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

April 2018

U.S. DEPARTMENT OF ENERGY | Legacy Management

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

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Abbreviations

AEC	U.S. Atomic Energy Commission
AIM	Archives and Information Management
AR	Administrative Record
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
DOE	U.S. Department of Energy
EM	Office of Environmental Management
EO	Executive Order
EQuIS	Environmental Quality Information System
ERDA	Energy Research and Development Administration
ERKS	electronic recordkeeping system
EWDAA	Energy and Water Development Appropriation Act
FDIS	FUSRAP Document Information System
FOIA	Freedom of Information Act
FUSRAP	Formerly Utilized Sites Remedial Action Program
FY	fiscal year
GEMS	Geospatial Environmental Mapping System
GIS	geographic information system
IC	institutional control
LM	Office of Legacy Management
LMS	Legacy Management Support
LOA	letter of agreement
LTS&M	long-term surveillance and maintenance
MED	Manhattan Engineer District
MOU	memorandum of understanding
MSL	Master Site List

NARA	National Archives and Records Administration
NEPA	National Environmental Policy Act
O&M	operations and maintenance
PEMP	Performance Evaluation and Management Plan
PMB	performance management baseline
QA	quality assurance
RACI	Responsible, Accountable, Consulted, Informed
RAM	Responsibility Assignment Matrix
RCRA	Resource Conservation and Recovery Act
ROD	Record of Decision
SME	subject matter expert
SOW	statement of work
TA	task assignment
UMTRCA	Uranium Mill Tailings Radiation Control Act
USACE	U.S. Army Corps of Engineers
WBS	Work Breakdown Structure

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 surveillance and maintenance (LTS&M), 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 as the program). FUSRAP was established in 1974 to remediate sites where radioactive contamination remained from Manhattan Engineer District (MED) and early U.S. Atomic Energy Commission (AEC) operations. This Program Management Plan 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) services contractor to successfully meet DOE's obligations and reporting requirements at FUSRAP sites. LM coordinates closely with the U.S. Army Corps of Engineers (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.

The Program Management Plan 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 discusses the FUSRAP communication plan.
- Section 5.0 describes the 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 discusses quality assurance.
- Section 9.0 presents the references and source documents used to prepare this plan.
- Section 10.0 provides links to relevant websites.

The LM Program is under change throughout the year. This Program Management Plan represents the current status and controlling documents as of April 2018. FUSRAP will follow the most current versions of controlling documents and organizational structure throughout the year. 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.

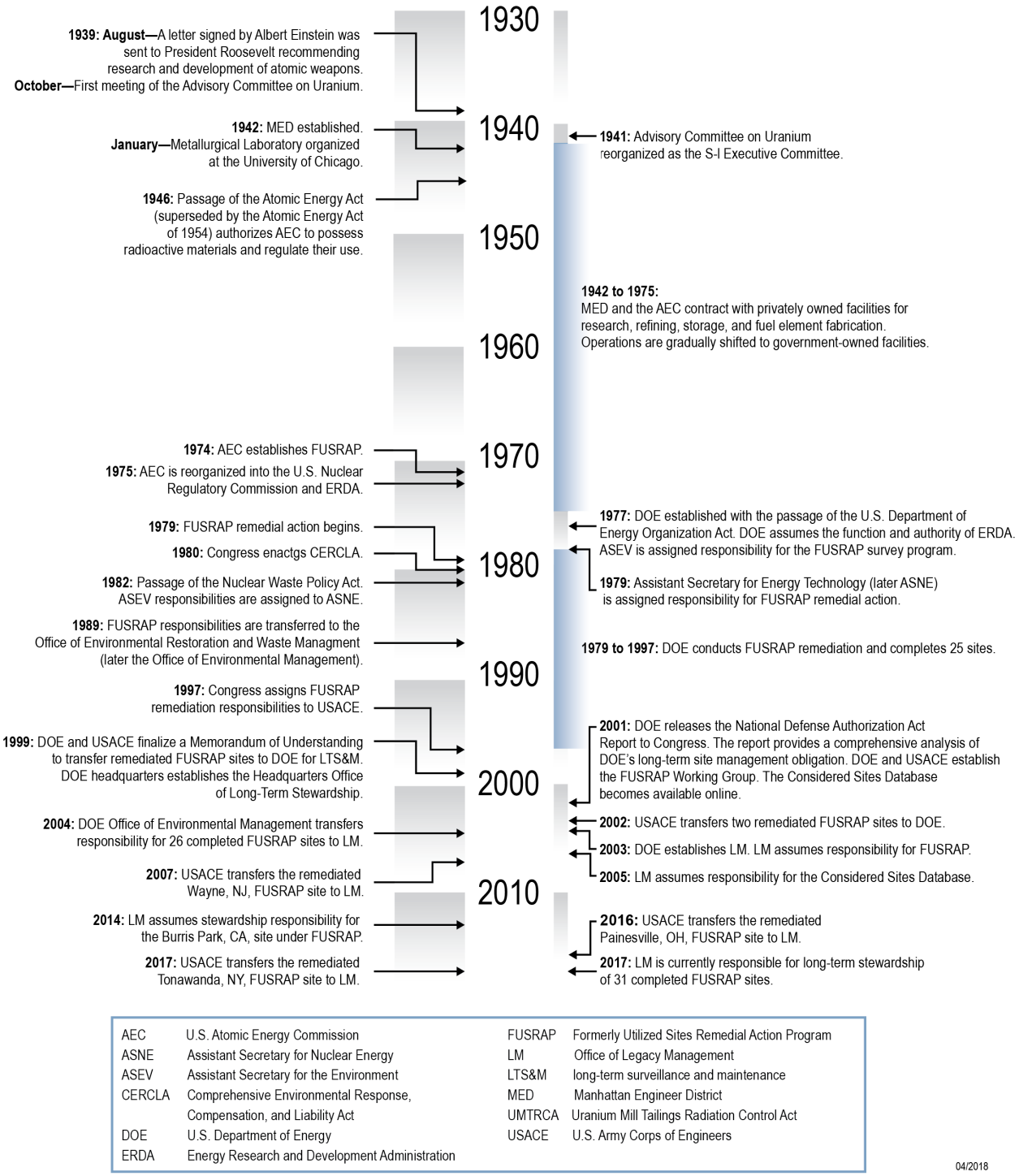

Figure 1. Key Dates for Historical MED/AEC and FUSRAP Activities

1.2.1 Overview of Manhattan Engineer District/Atomic Energy Commission 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 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 the actual operations.

The most readily available sources of historical information about the early activities of the MED/AEC are *A History of the United States Atomic Energy Commission, Volume I: The New World* (Hewlett and Anderson 1962) and *Volume II: Forging the Atomic Shield* (Hewlett and Duncan 1969). Information about early atomic research and the Manhattan Project is available at the following link: https://www.osti.gov/opennet/manhattan-project-history/index.htm. Additional historical references are provided in Section 10.0. 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 2, 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.

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.

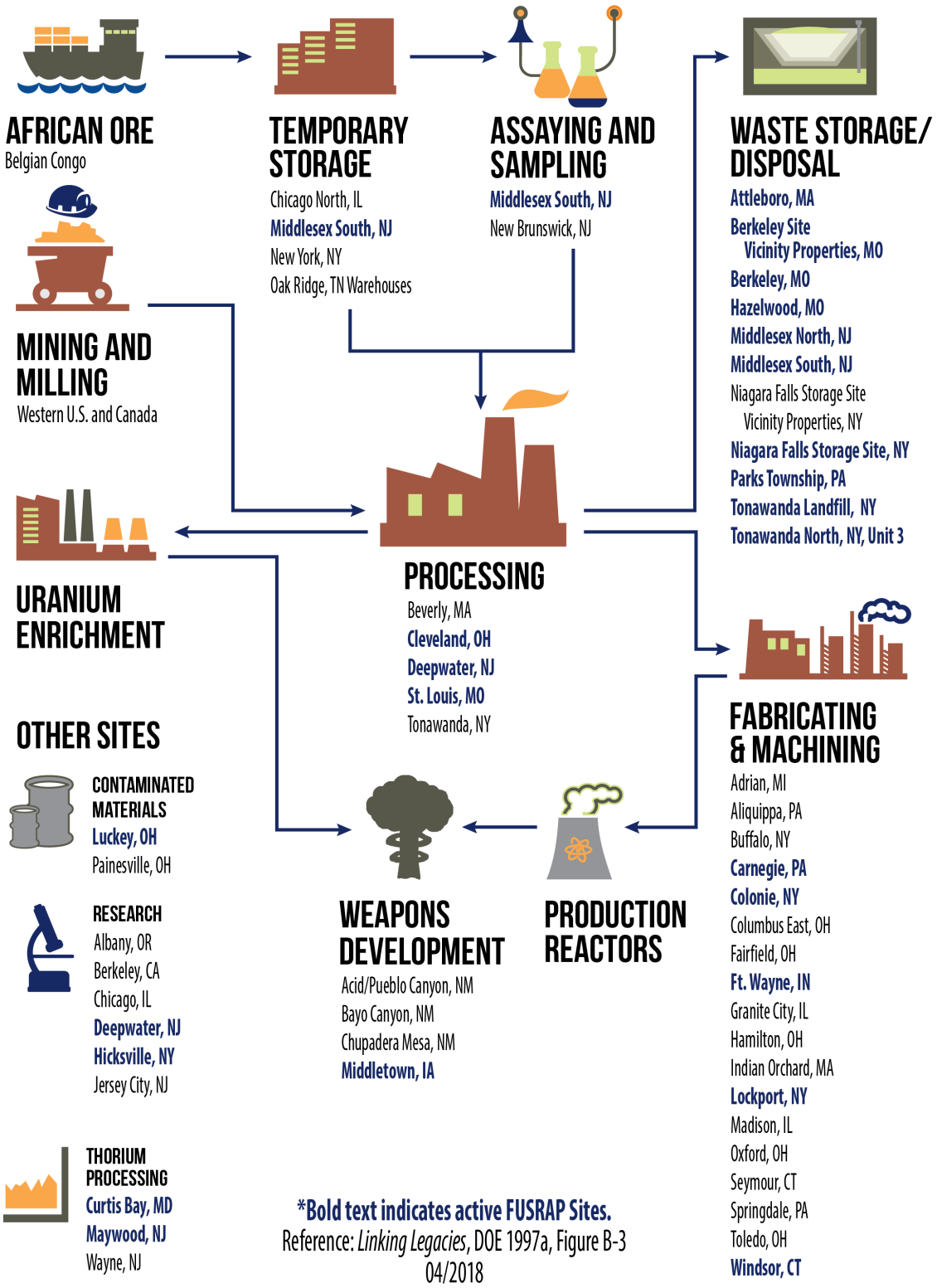

Figure 2. MED/ Early AEC Operations with Associated FUSRAP Sites

1.2.2 FUSRAP Activities Prior to 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. The responsibility for this survey was assigned to the 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.

In January 1975, AEC was abolished and its programmatic responsibilities transferred to the Energy Research and Development Administration (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 the 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 a public press release 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 site. Due to the importance of this effort, the ASEV initiated 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 for certifying the postremedial 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 for cleanup. Additional sites were added to FUSRAP as a result of congressional action (i.e., the Energy and Water Development Appropriation Act [EWDAA] for 1984 and 1985) and as a result of transfer from DOE's Surplus Facilities Management Program. These site records are now compiled and managed in a single location. This reference tool is called the Master Sites List (see Section 3.3.2.1).

[1] Per 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.

Remediation under FUSRAP began 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 be 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. DOE established radiological cleanup guidelines for residual concentrations of radionuclides in soil, concentrations of radon and radon decay products, external gamma radiation levels, surface contamination levels, and air/water effluent concentrations (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. In 1989, these responsibilities were transferred to the newly created Office of Environmental Restoration and Waste Management, later renamed Office of Environmental Management (EM). As of 1997, DOE completed remediation at 25 FUSRAP sites as noted in the MOU (Appendix A) and had begun characterization or remediation at several other sites or vicinity properties. DOE retained responsibility for LTS&M at these sites. Figure 3 shows the remediation time frames of the sites completed both prior to 1997 and after 1997, along with the dates that additional sites were added to the program. 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. In 1999, an MOU entitled *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)* (Appendix A) was signed, and it defined the roles of each agency in administering and executing FUSRAP.

Under the MOU, 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 accepts contaminated sites that require cleanup under FUSRAP and completes remediation, described further in Section 3.0. 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 (National Contingency Plan) (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 stewardship of the remedy. Following the signing of the March 1999 MOU, DOE and USACE provided further clarification on areas that are not specifically outlined in the MOU. This information is captured in two letters of agreement (LOAs) between USACE and DOE issued in December 2001 and April 2002. In these letters, the agencies agreed to a

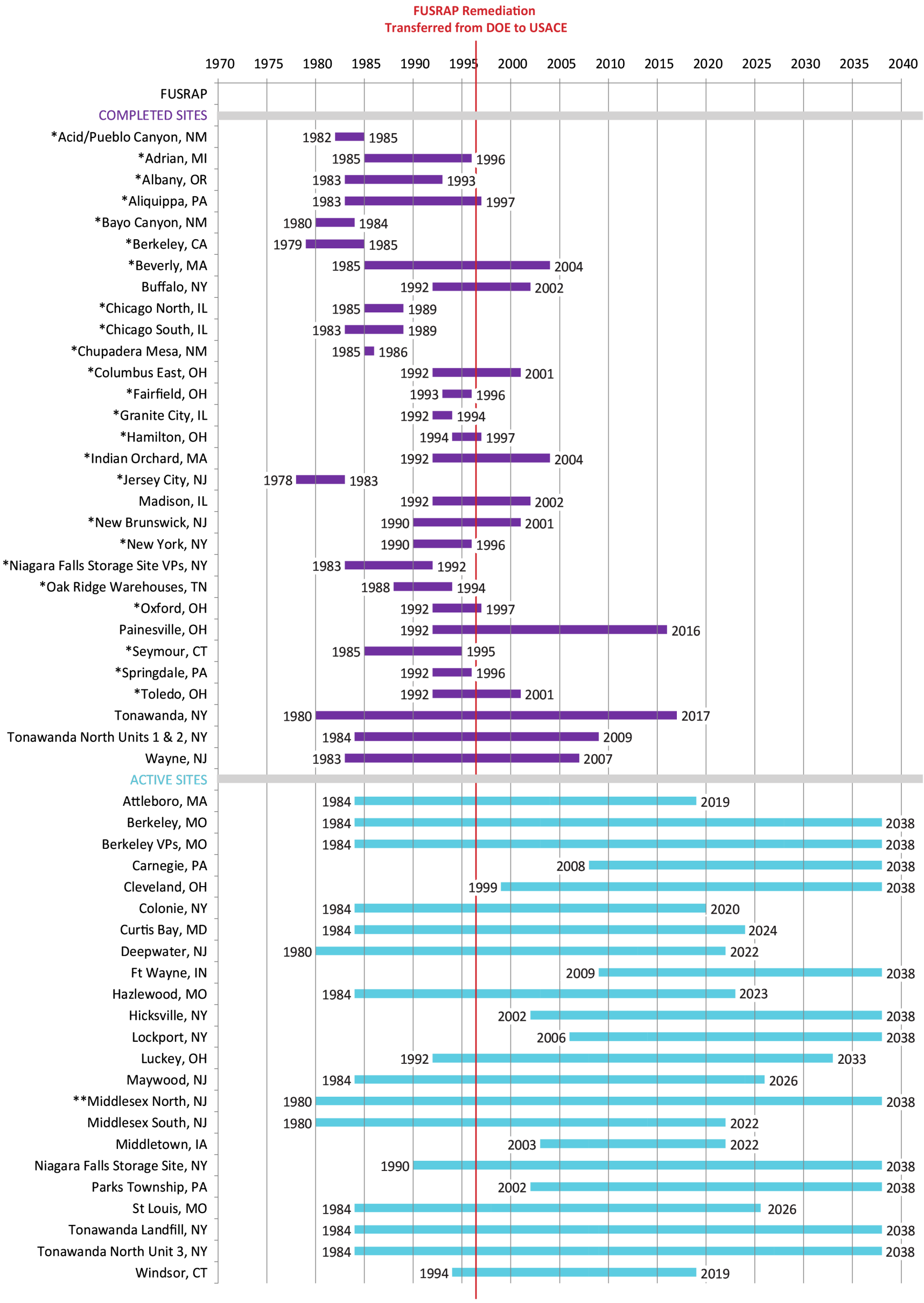

Figure 3. FUSRAP Site Remediation Timeline

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three-step process by which USACE will transfer completed sites to DOE for LTS&M. Table 1 provides a summary of DOE responsibilities identified in the MOU and LOAs. For the full description of the roles and responsibilities of DOE and USACE, refer to the MOU and LOAs in Appendix A.

