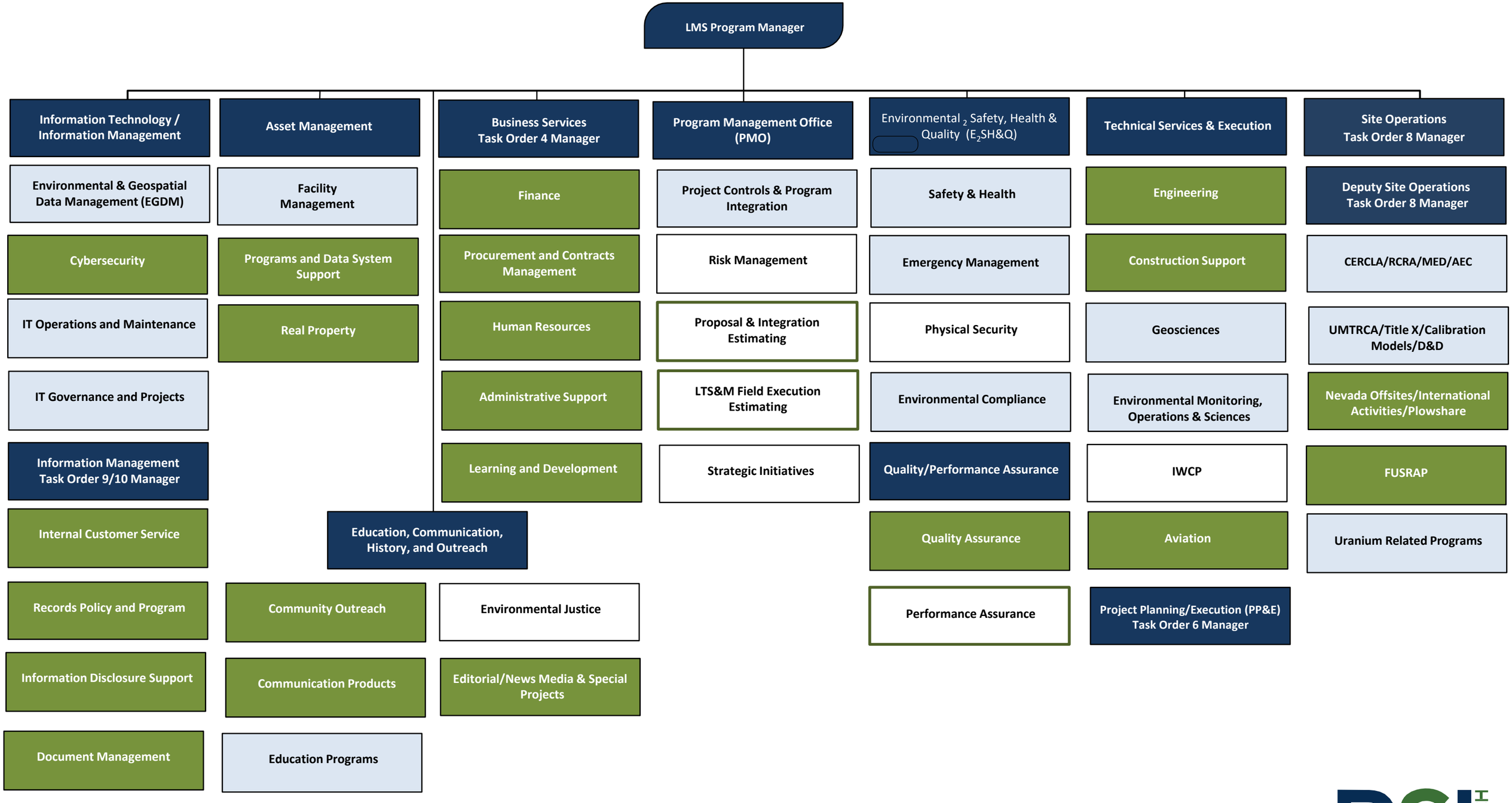
Christopher Carey
Assistant Counsel for Law and
Regulatory Programs

Enclosure
As stated

Cc:
CEMP-IS (Ms. D'Arcy)
CECW-IN (Ms. DaCosta-Chisley)
CEHNC-CX-OC (Mr. Roberts)

Appendix E

LMS Organization Chart



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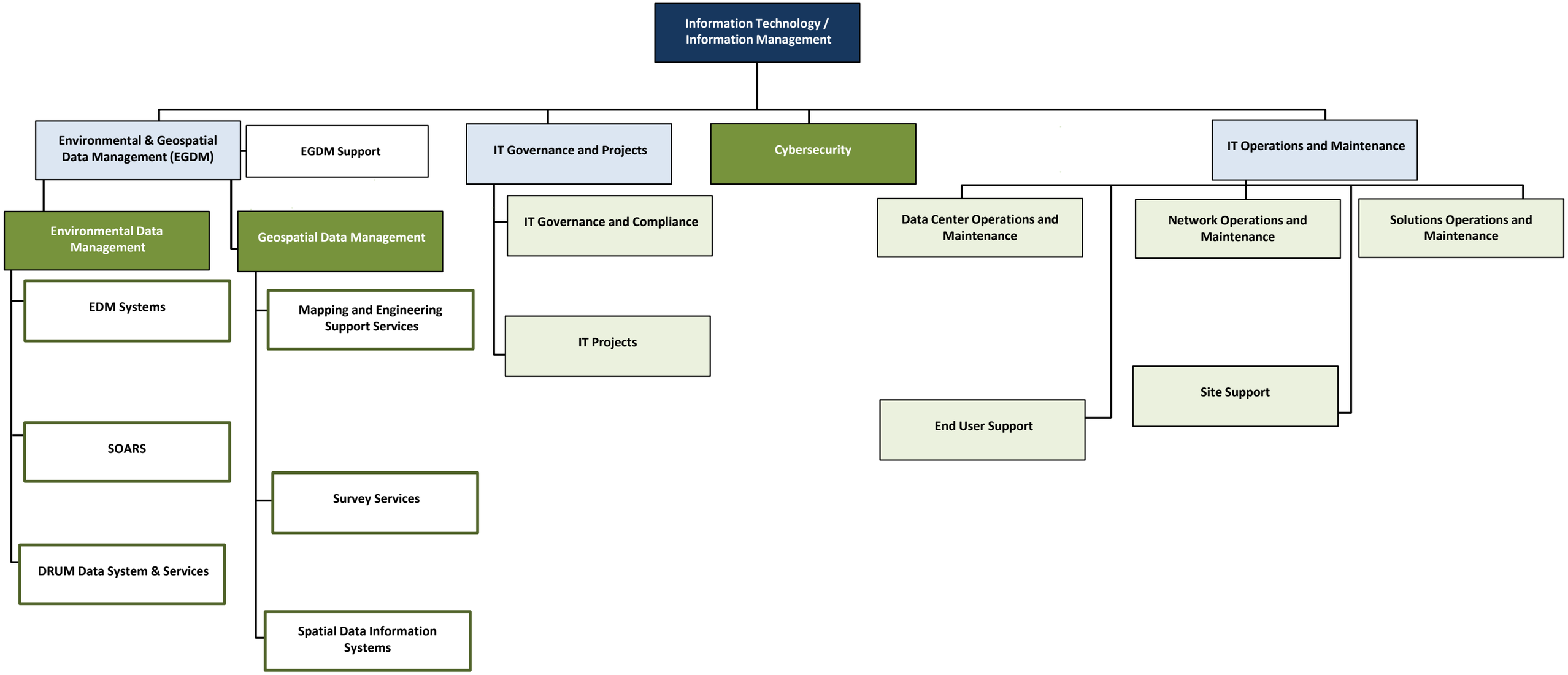

LEGEND

Program Manager / Senior Staff | Department Manager | Manager | Supervisor | Lead | (S) Subcontractor | (M) Matrixed | New to LMS Contract^ | Internal Transfer*

