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U.S. DEPARTMENT OF ENERGY | Legacy Management

Site Management Guide

March 2020 Update

Managing Today's Change, Protecting Tomorrow's Future

Cover photos, clockwise from upper left:

- BONUS, PR, Decommissioned Reactor Site
- Durango, CO, Processing Site
- Mexican Hat, UT, Disposal Site
- Rifle, CO, Disposal Site
- Center: Durango, CO, Disposal Site

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1.0 Introduction

The U.S. Department of Energy (DOE) Office of Legacy Management (LM), established in 2003, manages DOE's responsibilities associated with the closure of World War II and Cold War era sites that the federal government operated to research, produce, and test nuclear weapons and conduct other scientific and engineering research.

The operations that were conducted in this vast network of industrial facilities left a legacy of radioactive and chemical waste, environmental contamination, and hazardous facilities and materials at well over 100 sites. Since 1989, DOE has taken an aggressive accelerated cleanup approach to reduce risks, cut costs, and ensure the protection of human health and the environment. The establishment of LM is part of that approach.

At most DOE sites undergoing cleanup, some residual hazards will remain when cleanup is completed due to financial and technical impracticality. However, DOE still has an obligation to protect human health and the environment after cleanup is completed. LM fulfills DOE's postclosure obligation by providing long-term management of postcleanup sites that do not have continuing missions.

2.0 Purpose

The main purpose of the *Site Management Guide* is to be a reference document for LM and its contractor(s) and to provide accurate and consistent information across the LM organization. The LM *Site Management Guide* coordinator updates the guide annually. The primary data elements of the *Site Management Guide* are the following:

- Site Name and Location (State)
- Pre-LM Name
- Transferring Organization
- Actual Transfer Date (Fiscal Year [FY])
- Planned Transfer Date (FY)
- Regulatory Drivers and Programmatic Framework
- Site Category

The data elements listed above are under configuration control and cannot be altered without proper approvals. LM manages and controls all S*ite Management Guide* changes except changes to data about the DOE Office of Environmental Management (EM) Closure Sites transferring to LM. Such changes require joint approval by EM-1 and LM-1.

3.0 Regulatory Drivers and Programmatic Framework

Regulatory drivers are statutes or programs that direct cleanup and management requirements at DOE sites. LM currently manages sites with diverse regulatory drivers or as part of internal DOE or congressionally-recognized programs.

Regulatory drivers include the following:

- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- Resource Conservation and Recovery Act (RCRA)
- Uranium Mill Tailings Radiation Control Act (UMTRCA) Title I
- UMTRCA Title II
- Nuclear Waste Policy Act (NWPA) Section 151
- State Water Quality Standards

Additional sites were remediated and LM manages them today under the following programmatic frameworks:

- The Formerly Utilized Sites Remedial Action Program (FUSRAP)
- The DOE Decontamination and Decommissioning (D&D) Program
- The Nevada Offsites
- Manhattan Engineer District/Atomic Energy Commission (MED/AEC) Legacy Sites
- Plowshare/ Vela Uniform Program Sites

CERCLA/RCRA sites were radiologically or chemically contaminated by federal milling, processing, research, or weapons-manufacturing operations. Once remediation is completed, LM becomes responsible for long-term management. UMTRCA Title I sites are associated with former privately operated uranium ore-processing locations. The remediation of these sites created 19 disposal sites that contain encapsulated uranium mill tailings and associated contaminated materials. UMTRCA Title II sites formerly were commercially owned and are regulated under a U.S. Nuclear Regulatory Commission (NRC) license. For license termination, the owner must conduct an NRC-approved cleanup of any on-site radioactive waste remaining from former uranium ore-processing operations. The site owner must also provide funding to offset some of the costs of site transition to LM and post-transfer long-term surveillance and maintenance (LTS&M). One site was remediated under Section 151 of the Nuclear Waste Policy Act, which contains provisions for transferring privately owned disposal sites to the federal government if the site activities were conducted for the benefit of the government. NRC is the regulator for this site as well. Finally, LM manages one site that was remediated under State Water Quality Standards. Cleanup was regulated by the Colorado River Basin Regional Water Quality Control Board, a California state agency, under the Waste Discharge Requirements Order of 1989.

Programmatic framework sites include FUSRAP sites where the U.S. Army Corps of Engineers (USACE) is responsible for site surveys and remediation before they are eventually transferred to LM for post-closure care. FUSRAP was initiated in 1974 to identify, investigate and clean up or control sites throughout the United States that were contaminated as a result of the nation's early atomic weapons and energy programs. D&D sites were remediated under DOE orders or applicable environmental protection laws. They include experimental reactors or locations where nuclear energy research was carried out. The Nevada Offsites are locations in the continental United States where underground nuclear tests were conducted or sites that were evaluated for such tests that are located off the Nevada National Security Site (formerly the Nevada Test Site). Individual Nevada Offsites have been remediated under a variety of frameworks, including Federal Facility Agreements and Consent Orders and voluntary cleanup programs with states. MED/AEC legacy sites are sites that were associated with the program during World War II by the U.S. to produce the first nuclear weapons as well as AEC sites associated with early weapons development. Plowshare/ Vela Uniform Program Sites are sites where nonnuclear tests were conducted or where nuclear tests were cancelled after some activities had occurred. Most of the sites are records only sites, but some additional

investigations are being completed to determine whether there are outstanding liabilities from AEC operations.

4.0 Site Categories

The long-term management of each LM site is designated as one of three categories based on the actual or anticipated LTS&M activities associated with that site. The site category indicates the level of LTS&M activities that are expected for each site:

- **Category 1** activities typically include records-related activities and stakeholder support.
- **Category 2** activities typically include routine inspection (any site visit needed to verify the integrity of engineered or institutional barriers) and monitoring/maintenance, records-related activities, and stakeholder support.
- **Category 3** activities typically include operation and maintenance of active remedial action systems, routine inspection (any site visit needed to verify the integrity of engineered or institutional barriers) and monitoring/maintenance, records-related activities, and stakeholder support.

Note: For sites that have multiple categories, the overall category designation will always be the highest of all categories listed for that site. For example: The Salt Lake City, Utah, Disposal/Processing Site is currently counted as one site, but it has two category designations. The Salt Lake City, Utah, Processing Site (mill site) is a Category 1 site, and the Salt Lake City, Utah, Disposal Site is a Category 2 site. For reporting purposes, this site will have an overall category designation as a Category 2 site.