Table 1. DOE FUSRAP Responsibilities

MOU Citation	DOE Responsibility
Completed Sites	
III.B.1	• Maintain LTS&M 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&M 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 would 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, 1986b), which is part of the MRPM (DOE 1997b). • For privately owned FUSRAP sites where the long-term stewardship 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.

Note:
Refer to the original MOU and LOA text in Appendix A for definitions of terms for further interpretation.

Abbreviation:
MRPM = *FUSRAP Management Requirements and Policies Manual*

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 that document presents a document and activity review and approval authority matrix and notes specific documents to be issued to DOE for information or review. The USACE FUSRAP review and approval authority matrix is reprinted in Appendix E of this plan for reference. Section 3.0 provides additional discussion of LM's role in current site remediation activities. Figure 3 lists the sites that have been part of FUSRAP since 1997. 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 during the 1940s and 1950s a program involving research, development, processing, and production of uranium and thorium. This program also included the storage of radioactive ores and processing residues, such as mill tailings. Virtually all 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 ore and residual material from its processing, many of these sites became contaminated with radioactivity as a result of work performed for the government.

FUSRAP formally began in 1974. AEC and its successors, ERDA and DOE, conducted radiological surveys and other research work under the implied authority of the Atomic Energy Act of 1954, as amended. The intent of Congress, as expressed in the fiscal year (FY) 1978 DOE Authorization Act (Public Law 95-238) was that, at the completion of this 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. In the case of 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 (Public Law 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 (Public Laws 105-245 and 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 National Contingency Plan. 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 at 66 [Jul 21, 1997] and H. Conf. Rep. 105-271 at 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 LM *2016–2025 Strategic Plan*

This Program Management Plan aligns with the LM's goals and objectives as defined in the Legacy Management *2016–2025 Strategic Plan* (DOE 2016a). 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, objectives, and requirements and the FUSRAP performance strategies.

Table 2. LM Strategic Goals, Objectives, and Requirements 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&M requirements for FUSRAP active sites. 2. Conduct LTS&M, 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&M 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 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. 2. Make information more accessible.	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 account for climate change in LM site management. 2. Optimize public use of federal lands and properties. 3. Transfer excess real and personal government property.	1. Perform LTS&M 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, Objectives, and Requirements, and FUSRAP Performance Strategies (continued)

LM Strategic Goal	Applicable LM Strategic Objectives	FUSRAP Performance Strategies
Goal 5: Sustain management excellence	1. Develop and maintain high standards for planning, budget, acquisition, and project management. 2. Sustain a talented, diverse, inclusive, and performance-driven federal workforce. 3. Improve the efficiency and effectiveness of administrative actions.	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 the people and governments of tribal nations. 4. Support development of the Manhattan Project National Historical Park. 5. Implement Executive Order (EO) 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 *2016–2025 Strategic Plan* (DOE 2016a)

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2.0 Program Organization

This section describes the LM and the 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 objectives as described in the contract performance work statement and the detailed task assignment (TA) statements of work (SOWs).

2.1.1 LM

Figure 4 shows the structure of the LM program. LM directors are located in Washington, D.C.; other management and personnel are located in geographically dispersed offices 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 Human Resources Management Team and the Public and Intergovernmental Engagement 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 strategic planning, program integration, finance and budget, acquisition, and administrative support.
- LM-20, the Office of Site Operations, is responsible for implementing LTS&M at sites transferred to LM to ensure sustainable protection of human health and the environment. LM-20 also has responsibility for safety, quality assurance, 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 Team. The LM RCRA/CERCLA/FUSRAP Team leader serves as the LM TA manager for the FUSRAP TA 102 and is supported by the LM FUSRAP manager, FUSRAP site managers, and subtask managers as required (Figure 5). Functional support services such as Records Management, environmental information systems, geographic information systems (GIS), 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 (LM-21).

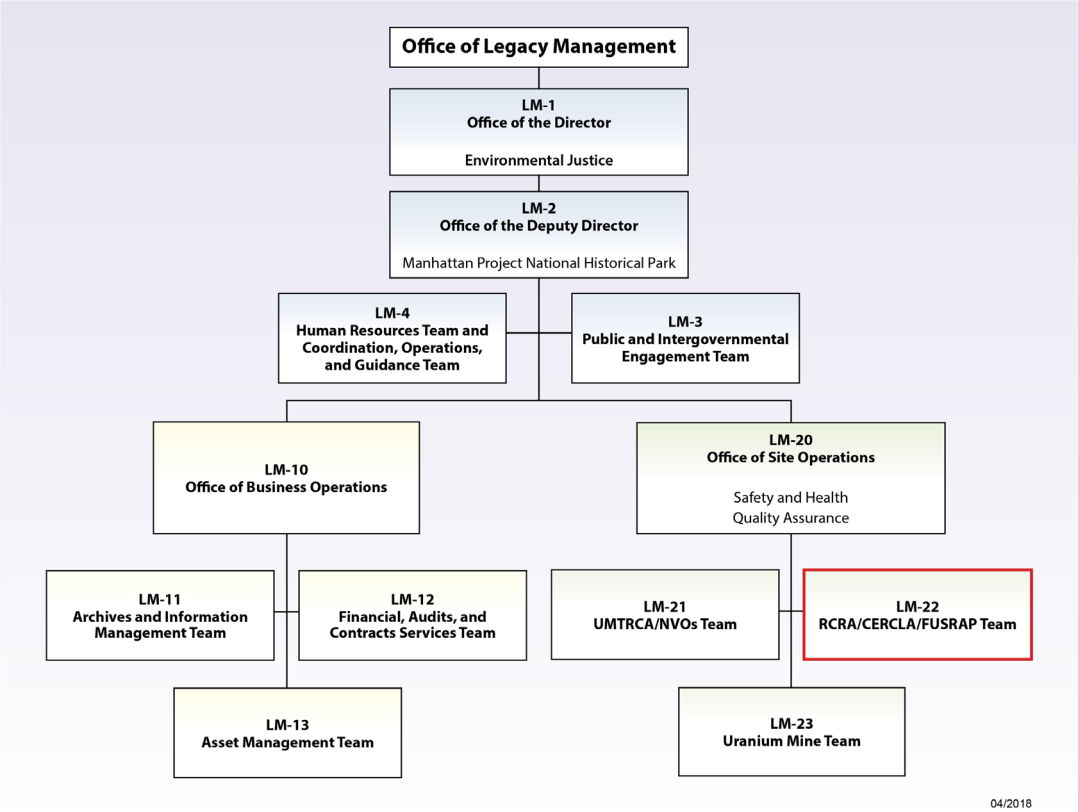

Figure 4. LM Organization

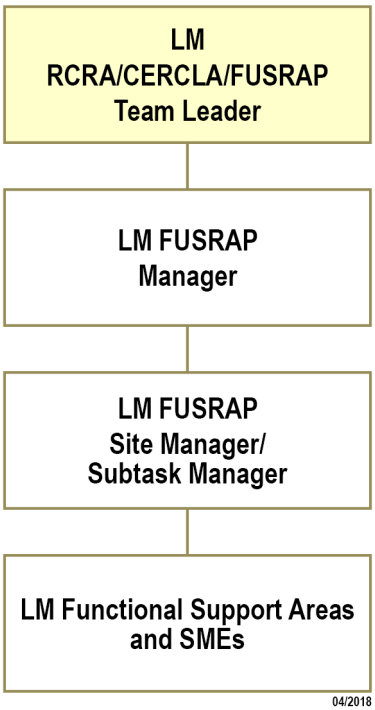

Figure 5. LM FUSRAP Organization

2.1.2 LMS Contractor

The LMS contractor is Navarro Research and Engineering, Inc. The LMS organization, shown in Figure 6, is organized for both project execution and ongoing LM program support functions, as required in the LMS contract. This is depicted in the three levels of the organization chart: Management, Integrated Project Teams (project execution), and mission services (ongoing LM program support and functional area support to Integrated Project Teams). The organizational chart reflects the specific TAs included in the LMS contract.

The FUSRAP TA 102 utilizes an Integrated Project Team, with the FUSRAP TA manager (LMS FUSRAP manager) reporting directly to the Projects and Programs manager, who is responsible for all LMS LTS&M projects. The Task 102 Integrated Project Team includes individuals assigned to the program as support from various mission services, including resources from Task 105, Archives and Information Management, and Task 106, Asset Management; the Environment, Safety, Health, and Quality Assurance (ESH&Q) functional group; environmental field and technical support resources from the Project Services functional group; and business management services and stakeholder communications from the Business Services group.

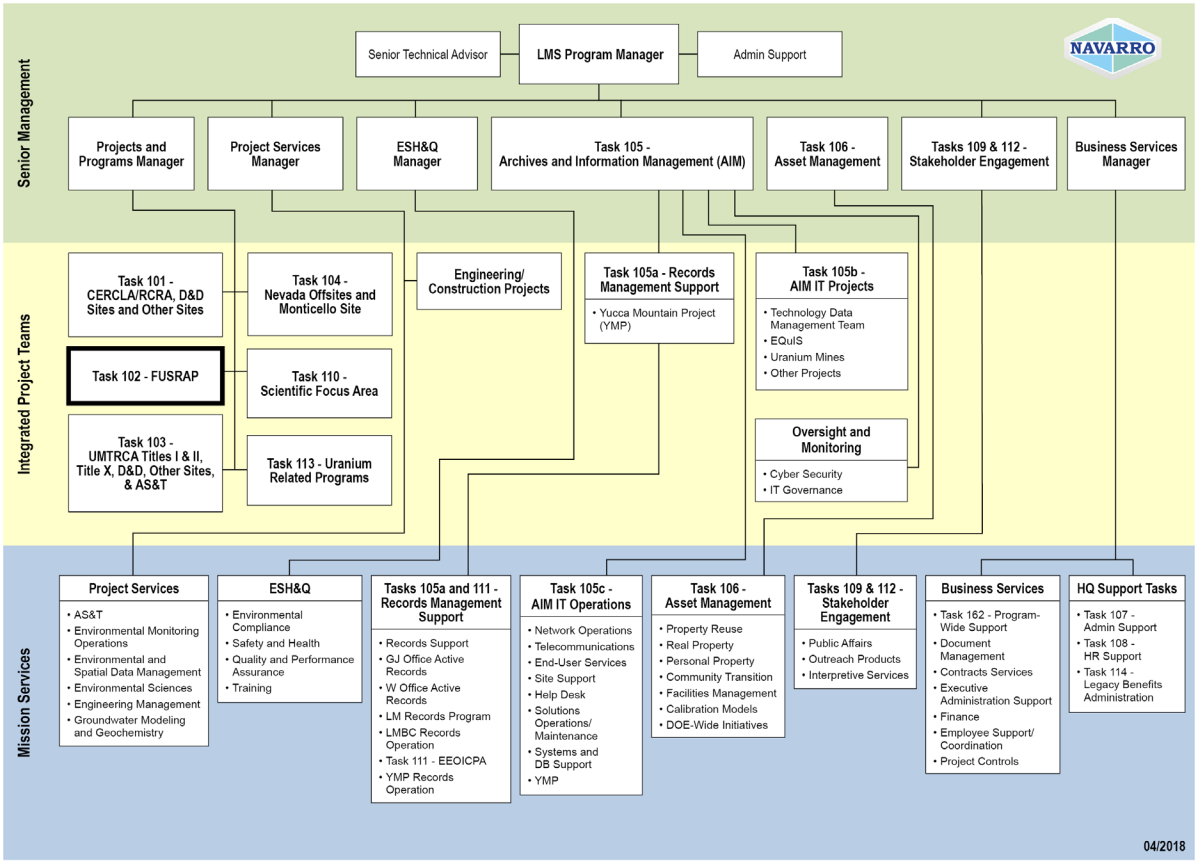

Figure 6. LMS Organization

The LMS FUSRAP manager has responsibility for overall technical, cost, and schedule performance for the FUSRAP TA 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 (PEMP) and SOW prior to work commencing (Section 3.1). In addition, 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.

Figure 7 shows the LMS FUSRAP TA 102 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 four LMS site leads: the (1) Ineligible Sites lead, (2) Active Sites lead (3) Completed Sites lead, and (4) the MED/AEC Legacy Sites lead. In addition, specific FUSRAP sites may have assigned LMS site leads. Specific personnel assigned to FUSRAP are listed on the Responsibility Assignment Matrix (RAM); a current version of the RAM is maintained on the contractor intranet site at https://lmportal.lm.doe.gov/Contractor/LMS_Contract.aspx.