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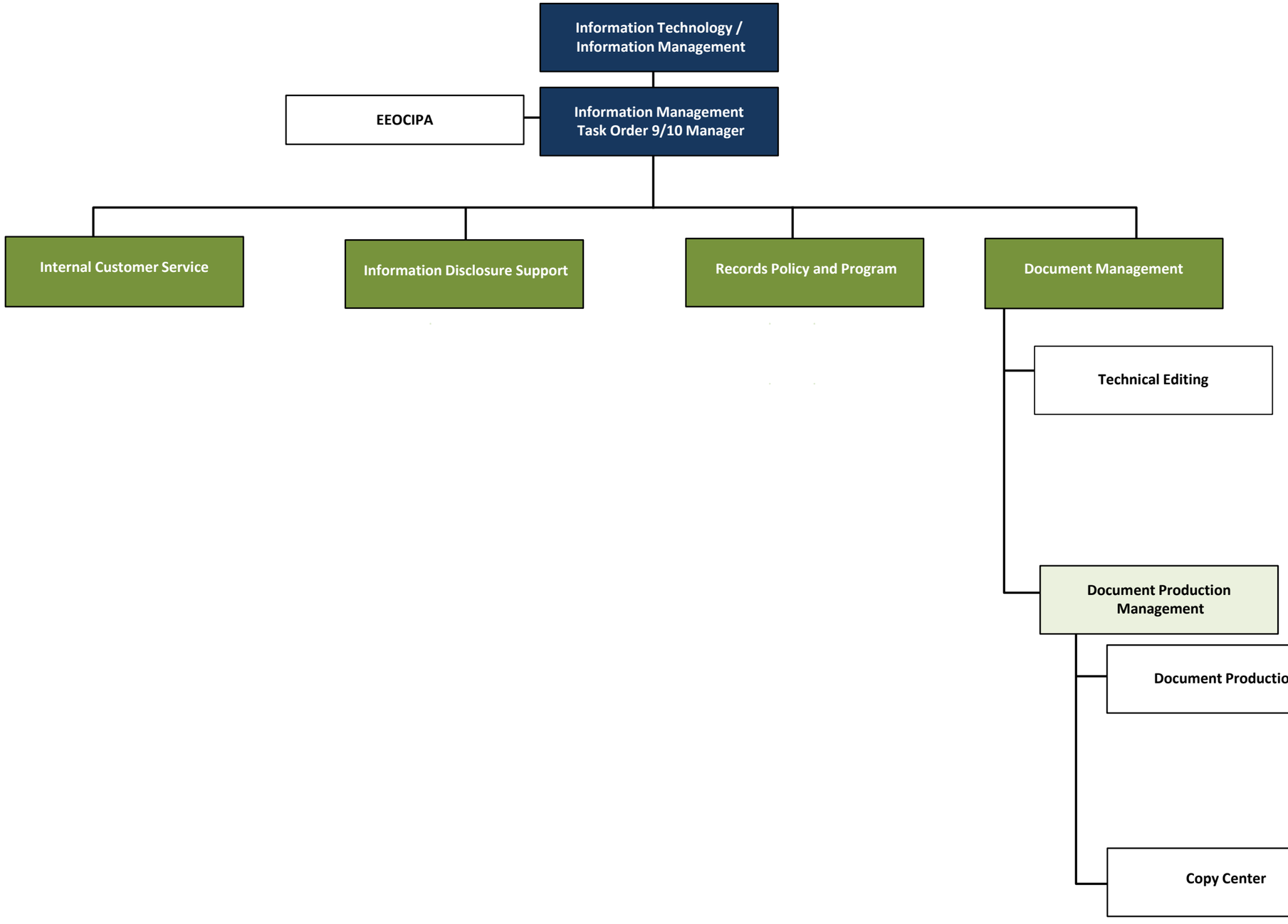

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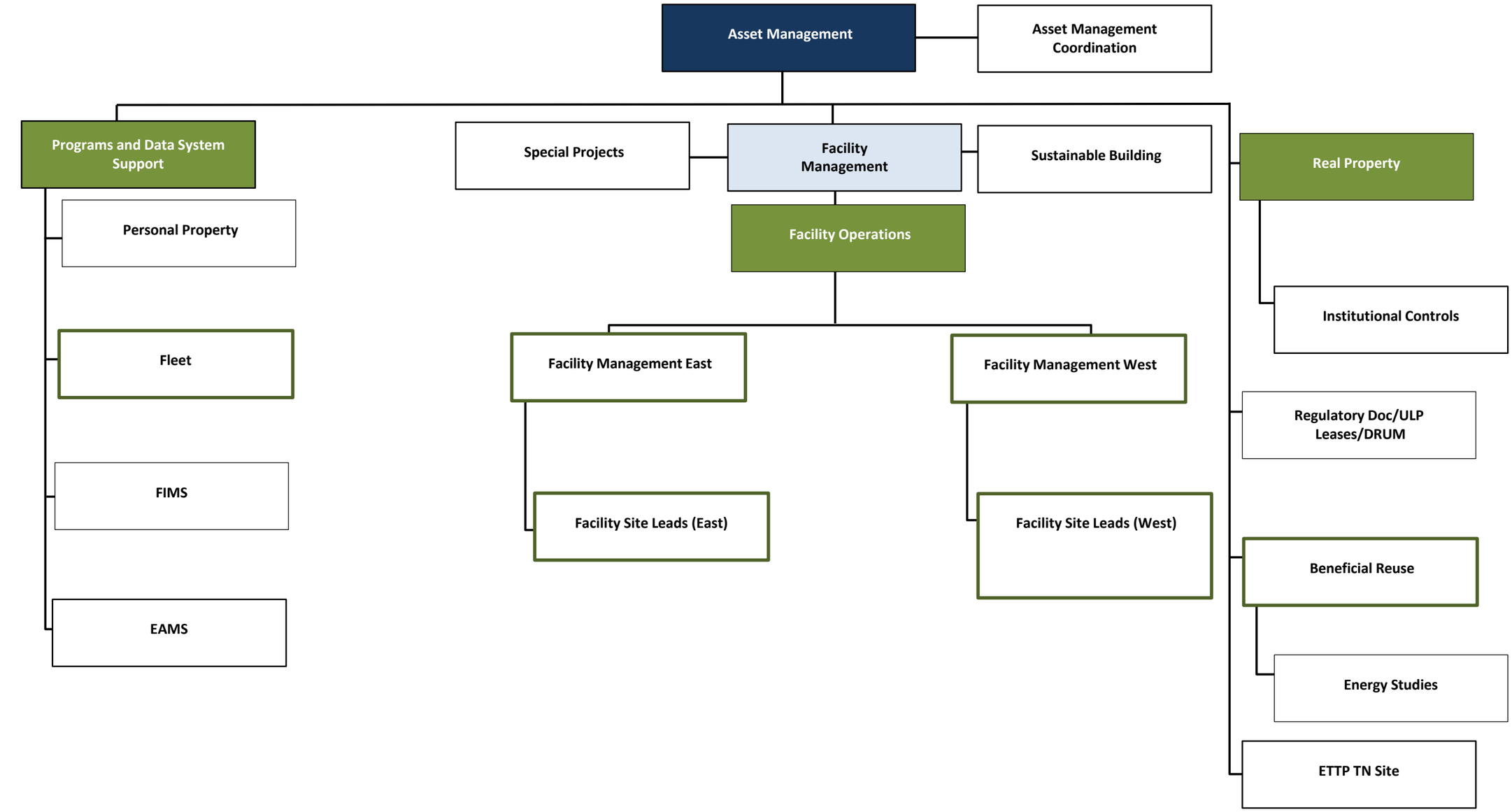