LM also maintains a Transitioning Sites category, which consists of sites that will transfer to LM within the next five years. LM often conducts site-specific activities to prepare a site for acceptance into the LM program. Although the date that a new site officially becomes LM's responsibility is important, LM is conducting due diligence by working on sites as much as five years ahead of transition dates. Important transition activities can include developing LTS&M plans, which, depending on the authorities under which the site has undergone remediation, may require approval by regulators such as NRC or the U.S. Environmental Protection Agency. Other transition responsibilities include identifying and preserving records, and ascertaining that real property instruments, such as administrative institutional controls, are in place. The designation of when transition activities begin at a site will help LM better align its budget formulation, life-cycle planning, and staffing with the beginning of actual work at future LM sites. As each site in the Transitioning Sites category is formally transferred to LM, it is officially designated as a Category 1, 2, or 3 site.

5.0 Site Counts

The *Site Management Guide* is the control document for all site count information. The manner in which sites are counted is critical for ensuring that LM provides accurate and consistent site count data. It has been determined that each geographic site location will be counted as one site. This includes geographic site locations having both a former processing site and an associated disposal site. These types of sites will also be counted as one site.

Note: The only exceptions to the site count guidance are two FUSRAP sites in Berkeley, Missouri (Berkeley Site and Berkeley Site Vicinity Properties), and the two FUSRAP sites in Niagara Falls, New York (Niagara Falls Storage Site and Niagara Falls Storage Site Vicinity Properties). These four FUSRAP sites are currently counted as four sites because USACE manages them as four separate sites.

The following are examples of UMTRCA sites that have both a former processing site and an associated disposal site:

- **These two Gunnison, Colorado, sites count as one site:**
  1) Gunnison, Colorado, Disposal Site
  2) Gunnison, Colorado, Processing Site

- **These three Rifle, Colorado, sites count as one site:**
  1) Rifle, Colorado, Processing (New) Site
  2) Rifle, Colorado, Processing (Old) Site
  3) Rifle, Colorado, Disposal Site

6.0 Site Nomenclature

The names of many sites that transfer to the LM program are confusing and non-descriptive. In many cases sites have names using the company name of the former site operator or using a geographic name or nickname. LM has established the following guidelines for naming or identifying sites within LM to eliminate confusion when trying to identify sites and site locations:

- Eliminate use of company names of current or former operators or property owners.
- When possible, name a site by using the name of the nearest city or town. If multiple sites exist near the same city or town, use a direction name (North, South, East, West) following the city or town name.

  Note: LM will receive a few sites that do not have a city or town near the site to use as the site name. In these cases, the sites will retain the current pre-LM name. **Example:** There are no cities or towns near the Salmon, Mississippi, Site. "Salmon" is the project name of the site and is not referencing a geographic location; therefore, the Salmon, Mississippi, Site retains the pre-LM site name.

  FUSRAP sites not yet transferred to LM retain their USACE name (as shown under the Pre-LM Name column in Appendix B). Upon transfer, site names will be changed in accordance with LM site nomenclature.

  Be aware that LM has revised several site names for sites that have not yet transferred to LM (mainly associated with UMTRCA Title II sites) for internal management purposes. Until a site officially transfers to LM, the original (pre-LM) site name will be referenced in all outside reporting and data sharing. Appendixes A and B include pre-LM and LM site names for ease in cross-referencing.

- The name should also include the state in which the site is geographically located.

- When applicable the site name should include additional information about the site, such as processing, disposal, or decommissioned reactor. See Example:

  Maybell, Colorado, Disposal Site
  Maybell West, Colorado, Disposal Site

7.0 Site Transition Policy

This section references the following site transition policy documents:

Terms and Conditions Between EM and LM – This document outlines proposed terms and conditions for managing and funding site transition activities between EM and LM. The *Terms and Conditions for Site Transition – February 2005* document is available at the following web address: http://energy.gov/lm/guidance-reports-and-documents
Site Transition Plan Guidance – This document provides guidance for the development of site transition plans. The *Site Transition Plan Guidance* document is available at the following web address: http://energy.gov/lm/guidance-reports-and-documents
Records and Information Management Transition Guide – This guidance document establishes a framework for developing a Records and Information Management Transition Plan as part of the overall transition effort for a legacy site. The *LM Records and Information Management Transition Guidance* document is available at the following web address: http://energy.gov/lm/downloads/lm-records-and-information-management-transition-guidance-may-2016
Site Transition Framework – This document provides a framework for all DOE facilities and sites where DOE may have anticipated LTS&M responsibilities. The *Site Transition Framework for Long-Term Surveillance and Maintenance* document is available at the following web address: http://energy.gov/lm/guidance-reports-and-documents
Site Transition Process Upon Cleanup Completion – This two-page fact sheet outlines LM's policy on various aspects of site transition. The *Site Transition Process Upon Cleanup Completion* document is available at the following web address: http://energy.gov/lm/guidance-reports-and-documents
Site-Specific Fact Sheets – These fact sheets for sites that have transferred to LM cover the following topics: key milestones, site condition at the time of transfer, transition issues, and information about the management and mitigation of programmatic risk. Site-specific information is available from the respective LM site manager and at the following web address: http://energy.gov/lm/sites/lm-sites

8.0 Interrelationship of Site Management Guide Data

All LM federal and contractor staff should abide by the *Site Management Guide* because of the interrelationship and interdependency among site count data and other LM products, processes, and systems.

Looking at the LM program and the core functions of planning, budget formulation, budget execution, and evaluation, site count data is a major part of many products. The following are just a few of the products that require current and accurate site count data:

- LM Strategic Plan

- Budget Formulation
- Life-Cycle Planning
- Environmental Liability Estimates
- DOE Performance Measure Management System

LM staff should use the *Site Management Guide* as the source document when preparing or releasing site count information for DOE data calls or to transferring organizations. All changes or questions associated with the data in this guide should be addressed to the LM *Site Management Guide* coordinator.

9.0 Appendixes

Site Management Guide site data are presented in the following appendixes. In each appendix, changes from the previous update are shown in red font.

Appendix A-1 – Alphabetical Site Count Listing: This appendix lists the sites in the LM program aphetically.

Appendix A-2 – Site Count Listing by Transfer Date: This appendix lists the sites in the LM program by fiscal year transfer date.