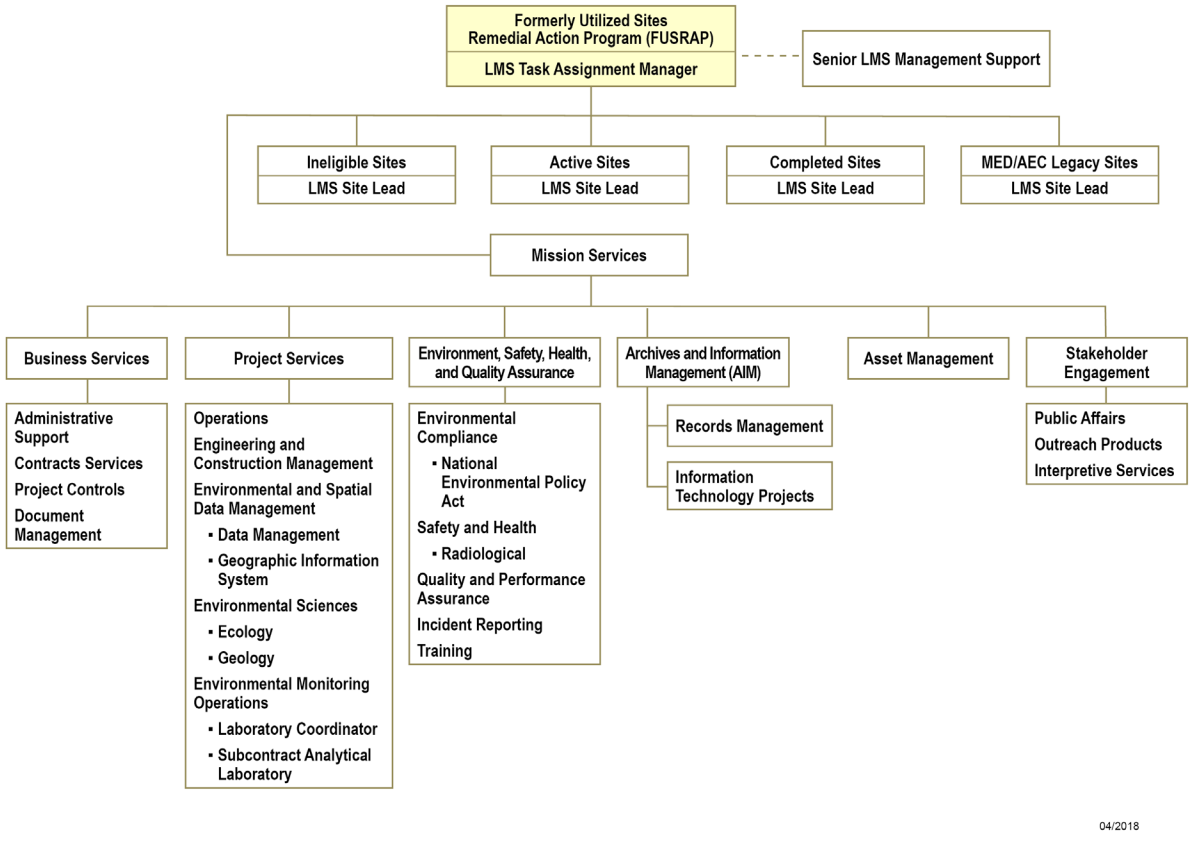

Figure 7. LMS FUSRAP Task 102 Organization

Each LMS site lead is assigned to a specific FUSRAP level 1 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.

Table 3. FUSRAP Team Roles and Responsibilities

Personnel	Roles and Responsibilities	Authority
LM RCRA/ CERCLA/ FUSRAP Team Leader	TA manager for Task 102 Program governance and sponsorship LM management of TA 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 and TA BCPs Approve performance evaluation items for the LMS services contract Approve contractor performance assessment	Assign subtask leads Assign work under TA Stop work due to unsafe work conditions
LM FUSRAP 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 TA 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 TA Oversight of contractor performance Stop work due to unsafe work conditions

Table 3. FUSRAP Team Roles and Responsibilities (continued)

Personnel	Roles and Responsibilities	Authority
Other LM teams and SMEs (e.g., ESDM, 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
Contracting Officer Contracting Officer's Representative	Roles/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*, Contract Number DE-LM0000421, June 2015	
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 TA Assign subtask work scope, ensuring that schedules and budgets are consistent with baseline commitments and with the funds obligated Manage TA budgets and schedules Report monthly EVMS statistics Track and deliver milestones and deliverables Prepare accruals Manage all FUSRAP BCPs, 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 BCPs prior to submission to LMS Senior Management and DOE Sign FUSRAP deliverables
LMS Site Leads	Perform subtask work Ensure coordination and regular communication with LM FUSRAP site managers Understand project budgets and scope Have an understanding of the physical characteristics and the regulatory and remediation status of the sites under their responsibility Update monthly subtask EVMS inputs Support life-cycle baseline 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 Mission 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, have an understanding of 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:
BCPs = baseline change proposals
ESDM = Environmental and Spatial Data Management
EVMS = Earned Value Management System

The FUSRAP TA organization functions as an integrated project team and includes individuals who are assigned to the project from mission services groups. These individuals are responsible for delivering functional support, knowledge, and expertise in accordance with the established and approved LM requirements documents (Table 4) 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 mission services managers are responsible for training of 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 mission services support area function to address additional requirements and the specificity necessary for successful execution. Specific functional support personnel assigned to FUSRAP are listed on the current version of the RAM (https://lmportal.lm.doe.gov/Contractor/LMS_Contract.aspx).

Table 4 identifies the mission services functions that are utilized 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 program-wide functional area work is conducted for all tasks, including FUSRAP, and the details are not repeated in this plan. FUSRAP-specific requirements are noted along with a reference to the section in this plan where they are discussed. Additional FUSRAP-specific processes and procedures are identified in Section 3.0 through Section 8.0 of this plan.

Table 4. Programmatic Responsibilities and Requirements for Functional Area Support

Mission Services 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 • MED/AEC Legacy Sites
Project Controls	Manage project schedules, budgets and reporting requirements using the LMS EVMS system	• *Project Management Control Systems Manual* (LMS/POL/S04330) • DOE Order 413.3B, *Program and Project Management for the Acquisition of Capital Assets*	• Technical, cost, and schedule PMB development • Cost and Schedule Performance and Reporting • EVMS • Baseline Change Control preparation	• 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 • MED/AEC Legacy Sites
Stakeholder Engagement	Perform public outreach, response to public and media inquiries, and preparation and dissemination of materials to stakeholders	• *Public Affairs Manual* (LMS/POL/S11690) • *Graphic Design Manual* (LMS/POL/S11794) • LM Procedure 200.1-7, *Adding or Revising Content or Transferring Websites to the LM Public Website*	• 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 • MED/AEC Legacy Sites
Document Management	Review, edit, and produce documents and deliverables	• *Document Production Manual* (LMS/POL/S09818)	• Editing, document production • Document control • Posting documents to website	• Program Management • Ineligible Sites • Active Sites • Completed Sites • MED/AEC Legacy Sites

Table 4. Programmatic Responsibilities and Requirements for Functional Area Support (continued)

Mission Services Area	Responsibility	Requirements and Documents	Programmatic Elements/Processes Applied to FUSRAP	FUSRAP Work Elements Supported
Project Services				
Operations and LTS&M	Perform site operations/fieldwork; responsible for safe and compliant operations/fieldwork execution	• *Conduct of Operations Manual* (LMS/POL/S04374) • DOE Policy 454.1, Chg 1, *Use of Institutional Controls* • LM Guide 454.1a, *Guidance for Developing and Implementing Institutional Controls for Long-Term Surveillance and Maintenance at DOE Legacy Management Sites*	• Performance and safety objectives for all operational work	• Completed Sites • MED/AEC Legacy Sites
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 • MED/AEC Legacy Sites
Environmental and Spatial Data Management	Perform environmental data management and analysis	• *Environmental Support Services Data Management Procedures* (LMS/PRO/S06690) • *Recommendations for Storage of U.S. Army Corps of Engineers (USACE) Environmental Data* (Navarro 2016)	• Environmental data management (field and laboratory) • Import of selected FUSRAP data and metadata into EQuIS • Manage all LM-generated data	• Active Sites • Completed Sites • MED/AEC Legacy Sites
	Perform geospatial analysis and mapping	• *GEMS Operations Manual* (LMS/PRO/S08779) • *Operations Manual for ArcGIS* (LMS/PRO/S08771)	• Geospatial analysis and visualization	• Active Sites • Completed Sites • MED/AEC Legacy Sites
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 • MED/AEC Legacy Sites
Environmental Monitoring Operations	Perform LTS&M field activities at specific sites	• *Environmental Procedures Catalog* (LMS/POL/S04325) • *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 • MED/AEC Legacy Sites

Table 4. Programmatic Responsibilities and Requirements for Functional Area Support (continued)

Mission Services Area	Responsibility	Requirements and Documents	Programmatic Elements/Processes Applied to FUSRAP	FUSRAP Work Elements Supported
Environment, Safety, Health, and Quality Assurance				
Environmental Compliance	Identify and develop plans that comply with regulatory requirements associated with the program	• *Environmental Management System Description* (LMS/POL/S04346) • *Environmental Protection Manual* (LMS/POL/S04329) • *Environmental Instructions Manual* (LMS/POL/S04338) • *Environmental Management System Sustainability Teams Manual* (LMS/POL/S11374) • *Environmental Procedures Catalog* (LMS/POL/S04325) • DOE Order 436.1, *Departmental Sustainability* • LM Policy 436.1C, *Environmental Policy* • DOE Order 451.1B, Chg 3, *National Environmental Policy Act Compliance Program* • LM Procedure 451.1C, *National Environmental Policy Act (NEPA) Planning and Compliance Procedure*	• Environmental compliance • Environmentally related institutional controls (ICs) (all ICs tracked by Asset Management)	• Active Sites • Completed Sites • MED/AEC Legacy Sites

Table 4. Programmatic Responsibilities and Requirements for Functional Area Support (continued)

Mission Services 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	• *Integrated Safety Management System Description* (LMS/POL/S14463) • *Worker Safety and Health Program (10 CFR 851)* (LMS/POL/S14697) • *Safety and Health Manual* (LMS/POL/S04321) • *Incident Reporting Procedure* (LMS/POL/S11736) • *Drilling Health and Safety Requirements* (LMS/POL/S04331) • *Safety and Health Procedures Manual* (LMS/PRO/S04337) • *Integrated Work Control Process* (LMS/POL/S11763) • *Emergency Management Program Description* (LMS/POL/S14748) • DOE Policy 450.4A, *Integrated Safety Management Policy*	• 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 record keeping	• Program Management • Active Sites • Completed Sites • MED/AEC Legacy Sites
	Ensure that work is conducted in accordance with approved radiological controls; issue radiological work permits	• *Radiation Protection Program Plan* (LMS/POL/S04373) • *Radiological Control Manual* (LMS/POL/S04322) • DOE Order 458.1 Chg 3, *Radiation Protection of the Public and the Environment*	• Radiation protection	• Program Management • Active Sites • Completed Sites • MED/AEC Legacy Sites

Table 4. Programmatic Responsibilities and Requirements for Functional Area Support (continued)

Mission Services Area	Responsibility	Requirements and Documents	Programmatic Elements/Processes Applied to FUSRAP	FUSRAP Work Elements Supported
Quality and Performance Assurance	Support development of TA- or site-specific QA plans (if applicable); conduct assessments and surveillances; assist with developing and distributing lessons learned	• *Quality Assurance Program Description* (LMS/POL/S13806) • *Quality Assurance Manual* (LMS/POL/S04320) • DOE Policy 226.2, *Policy for Federal Oversight and Contractor Assurance Systems* • DOE Order 226.1B, *Implementation of Department of Energy Oversight Policy* • DOE Order 414.1D, *Quality Assurance* • LM Plan-1-10.0-1.0-0.0, *Quality Management System Document* • LM Procedure-2-10.0-1.0-0.0, *Oversight* • LM Guide-4-10.0-1.0-0.2, *ePegasus User Guide*	• QA plans/requirements • Assessments and surveillances • Lessons Learned • Contractor assessment and oversight reports	• Program Management • Active Sites • Completed Sites • MED/AEC Legacy Sites
Incident Reporting	Identify, categorize, and report incidents, including but not limited to safety-related and environmental incidents	• *Incident Reporting Procedure* (LMS/POL/S11736)	• Incident reporting and notification	• Active Sites • Completed Sites • MED/AEC Legacy Sites
Training	Maintain training assignments; training completion database; provide training for selected courses	• *Training Program Description* (LMS/POL/S04323)	• All required reading and training	• Program Management • Ineligible Sites • Active Sites • Completed Sites • MED/AEC Legacy Sites

Table 4. Programmatic Responsibilities and Requirements for Functional Area Support (continued)

Mission Services Area	Responsibility	Requirements and Documents	Programmatic Elements/Processes Applied to FUSRAP	FUSRAP Work Elements Supported
Archives and Information Management (AIM)				
Records Management	Provide support for the transition, transfer, receipt, continued maintenance and use, storage, and disposition of USACE, LM, and LMS FUSRAP records	• *Records Management Manual* (LMS/POL/04327) • DOE Order 200.1A, *Information Technology Management* • LM Procedure 200.4E, *Records Management* • LM Procedure 513.1C, *Freedom of Information Act and Privacy Act Response* • DOE Order 243.1B, *Records Management Program* • LM Procedure 243.6, *Routine Requests for Information* • LM Guide 243.1B *Records and Information Management Transition Guidance*	• File management system • Records retention and disposition schedules • Records transition guidance • Regardless of media, preservation of FUSRAP records • FUSRAP implements a separate records database, FDIS (see Section 6.0)	• Program Management • Ineligible Sites • Active Sites • Completed Sites • MED/AEC Legacy Sites
Information Technology Projects	Provide support to the TA manager for development of project-specific software tools and databases	• *Information Technology Configuration Management Plan* (LMS/POL/S07827)	• Software development and application (FDIS)	• Program Management • Ineligible Sites • Active Sites • Completed Sites • MED/AEC Legacy Sites
Asset Management				
Asset Management	Provide personal and real property asset management support	• *Real Property Management* (LMS/POL/S04335) • *Personal Property Management Manual* (LMS/POL/S04336) • DOE Order 430.1C, *Real Property Asset Management* • DOE Guide 430.1-8, *Asset Revitalization Guide for Asset Management and Reuse* • LM Procedure 430.1C, *Request for Realty Services*	• Institutional controls • 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 • MED/AEC Legacy Sites

Abbreviations:
EQuIS = Environmental Quality Information System
EVMS = Earned Value Management System
FDIS = FUSRAP Document Information System
ICs = institutional controls
PMB = performance management baseline

2.2 Program Interfaces

The LMS direct line management structure for the FUSRAP TA aligns to the LM organizational structure with the LMS site leads interfacing primarily with the LM site managers, the LMS FUSRAP manager interfacing primarily with the LM FUSRAP manager, the LMS Projects and Programs manager interfacing with the RCRA/CERCLA/FUSRAP Team leader (and task manager), and the LMS program manager interfacing with LM and LM-20 senior management (Figure 8). This alignment supports clear lines of communication, responsibility, and authority within the LMS organization for execution of the FUSRAP TA. The managers of mission 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 the TA. Additional discussion regarding internal communication is provided in Section 4.0.