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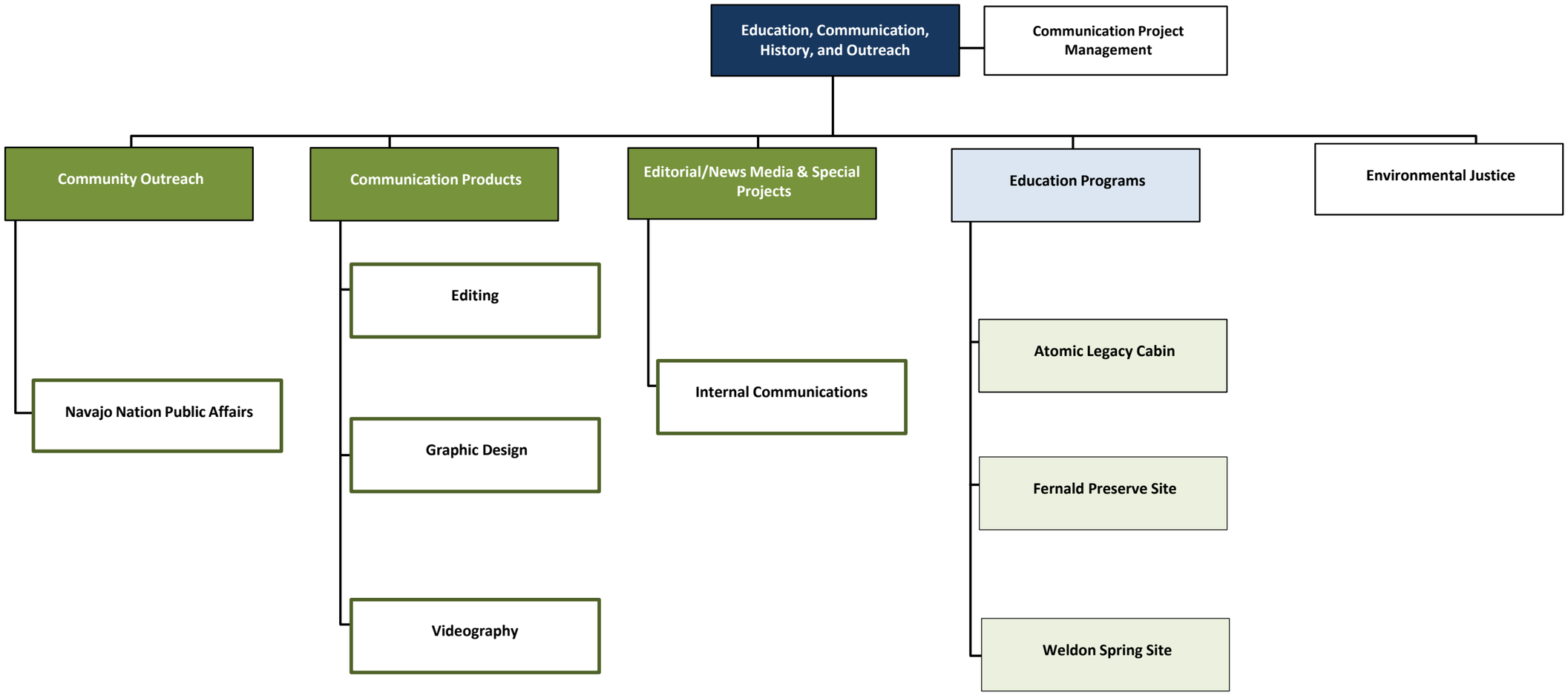

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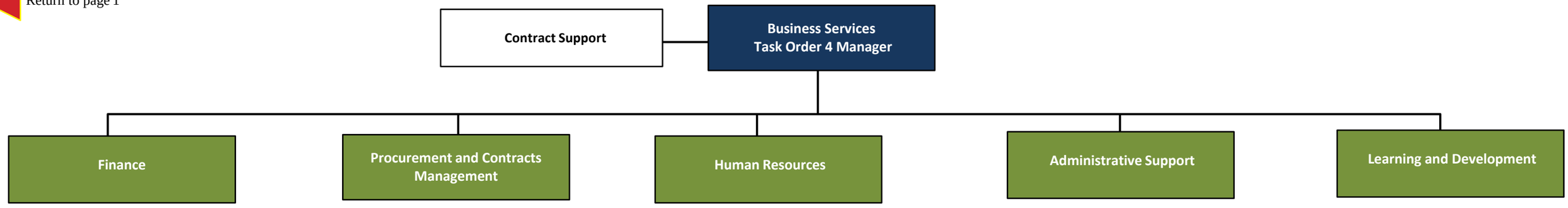

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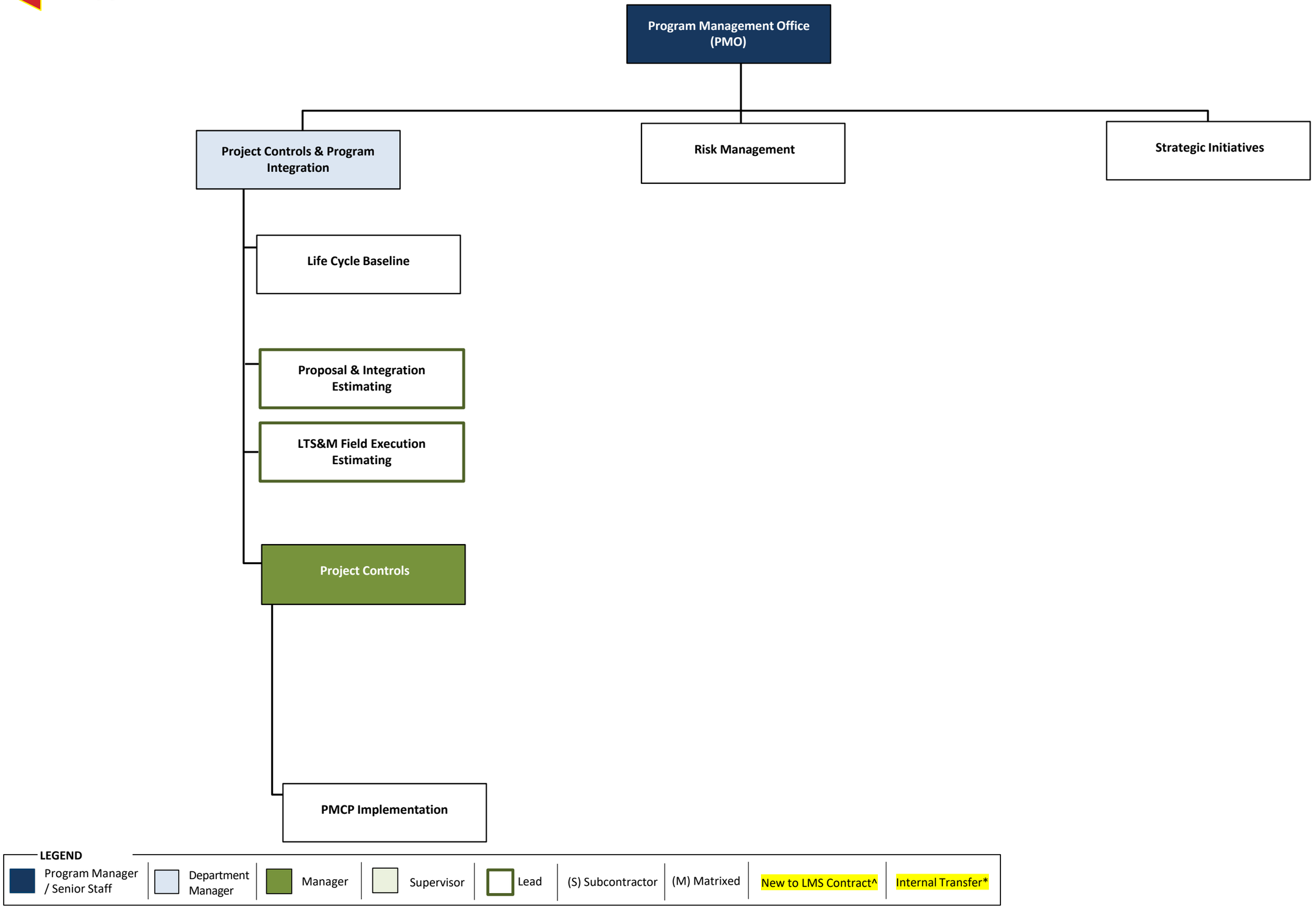