Appendix B – Site Transition Schedule: This appendix lists the sites that are scheduled to transfer to LM from FY 2020 through FY 2070.

Appendix C – Transitioning Sites Category: This appendix is a list of sites scheduled to transfer to LM within the next five years.

Appendix D – Planned Site Count by Year: This appendix shows the number of sites currently in the LM program combined with sites that are scheduled to transfer to LM over the next 10 years.

Appendix E – Site Count by State: This appendix is a table of sites currently in the LM program, listed by state and site category.

Appendix F – Site Count by Regulatory Driver/Programmatic Framework and Site Category: This appendix is a chart of sites currently in the LM program listed by Regulatory Driver/Programmatic Framework and site category.

Appendix G – LM Site Maps: This appendix contains two maps, a map of sites currently in the LM program and a map of the anticipated sites through FY 2030.

Appendix H– Site Information Summary: This appendix provides a summary of sites that are being managed under LTS&M. It consists of commonly used data points from the DOE Office of Legacy Management Site Overview report (number of wells, number of disposal cells, and institutional controls) and is grouped by Regulatory Driver/Programmatic Framework. The sites are counted as outlined in Section 5.0 above. The summary shows data for the prior year and the current year. Site-specific information supporting the summary is reviewed and updated annually by DOE and contractor site managers.

Appendix I – Land Having Legacy Management: This appendix is a chart displaying acreage totals for non-DOE-owned sites/land with rights to conduct activities, DOE-owned (fee simple) land, and withdrawn land (for more information, see the DOE Office of Legacy Management Site Overview report).

Appendix J – Environmental Liabilities: This appendix is a summary of the 75-year constant dollar totals for LM sites and sites scheduled to transfer to LM.

Appendix K– Abbreviations: This appendix is a list of abbreviations used in the *Site Management Guide*.

Appendix A-1: Alphabetical Site Count Listing

Alphabetical Site Count Listing Through March 2020

	LM Site Name	Pre-LM Name[1]	Site Category	Regulatory Driver/ Programmatic Framework	Fiscal Year Transfer Date[1]
1	Acid/Pueblo Canyon, NM, Site	Acid/Pueblo Canyon	1	FUSRAP	1985
2	Adrian, MI, Site	General Motors	1	FUSRAP	1996
3	Albany, OR, Site	Albany Research Center	1	FUSRAP	1993
4	Aliquippa, PA, Site	Aliquippa Forge	1	FUSRAP	1997
5	Ambrosia Lake, NM, Disposal Site	Ambrosia Lake	2	UMTRCA Title I	1998
6	Amchitka, AK, Site	Amchitka Island	2	Nevada Offsites	2008
7	Ashtabula, OH, Site	Ashtabula Closure Project	1	MED/AEC Legacy Site	2010
8	Attleboro, MA, Site	Shpack Landfill	1	FUSRAP	2019
9	Bayo Canyon, NM, Site[2]	Bayo Canyon	2	FUSRAP	1984
		Bayo Canyon Aggregate Area		CERCLA/RCRA	2019
10	Berkeley, CA, Site	University of California (Gilman Hall)	1	FUSRAP	1985
11	Beverly, MA, Site	Ventron Corporation	1	FUSRAP	2004
12	Bluewater, NM, Disposal Site	Bluewater Site	2	UMTRCA Title II	1997
13	BONUS, PR, Decommissioned Reactor Site	BONUS Reactor	2	D&D	2004
14	Bronco, CO, Site	Bronco	2	Plowshare/Vela Uniform Program	2019
15	Buffalo, NY, Site	Bliss and Laughlin Steel Company	1	FUSRAP	2002
16	Burrell, PA, Disposal Site	Burrell Site	2	UMTRCA Title I	1994
17	Burris Park, CA, Site	Burris Park Field Station	2	MED/AEC Legacy Site	2015
18	Canonsburg, PA, Disposal Site	Canonsburg Site	2	UMTRCA Title I	1996
19	Center for Energy and Environmental Research, PR, Site	Rio Piedras Site	1	MED/AEC Legacy Site	2006
		Mayaguez Site			
20	Central Nevada Test Area, NV	Central Nevada Test Area	2	Nevada Offsites	2008
21	Chariot, AK, Site	Chariot Site	1	Nevada Offsites	2005
22	Chicago North, IL, Site	National Guard Armory	1	FUSRAP	1989
23	Chicago South, IL, Site	University of Chicago	1	FUSRAP	1989
24	Chupadera Mesa, NM, Site	Chupadera Mesa	1	FUSRAP	1986
25	Colonie, NY, Site	Colonie Interim Storage Site	2	FUSRAP	2019
26	Columbus East, OH, Site	B & T Metals Site	1	FUSRAP	2001
27	Columbus, OH, Site	Columbus Closure Project	1	MED/AEC Legacy Site	2008
28	Durango, CO, Disposal/Processing Site	Bodo Canyon Cell	2	UMTRCA Title I	1996
		Durango Mill			
		Raffinate Ponds			
29	Edgemont, SD, Disposal Site	Edgemont Site	2	UMTRCA Title II	1996
30	El Verde, PR, Site	El Verde	1	MED/AEC Legacy Site	2006
31	Fairfield, OH, Site	Associate Aircraft Tool and Manufacturing	1	FUSRAP	1996
32	Falls City, TX, Disposal Site	Falls City Site	2	UMTRCA Title I	1997
33	Fernald Preserve, OH, Site	Fernald Closure Project	3	CERCLA/RCRA	2008
34	Gasbuggy, NM, Site	Gasbuggy Site	2	Nevada Offsites	2008
35	General Atomics Hot Cell Facility, CA, Site	General Atomics Hot Cell Facility	1	MED/AEC Legacy Site	2005
36	Geothermal Test Facility, CA, Site	Geothermal Test Facility	1	State Water Quality Standards	2005

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Appendix A-1: Alphabetical Site Count Listing (continued)