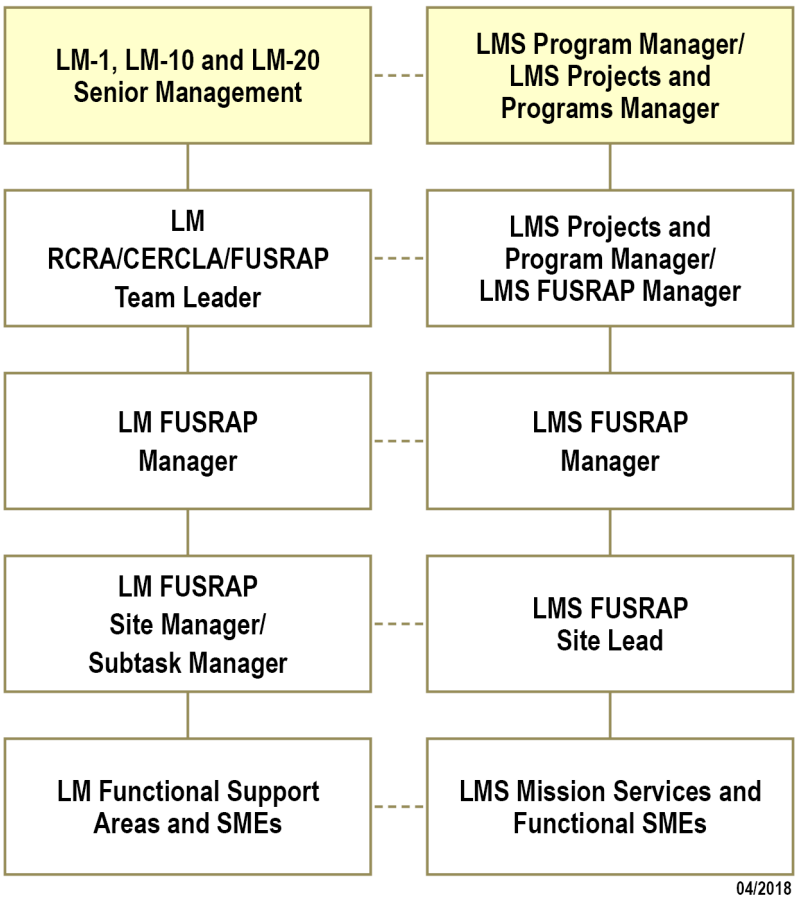

Figure 8. LM and LMS FUSRAP Interfaces

2.3 Lines of Authority

Frequent and effective communication between LM and LMS personnel is critical to the success of the program. LMS site leads and mission 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 baseline change proposals (BCPs), 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 3.0.

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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 orders is applied to the FUSRAP work. In the following subsections, details regarding the overall FUSRAP program WBS, program planning activities, and 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 cost. A comprehensive WBS has been developed to define all the FUSRAP work and provide a baseline for planning, execution, and performance monitoring and control. The framework provides a consistent method to communicate all the FUSRAP outcomes and deliverables.

The FUSRAP federal team defined the first two levels of the program's work. The WBS is important because it communicates a clear understanding of outcomes and the relationship among the work packages and activities. More importantly, the WBS provides consistency in the planning and execution processes (e.g., life-cycle baseline, LMS contract, and budget calculations) and facilitates the process of formally identifying and accepting completed deliverables. The contractor uses the first two levels of the program's work to further develop and extend the lower-level work elements.

Specifics of the lower WBS levels may change within each subtask, but the general work packages (e.g., site management, technical support, LTS&M) are constant. This allows for consistency and integration between program planning (Section 3.2) and program execution (Section 3.3).

The WBS and respective work packages are further defined in Figure 9. The five FUSRAP high-level work elements with a brief description of the associated work packages are as follows:

- Program Management: Overall management of program scope, schedule, and budget. Work packages for program management include:
  - LM program integration support, which encompasses a broad range of activities and functions that provide direct program management support for LTS&M and asset management activities. Support will include, but not be limited to, program planning and analysis support, project controls and earned-value management analysis support, life-cycle baseline planning and development support, budget formulation and execution support, performance measure analysis and evaluation support, support for other requirements (e.g., interagency agreements), analysis and reporting support, and other duties and special projects as required, such as data and information management.
  - Task Management, which consists of daily execution of the program scope, schedule, budget, and associated reporting. This work package may also include technical management activities, such as support of working groups, meetings, and site visits that are not specifically budgeted in other work packages.

- Ineligible Sites (Section 3.3.2.1): Performance of site eligibility determinations, updating ineligible site resources, and maintaining documents related to ineligible sites. Work packages for the Ineligible Sites work element include:
  - Eligibility determination and referral, which is performed as needed; sites are evaluated for FUSRAP eligibility following *Determining Eligibility for FUSRAP Sites* (LMS/PLN/S13050) (DOE 2015a)
  - Master Site List (MSL) update, which consists of the annual update of the MSL and its source lists
  - Annual risk analysis and ranking of ineligible sites, which searches for new site information, ranks sites with potential programmatic risk, and, as needed, updates the methodology for screening sites that is based on *FUSRAP Screening Methodology for Inactive Sites and Other Sites* (LMS/S11541) (DOE 2014e)
  - Considered Sites Database (CSD) and Ineligible Site document maintenance, which consists of correcting, as necessary, errors found during updates from the CSD or adding newly discovered documents to the FUSRAP collections
- Active Sites (Section 3.3.2.2): Support for pre-transition and transition tasks for sites being remediated by USACE per MOU Article III.C.1, *Active Sites.* Work packages for the Active Sites work element include:
  - Pre-Transition, which includes work performed for active sites in advance of the transition stage, which begins upon receipt of the site closeout report and declaration of completion from USACE. Typically, sites with anticipated Category 1 or 2 LTS&M responsibilities will have 1 year of pre-transition, and sites with anticipated Category 3 LTS&M responsibilities will have 2 years of pre-transition. The Task Assignment 102 contract will identify specific pre-transition activities on a site-specific basis. Separate work packages may be developed for individual sites that are in this stage.
  - Transition, which includes work performed for active sites within the 2-year window before the effective transfer date that starts when LM receives the site closeout report and declaration of completion from USACE. Separate work packages may be developed for individual sites that are in this stage.
- Completed Sites (Section 3.3.2.3): Performance of LTS&M and associated activities, in accordance with MOU Article III.B.1, *Completed Sites*. Work packages for the Completed Sites work element include:
  - Category 1 LTS&M, which includes LTS&M work for sites designated as Category 1. As of March 2018, 28 sites are included in the Completed Sites Category 1 work package.
  - Category 2 LTS&M, which includes LTS&M work for sites designated as Category 2. As of March 2018, three sites are included in the Completed Sites Category 2 work package.
  - Category 3 LTS&M, which includes LTS&M work for sites designated as Category 3. This work package is a placeholder for future Category 3 completed sites.

- MED/AEC Legacy Sites (Section 3.3.2.4): Performance of LTS&M and associated activities at sites that were ineligible for FUSRAP remediation but require LM stewardship under the authority of the Atomic Energy Act of 1954, as amended. Work packages for the MED/AEC Legacy Sites work element include:
  - Category 1 LTS&M, which includes LTS&M work for MED/AEC Legacy sites designated as Category 1. This work package is a placeholder for future Category 1 sites.
  - Category 2 LTS&M, which includes LTS&M work for MED/AEC Legacy sites designated as Category 2. As of March 2018, one site is included in the MED/AEC Legacy Sites Category 2 work package.

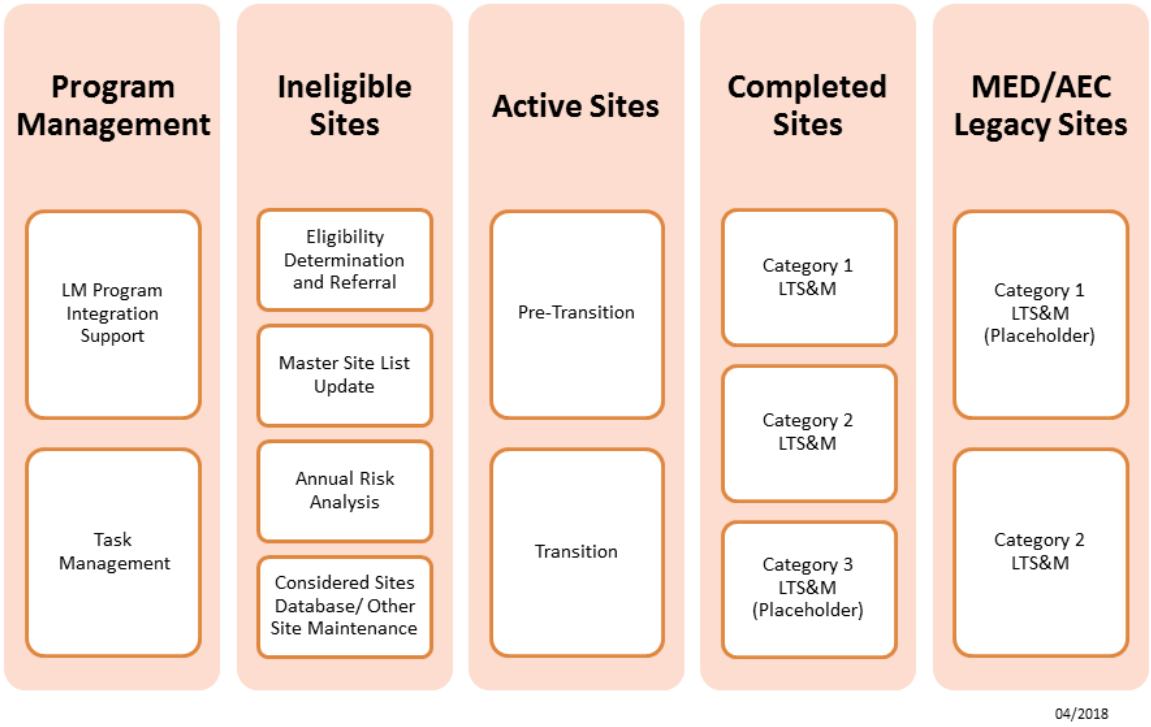

Figure 9. FUSRAP WBS and Work Packages

3.2 Program Planning

Planning is a key attribute of LM Program Integration Support activities to ensure that LM's goals and objectives are achieved. The processes for managing the life-cycle baselines and for contract baselines (out years) are described in the following subsections.

3.2.1 Life-Cycle Baseline

In LM, life-cycle baseline 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, and this document establishes the schedule and deliverables required for LMS in completing the annual life-cycle baseline planning and evaluation effort. FUSRAP life-cycle

baseline planning is conducted annually as part of the LM review but may also require periodic updates or revisions throughout the fiscal year as new information is obtained or work priorities change. FUSRAP life-cycle baselines are modeled on similar sites within LM, such as the UMTRCA Title I sites.
The annual life-cycle 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 life-cycle baseline, which is required for completing LM-wide environmental liability estimates.

The current fiscal year baselines (Section 3.2.2) are highly detailed and are used to fund project work and measure performance. The life-cycle baselines are used to project FUSRAP costs for 5 and 75 years to estimate future resource needs. Baselines include a scope statement to establish the technical baseline, a schedule to establish the schedule baseline, cost estimate to establish the cost baseline, associated assumptions, and a risk assessment. Ultimately, customization of the life-cycle baseline of each active site is desired to provide the most accurate assessment of potential future liability for the program.

LM site managers and the LMS site leads are responsible for estimating life-cycle baseline 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, life-cycle baselines 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 work packages described in Section 3.1. The project baseline summary describes the current 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 life-cycle baseline 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 operations and maintenance (O&M) reports and cost estimates provided by USACE for sites within the transition stage
- Notes or updates to life-cycle baselines 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

Only active FUSRAP sites currently have a site-specific life-cycle baseline. After site transfer, when the site moves from management under the Active Site subtask to management under the Completed Site subtask, life-cycle baseline planning for that site moves into the Completed Sites life-cycle baseline. 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 life-cycle baselines 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 life-cycle baseline planning is the basis for the contract baseline, with revisions made as needed to reflect changes in site status or work priorities.

3.3 Program Execution

3.3.1 LMS Contract: Task Assignment Management

FUSRAP management operates within instructions, formats, and procedures established in the *LMS Projects and Programs Manual* (LMS/POL/S05760) and other applicable technical standards and guidance documents. 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 mission services staff. 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.

Management of the LMS contract is performed within the Project Management work element There are two primary work packages in Program Management—LM Program Integration Support and Task Management. They are executed and implemented as part of the overarching activities for FUSRAP not specific to the other four TA 102 subtasks.

3.3.1.1 LM Program Integration Support

The LM Program Integration Support scope is a broad range of activities and functions that provide direct program management support for LM program activities, as discussed in Section 2.1.2.1. Support includes, but is not limited to, program planning and analysis, project controls and earned-value management analysis, life-cycle baseline planning and development (Section 3.2.1), budget formulation and execution, environmental liability reporting and analysis, performance measure analysis and evaluation, mission support activities (interagency agreements), financial analysis and reporting, and other duties and special projects as requested by LM program analysts.

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 BCP process described in Section 5 of the *Project Management Control Systems Manual* and LM Procedure 413.3B-20, *Change Control Management*.

The final TA 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.

The schedule baseline depicts all major activities and milestones associated with a task. A task's progress is measured against the approved schedule baseline. A schedule showing the typical FUSRAP activities during a contract year is presented in Figure 10. The baseline schedule will include these recurring items and is updated as needed to address site- or contract-specific tasks, such as site-specific transition plans or LTS&M 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 all milestones and deliverables. The schedule is fully resource-loaded and logic-tied and is part of the PMB for the FUSRAP TA. 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 BCP process. The most dynamic portion of the schedule is associated with Active Sites. The *Site Management Guide*, also maintained under configuration control, documents the 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 BCP process; otherwise, it is documented in the life-cycle baseline update.

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 TAs.