Page 7 – **RSI Team Organization Chart**

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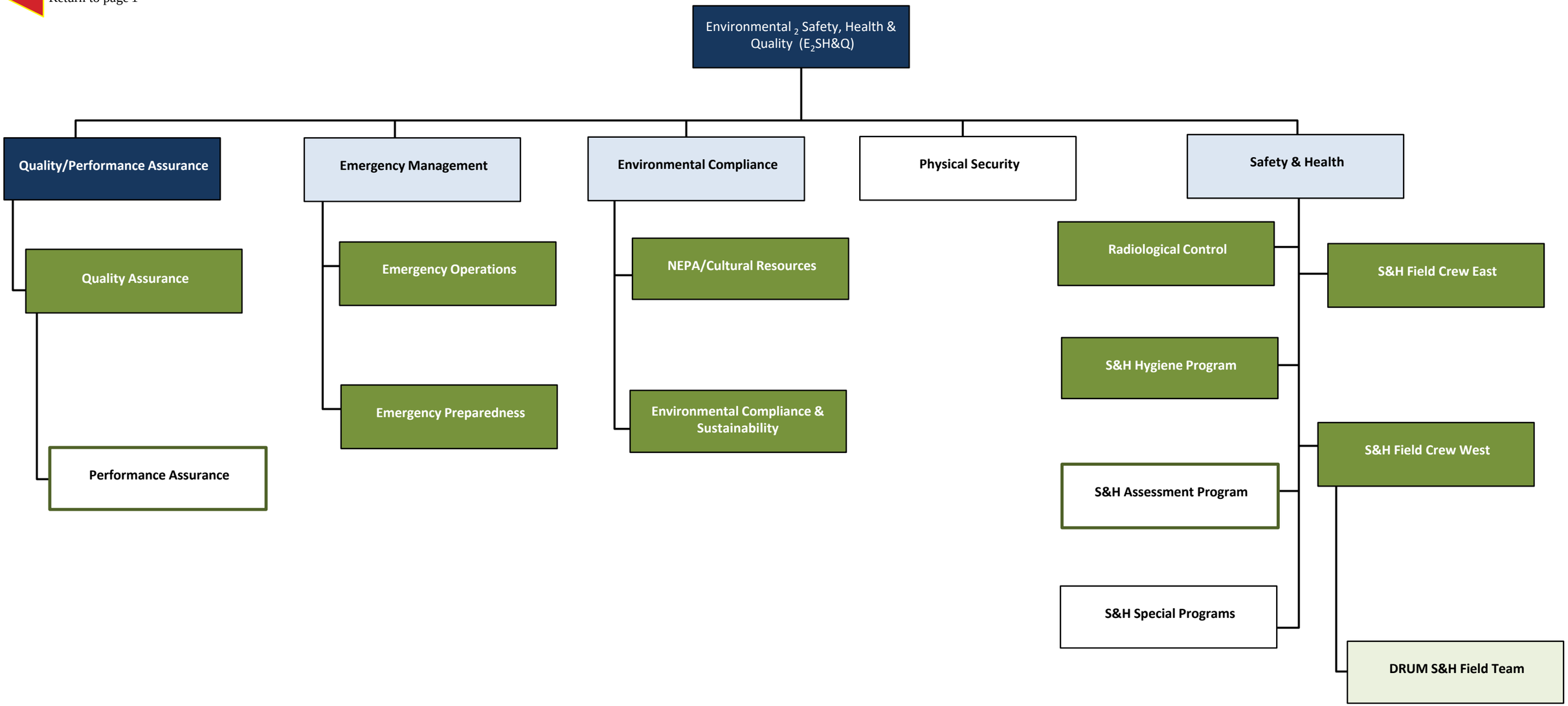

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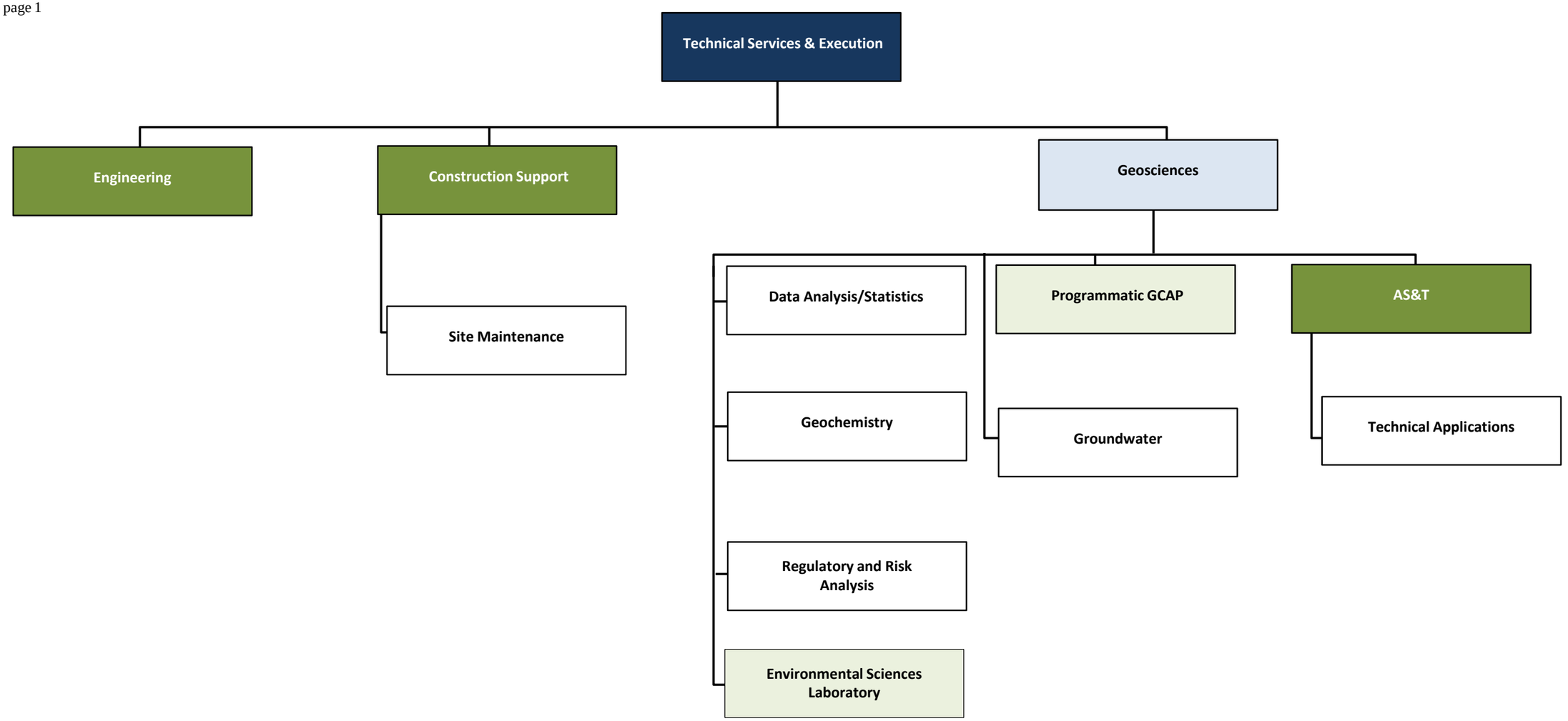

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Program Manager / Senior Staff | Department Manager | Manager | Supervisor | Lead | (S) Subcontractor | (M) Matrixed | New to LMS Contract^ | Internal Transfer*

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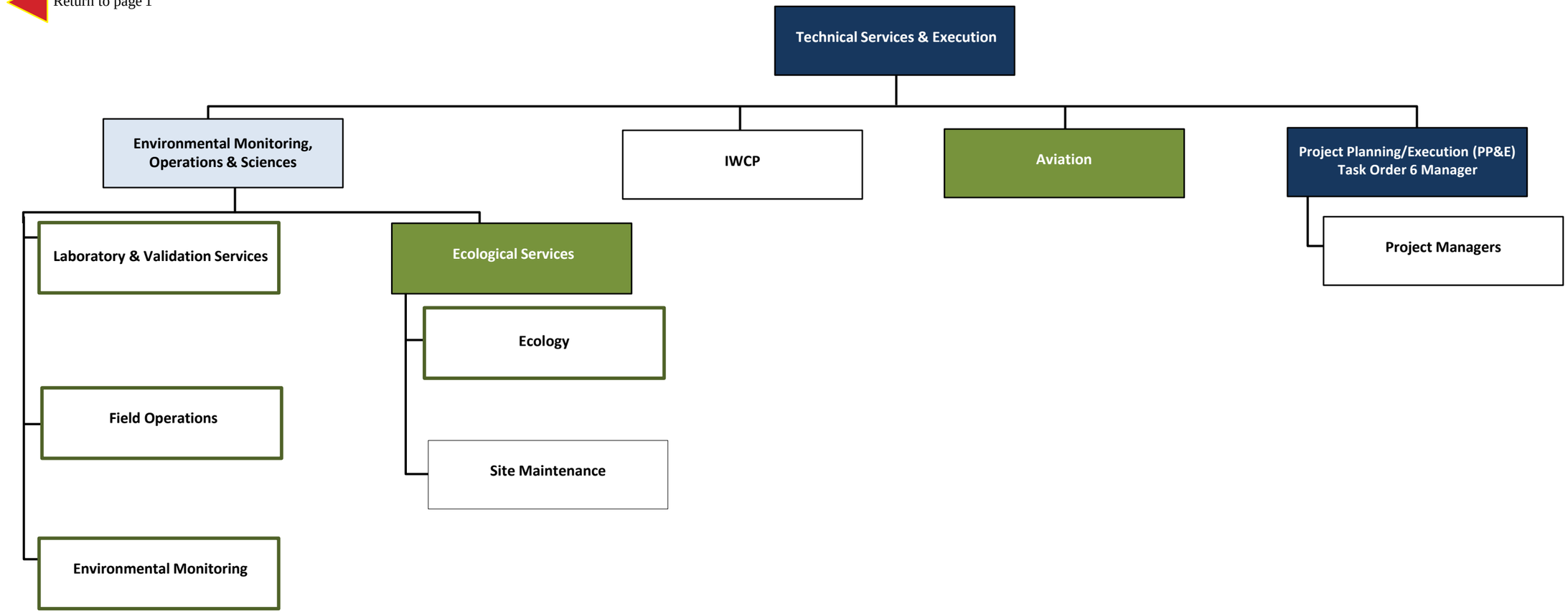