Alphabetical Site Count Listing Through March 2020

	LM Site Name	Pre-LM Name[1]	Site Category	Regulatory Driver/ Programmatic Framework	Fiscal Year Transfer Date[1]
37	Gnome-Coach, NM, Site	Gnome-Coach	2	Nevada Offsites	2008
38	Grand Junction, CO, Disposal/Processing Site	Cheney Disposal Cell Grand Junction Mill 1	3	UMTRCA Title I	1999
39	Grand Junction, CO, Site	Grand Junction Mill 2	2	D&D	2002
40	Granite City, IL, Site	Granite City Steel	1	FUSRAP	1994
41	Green River, UT, Disposal Site	Green River Site	2	UMTRCA Title I	1998
42	Gunnison, CO, Disposal/Processing Site	Gunnison Disposal Cell Gunnison Mill	2	UMTRCA Title I	1997
43	Hallam, NE, Decommissioned Reactor Site	Hallam Nuclear Power Facility	2	D&D	1998
44	Hamilton, OH, Site	Herring-Hall-Marvin Safe Company	1	FUSRAP	1997
45	Indian Orchard, MA, Site	Chapman Valve Site	1	FUSRAP	2004
46	Inhalation Toxicology Laboratory, NM, Site	Inhalation Toxicology Laboratory	1	MED/AEC Legacy Site	2012
47	Jersey City, NJ, Site	Kellex/Pierpont	1	FUSRAP	1983
48	Laboratory for Energy-Related Health Research, CA, Site	Laboratory for Energy-Related Health Research	2	CERCLA/RCRA	2006
49	Lakeview, OR, Disposal/Processing Site	Lakeview Site Lakeview Mill	2	UMTRCA Title I	1995
50	L-Bar, NM, Disposal Site	SOHIO – LBAR Site	2	UMTRCA Title II	2004
51	Lowman, ID, Disposal Site	Lowman Site	2	UMTRCA Title I	1994
52	Madison, IL, Site	Spectrulite Consortium, Inc.	1	FUSRAP	2002
53	Maxey Flats, KY, Disposal Site	Maxey Flats Disposal Site	1	CERCLA/RCRA	2004
54	Maybell, CO, Disposal Site	Maybell Mill Site	2	UMTRCA Title I	1999
55	Maybell West, CO, Disposal Site	UMETCO – Maybell Site 2	2	UMTRCA Title II	2010
56	Mexican Hat, UT, Disposal Site	Mexican Hat Site	2	UMTRCA Title I	1997
57	Missouri University Research Reactor, MO, Site	Missouri University Research Reactor	1	MED/AEC Legacy Site	2005
58	Monticello, UT, Disposal and Processing Sites	Monticello Mill Site and Vicinity Properties	3	CERCLA/RCRA	2002
59	Monument Valley, AZ, Processing Site	Monument Valley Site	2	UMTRCA Title I	1997
60	Mound, OH, Site	Miamisburg Closure Project	3	CERCLA/RCRA	2012
61	Naturita, CO, Disposal/Processing Site	Naturita Site Naturita Mill	2	UMTRCA Title I	1999
62	New Brunswick, NJ, Site	New Brunswick Laboratory	2	FUSRAP	2001
63	New York, NY, Site	Baker and Williams Warehouses	1	FUSRAP	1996
64	Niagara Falls Storage Site Vicinity Properties, NY, Site	Niagara Falls Storage Site Vicinity Properties	1	FUSRAP	1992
65	Oak Ridge, TN, Warehouses Site	Elza Gate	1	FUSRAP	1994
66	Oxford, OH, Site	Alba Craft Laboratory	1	FUSRAP	1997
67	Oxnard, CA, Site	Oxnard Site	1	MED/AEC Legacy Site	2008
68	Painesville, OH, Site	Painesville Site	2	FUSRAP	2016
69	Parkersburg, WV, Disposal Site	Parkersburg Site	2	NWPA	1994
70	Pinellas County, FL, Site	Pinellas STAR Center	3	CERCLA/RCRA	2004
71	Piqua, OH, Decommissioned Reactor Site	Piqua Nuclear Power Facility	2	D&D	1998

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Appendix A-1: Alphabetical Site Count Listing (continued)

Alphabetical Site Count Listing Through March 2020

	LM Site Name	Pre-LM Name[1]	Site Category	Regulatory Driver/ Programmatic Framework	Fiscal Year Transfer Date[1]
72	Plowshare/Vela Uniform Sites, NV, Records Only	Plowshare/Vela Uniform Sites (Records Only)	1	Plowshare/Vela Uniform Program	2019
73	Pre-Gondola and Trencher, MT, Site	Pre-Gondola, Trencher	2	Plowshare/Vela Uniform Program	2019
74	Pre-Schooner II, ID, Site	Pre-Schooner II	1	Plowshare/Vela Uniform Program	2019
75	Rifle, CO, Disposal/Processing Site	Rifle (New) Mill	2	UMTRCA Title I	1998
		Rifle (Old) Mill			
		Estes Gulch Disposal Cell			
76	Rio Blanco, CO, Site	Rio Blanco	2	Nevada Offsites	2008
77	Riverton, WY, Processing Site	Riverton Site	2	UMTRCA Title I	1991
78	Rocky Flats, CO, Site	Rocky Flats Closure Project	3	CERCLA/RCRA	2008
79	Rulison, CO, Site	Rulison	2	Nevada Offsites	2008
80	Salmon, MS, Site	Salmon Site	2	Nevada Offsites	2008
81	Salt Lake City, UT, Disposal/Processing Site	South Clive Disposal Cell	2	UMTRCA Title I	1997
		Salt Lake City Mill			
82	Seymour, CT, Site	Seymour Specialty Wire	1	FUSRAP	1995
83	Sherwood, WA, Disposal Site	WNI – Sherwood Site	2	UMTRCA Title II	2001
84	Shiprock, NM, Disposal Site	Shiprock Site	3	UMTRCA Title I	1996
85	Shirley Basin South, WY, Disposal Site	Petrotomics – Shirley Basin 1	2	UMTRCA Title II	2005
86	Shoal, NV, Site	Project Shoal	2	Nevada Offsites	2008
87	Site A / Plot M, IL, Decommissioned Reactor Site	Palos Forest (Site A/Plot M) Preserve	2	D&D	1998
88	Slick Rock, CO, Disposal/Processing Site	Slick Rock (North Continent) Mill 1	2	UMTRCA Title I	1998
		Slick Rock (Union Carbide) Mill 2			
		Burro Canyon Disposal Cell			
89	Spook, WY, Disposal Site	Spook Site	2	UMTRCA Title I	1993
90	Springdale, PA, Site	C.H. Schnorr; C.H. Schnoor	1	FUSRAP	1996
91	Toledo, OH, Site	Baker Brothers, Inc.	1	FUSRAP	2001
92	Tonawanda, NY, Site	Linde Air Products	2	FUSRAP	2017
93	Tonawanda North, NY, Site Unit 1	Ashland #1	1	FUSRAP	2009
94	Tonawanda North, NY, Site Unit 2	Ashland #2	1	FUSRAP	2009
95	Tuba City, AZ, Disposal Site	Tuba City Site	3	UMTRCA Title I	1996
96	Utah, UT, Site	Utah	2	Plowshare/Vela Uniform Program	2019
97	Vallecitos Nuclear Center, CA, Site	General Electric Vallecitos Nuclear Center	1	MED/AEC Legacy Site	2013
98	Wayne, NJ, Site	Wayne Interim Storage Site	1	FUSRAP	2007
99	Weldon Spring, MO, Site	Weldon Spring Site	3	CERCLA/RCRA	2003
100	Windsor, CT, Site	Combustion Engineering Site	1	FUSRAP	2019
				Total	**100**