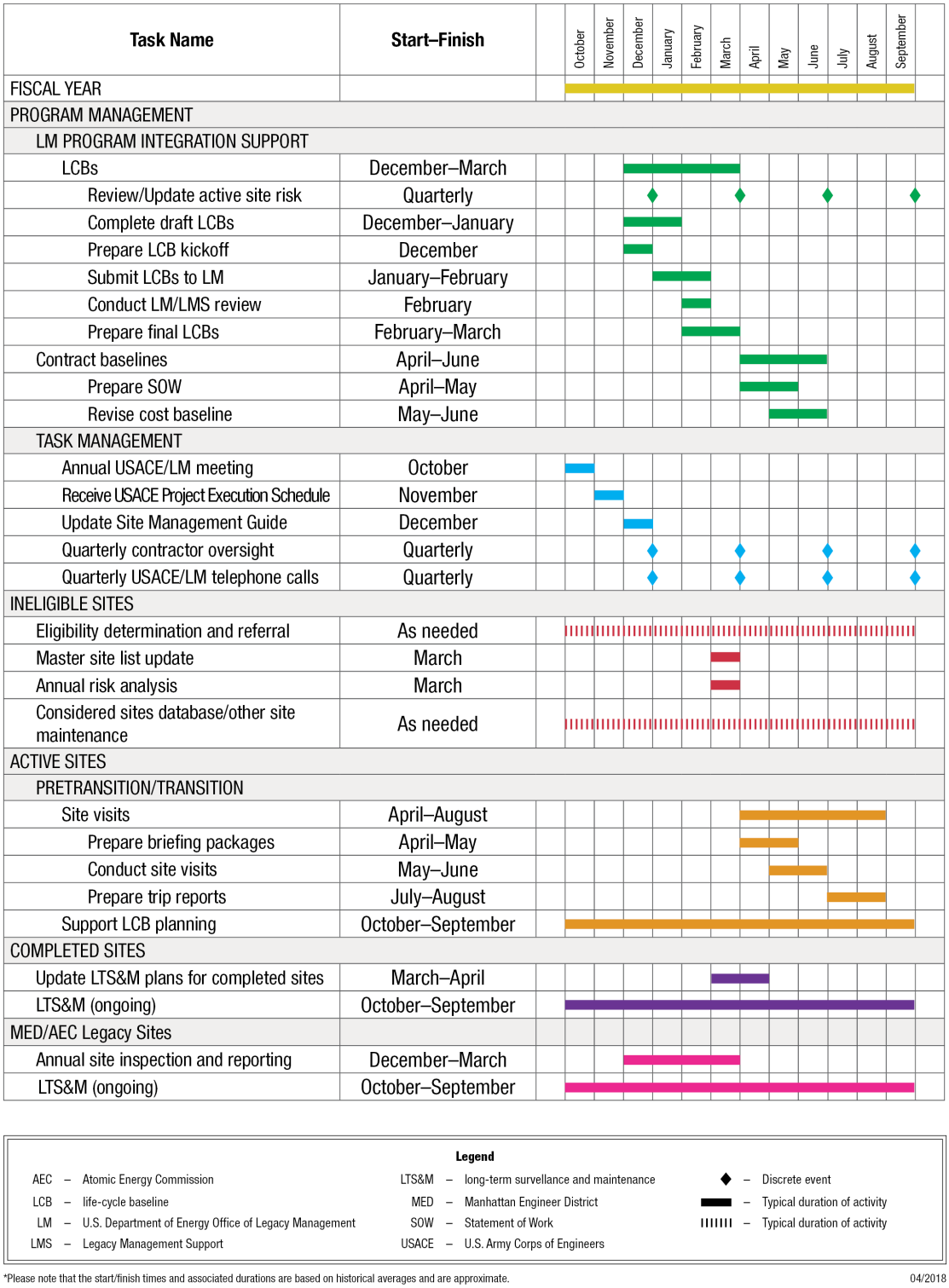

Figure 10. Typical FUSRAP Fiscal Year Schedule

3.3.1.2 Task Management

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&M. 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 and subcontractor personnel shall perform only work that is authorized. In accordance with the *LMS Projects and Programs Manual*, the LMS FUSRAP manager or 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. Appendix D 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&M work. 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; as long as they do not result in changes to scope or cost, they do not require the BCP process.

Cost control is maintained through the use of a validated project control system that incorporates earned value performance measurement; it is described in the LMS *Project Management Control Systems Manual* (LMS/POL/S04330). Current contract and life-cycle cost baselines 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 intranet website. 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 schedule for level-of-effort activities or an estimated completion percentage for discretely budgeted tasks.

The Task Management subtask may also include other general FUSRAP activities, such as the following:

- Preparation of general FUSRAP technical papers and presentations
- Support of LM/USACE working groups on issues related to active site transition
- Site visits and technical support provided to condition assessment surveys for active sites prior to pre-transition or transition, and associated trip reports
- Preparation of meeting minutes
- Technical review of documents associated with active sites prior to pre-transition or transition

3.3.1.3 Program Deliverables

Contract deliverables and milestones for the project are identified by level 1 WBS and are determined annually as part of the SOW and baseline development process. Deliverables and milestones may be defined as part of the PEMP, as part of the contract, or both. Specific delivery dates for each milestone and deliverable are maintained under configuration control in the FUSRAP PMB schedule.

Typical deliverables for the Program Management work element will include documents such as the following:

- Resource-loaded schedule
- Monthly technical status reports
- Updates to existing programmatic plans and key documents
- Life-cycle baseline updates
- Public and government inquiry log
- Interagency meeting minutes

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

3.3.2 Technical Subtasks for FUSRAP Sites

The technical subtasks performed as part of FUSRAP consist of the four categories of sites that are part of the WBS and SOW.

3.3.2.1 Ineligible Sites

As described in Section 3.1, the Ineligible Sites subtask has the following four work packages, which are described in this subsection:

- Eligibility determination and referral
- MSL update

- Annual risk analysis and ranking
- Considered Site Database and Ineligible Site document maintenance

Eligibility Determination and Referral

As noted in the MOU Article III.D.1, *FUSRAP Eligibility (New Sites)* and 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 Considered Sites Library (CSL). The Considered Sites Database (CSD) is a subset of the CSL that is posted to the LM public website.

When necessary, eligibility determinations and referrals to USACE are performed following *Determining Eligibility for FUSRAP Sites* (LMS/PLN/S13050) (DOE 2015a). 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 (typically during the 1940s to early 1960s time frame).
2. The activities resulted in residual radioactive contamination (primarily uranium, radium, thorium, and their daughter elements) that exceed current cleanup criteria.
3. The authority to request appropriations to perform remedial action at the site is prescribed within existing legislation and guidelines.
4. The site is neither subject to remedial action under any other remedial action program nor has residual radioactive contamination addressed under a U.S. Nuclear Regulatory Commission or state license.

If LM determines a site to be eligible, stakeholders will be notified, and the site will be referred to USACE for remediation. 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 not designated for remediation, LM continues to provide stewardship of that site.

MSL Update and ***Annual Risk Analysis***

In addition to eligibility determinations and referrals, maintenance of the MSL is performed under the Ineligible Sites subtask. The LMS site lead maintains the original copy of the MSL, which is a spreadsheet containing site notes, alternate site names, and other information for 808 sites that have been evaluated for FUSRAP eligibility or have a connection to LM outside of FUSRAP; a copy of the MSL is also posted to the FUSRAP SharePoint portal. The MSL is reviewed and updated annually.

In 2014, LM reviewed the MSL to determine the relative potential for action to be required at sites that were previously unscreened or determined to be ineligible for FUSRAP. The results of this screening are provided in *Final Results of the FUSRAP Screening Process* (LMS/S12071)

(DOE 2014c). An annual risk analysis and ranking of ineligible sites is performed annually, or as otherwise determined, to search for new site information and update the results of this original screening. During the annual update, updates are also made as necessary to the methodology for screening sites based on *FUSRAP Screening Methodology for Inactive Sites and Other Sites* (LMS/S11541) (DOE 2014e).

CSD and Ineligible Site Document Maintenance

The CSD is the publicly available collection of documents related to sites that were considered for FUSRAP but determined to be ineligible. During update 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.

Deliverables

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

- Updated MSL
- Updated risk analysis and ranking for the MSL
- Updated screening methodology
- Eligibility referrals and packages completed upon request

3.3.2.2 Active Sites

As noted in the MOU Article III.C.1, Active Sites, and additional discussion in the LOAs, DOE responsibilities include pre-transition and transition support for active sites. This support is performed as part of the Active Sites subtask. Figure 11 summarizes the three-step site transfer process outlined in the December 2001 LOA that occurs during the pre-transition and transition stages for active sites. These activities are summarized in the following subsections, and additional details are provided in *Transition and Transfer Guidance for FUSRAP Sites* (DOE forthcoming).

As indicated in Figure 11:

- 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 closure 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 2-year transition period. In this step, USACE transmits the final site documents to DOE, as described in Table 1.

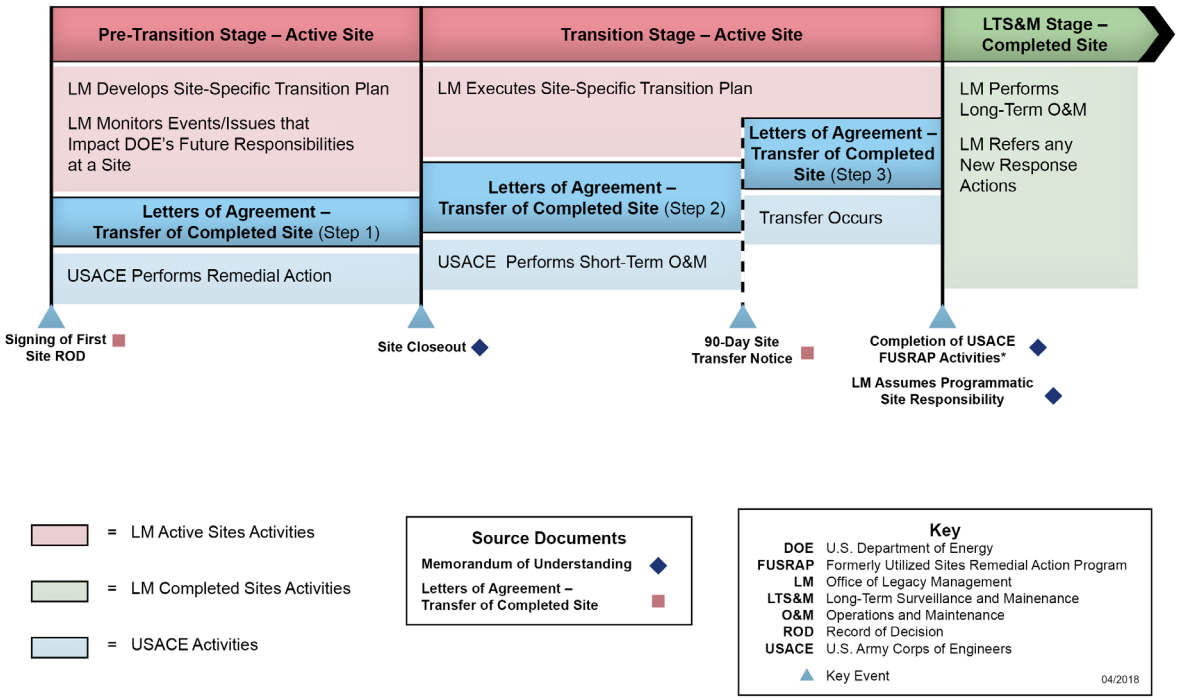

Figure 11. Transition from Active Site to Completed Site

Pre-Transition

Pre-transition activities for sites actively being remediated by USACE (Figure 12) may include status meetings and site visits. Information from these activities is used to further refine the life-cycle baseline for that site. Generally, sites with an anticipated Category 1 or 2 level of LTS&M effort are included within the Active Sites WBS level with pre-transition scope activities within 3 years of the transfer date; anticipated Category 3 sites are included within 4 years of the transfer date. However, pre-transition activities may be budgeted and executed earlier on a site-specific basis. 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 the pre-transition phase, preparation of the Draft SSTP will typically begin no more than 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. The draft site-specific transition plan is prepared using available knowledge, *Site Transition Framework for Long-Term Surveillance and Maintenance* (Site Transition Framework) (DOE 2005), and the *Transition and Transfer Guidance for FUSRAP Sites* (DOE forthcoming). For more complex sites, the site-specific transition plan development may start earlier.

Transition

Once LM receives the declaration of completion and site closeout report from USACE, a site officially enters into the transition phase. During this time USACE continues to perform O&M

activities while LM finalizes and executes the site-specific transition plan to adequately capture LTS&M requirements and perform due diligence. The transition of responsibilities from USACE to LM occurs mostly at the district level for USACE. Figure 12 shows the USACE districts involved with FUSRAP remediation. Transition activities identified in the site-specific transition plan and other guidance documents are designed to ensure that LM acquires essential knowledge for incorporation into LTS&M plans and retention in FUSRAP records.

The 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.

As stated in the "Pre-Transition" section, approximately 6 months before the anticipated start of the 2-year O&M period (i.e., during the pre-transition stage), a draft site-specific transition plan is developed. This plan 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 site-specific transition plan is developed and issued within 3 months, and a draft LTS&M Plan is prepared. At the end of the 2-year period, the LTS&M Plan is finalized.

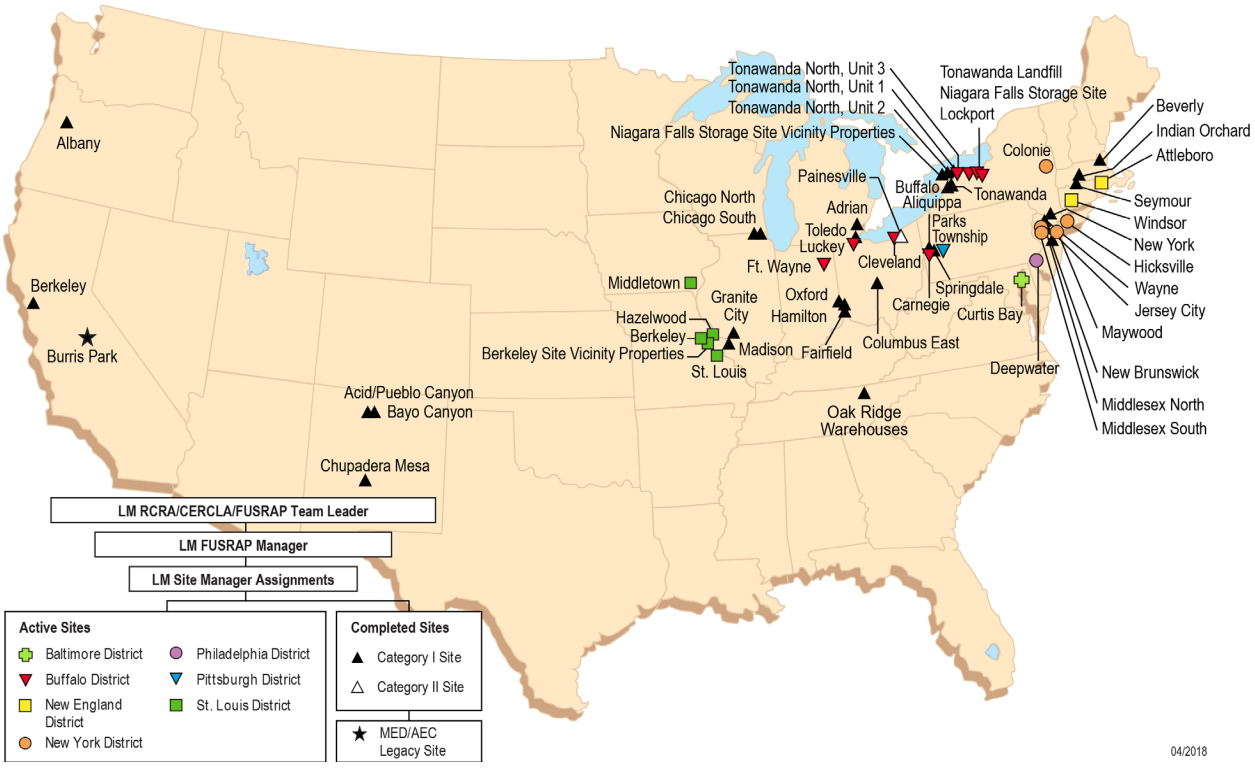

Figure 12. Locations of FUSRAP Sites

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

In general, the FUSRAP transition scope involves:

- Acquiring and preserving site records to maintain a technical understanding of the final site conditions, remedial actions performed, and condition at site closure.
- Ensuring remedy conformance with ROD 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&M Plan for the site.
- Developing and maintaining a detailed life-cycle cost and schedule estimate for the transition and LTS&M periods.