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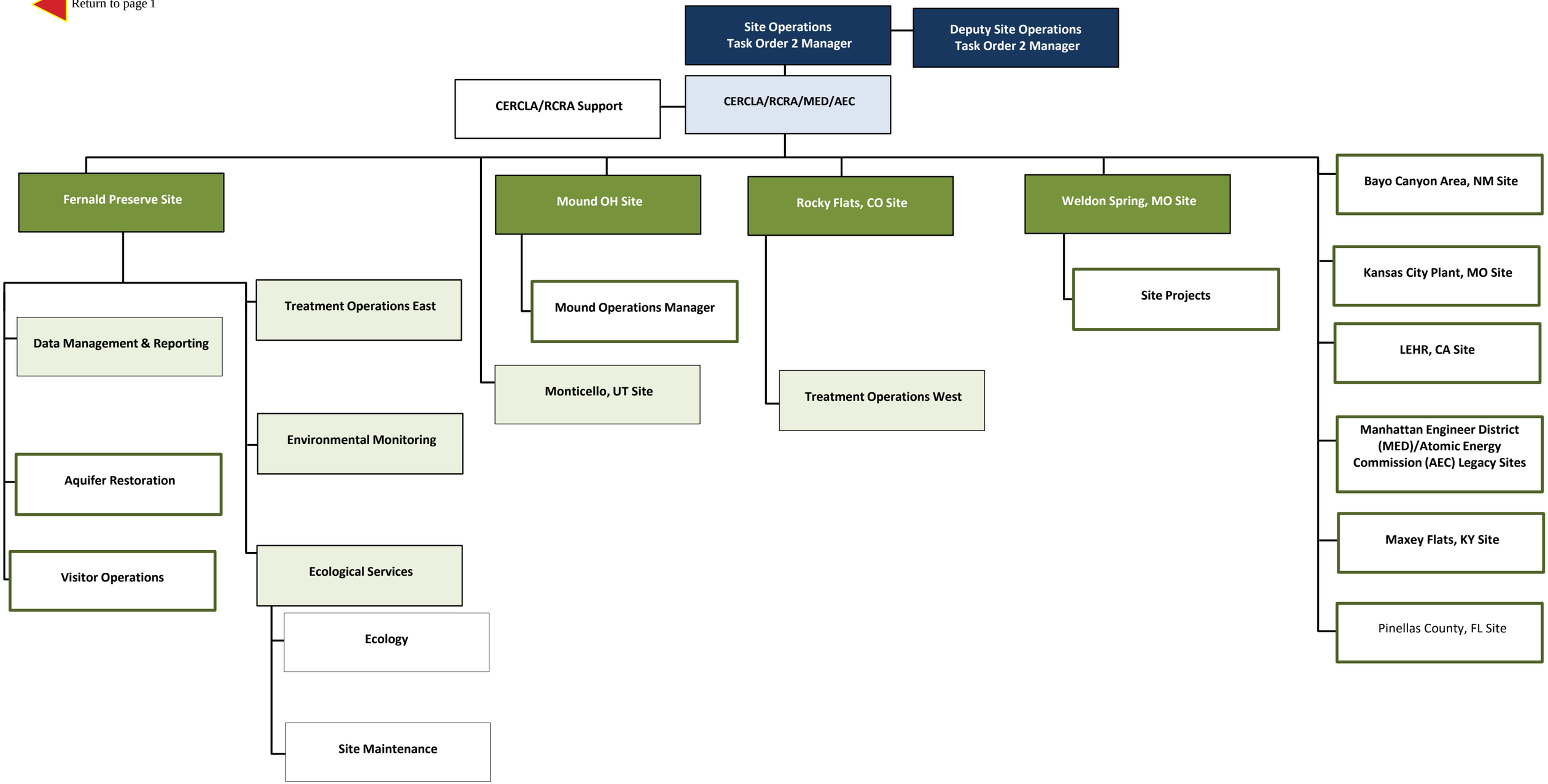

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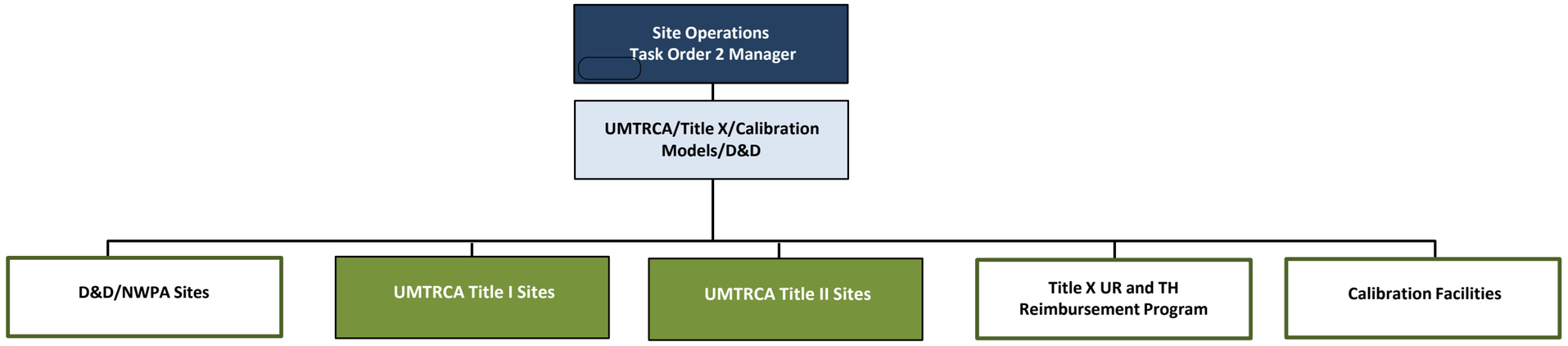

LEGEND

Program Manager / Senior Staff | Department Manager | Manager | Supervisor | Lead | (S) Subcontractor | (M) Matrixed | New to LMS Contract^ | Internal Transfer*

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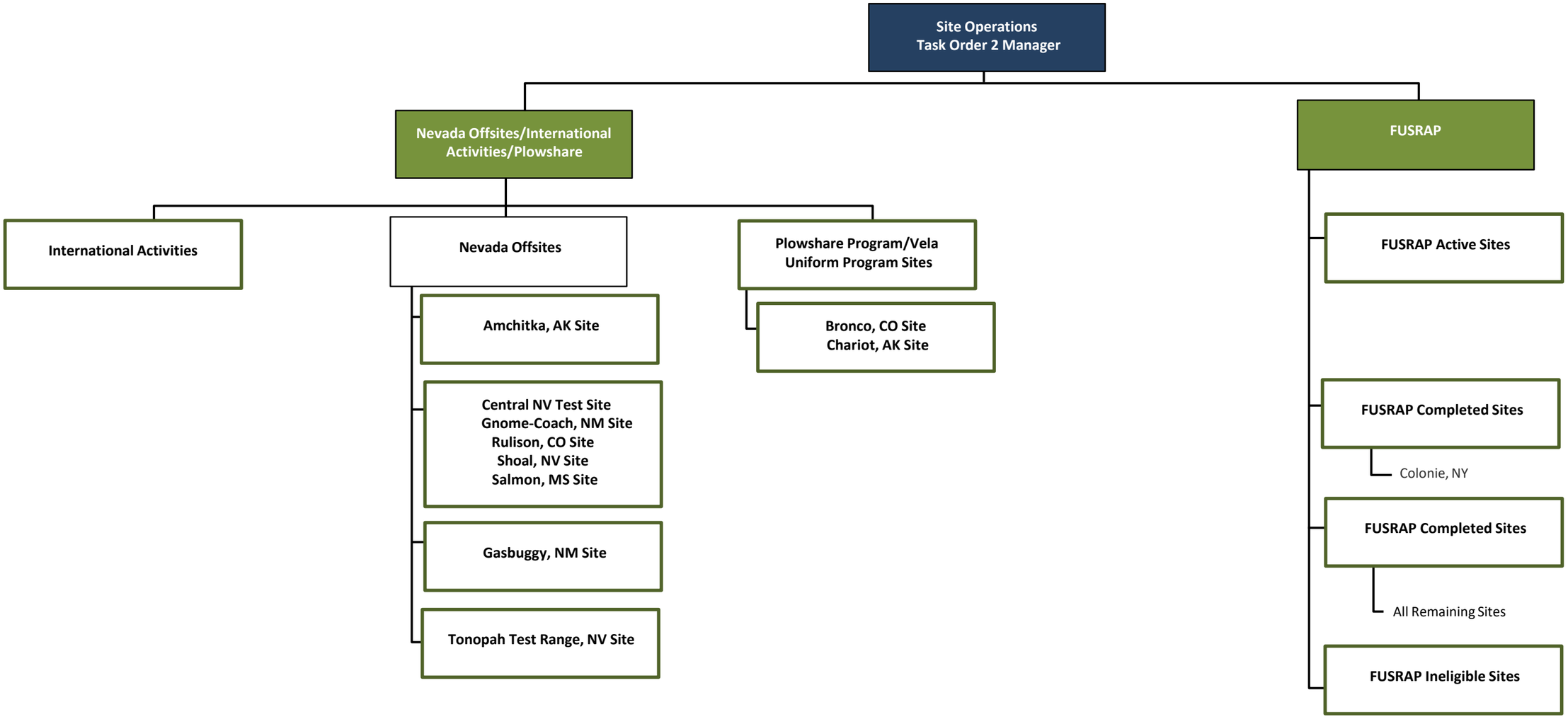