Notes:

[1]FUSRAP Pre-LM names per USACE and Fiscal Year Transfer Dates per Federal Register notice of cleanup certification or DOE certification.

[2]The Bayo Canyon Aggregate Area RCRA site is counted with the Bayo Canyon FUSRAP site. For site count purposes, the FUSRAP programmatic framework is designated as the primary regulatory driver and is shown as FUSRAP in the following appendixes.

Appendix A-2: Site Count Listing by Transfer Date

Site Count Listing by Transfer Date Through March 2020

	LM Site Name	Pre-LM Name[1]	Site Category	Regulatory Driver/ Programmatic Framework	Fiscal Year Transfer Date[1]
1	Jersey City, NJ, Site	Kellex/Pierpont	1	FUSRAP	1983
2	Bayo Canyon, NM, Site[2]	Bayo Canyon	2	FUSRAP	1984
		Bayo Canyon Aggregate Area		CERCLA/RCRA	2019
3	Acid/Pueblo Canyon, NM, Site	Acid/Pueblo Canyon	1	FUSRAP	1985
4	Berkeley, CA, Site	University of California (Gilman Hall)	1	FUSRAP	1985
5	Chupadera Mesa, NM, Site	Chupadera Mesa	1	FUSRAP	1986
6	Chicago North, IL, Site	National Guard Armory	1	FUSRAP	1989
7	Chicago South, IL, Site	University of Chicago	1	FUSRAP	1989
8	Riverton, WY, Processing Site	Riverton Site	2	UMTRCA Title I	1991
9	Niagara Falls Storage Site Vicinity Properties, NY, Site	Niagara Falls Storage Site Vicinity Properties	1	FUSRAP	1992
10	Albany, OR, Site	Albany Research Center	1	FUSRAP	1993
11	Spook, WY, Disposal Site	Spook Site	2	UMTRCA Title I	1993
12	Burrell, PA, Disposal Site	Burrell Site	2	UMTRCA Title I	1994
13	Granite City, IL, Site	Granite City Steel	1	FUSRAP	1994
14	Lowman, ID, Disposal Site	Lowman Site	2	UMTRCA Title I	1994
15	Oak Ridge, TN, Warehouses Site	Elza Gate	1	FUSRAP	1994
16	Parkersburg, WV, Disposal Site	Parkersburg Site	2	NWPA	1994
17	Lakeview, OR, Disposal/Processing Site	Lakeview Site	2	UMTRCA Title I	1995
		Lakeview Mill			
18	Seymour, CT, Site	Seymour Specialty Wire	1	FUSRAP	1995
19	Adrian, MI, Site	General Motors	1	FUSRAP	1996
20	Canonsburg, PA, Disposal Site	Canonsburg Site	2	UMTRCA Title I	1996
21	Durango, CO, Disposal/Processing Site	Bodo Canyon Cell	2	UMTRCA Title I	1996
		Durango Mill			
		Raffinate Ponds			
22	Edgemont, SD, Disposal Site	Edgemont Site	2	UMTRCA Title II	1996
23	Fairfield, OH, Site	Associate Aircraft Tool and Manufacturing	1	FUSRAP	1996
24	New York, NY, Site	Baker and Williams Warehouses	1	FUSRAP	1996
25	Shiprock, NM, Disposal Site	Shiprock Site	3	UMTRCA Title I	1996
26	Springdale, PA, Site	C.H. Schnorr; C.H. Schnoor	1	FUSRAP	1996
27	Tuba City, AZ, Disposal Site	Tuba City Site	3	UMTRCA Title I	1996
28	Aliquippa, PA, Site	Aliquippa Forge	1	FUSRAP	1997
29	Bluewater, NM, Disposal Site	Bluewater Site	2	UMTRCA Title II	1997
30	Falls City, TX, Disposal Site	Falls City Site	2	UMTRCA Title I	1997
31	Gunnison, CO, Disposal/Processing Site	Gunnison Disposal Cell	2	UMTRCA Title I	1997
		Gunnison Mill			
32	Hamilton, OH, Site	Herring-Hall-Marvin Safe Company	1	FUSRAP	1997
33	Mexican Hat, UT, Disposal Site	Mexican Hat Site	2	UMTRCA Title I	1997
34	Monument Valley, AZ, Processing Site	Monument Valley Site	2	UMTRCA Title I	1997
35	Oxford, OH, Site	Alba Craft Laboratory	1	FUSRAP	1997
36	Salt Lake City, UT, Disposal/Processing Site	South Clive Disposal Cell	2	UMTRCA Title I	1997
		Salt Lake City Mill			

Continued on next page

Appendix A-2: Site Count Listing by Transfer Year (continued)