It is anticipated that as USACE and LM enter into transitions of more complex sites, transition support and LTS&M responsibilities will become more detailed and site-specific. As the two parties work together on a detailed approach to site transfers, LM site-specific transition plans and LTS&M 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&M responsibilities.

Deliverables

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

- Draft and final site-specific transition plan
- Draft and final LTS&M Plan
- Initial versions of site fact sheet and website

3.3.2.3 Completed Sites

The Completed Sites subtask consists of implementation of the LTS&M 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&M plans. Every site in the LM program is defined as a Category 1, 2, or 3 site; each LTS&M category is listed in the *Site Management Guide* (DOE 2017) and is based on the actual or anticipated LTS&M activities associated with

that site. The level of LTS&M responsibility expected for each site category and work package is described as follows:

- Category 1 site activities include records-related activities and stakeholder support.
- 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.
- Category 3 site activities include operation and maintenance of active remedial action systems in addition to all of the LTS&M functions required for a Category 2 site.

Currently, most FUSRAP sites are Category 1 sites, for which LTS&M consists of managing the site record collections, ensuring the compliance of the remedy, and providing ongoing stakeholder support. The *Long-Term Surveillance and Maintenance Requirements for Completed FUSRAP Sites* (DOE 2016c) documents the specific LTS&M 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&M responsibilities. Individual LTS&M plans are prepared initially for Category 2 and 3 sites; these plans may be consolidated into single programmatic Category 2 or Category 3 LTS&M plans as appropriate.

LM's objectives for LTS&M 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 Reviews where appropriate)
- Establishing and maintaining durable and enforceable ICs, easements, or protective measures, if required

Final site conditions will determine if LM can disposition a DOE-owned FUSRAP site for beneficial reuse after transfer is complete. During the O&M period, 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 reevalutated for potential reuses as the site remains in LTS&M. 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&M 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 Completed Sites subtask, LM may also 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&M strategy is required or potential eligibility for returning the site to active status. Risk screening for ineligible sites will be performed during the annual risk analysis and ranking described in Section 3.3.2.1. LM will follow *Determining Eligibility for FUSRAP Sites* for the site to determine eligibility based on the new information, and, if appropriate, refer the site to USACE. In accordance with Appendix G of ER-200-1-4 (included as Appendix E of this document), USACE then determines if the site may be added to FUSRAP or eliminated from further consideration.

Deliverables

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

- Desktop assessments
- Updates to the LTS&M plan(s)
- Updates to site fact sheet and website
- Site inspection reports (if necessary)

3.3.2.4 MED/AEC Legacy Sites

Under FUSRAP, unique sites may exist that were determined to be ineligible for FUSRAP remediation but that require LM stewardship under the authority of the Atomic Energy Act of 1954, as amended. These sites are termed MED/AEC legacy sites, and LTS&M activities for these sites are performed under the MED/AEC Legacy Sites work element. Currently, the only MED/AEC legacy site in FUSRAP is the Burris Park, California, Site, which is a Category 2 site. The work packages for the MED/AEC Legacy Sites subtask consist of a placeholder for Category 1 LTS&M and Category 2 LTS&M.

Deliverables

Typical deliverables for the MED/AEC Legacy Sites work element include the following:

- Desktop assessments
- Updates to the LTS&M plan(s)
- Updates to site fact sheet and website
- Site inspection reports (if necessary)

4.0 FUSRAP Communication Plan

Effective communication is essential for program success. Program communication creates a bridge between LMS 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

Internal communications are defined as those occurring within the LM or LMS organizations and those between LM and the LMS contractor. Routine communications may occur between the LMS or 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 LMS 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.

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 5.

Table 5. FUSRAP Internal Routine Team Meetings

Meeting	Frequency	Attendees	Key Purpose
LM team meeting	Biweekly	• LM RCRA/CERCLA/FUSRAP team leader • LM FUSRAP manager • LM site managers • Other LM staff	• Update federal staff on FUSRAP activities • Identify and track open and new actions • Discuss current management issues
LM/LMS management update	Weekly	• LM FUSRAP manager • LM site managers • LMS FUSRAP manager • LMS site leads • LMS administrative support	• Update management on FUSRAP activities • Identify and track open and new actions • Discuss current management issues
LMS weekly planning meeting	Weekly	• Dedicated LMS FUSRAP staff • Mission services personnel with current activities	• Review, discuss ongoing activities • Track upcoming deliverables • Discuss financials and resource needs
Active Sites transition working meeting	Weekly	• LM site managers • LMS Active Site leads	• Communicate status of each transitioning site • Focus on near-term site transitioning • Ensure management and technical consistency across sites • Share experiences across sites to optimize processes
Completed Sites working meeting	Twice monthly	• LM site managers • LMS Completed Site leads and staff	• Communicate status of Completed Site reviews and assessments • Share additional information as needed

Meeting minutes are prepared, reviewed, and distributed before the next meeting to document discussions and actions. These meeting minutes are also stored on the FUSRAP SharePoint site. For the management update meeting, the FUSRAP Issue and Action List is maintained from week to week. This list identifies long-term issues that create impacts to the program scope, schedule, and budget, as well as immediate action items that have been requested along with the requestor, action owner, request date, and due date. A current FUSRAP deliverables list is also maintained and discussed during the management update meeting.

In addition to meeting minutes, the FUSRAP SharePoint site is used to provide a repository for FUSRAP reports and other technical information. Team members may upload documents or other files for sharing and review within the team.

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 *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 6.

4.2.1 Public Outreach

Outreach activities are conducted to actively inform the public about FUSRAP activities and encourage public input while providing opportunities for open, ongoing, two-way communication. During USACE site cleanups and site transition activities, LM supports public outreach efforts at the request of USACE and when appropriate.

The primary methods of providing information to the public are the LM public website (Section 6.4.2) and email distribution lists. LM directly communicates with stakeholders who have provided an email address. Those stakeholders can be notified regarding the availability of FUSRAP documents, scheduled meetings, postings to the LM public website, and other information of interest.

4.2.2 Agencies and Stakeholders

Consistent and accurate communication between LM and USACE is essential during the site referral process (Section 3.3.2.1) and during the transition of Active Sites from USACE to LM (Section 3.3.2.2) to ensure that correct information about site liabilities is provided. In support of these efforts, frequent meetings between LM and USACE are held. 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, routine teleconferences 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 also stored on the FUSRAP SharePoint site.

Table 6. 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, Baltimore, and New England), and individual program managers.	• Establish DOE–USACE Working Groups for site transition. • LM-22 quarterly review meetings between LM and USACE. • LM site managers schedule project kick-off with USACE. • LM site managers initiate site-specific meetings for issues that require USACE input, including direct communication for USACE–LM/LMS functional leads (i.e., Records Management, data management).	• 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 mission services personnel support site-specific transition of a specific element of the transition (e.g., Records Management, data). • LMS has a contractual milestone to provide interagency meeting minutes within 45 calendar days.
LM and FUSRAP site-specific regulators and officials LM interfaces with local officials, state regulators, and federal regulatory agencies such as the U.S. Nuclear Regulatory Commission 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.
LM and FUSRAP site-specific property and vicinity property owners LM interfaces with numerous property owners and owners of vicinity properties.	• LM Asset Management negotiates and signs access agreements. • Determine required actions related to any land or property use changes. • LM site managers provide LTS&M data to site owners.	• Prepare site access agreements. • 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&M report.
LM and public stakeholders LM interfaces with numerous public stakeholders and media representatives.	• LM site managers schedule and attend public meetings. • 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. • Maintain stakeholder inquiry log.

LM and USACE also participate in working groups to address specific topics, such as data management and real property. These working groups provide a forum for LM, USACE management, and technical SMEs to exchange information, to clarify transition procedures, and to collaborate on the development of mutually beneficial work processes.

Face-to-face meetings between LM and USACE may also occur during site visits or condition assessment surveys. In addition, annual program-level meetings between LM and USACE are planned to provide high-level updates on current and future work.

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
- 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.

LMS 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.

4.2.3 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 Grand Junction LM Office; or by other means. The process flow for public inquiries is outlined in Figure 13 and is described in more detail below. A RACI chart for responses to public inquiries is provided in Appendix D.

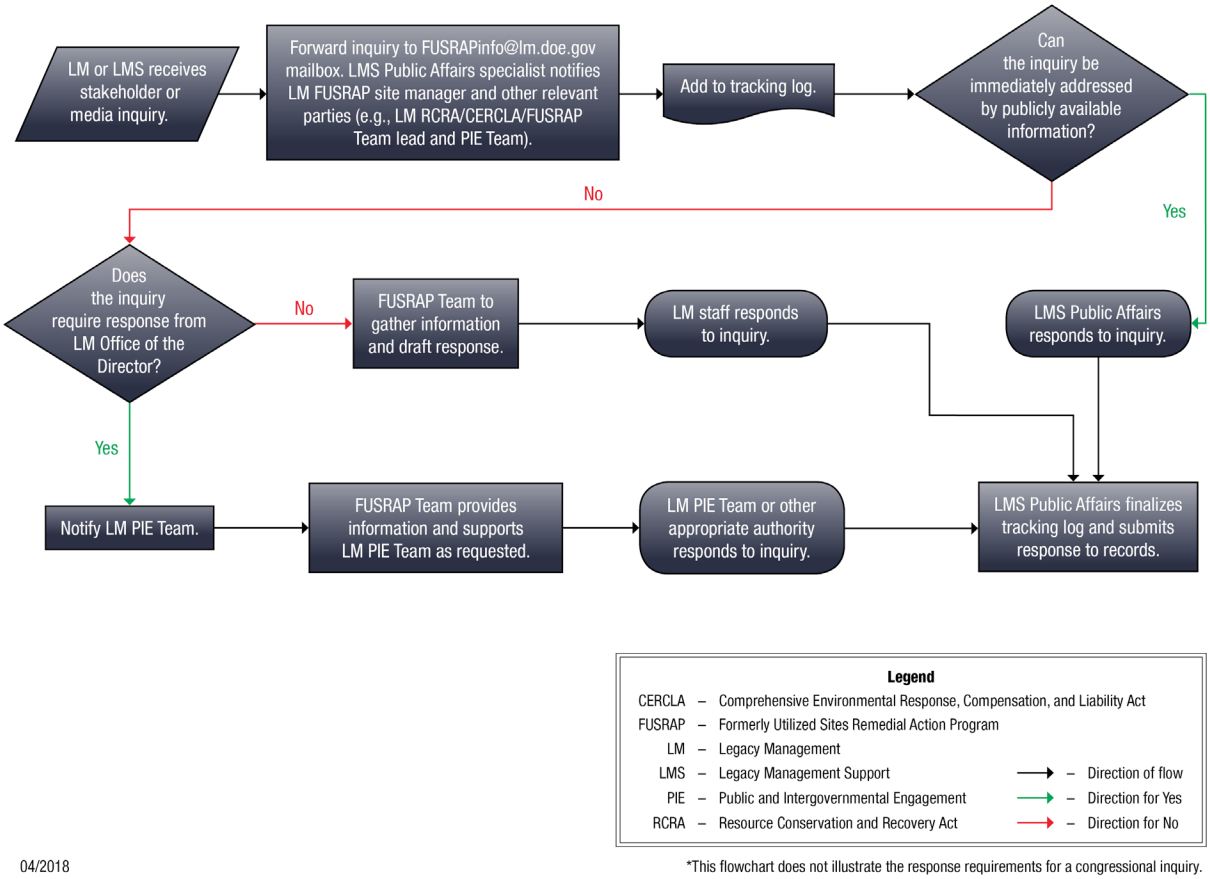

Figure 13. Public Inquiry Response Flow Chart

4.2.3.1 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 manager, LMS FUSRAP manager, the LM RCRA/CERCLA/FUSRAP Team leader, the LM Public and Intergovernmental Engagement (PIE) 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 only authorized to provide 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.

- For FUSRAP inquiries that can be answered by publicly available information, the LMS Public Affairs specialist may respond directly.

- In cases where more information is needed but no direct LM response is required (i.e., 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 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 manager and LM PIE 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 managers (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 PIE 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 Procedure 513.1C, *Freedom of Information Act and Privacy Act Response.*

4.2.3.2 Inquiry Tracking

The LMS Public Affairs specialist maintains separate tracking documents for stakeholder inquiries and media inquiries on the FUSRAP SharePoint site. 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 SharePoint library 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 SharePoint. 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.

5.0 FUSRAP Risk and Issue Management

5.1 Risk Management

Risk is identified during several stages of the program. Programmatic risks, such as those that impact cost, schedule, and scope, are evaluated and documented during development of the life-cycle baseline. 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&M. Updated risk information may be obtained from working groups, site visits, quarterly meetings, and desktop audits and is incorporated into the life-cycle baseline for that site to reduce unknowns and site risk. Typical sources of risk evaluated in the life-cycle baseline 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), 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 life-cycle baseline estimate.

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&M plans. Specific risks may be monitored during annual site inspections and desktop assessment for changes in potential severity and handling strategies.