LEGEND

Program Manager / Senior Staff | Department Manager | Manager | Supervisor | Lead | (S) Subcontractor | (M) Matrixed | New to LMS Contract^ | Internal Transfer*

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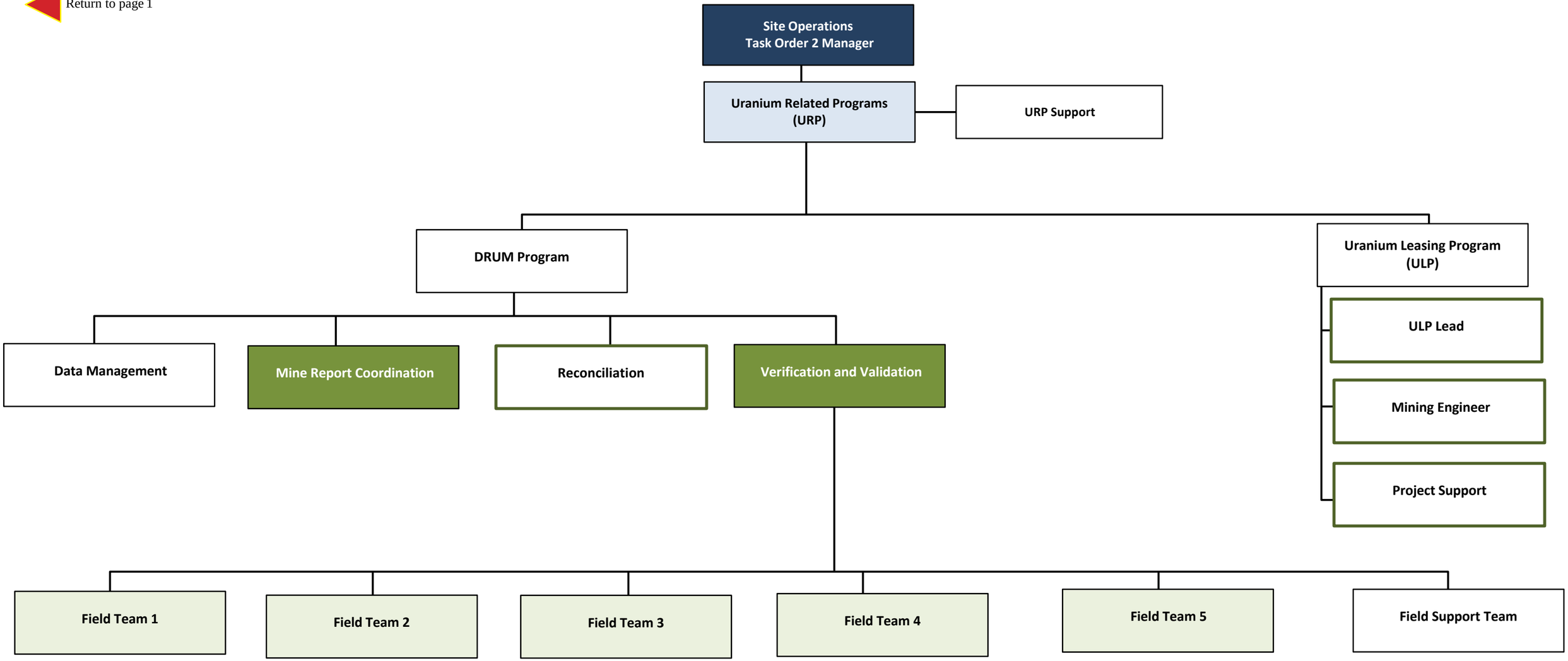

LEGEND

Program Manager / Senior Staff | Department Manager | Manager | Supervisor | Lead | (S) Subcontractor | (M) Matrixed | New to LMS Contract^ | Internal Transfer*

In Partnership with Amentum and TFE

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Legend Definitions

Program Manager:
Ultimate authority on the LMS contract and is fully accountable for contract performance and has the complete authority to execute the contract and commit resources.

Senior Staff:
Can report directly to the PM or another manager. Senior staff members are a part of the senior leadership team.

Department Manager:
Manage employees, supervisors, leads, and managers

Manager:
Manage employees, leads, and supervisors

Supervisor:
Manage employees and leads

Lead:
Subject Matter Expert for the team, assists supervisor, manager, or department manager with information flow to and from the team. Does not have supervisory or managerial responsibilities.

Appendix F

Long-Term Periodic Review Instructions

F1. Purpose

Long-term stewardship (LTS) requirements for some FUSRAP completed sites may include performing periodic evaluations of site protectiveness, which are referred to as long-term periodic reviews (LTPRs) by LM.

LTPRs, known as CERCLA Five-Year Review (FYR) reports for National Priorities List (NPL) sites, are prepared pursuant to CERCLA Section 121, consistent with the National Contingency Plan (NCP) found at Title 40 *Code of Federal Regulations* Section 300.430 (f)(4)(ii) (40 CFR 300.430[f][4][ii]). These reviews are required after CERCLA corrective actions where hazardous substances remain above levels that allow for unlimited use and unrestricted exposure (UU/UE). The CERCLA requirement is stated in Title 42 *United States Code* Section 9621(c) (42 USC 9621[c]). The term "hazardous substance" is defined in CERCLA Section 101(14).

These reviews are required every 5 years for as long as residual contamination remains above UU/UE conditions. Requirements for FYRs are typically documented in the Record of Decision for a site.

The purpose of the reviews is to evaluate the implementation and performance of the remedy to determine whether the remedy will continue to be protective of human health and the environment.

F2. LTPR Scope

FYRs provide an opportunity to evaluate the implementation and performance of a remedy to determine whether it remains protective of human health and the environment.

The FYR process integrates information taken from decision documents and operational data with the experiences of those responsible for and affected by actions at the site. There are six components to the FYR process: (1) community involvement and notification, (2) document review, (3) data review and analysis, (4) site inspection, (5) interviews and (6) protectiveness determination. Together, the reviewer uses these components to assess the remedy's performance, and, ultimately, to determine the protectiveness of that remedy.

The LMS site lead has overall responsibility for the LTPR scope, schedule, and budget. Others involved will include the program manager; site lead; supporting geologists, scientists, and engineers; Geographic Information Systems support, the appropriate subject matter experts (SMEs) (e.g., risk assessor); and Document Management.

It is expected that the SME(s) should remain on the project team and appropriately engaged throughout the lifecycle of the document for technical consistency.

Agency involvement in the FYR process will vary from site to site.

FUSRAP completed sites that are on the NPL will require U.S. Environmental Protection Agency (EPA) review of the LTPR.

FUSRAP completed sites that are **not** on the NPL will not require EPA review. The state regulatory agency may or may not review the LTPR. The state agency should be consulted before starting the process to determine involvement.