Site Count Listing by Transfer Date Through March 2020

	LM Site Name	Pre-LM Name[1]	Site Category	Regulatory Driver/ Programmatic Framework	Fiscal Year Transfer Date[1]
37	Ambrosia Lake, NM, Disposal Site	Ambrosia Lake	2	UMTRCA Title I	1998
38	Green River, UT, Disposal Site	Green River Site	2	UMTRCA Title I	1998
39	Hallam, NE, Decommissioned Reactor Site	Hallam Nuclear Power Facility	2	D&D	1998
40	Piqua, OH, Decommissioned Reactor Site	Piqua Nuclear Power Facility	2	D&D	1998
41	Rifle, CO, Disposal/Processing Site	Rifle (New) Mill	2	UMTRCA Title I	1998
		Rifle (Old) Mill			
		Estes Gulch Disposal Cell			
42	Site A / Plot M, IL, Decommissioned Reactor Site	Palos Forest (Site A/Plot M) Preserve	2	D&D	1998
43	Slick Rock, CO, Disposal/Processing Site	Slick Rock (North Continent) Mill 1	2	UMTRCA Title I	1998
		Slick Rock (Union Carbide) Mill 2			
		Burro Canyon Disposal Cell			
44	Grand Junction, CO, Disposal/Processing Site	Cheney Disposal Cell	3	UMTRCA Title I	1999
		Cheney Disposal Mill 1			
45	Maybell, CO, Disposal Site	Maybell Mill Site	2	UMTRCA Title I	1999
46	Naturita, CO, Disposal/Processing Site	Naturita Site	2	UMTRCA Title I	1999
		Naturita Mill			
47	Columbus East, OH, Site	B & T Metals Site	1	FUSRAP	2001
48	New Brunswick, NJ, Site	New Brunswick Laboratory	2	FUSRAP	2001
49	Sherwood, WA, Disposal Site	WNI – Sherwood Site	2	UMTRCA Title II	2001
50	Toledo, OH, Site	Baker Brothers, Inc.	1	FUSRAP	2001
51	Buffalo, NY, Site	Bliss and Laughlin Steel Company	1	FUSRAP	2002
52	Grand Junction, CO, Site	Grand Junction Mill 2	2	D&D	2002
53	Madison, IL, Site	Spectrulite Consortium, Inc.	1	FUSRAP	2002
54	Monticello, UT, Disposal and Processing Sites	Monticello Mill Site and Vicinity Properties	3	CERCLA/RCRA	2002
55	Weldon Spring, MO, Site	Weldon Spring Site	3	CERCLA/RCRA	2003
56	Beverly, MA, Site	Ventron Corporation	1	FUSRAP	2004
57	BONUS, PR, Decommissioned Reactor Site	BONUS Reactor	2	D&D	2004
58	Indian Orchard, MA, Site	Chapman Valve Site	1	FUSRAP	2004
59	L-Bar, NM, Disposal Site	SOHIO – LBAR Site	2	UMTRCA Title II	2004
60	Maxey Flats, KY, Disposal Site	Maxey Flats Disposal Site	1	CERCLA/RCRA	2004
61	Pinellas County, FL, Site	Pinellas STAR Center	3	CERCLA/RCRA	2004
62	Chariot, AK, Site	Chariot Site	1	Nevada Offsites	2005
63	General Atomics Hot Cell Facility, CA, Site	General Atomics Hot Cell Facility	1	MED/AEC Legacy Site	2005
64	Geothermal Test Facility, CA, Site	Geothermal Test Facility	1	State Water Quality Standards	2005
65	Missouri University Research Reactor, MO, Site	Missouri University Research Reactor	1	MED/AEC Legacy Site	2005
66	Shirley Basin South, WY, Disposal Site	Petrotomics – Shirley Basin 1	2	UMTRCA Title II	2005
67	Center for Energy and Environmental Research, PR, Site	Rio Piedras Site	1	MED/AEC Legacy Site	2006
		Mayaguez Site			
68	El Verde, PR, Site	El Verde	1	MED/AEC Legacy Site	2006
69	Laboratory for Energy-Related Health Research, CA, Site	Laboratory for Energy-Related Health Research	2	CERCLA/RCRA	2006
70	Wayne, NJ, Site	Wayne Interim Storage Site	1	FUSRAP	2007
71	Amchitka, AK, Site	Amchitka Island	2	Nevada Offsites	2008

Continued on next page

Appendix A-2: Site Count Listing by Transfer Year (continued)

Site Count Listing by Transfer Date Through March 2020

	LM Site Name	Pre-LM Name[1]	Site Category	Regulatory Driver/ Programmatic Framework	Fiscal Year Transfer Date[1]
72	Central Nevada Test Area, NV	Central Nevada Test Area	2	Nevada Offsites	2008
73	Columbus, OH, Site	Columbus Closure Project	1	MED/AEC Legacy Site	2008
74	Fernald Preserve, OH, Site	Fernald Closure Project	3	CERCLA/RCRA	2008
75	Gasbuggy, NM, Site	Gasbuggy Site	2	Nevada Offsites	2008
76	Gnome-Coach, NM, Site	Gnome-Coach	2	Nevada Offsites	2008
77	Oxnard, CA, Site	Oxnard Site	1	MED/AEC Legacy Site	2008
78	Rio Blanco, CO, Site	Rio Blanco	2	Nevada Offsites	2008
79	Rocky Flats, CO, Site	Rocky Flats Closure Project	3	CERCLA/RCRA	2008
80	Rulison, CO, Site	Rulison	2	Nevada Offsites	2008
81	Salmon, MS, Site	Salmon Site	2	Nevada Offsites	2008
82	Shoal, NV, Site	Project Shoal	2	Nevada Offsites	2008
83	Tonawanda North, NY, Site Unit 1	Ashland #1	1	FUSRAP	2009
84	Tonawanda North, NY, Site Unit 2	Ashland #2	1	FUSRAP	2009
85	Ashtabula, OH, Site	Ashtabula Closure Project	1	MED/AEC Legacy Site	2010
86	Maybell West, CO, Disposal Site	UMETCO – Maybell Site 2	2	UMTRCA Title II	2010
87	Inhalation Toxicology Laboratory, NM, Site	Inhalation Toxicology Laboratory	1	MED/AEC Legacy Site	2012
88	Mound, OH, Site	Miamisburg Closure Project	3	CERCLA/RCRA	2012
89	Vallecitos Nuclear Center, CA, Site	General Electric Vallecitos Nuclear Center	1	MED/AEC Legacy Site	2013
90	Burris Park, CA, Site	Burris Park Field Station	2	MED/AEC Legacy Site	2015
91	Painesville, OH, Site	Painesville Site	2	FUSRAP	2016
92	Tonawanda, NY, Site	Linde Air Products	2	FUSRAP	2017
93	Attleboro, MA, Site	Shpack Landfill	1	FUSRAP	2019
94	Windsor, CT, Site	Combustion Engineering Site	1	FUSRAP	2019
95	Bronco, CO, Site	Bronco	2	Plowshare/Vela Uniform Program	2019
96	Plowshare/Vela Uniform Sites, NV, Records Only	Plowshare/Vela Uniform Sites (Records Only)	1	Plowshare/Vela Uniform Program	2019
97	Pre-Gondola and Trencher, MT, Site	Pre-Gondola, Trencher	2	Plowshare/Vela Uniform Program	2019
98	Pre-Schooner II, ID, Site	Pre-Schooner II	1	Plowshare/Vela Uniform Program	2019
99	Utah, UT, Site	Utah	2	Plowshare/Vela Uniform Program	2019
100	Colonie, NY, Site	Colonie Interim Storage Site	2	FUSRAP	2019
				Total	**100**

Notes:

[1]FUSRAP Pre-LM names per USACE and Fiscal Year Transfer Dates per Federal Register notice of cleanup certification or DOE certification.