5.2 Issue Management

Throughout the program, team members will identify questions, concerns, gaps, conflicts and inconsistencies, or events that might have an impact (positive or negative) on project success. These may be in the form of a program or project issue. All team members may identify a potential issue. Issues will be evaluated for their impacts to the program scope, schedule, and budget and will be placed on the FUSRAP Issue and Action List (Section 4.1) at the discretion of the RCRA/CERCLA/FUSRAP Team leader or LMS FUSRAP manager after vetting through the FUSRAP team. Timely communication and discussion with relevant personnel (e.g., legal, contractual, technical) will be essential to resolving issues. FUSRAP may use a white paper process or other action to articulate these issues and arrive at a consensus decision to resolve the issue.

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6.0 FUSRAP Information Management

The management of FUSRAP information is a critical component of effective site stewardship. FUSRAP information includes physical records, electronic records, environmental and spatial data, or other types of data. This information is needed to respond to questions about historical operations and current site conditions and will be used in the future to demonstrate that FUSRAP sites were appropriately evaluated, remediated, and deemed safe. As a result, a FUSRAP responsibility is to maintain accurate and current information. There is a large volume of historical FUSRAP site information in LM's record holdings, and more is added as FUSRAP sites are closed and transferred to LM. All LM records (including those associated with FUSRAP) are managed in accordance with 36 CFR 1220–1239, "Records Management." The transition and transfer of records from USACE to LM is governed by the LM Guide 243.1B, *Records and Information Management Transition Guidance*. The LM-USACE Data Management Working Group is preparing the *Formerly Utilized Sites Remedial Action Program Data Management Transfer Procedures Memorandum*, which will provide specific details on FUSRAP data transfer requirements. 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 Records

The LM AIM team maintains physical FUSRAP records at the Legacy Management Business Center in Morgantown, West Virginia, and the LM office at Grand Junction, Colorado. While FUSRAP records were retrieved from multiple divergent sources, they are now managed through one set of LM protocols. The *FUSRAP Records Guidance* document (LMS/S04621) (DOE 2014d) identifies MED and AEC-era records not in LM's custody. FUSRAP records maintained by the National Archives and Records Administration (NARA) and its Federal Records Centers can be retrieved by LM by submitting a request to NARA when necessary.

Documentum, LM's electronic recordkeeping system (ERKS), contains PDFs of LM's electronic records and physical record finding aids and can be accessed remotely by federal and contractor staff or by contacting a member of the Records Management department. LM is adding important FUSRAP-related paper records to the FUSRAP Document Information System (FDIS) reference library to aid in the retrieval of FUSRAP records for internal users (Section 6.4.1). Documents in two key FUSRAP record collections, the Bechtel National Inc. (BNI) and the CSL collections, are being captured in FDIS and are described in the following subsections.

6.1.1 BNI Remedial Action Records

These records were created when BNI performed remediation on FUSRAP sites as the prime remediation contractor. The records span from FUSRAP inception through 1997.

6.1.2 CSL

These paper records were assembled by EM and predecessor organizations and represent the culmination of EM research, which began in the late 1970s and continued over the following two decades. The CSL includes information regarding the FUSRAP headquarters program functions, identification of candidate sites, determination of eligibility, and certification of successful remediation of the designated sites. The CSD is a subset of the CSL that is posted to

the LM public website. The CSD includes important documents about sites that were formerly used in the nation's nuclear weapons and early atomic energy programs and therefore had the potential for residual radioactive contamination onsite (Section 6.4.2).

6.2 Electronic Records

The AIM team also maintains electronic FUSRAP records in Documentum. These records can be accessed by contacting Records Management personnel. As with the paper records, LM is working to input copies of important electronic FUSRAP-related records into FDIS for internal LM access.

6.3 Environmental and Spatial Data

The completion of remediation at 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 Environmental and Spatial Data Management team manages historical data from Completed Sites and recent data transferred from USACE for Active Sites during site transition.

Historical environmental sampling data (e.g., soil and groundwater data) used to certify FUSRAP Completed Sites as clean are stored in the LM environmental data management system. Spatial data (e.g., as-built drawings and maps) are incorporated into and stored in the enterprise geodatabase and are used to verify historical site boundaries and remediation areas. Site certification data for Completed 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 Environmental and Spatial Data Management 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.

The *U.S. Department of Energy Office of Legacy Management Data Needs List for Formerly Utilized Sites Remedial Action Program Sites* (DOE 2017b) identifies the types of information required for a successful site transition from USACE to LM. LM requests that the types of information listed in this document be transferred from USACE to LM as part of the site transition activities during the transition stage.

A memo entitled *Recommendations for Storage of U.S. Army Corps of Engineers (USACE) Environmental Data* (Navarro 2016) identifies the types of data that LM should maintain and makes specific recommendations for how each data type should be stored within the LM systems upon transfer from USACE. Key types of data of primary interest for FUSRAP include radiological sampling and survey data from the final status survey that document the final as-left radiological condition of the site; groundwater data that support the performance of a

groundwater remedy; air-monitoring data that document potential worker or public exposure during remediation activities; and other site-specific data that support future life-cycle planning.

Future FUSRAP LTS&M activities will 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 *Records Management Manual* (LMS/POL/04327).

6.4 Data Accessibility

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

6.4.1 Internal Access

Documentum is the ERKS for all electronic LM record material, including FUSRAP records. The LM ERKS is directly accessible by Records Management personnel.

FDIS was developed as an interactive search and retrieval system designed to contain searchable PDF reference copies of FUSRAP document collections. FDIS allows LM site managers, LMS site leads, and SMEs to access a wide variety of FUSRAP documents previously only available to Records Management personnel. Going forward, Records Management staff will place FUSRAP records submitted to the Records Management group in both Documentum and FDIS.

The FUSRAP SharePoint site is a platform that allows LM and LMS to collaborate on shared documents associated with short-term efforts and initiatives. Final records will be submitted to the ERKS (and FDIS) and removed from the SharePoint site to reduce confusion and redundancy.

LM uses the custom-designed Geospatial Environmental Mapping System (GEMS) application to display validated information for the FUSRAP Completed Sites. As FUSRAP sites with LTS&M responsibilities, such as groundwater monitoring and ICs, transfer to LM, an internal GEMS site will be maintained to display the spatial data related to the groundwater wells and the areas requiring ICs.

LM has created a digital media repository to collect and maintain digital media. Photos can be uploaded into the system, and the user has the option to decide which metadata fields should be populated for each image. At this time, the digital media repository has not been used for FUSRAP, but the intent is to utilize its capabilities in the future.

6.4.2 Public Access

The public-facing LM website (https://www.lm.doe.gov/) provides the primary means of public access to FUSRAP documents and data. As noted in Section 6.1.2, 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, the basis for FUSRAP eligibility, and for sites remediated by DOE, important documents created during the period when remediation was conducted. For sites with successfully completed remediation, links to individual site fact sheets and webpages are also included on the CSD. The CSD is accessible on the LM public website at https://www.lm.doe.gov/Considered_Sites/.

For recently remediated sites (since 1997), the administrative record (AR) is also available for public access. The AR is a collection of documents that establish the basis for the selected remedy at a closure site governed by CERCLA. LM maintains a public AR website at https://www.lm.doe.gov/CERCLA/SiteSelector.aspx. The procedure for the posting of FUSRAP ARs and other records (such as the permanent record) for recently transitioned and transitioning sites is under development.

In addition, an external version of the GEMS site (https://gems.lm.doe.gov/) can be accessed for public viewing via a link on the main LM website. The external GEMS site 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 LM Procedure 513.1C, *Freedom of Information Act and Privacy Act Response.*

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

The LMS contractor manages the work it performs for LM in a manner that protects natural and cultural resources in accordance with (1) federal, state, and tribal regulations and guidance and (2) applicable executive orders. The LM Environmental Policy requires LM to effectively integrate the environmental management of natural and cultural resources into all activities.

A compliance review will be completed during site transition planning activities to determine requirements for LTS&M. The guidance provided in *Transition and Transfer Guidance for FUSRAP Sites* (DOE forthcoming) and the Site Transition Framework will be followed to systematically review potential compliance issues. As requirements change, the program will be evaluated to determine applicability to the work. LMS Environmental Compliance staff will review environmental laws, regulations, and directives applicable to FUSRAP in accordance with the *Environmental Instructions Manual* (LMS/POL/S04338).

Federal facilities and projects are required to comply with NEPA. This law requires that federal actions be evaluated for their potential impacts on the natural and human environment; in the case of sites remediated under a CERCLA process, the law requires that environmental values like those in NEPA reviews are considered. The information collected during the transition preparation process will provide the basis for the NEPA/environmental values review. Typical proposed actions, including LTS&M actions and plans and potential beneficial reuse options, are evaluated and documented prior to transition of the FUSRAP site to LM. Based on the proposed actions, LM will determine the proper level of NEPA review, which will be reflected in the LTS&M Plan or supporting plans.

Environmental compliance is also a primary consideration for LTS&M field activities at Completed Sites. The *Environmental Procedures Catalog* (LMS/POL/S04325) contains administrative and technical procedures that may be used for guidance in planning and conducting field activities. In many instances, the procedures in this catalog present procedural options or general considerations for completing a task; therefore, site-specific planning documents or SOWs are also necessary. The activity-specific procedures in this catalog provide the technical foundation for sampling and data acquisition activities based on research and industry standards.

In alignment with the Environmental Management System, described in *Environmental Management System Description* (LMS/POL/S04346), proposed LTS&M activities will be assessed for environmental impacts and opportunities to improve environmental performance

and use resilient environmental practices. The Environmental Management System helps LM use its finite resources wisely, minimize wastes and adverse environmental impacts, and comply with the laws, regulations, DOE requirements, and other applicable requirements that protect the environment, public health, and resources. Areas for consideration include reusing and recycling products or wastes, using environmentally preferable products (i.e., products with recycled content, such as office furniture and concrete and asphalt, products with reduced toxicity, and energy-efficient products), using alternative fuels, using renewable energy, and making environmental habitat improvements. In addition, if suitable habitat is present, DOE-owned sites will be evaluated for opportunities to improve the ecosystem or ecological biodiversity.

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 *Worker Safety and Health Program* (LMS/POL/S14697), the *Integrated Safety Management System Description* (LMS/POL/S14463), and the *Safety and Health Manual* (LMS/POL/S04321), 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.

LMS 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 authority to stop work if new hazards arise and when unsafe conditions exist. 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 LSM Task Assignment manager, or the LMS Safety and Health manager by use of lessons learned, trip reports, or other means to ensure continuous improvement.

FUSRAP safety and health needs are supported by the LMS Environment, Safety, Health, and Quality Assurance mission service area. Prior to field activities, training requirements will be determined by the LMS Safety and Health manager or designee and may consist of general or site-specific training. Specific requirements for site activities (e.g., site visits, sampling) are documented in Job Safety Analysis forms or Project Safety Plans and are reviewed before the start of field activities in prejob briefings and tailgate meetings.

8.0 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 quality assurance (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 *Quality Assurance Program Description* (LMS/POL/S13806) and the *Quality Assurance Manual* (LMS/POL/S04320) to provide a QA management system to implement the requirements of DOE Order 414.1D, *Quality Assurance*.

QA program criteria and associated requirements apply to all activities within FUSRAP. The achievement of quality 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 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 *Quality Assurance Manual* and criteria in DOE Order 414.1D are described in the following subsections.

8.1 QA Program

FUSRAP utilizes the LMS *Quality Assurance Manual* to implement the QA program. A separate QA plan has not been prepared. This Program Management Plan provides information on FUSRAP-specific QA elements.

8.2 Personnel Training and Qualification

FUSRAP staff are technically competent on the basis of 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.

8.3 Quality Improvement

FUSRAP uses the quality improvement process described in the LMS *Quality Assurance Manual*. Identified nonconformances and incidents are evaluated and reported with the assistance of the LMS QA organization. The Corrective Action Tracking System (CATS) is used to maintain and track corrective actions. Where appropriate, the nonconformance is reviewed to determine if reporting within the DOE Noncompliance Tracking System is required. The LMS *Quality Assurance Manual* describes procedures for performance assurance, cause analysis, corrective actions, and preventive actions, including lessons learned and management oversight.

FUSRAP routinely utilizes the lessons learned process to learn from past activities for the improvement of work processes, facility or equipment design and operation, quality, safety, and cost-effectiveness. LMS maintains a lessons learned repository on the LM intranet site at the following link: http://sp.lm.doe.gov/QA/Lessons%20Learned/Forms/By%20Year.aspx. In addition, management oversight activities such as site visits are used to review and observe work processes and identify personnel, equipment, technology, process, safety, or other issues that need management attention.

8.4 Control of Documents and Records

The LMS *Quality Assurance Manual* describes requirements for Quality Assurance Program Plans. FUSRAP is not anticipated to require a program-specific Quality Assurance Program Plan. In addition, the LMS *Quality Assurance Manual* and LM Procedure-2-10.2-4.2, *Records Management Program*, describe the requirements for records control. FUSRAP follows these requirements in addition to those listed in Section 6.0 of this Program Management Plan.

8.5 Work Processes

The work processes for review of materials such as deliverable documents are described in the LMS *Quality Assurance Manual* and apply for all FUSRAP deliverables.

8.6 Design Document Review

The requirements for review of design documents are described in the LMS *Quality Assurance Manual*. Typically FUSRAP does not produce design documents.

8.7 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 quality assurance requirements for suppliers and subcontractors are described in the LMS *Quality Assurance Manual*. The FUSRAP team will follow these requirements when procurements are required.

8.8 Inspection and Testing

This criterion is not currently applicable to FUSRAP.

8.9 Management and Independent Assessments

Management assessments and independent audits are performed within LM and LMS. Periodic management reviews and assessments are performed for all of LMS (including FUSRAP) to evaluate staffing, operations, financial performance, safety, and customer relations. Audits are performed periodically by LMS QA personnel, who are responsible for audit planning, performance, and reporting. FUSRAP staff support management assessments and QA audits as appropriate.

8.10 Contractor Oversight

LM staff perform contractor oversight activities in accordance with LM Procedure-2-10.0-1.0-0.0, *Oversight*, 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 LM Procedure-2-10.0-1.0-0.0, oversight activities may be performed by any 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).

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10 CFR 835. "Occupational Radiation Protection."

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10 CFR 1021. "National Environmental Policy Act Implementing Procedures."

36 CFR 1220–1239, "Records Management."

40 CFR 300. "National Oil and Hazardous Substances Pollution Contingency Plan."

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

243.1B, *Records and Information Management Transition Guidance*, May 2016 (LM Guide).

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414.1D, *Quality Assurance*, April 25, 2011.

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454.1, Chg 1, *Use of Institutional Controls*, December 7, 2015.

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GEMS Operations Manual, LMS/PRO/S08779, continually updated, prepared by Navarro Research and Engineering, Inc., for the U.S. Department of Energy Office of Legacy Management.

Graphic Design Manual, LMS/POL/S11794, continually updated, prepared by Navarro Research and Engineering, Inc., for the U.S. Department of Energy Office of Legacy Management.