- Meetings:
  - A kickoff meeting should be held with the LM/LMS team to review the LTPR schedule and document outline, confirm appropriate SMEs have been included, and review process are discussed. Additional topics should be discussed as appropriate.
  - During preparation of the draft LTPR, periodic status meetings should be conducted to ensure the document required scope is captured and remains on schedule.
  - During or following regulatory agency review of the draft final LTPR, the LM/LMS project team should meet with the regulatory agency to discuss any major comments or issues before responding to comments and preparing the final LTPR.
- The *Draft Final Long-Term Periodic Review Report, Colonie, New York Site* (DOE 2023), can be used as a template. A public notice is required for the LTPR. The LM/LMS project team will decide the medium for posting the public notice. As an example, for the FUSRAP Colonie, New York, Site, public notices were published in a newspaper for record. USACE has started to post notices on webpages only; for example, the first FYR for the Deepwater, New Jersey, Site is only posted online.
- Interview(s) have typically been conducted by the regulator, but other stakeholders should be considered, including the site owner, LMS site lead, and LM site manager.
- A physical inspection of the site is expected for preparation of the LTPR, which may coincide with other onsite tasks.
- LTPR Versions:
  - Draft, draft final, and final versions of the LTPR are typical.
  - LM comments will be addressed between the draft and draft final versions and can be accomplished using the track changes and comment features in Microsoft Word.
  - Regulator comments are addressed between the draft final and final versions. A formal response to the comment matrix (e.g., table or document) should be used for this process.
- LTPR Review Process:
  - Each version of the deliverable to be submitted to LM should be adequately reviewed from a technical, quality control, and editorial perspective as if the document is being submitted to an outside party.
  - All data and calculations generated for the report to include tables, referenced data in text, risk calculations, and figures should undergo a technical and quality assurance/quality control (QA/QC) review during preparation of the draft by LMS personnel other than the person or people who generated or input the information.
  - All technical interpretations, recommendations, and conclusions generated for the report should undergo a technical review by the appropriate SME.

— The following reviewers and sequence should be followed for the draft version of the LTPR.
  - LMS site lead review (if not the author)
  - Technical or SME review
  - QA/QC review
  - Editorial review
  - LM site manager review
  - Program manager review
— The draft final and final versions of the LTPR should be subject to reviews as determined by the LMS site lead based on the complexity and extent of the required revisions.

F3. LTPR Schedule

- A LTPR is typically budgeted for 6 to 12 months, depending on the complexity of the site. An example LTPR schedule is provided in Table F-1.
- A minimum of 30-day review period or longer should be planned for both LM and the regulator.

F4. LTPR Budget

- Personnel should be included from the following LMS functional groups: Applied Studies and Technology; Education, Communications, History, and Outreach (ECHO); Document Management; Environmental Compliance; and Asset Management.

F5. Selected Guidance

The following guidance should be reviewed in preparation for the LTPR.

DOE (U.S. Department of Energy), 2023. *Draft Final Long-Term Periodic Review Report, Colonie, New York Site*, LMS/CLN/40813, Office of Legacy Management, June.

EPA (U.S. Environmental Protection Agency), 2001. *Comprehensive Five-Year Review Guidance OSWER Directive 9355.7-03B-P*, June.

EPA (U.S. Environmental Protection Agency), 2011. *Recommended Evaluation of Institutional Controls: Supplement to the "Comprehensive Five-Year Review Guidance,"* OSWER Directive 9355.7-18, September.

EPA (U.S. Environmental Protection Agency), 2016. *Five-Year Review Recommended Template*, OLEM 9200.0-89, January.

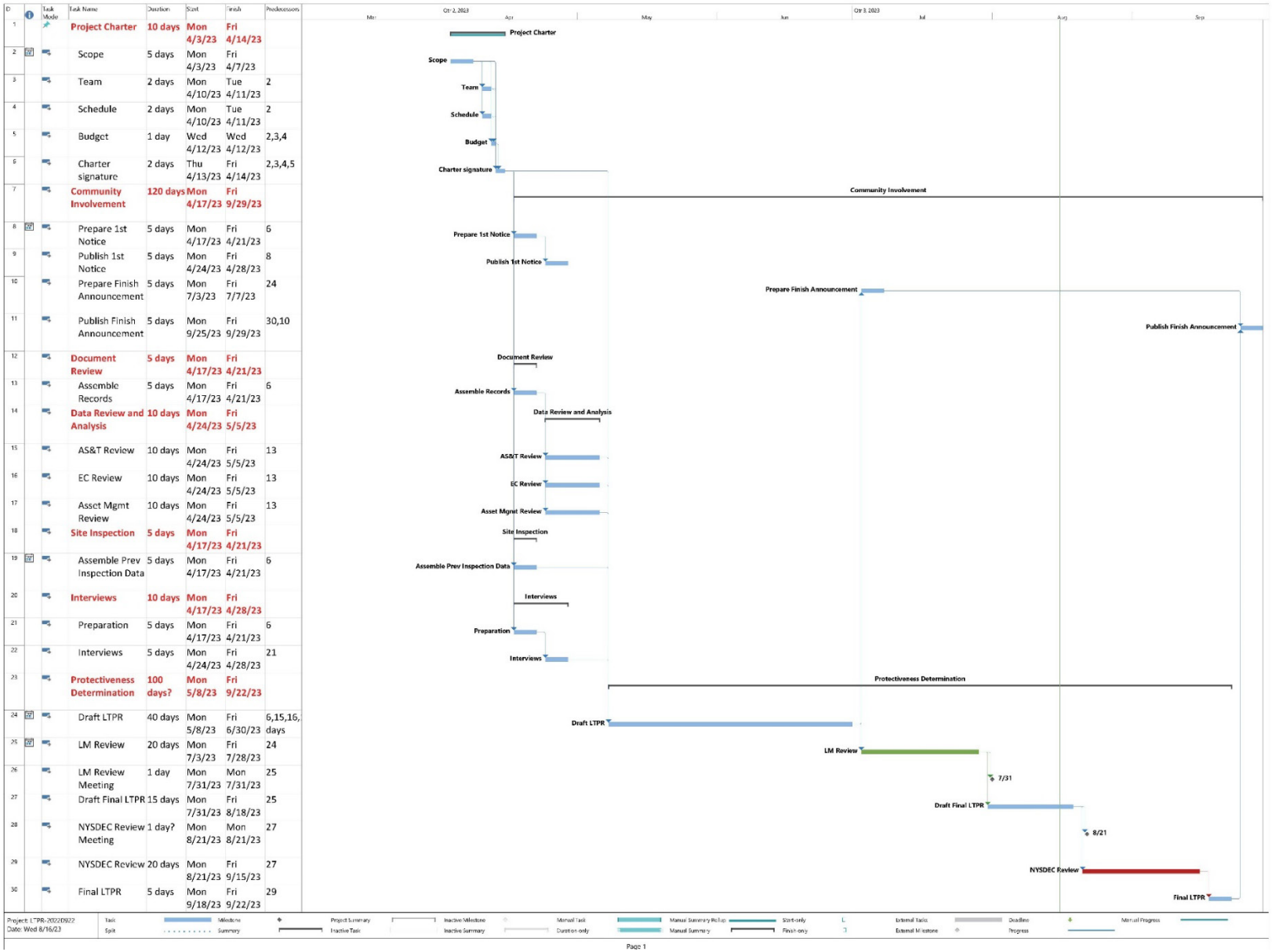
USACE (U.S. Army Corps of Engineers), 2014. *Formerly Utilized Sites Remedial Action Program*, Engineer Regulation (ER) 200-1-4, August 2014.

USACE (U.S. Army Corps of Engineers), 2018. *First Five-Year Review Report for Colonie FUSRAP Site Groundwater Operable Unit Town of Colonie Albany County, New York*, October.

USACE (U.S. Army Corps of Engineers), 2020. *Formerly Utilized Sites Remedial Action Program (FUSRAP) Five-Year Review Policy*, June.