[2]The Bayo Canyon Aggregate Area RCRA site is counted with the Bayo Canyon FUSRAP site. For site count purposes, the FUSRAP programmatic framework is designated as the primary regulatory driver. The RCRA site is shown with the FUSRAP site having a transfer date of 2019.

Appendix B: Site Transition Schedule

Sites Planning to Transition in FY 2020

	LM Site Name	Pre-LM Name	Site Category	Transferring Organization	Regulatory Driver/ Programmatic Framework
1	Tonopah Test Range, NV, Site	Corrective Action Units; 411 (Nellis), 412 (TTR), 413 (TTR) and 414 (TTR)	2	EM	Nevada Offsites
				Total	**1**
				Cumulative	**101**

Sites Planning to Transition in FY 2021

	LM Site Name	Pre-LM Name	Site Category	Transferring Organization	Regulatory Driver/ Programmatic Framework
1	East Tennessee Technology Park, TN, Site[3]	East Tennessee Technology Park	2	EM	CERCLA/RCRA
				Total	**1**
				Cumulative	**102**

Sites Planning to Transition in FY 2022

	LM Site Name	Pre-LM Name	Site Category	Transferring Organization	Regulatory Driver/ Programmatic Framework
1	Durita, CO, Disposal Site	HECLA – Durita Site	2	Private Licensee	UMTRCA Title II
2	Elemental Mercury Storage Facility	Mercury Storage Facility	3	EM	CERCLA/RCRA
3	Panna Maria, TX, Disposal Site	Chevron – Panna Maria Site	2	Private Licensee	UMTRCA Title II
4	Split Rock, WY, Disposal Site	WNI – Split Rock Site	2	Private Licensee	UMTRCA Title II
				Total	**4**
				Cumulative	**106**

Sites Planning to Transition in FY 2023

	LM Site Name	Pre-LM Name	Site Category	Transferring Organization	Regulatory Driver/ Programmatic Framework
1	Bear Creek, WY, Disposal Site[1]	Anadarko Petroleum – Bear Creek Site	2	Private Licensee	UMTRCA Title II
2	Gas Hills North, WY, Disposal Site[1]	Pathfinder – Lucky Mc Site	2	Private Licensee	UMTRCA Title II
3	Hazelwood, MO, Site	Latty Avenue Properties	2	USACE	FUSRAP
4	Ray Point, TX, Disposal Site	Exxon Mobil – Ray Point Site, Felder Site	2	Private Licensee	UMTRCA Title II
				Total	**4**
				Cumulative	**110**

Sites Planning to Transition in FY 2024

	LM Site Name	Pre-LM Name	Site Category	Transferring Organization	Regulatory Driver/ Programmatic Framework
1	Highland, WY, Disposal Site	Exxon Mobil – Highland Site	2	Private Licensee	UMTRCA Title II
2	Middletown, IA, Site	Iowa Army Ammunition Plant	2	USACE	FUSRAP
3	Tonawanda, NY, Landfill Site	Tonawanda Landfill	2	USACE	FUSRAP
				Total	**3**
				Cumulative	**113**

Sites Planning to Transition in FY 2025

	LM Site Name	Pre-LM Name	Site Category	Transferring Organization	Regulatory Driver/ Programmatic Framework
1	Ambrosia Lake West, NM, Disposal Site	Rio Algom – Ambrosia Lake Site 2	2	Private Licensee	UMTRCA Title II
2	Conquista, TX, Disposal Site	Conoco – Conquista Site	2	Private Licensee	UMTRCA Title II
3	Gas Hills East, WY, Disposal Site	UMETCO – Gas Hills Site	2	Private Licensee	UMTRCA Title II
4	Lisbon Valley, UT, Disposal Site	Rio Algom – Lisbon Valley Site	2	Private Licensee	UMTRCA Title II
5	Sequoyah County, OK, Disposal Site	Sequoyah Fuels Site	2	Private Licensee	UMTRCA Title II
6	Uravan, CO, Disposal Site	UMETCO – Uravan Site	2	Private Licensee	UMTRCA Title II
				Total	**6**
				Cumulative	**119**

Appendix B: Site Transition Schedule (continued)

Sites Planning to Transition in FY 2026

	LM Site Name	Pre-LM Name	Site Category	Transferring Organization	Regulatory Driver/ Programmatic Framework
1	Deepwater, NJ, Site	DuPont Chambers Works	2	USACE	FUSRAP
2	Ford, WA, Disposal Site	Dawn – Ford Site	2	Private Licensee	UMTRCA Title II
3	Kansas City Plant, KS, Site	Kansas City Plant — Bannister Federal Complex	3	NNSA	CERCLA/RCRA
4	Maywood, NJ, Site[2]	Maywood Chemical Superfund Site	2	USACE	FUSRAP
5	Middlesex South, NJ, Site[2]	Middlesex Sampling Plant	2	USACE	FUSRAP
6	St. Louis, MO, Site	St. Louis Downtown Site	2	USACE	FUSRAP
				Total	**6**
				Cumulative	**125**

Sites Planning to Transition in FY 2027

	LM Site Name	Pre-LM Name	Site Category	Transferring Organization	Regulatory Driver/ Programmatic Framework
1	Church Rock, NM, Disposal Site	General Electric/United Nuclear Corporation – Church Rock Site	2	Private Licensee	UMTRCA Title II
				Total	**1**
				Cumulative	**126**

Sites Planning to Transition in FY 2028

There are no sites planned for transition.