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Information Technology Configuration Management Plan, LMS/POL/S07827, continually updated, prepared by Navarro Research and Engineering, Inc., for the U.S. Department of Energy Office of Legacy Management.

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LMS Projects and Programs Manual, LMS/POL/S05760, continually updated, prepared by Navarro Research and Engineering, Inc., for the U.S. Department of Energy Office of Legacy Management.

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Considered Sites Database at https://www.lm.doe.gov/Considered_Sites/Summary/. Provides information with site-specific search capabilities.

DOE Guidance on Institutional Controls at https://www.directives.doe.gov/directives/0454.1-EGuide-1/view. Provides guidance on establishing and implementing ICs at DOE sites.

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

FUSRAP LMS Responsibility Assignment Matrix: https://lmportal.lm.doe.gov/Contractor/LMS_Contract.aspx.

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: https://www.lm.doe.gov/CERCLA/SiteSelector.aspx

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&M requirements.

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

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

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**

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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

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Appendix B

Summary of FUSRAP Site Information

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	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	Bayo Canyon, NM	Project Y Demolition Range; TA-10	Weapons Development	1980				1984	1	AEA				
6	Berkeley, CA	Gilman Hall, Univ of Cal.-Berkeley	Research	1979				1985	1	AEA				
7	Beverly, MA	Ventron/Metal Hydrides	Fabricating & Machining	1985				2004	1	AEA				
8	Buffalo, NY	B & L Steel	Fabricating & Machining	1992				2002	1	AEA				
9	Chicago North, IL	National Guard Armory	Research	1985				1989	1	AEA				
10	Chicago South, IL	University of Chicago	Research	1983				1989	1	AEA				
11	Chupadera Mesa, NM	Chupadera Mesa	Weapons Development	1985				1986	1	AEA				
12	Columbus East, OH	B & T Metals	Fabricating & Machining	1992				2001	1	AEA				
13	Fairfield, OH	Associated Aircraft Tool and Manufacturing	Fabricating & Machining	1993				1996	1	AEA				
14	Granite City, IL	General Steel Industries	Fabricating & Machining	1992				1994	1	AEA				
15	Hamilton, OH	Herring-Hall Marvin Safe	Fabricating & Machining	1994				1997	1	AEA				
16	Indian Orchard, MA	Chapman Valve	Fabricating & Machining	1992				2004	1	AEA				
17	Jersey City, NJ	Kellex/Pierpont (Vitro)	Research	1978				1983	1	AEA				
18	Madison, IL	Spectrulite Consortium/Dow Chemical	Fabricating & Machining	1992				2002	1	AEA				
19	New Brunswick, NJ	New Brunswick Lab	Research	1990				2001	2	AEA				
20	New York, NY	Baker & Williams Warehouses	Temporary Storage	1990				1996	1	AEA				
21	Niagara Falls Storage Site VPs, NY	NFSS VPs	Waste Storage / Disposal	1983				1992	1	AEA				
22	Oak Ridge, TN Warehouses	Elza Gate	Temporary Storage	1988				1994	1	AEA				
23	Oxford, OH	Alba Craft Laboratory	Fabricating & Machining	1992				1997	1	AEA				
24	Painesville, OH	Diamond Magnesium Company	Contaminated Materials	1992	2003	2003	2006	2016	2	CERCLA				
25	Seymour, CT	Seymour Specialty Wire	Fabricating & Machining	1985				1995	1	AEA				
26	Springdale, PA	C.H. Schnorr & Company	Fabricating & Machining	1992				1996	1	AEA				
27	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	2	CERCLA				
28	Tonawanda North Unit 1, NY	Ashland Unit 1	Waste Disposal	1984	1993	1993	1998	2009	1	CERCLA				
29	Tonawanda North Unit 2, NY	Ashland Unit 2	Waste Disposal	1984	1993	1993	1998	2009	1	CERCLA				
31	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	
MED/AEC LEGACY SITE														
1	Burris Park, CA	Burris Park Field Station	Research	N/A**				2014	2	State Agreement				
ACTIVE SITES														
1	Attleboro, MA	Shpack Landfill	Waste Disposal	1984	2004	2004	2005	2019	2	CERCLA		NPL[f]		
2	Berkeley, MO	St Louis Airport	Waste Disposal	1984	1994	2003	2005	2038	3	CERCLA		NPL	FFA	
3	Berkeley VPs, MO	St Louis Airport VPs	Waste Disposal	1984	1994	2003	2005	2038	3	CERCLA			FFA	
4	Carnegie, PA	Superior Steel	Fabricating & Machining	2008	TBD	TBD	TBD	2038	2	CERCLA NRC-term.				
5	Cleveland, OH	Harshaw Chemical Company	Processing	1999	2006 with revision in 2009	2012	TBD	2038	2	CERCLA				
6	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	2	CERCLA	CA			DOE
7	Curtis Bay, MD	W.R. Grace	Thorium Processing	1984	Building 23 2003, RWDA 2005	Building 23 2003, RWDA 2008	Building 23 2005, RWDA 2011	2024	2	CERCLA				
8	Deepwater, NJ	DuPont Chambers Works	Research, Processing	1980	2011	2013	2014	2022	2	CERCLA				
9	Fort Wayne, IN	Joslyn Manufacturing and Supply	Fabricating & Machining	2009	TBD	TBD	TBD	2038	2	CERCLA	CA			
10	Hazlewood, MO	Latty Ave, MO	Fabricating & Machining	1984	1994	2003	2005	2023	3	CERCLA	CA	NPL[g]	FFA	
11	Hicksville, NY	Sylvania / Corning Plant	Research	2002	2010	TBD	TBD	2038	2	CERCLA		NPL	FFA	
12	Lockport, NY	Guterl Specialty Steel	Fabricating & Machining	2006	2010	TBD	TBD	2038	2	CERCLA				
13	Luckey, OH	Luckey, OH	Contaminated Materials	1992	2000	2003	Soil 2006, Groundwater 2008	2033	2	CERCLA				

	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
14	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	2026	2	CERCLA NRC-term.	CA	NPL	FFA	DOE
15	Middlesex North, NJ	Middlesex Municipal Landfill	Waste Disposal	1980/ 2014[h]	2016	TBD	TBD	2038	2	CERCLA				
16	Middlesex South, NJ	Middlesex Sampling Plant	Temporary Storage, Assaying & Sampling	1980	Soil 2004, Groundwater 2016	Soil 2005	Soil 2005	2022	2	CERCLA		NPL	FFA	DOE
17	Middletown, IA	Iowa Army Ammunition Depot	Weapons Development	2003	2009	2011	2011	2022	2	CERCLA		NPL	FFA	
18	Niagara Falls Storage Site, NY	Niagara Falls Storage Site, NY	Waste Storage / Disposal	1990	2007, Addendum 2011	IWCS 2015	TBD	2038	2	CERCLA				DOE
19	Parks Township, PA	Shallow Land Disposal Area	Waste Disposal	2002	2006	2006	2007, Amendment 2015	2038	2	CERCLA NRC inact.	CA			
20	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	2026	3	CERCLA		NPL	FFA	
21	Tonawanda Landfill, NY	Tonawanda Landfill and Mudflats	Waste Disposal	1984	2005	1993, Mudflats Addendum 2009, Landfill OU 2015	Mudflats OU 2008 Landfill OU 2017	2038	2	CERCLA				
22	Tonawanda North Unit 3, NY	Seaway Industrial	Waste Disposal	1984	1993	1993, Addendum 2008	2009	2038	2	CERCLA				
23	Windsor, CT	Combustion Engineering	Fabricating & Machining	1994	2000	2008	n/a	2019	1	NRC-term.				
REFERRED SITES - Eligible but Not Currently Designated by USACE for FUSRAP														
1	Queens, NY	Wolff-Alport Chemical Company	not yet designated	2013					1	CERCLA		NPL		
2	Staten Island, NY	Staten Island Warehouse	not yet designated	2009					1	CERCLA				
3	NFSS VPs H and X-Prime, NY	NFSS VPs H and X-Prime	not yet designated	2014					1	CERCLA				
4	Painesville Landfills III and V, OH	Diamond Magnesium Company	not yet designated	2015					1	CERCLA				
			Totals	**59**				**55**			**6**	**10**	**9**	**4**

Sites with Transfer Dates 2019-2023	**7**	Near term transition; within five years
Sites with Transfer Dates 2024-2037	**4**	Long term transition; scheduled transfer dates but outside of five year window
Sites with Transfer Dates 2038+	**12**	Transfer date is to be determined per USACE schedule; assigned FY38 transfer date for planning purposes

Category 1 Sites	**33**
Category 2 Sites	**22**
Category 3 Sites	**4**

CERCLA Sites	**31**
AEA Sites	**26**
Sites that have /had NRC Licenses	**5**

Notes:

[a] Fiscal Year of Transfer Date. Transfer dates for the Completed Sites and the MED/AEC Legacy Site are from the *LM Site Management Guide* , March 2017. Transfer dates for the Active Sites are those FYs reported by USACE HQ, November, 2017. For dates noted as TBD by USACE, LM has established a 2038 transfer dated for planning purposes.

[b] Categories are those listed in the LM Site Management Guide, March 2017 [rev. 19] with the exception of Adrian, Aliquippa, Chicago South, Madison, and Seymour, which are listed as Category 1 in anticipation of a category change in the next revision of the 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.

[**] Burris Park, CA Site was not eligible for FUSRAP. However, the research work was performed under contract to AEC, and site stewardship of residual strontium-90 was undefined. In 2014, LM agreed to take LTS&M responsibility.

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

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FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM (FUSRAP):

A Legislative History

CHRONOLOGY:

March 1974

The Formerly Utilized Sites Remedial Action Program (FUSRAP) is established in 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 the AEC and later sold. There was no authorizing legislation, nor was specific authorizing legislation ever passed, although in the early 1980's 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 the Atomic Energy Commission with the Office of Coal Research. ERDA becomes operational by executive Order 11834, January 19, 1975, bringing FUSRAP with it.

August 1977

The Department of Energy Organization Act folds ERDA into the newly formed Department of Energy (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. However, this bill is reported out of committee.

October 1, 1980

Public law 96-367 is signed into law. Energy and Water Development Appropriations Act, 1981, covers DOE for FY1981; no FUSRAP language.

December 4, 1981

Public law 97-88 is signed into law. Energy and Water Development Appropriations Act, 1982, covers DOE for FY 1982; no FUSRAP language.

July 14, 1983

Public Law 98-50 is signed into law. The conference report supporting Public Law 98-50, (Energy and Water Appropriations Act FY 1984) 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

Public Law 98-360 is signed into law. The conference report supporting Public Law 98-360 (Energy and Water Appropriations Act for FY 1985) specifies details on FUSRAP work at the St. Louis Airport site.

July 19, 1988

Public Law 100-371 is signed into law. Energy and Water Development Appropriations Act, 1989; covers DOE for FY 1989; no FUSRAP language.

September 28, 1988

House Conference Report 100-1002. Appropriations for the Department of Defense; bans Albany waste from Tonawrn1da, NY. Report accompanies H.R. 4781 and Public Law 100-463, which was signed into law October 1, 1988.

September 29, 1989

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

November 5, 1990

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

August 17, 1991

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

October 2, 1992

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

October 28, 1993

Public Law103-126 is signed into law. Energy and Water Development Appropriations Act, 1994; covers DOE for FY 1994; no FUSRAP language.

August 26, 1994

Public Law 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 clean-up of the Wayne, NJ, Interim Storage Site under FUSRAP.

July 30, 1996

Public Law 104-206 is signed into law. Based on Senate Reports. 1959.

October 13, 1997

Public Law 105-62 is signed into law. Based on conference reconciliation of H. R. 2283 and 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).

Public Law 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

Public Law 105-85 is signed into law. This legislation served as an act to authorize appropriations for FY 1998 for military activities of the DOD, 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

Public Law 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 (NRDC) 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

Public Law 105-261 is signed into law. Section 3162 expresses the sense of Congress that the OMB, beginning with FY 2000, should transfer the FUSRAP from the defense 050 budget function to a non-defense 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 Formerly Utilized Sites Remedial Action Program (FUSRAP) is signed.

September 29, 1999

Public Law 106-60, the Energy and Water Appropriations Act for FY 2000 is signed, authorizing a budget of $150 million for FUSRAP in FY2000. 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

Public Law 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 FY2000.

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 FY2001, is passed by Congress, vetoed by the president, but, with more than a 2/3 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, PA.

November 12, 2001

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

January 20, 2002

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

February 20, 2003

Public Law 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

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

December 8, 2004

Public Law 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

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

June 29, 2006

Public Law 109-274 is signed into law. H.R. 5427 specified funding of $130 million for FUSRAP in 2007. The Act specified the "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

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

July 14, 2008

Public Law 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

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

July 22, 2010

Public Law 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

Public Law 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

Public Law 113-76 is signed into law. H.R. 3547 specified funding of $103.5 million for FUSRAP in fiscal year 2015.

April 24, 2015

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

December 10, 2016

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

April 26, 2016

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

May 5, 2017

Public Law 115-31 is signed into law. H.R. 244 specified funding of $112 million for FUSRAP in FY 17.

July 17, 2017

H.R. 3266 specified funding of $118 million for FUSRAP in FY 18.

Appendix D

FUSRAP RACI Charts

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RACI Matrix - Response to External FUSRAP Inquiries											
	LM Team					**LMS Team**					
Role / **Project Deliverable (or Activity)**	LM PIE Team	LM RCRA/CERCLA/FUSRAP Team leader	LM FUSRAP Manager	LM FUSRAP Site or Subtask Managers	Other LM teams and SMEs (e.g., EDSM, Real Property or Records)	Projects and Program Manager	LMS Stakeholder Engagement Manager	LMS FUSRAP Manager	LMS Site Leads	LMS Public Affairs Staff	Assigned Mission Services Personnel / Subject Matter Experts (e.g., Records Management Personnel)
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 PIE Team or other authority											
Notify LM Office of the Director and PIE 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 PIE 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

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RACI Matrix - FUSRAP Programmatic Document Change Control								
	LM Team				**LMS Team**			
Role / **Project Deliverable (or Activity)**	LM RCRA/CERCLA/FUSRAP Team leader	LM FUSRAP Manager	LM FUSRAP Site or Subtask Managers	Other LM teams and SMEs (e.g., EDSM, Real Property or Records)	Projects and Program Manager	LMS FUSRAP Manager	LMS Site Leads	Assigned Mission Services Personnel / 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 baseline change procedure (BCP) 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:

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

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 Manager	LM FUSRAP Site or Subtask Managers	Other LM teams and SMEs (e.g., EDSM, Real Property or Records)	Projects and Program Manager	LMS FUSRAP Manager	LMS Site Leads	Assigned Mission Services Personnel / 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 baseline change procedure (BCP) 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
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

Appendix E

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

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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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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) 761-8538 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)

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