Table F-1. Example LTPR Schedule (note: regulatory review is site-specific)

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors
1		**Project Charter**	**10 days**	**Mon 4/3/23**	**Fri 4/14/23**	
2		Scope	5 days	Mon 4/3/23	Fri 4/7/23	
3		Team	2 days	Mon 4/10/23	Tue 4/11/23	2
4		Schedule	2 days	Mon 4/10/23	Tue 4/11/23	2
5		Budget	1 day	Wed 4/12/23	Wed 4/12/23	2,3,4
6		Charter signature	2 days	Thu 4/13/23	Fri 4/14/23	2,3,4,5
7		**Community Involvement**	**120 days**	**Mon 4/17/23**	**Fri 9/29/23**	
8		Prepare 1st Notice	5 days	Mon 4/17/23	Fri 4/21/23	6
9		Publish 1st Notice	5 days	Mon 4/24/23	Fri 4/28/23	8
10		Prepare Finish Announcement	5 days	Mon 7/3/23	Fri 7/7/23	24
11		Publish Finish Announcement	5 days	Mon 9/25/23	Fri 9/29/23	30,10
12		**Document Review**	**5 days**	**Mon 4/17/23**	**Fri 4/21/23**	
13		Assemble Records	5 days	Mon 4/17/23	Fri 4/21/23	6
14		**Data Review and Analysis**	**10 days**	**Mon 4/24/23**	**Fri 5/5/23**	
15		AS&T Review	10 days	Mon 4/24/23	Fri 5/5/23	13
16		EC Review	10 days	Mon 4/24/23	Fri 5/5/23	13
17		Asset Mgmt Review	10 days	Mon 4/24/23	Fri 5/5/23	13
18		**Site Inspection**	**5 days**	**Mon 4/17/23**	**Fri 4/21/23**	
19		Assemble Prev Inspection Data	5 days	Mon 4/17/23	Fri 4/21/23	6
20		**Interviews**	**10 days**	**Mon 4/17/23**	**Fri 4/28/23**	
21		Preparation	5 days	Mon 4/17/23	Fri 4/21/23	6
22		Interviews	5 days	Mon 4/24/23	Fri 4/28/23	21
23		**Protectiveness Determination**	**100 days?**	**Mon 5/8/23**	**Fri 9/22/23**	
24		Draft LTPR	40 days	Mon 5/8/23	Fri 6/30/23	6,15,16, days
25		LM Review	20 days	Mon 7/3/23	Fri 7/28/23	24
26		LM Review Meeting	1 day	Mon 7/31/23	Mon 7/31/23	25
27		Draft Final LTPR	15 days	Mon 7/31/23	Fri 8/18/23	25
28		NYSDEC Review Meeting	1 day?	Mon 8/21/23	Mon 8/21/23	27
29		NYSDEC Review	20 days	Mon 8/21/23	Fri 9/15/23	27
30		Final LTPR	5 days	Mon 9/18/23	Fri 9/22/23	29



Appendix G

FUSRAP RACI Charts

RACI Matrix - Response to External FUSRAP Inquiries											
	LM Team					**LMS Team**					
Role / **Project Deliverable (or Activity)**	LM ECHO Team	LM RCRA/CERCLA/ FUSRAP Team leader	LM FUSRAP Program Manager	LM FUSRAP Site or Subtask Managers	Other LM teams and Subject Matter Experts	Projects and Program Manager	LMS Stakeholder Engagement Manager	LMS FUSRAP Manager	LMS FUSRAP Site Leads	LMS Public Affairs Staff	Assigned Program Services Personnel and Subject Matter Experts
Tracking external inquiries - regardless of how received, all inquiries sent to FUSRAPinfo@lm.doe.gov											
Add to tracking log			**I**	**I**			**A**			**R**	
Notify LM FUSRAP Site Manager				**I**			**I**	**A**	**I**	**R**	
Determine appropriate response pathway (Cases 1 through 3)		**C**	**C**	**C**			**A**	**I**	**I**	**R**	
Submit to records following resolution			**I**	**I**			**A**	**I**	**I**	**R**	
Case 1: Inquiry response can be addressed by LMS Public Affairs Personnel referring to publically available information											
Respond to inquiry			**I**	**I**			**A**	**I**	**C**	**R**	**C**
Case 2: Inquiry requires response by LM Personnel											
LM and LMS collaborate to draft response		**I**	**C**	**C**	**C**		**A**	**C**	**C**	**R**	**C**
Respond to inquiry		**C**	**A**	**R**			**I**	**I**	**I**	**I**	
Case 3: Inquiry requires response by LM ECHO Team or other authority											
Notify LM Office of the Director and Notiify LM ECHO Team	**I**	**C**	**R/A**	**I**			**I**	**I**	**I**	**I**	**I**
LM and LMS collaborate to draft response		**C**	**C**	**C**	**C**		**A**	**C**	**C**	**R**	**C**
Send response to LM ECHO Team or other authority for response to inquiry		**C**	**R/A**	**C**	**I**		**I**	**I**	**I**	**I**	
Respond to inquiry	**R/A**	**I**	**I**	**I**	**I**		**I**	**I**	**I**	**I**	

RACI represents: R - Responsible, A - Accountable, C - Consulted, and I - Informed

RACI Definitions:

Responsible = person or role responsible for completing the work; only one "R" may appear per row
Accountable = person or role ultimately accountable for the processes or tasks being completed appropriately; only one "A" may appear per row
Consulted = person or role whose subject matter expertise is required for input or review in order to complete the item
Informed = person or role that is kept informed of the status of item completion
ECHO = Education, Communication, History, and Outreach

RACI Matrix - FUSRAP Programmatic Document Change Control								
	LM Team				**LMS Team**			
Role / **Project Deliverable (or Activity)**	LM RCRA/CERCLA/ FUSRAP Team leader	LM FUSRAP Program Manager	LM FUSRAP Site or Subtask Managers	Other LM teams and Subject Matter Experts	Projects and Program Manager	LMS FUSRAP Manager	LMS FUSRAP Site Leads	Assigned Mission Services Personnel and Subject Matter Experts
Initiating								
Identify need for revision to programmatic document	**I**	**C**	**C**	**I**	**C**	**R/A**	**C**	**C**
Review project scope		**I**	**I**		**C**	**R/A**	**C**	**C**
Initiate task order change (TOC) procedure if necessary - leads to separate process	**I**	**I**	**I**		**C**	**R/A**	**C**	**C**
Schedule document revision		**I**	**I**			**R/A**	**C**	**C**
Planning								
Assign responsible individual for document change	**I**	**C/I**	**C/I**			**R/A**	**C**	**C**
Review scope, schedule, and resource needs		**I**	**I**		**I**	**A**	**R**	**C**
Identify milestones and key steps		**I**	**I**		**I**	**A**	**R**	**C**
Executing								
Revise document as desired		**I**	**I**	**I**	**I**	**A**	**R**	**R**
Report work activity status		**I**	**I**	**I**	**I**	**A**	**R**	**R**
Monitoring and Controlling								
Perform oversight assessments		**A**	**R**	**C**	**I**	**I**	**I**	
Evaluate project progress	**I**	**A**	**R**	**C**	**I**	**I**	**I**	
Closing								
Complete document revision	**I**	**I**	**I**		**C**	**A**	**R**	**C**
Approve/ reject document revision	**C**	**A**	**R**	**C**		**I**	**I**	**I**
Address followup actions as necessary		**I**	**I**		**C**	**R/A**	**C**	**C**

RACI represents: R - Responsible, A - Accountable, C - Consulted, and I - Informed

RACI Definitions:

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Consulted = person or role whose subject matter expertise is required for input or review in order to complete the item
Informed = person or role that is kept informed of the status of item completion

RACI Matrix - New FUSRAP Activities (within contracted scope)								
	LM Team				**LMS Team**			
Role / **Project Deliverable (or Activity)**	LM RCRA/CERCLA/ FUSRAP Team leader	LM FUSRAP Program Manager	LM FUSRAP Site or Subtask Managers	Other LM teams and Subject Matter Experts	Projects and Program Manager	LMS FUSRAP Manager	LMS FUSRAP Site Leads	Assigned Mission Services Personnel and Subject Matter Experts
Initiating								
Identify need for work activity		I	I		C	R/A	C	C
Review project scope and budget		I	I		C	R/A	C	C
Initiate task order change (TOC) procedure if necessary - leads to separate process	I	I	I		C	R/A	C	C
Planning								
Assign responsible individual for work	I	C/I	C/I			R/A	C	C
Review activity scope, schedule, and resource needs		I	I		I	A	R	C
Identify milestones and key steps		I	I		I	A	R	C
Executing								
Execute work activity		I	I	I	I	A	R	C
Report work activity status		I	I	I	I	A	R	C
Monitoring and Controlling								
Perform oversight assessments		A	R	C	I	I	I	
Evaluate project progress	I	A	R	C	I	I	I	
Closing								
Complete final work product	I	I	I		C	A	R	C
Approve/ reject work product	C	A	R	C		I	I	I
Address followup actions as necessary		I	I		C	R/A	C	C

RACI represents: R - Responsible, A - Accountable, C - Consulted, and I - Informed

RACI Definitions:

Responsible = person or role responsible for completing the work; only one "R" may appear per row
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