Sites Planning to Transition in FY 2029

	LM Site Name	Pre-LM Name	Site Category	Transferring Organization	Regulatory Driver/ Programmatic Framework
1	Curtis Bay, MD, Site	W.R. Grace at Curtis Bay Site	2	USACE	FUSRAP
				Total	**1**
				Cumulative	**127**

Sites Planning to Transition in FY 2030

	LM Site Name	Pre-LM Name	Site Category	Transferring Organization	Regulatory Driver/ Programmatic Framework
1	Gas Hills West, WY, Disposal Site	ANC – Gas Hills Site	2	Private Licensee	UMTRCA Title II
				Total	**1**
				Cumulative	**128**

Sites Planning to Transition in FY 2031

	LM Site Name	Pre-LM Name	Site Category	Transferring Organization	Regulatory Driver/ Programmatic Framework
1	Tonawanda North, NY, Site Unit 3	Seaway Industrial Park	2	USACE	FUSRAP
				Total	**1**
				Cumulative	**129**

Sites Planning to Transition in FY 2032

There are no sites planned for transition.

Sites Planning to Transition in FY 2033

	LM Site Name	Pre-LM Name	Site Category	Transferring Organization	Regulatory Driver/ Programmatic Framework
1	Luckey, OH, Site	Luckey Site	2	USACE	FUSRAP
				Total	**1**
				Cumulative	**130**

Sites Planning to Transition in FY 2034

There are no sites planned for transition.

Appendix B: Site Transition Schedule (continued)

Sites Planning to Transition in FY 2035 – 2070

	LM Site Name	Pre-LM Name	Site Category	Transferring Organization	Regulatory Driver/ Programmatic Framework	Planned Transfer
1	Grants, NM, Disposal Site	Homestake – Grants Site	2	Private Licensee	UMTRCA Title II	2035
2	Moab, UT, Disposal/Processing Site	Atlas – Moab Mill Crescent Junction Disposal Cell	3	EM	UMTRCA Title I	2035
3	Berkeley, MO, Site	St. Louis Airport Site	2	USACE	FUSRAP	2038
4	Berkeley, MO, Site Vicinity Properties	St. Louis Airport Site Vicinity Properties	2	USACE	FUSRAP	2038
5	Carnegie, PA, Site[4]	Superior Steel	2	USACE	FUSRAP	2038
6	Cleveland, OH, Site[4]	Harshaw Chemical Company	2	USACE	FUSRAP	2038
7	Ft. Wayne, IN, Site[4]	Joslyn Manufacturing and Supply Company	2	USACE	FUSRAP	2038
8	Hicksville, NY, Site[4]	Sylvania Corning Plant	2	USACE	FUSRAP	2038
9	Lockport, NY, Site[4]	Guterl Specialty Steel	2	USACE	FUSRAP	2038
10	Middlesex North, NJ, Site[4]	Middlesex Municipal Landfill	2	USACE	FUSRAP	2038
11	Niagara Falls Storage Site, NY, Site[2,4]	Niagara Falls Storage Site (includes VPs E, E Prime, G and H Prime)	2	USACE	FUSRAP	2038
12	Parks Township, PA, Site	Shallow Land Disposal Area	2	USACE	FUSRAP	2040
13	Portsmouth, OH, Site	Portsmouth Gaseous Diffusion Plant	2	EM	CERCLA/RCRA	2041
14	West Valley, NY, Site	West Valley Demonstration Project	2	EM	CERCLA/RCRA	2041
15	Energy Technology Engineering Center, CA, Site	Energy Technology Engineering Center	1	EM	MED/AEC Legacy Site	2044
16	Cañon City, CO, Disposal Site	Cotter – Canon City Site	2	Private Licensee	UMTRCA Title II	2047
17	Salt Lake City 11e.(2), UT, Disposal Site	11e(2) Disposal Site	2	Private Licensee	UMTRCA Title II	2047
18	Shirley Basin North, WY, Disposal Site	Pathfinder – Shirley Basin Site 2	2	Private Licensee	UMTRCA Title II	2047
19	Shootaring Canyon, UT, Disposal Site	Plateau Shootaring Canyon Site	2	Private Licensee	UMTRCA Title II	2047
20	Sweetwater, WY, Disposal Site	Kennecott Sweetwater Site	2	Private Licensee	UMTRCA Title II	2047
21	White Mesa, UT, Disposal Site	EFN – White Mesa Site	2	Private Licensee	UMTRCA Title II	2047
22	Andrews 11e.(2), TX, Disposal Site	Waste Control Specialists 11e.(2) Disposal Cell	2	Private Licensee	UMTRCA Title II	2050
23	Paducah, KY, Site	Paducah Gaseous Diffusion Plant	2	EM	CERCLA/RCRA	2070
				Total	23	
				Cumulative	**153**	

FUSRAP Sites Referred from DOE to USACE – Not Currently Designated by USACE For Active Status						
	LM Site Name	Pre-LM Name	Site Category	Transferring Organization	Regulatory Driver/ Programmatic Framework	Planned Transfer
1	Niagara Falls Storage Site Vicinity Property X	Niagara Falls Storage Site Vicinity Property X	1	USACE	FUSRAP	2038
2	Painesville Landfills III and V, OH, Sites	Painesville Landfills III and V	1	USACE	FUSRAP	2038
3	Queens, NY, Site[4]	Wolff-Alport Chemical Company	1	USACE	FUSRAP	2038
4	Staten Island, NY, Site[4]	Staten Island Warehouse	1	USACE	FUSRAP	2038

Notes:

[1] The fee land and wells for the Bear Creek and Gas Hills North, WY Sites have transferred to DOE, but the Title II private license has not been terminated. These sites will formally transfer to DOE after NRC concurs that remedial action has been completed and accepts the site-specific long-term surveillance plan. After which, the sites will be administered under the NRC general license for long-term care.

[2] The DOE Office of Legacy Management is the owner of record at the following FUSRAP sites: Maywood, NJ; Middlesex South, NJ; and Niagara Falls, NY. LM shall accept responsibility for all federally-owned real property and interests therein, acquired by USACE for FUSRAP execution at the time of site closeout (i.e., public declaration of completion). LTS&M responsibilities shall transfer to LM two years after site closeout. Fiscal year transition date to LM is triggered by the site closeout event.

[3] The K-25 slab at the East Tennessee Technology Park, TN, Site will transfer in FY2021. The remainder of the site will transition in FY2025.

[4] Completion date assumed to be FY2038 for planning purposes. Actual remedial action completion date not yet determined by USACE.

Appendix C: Transitioning Sites Category

BY END OF FISCAL YEAR

LM Site Name	Site Category	Regulatory Driver/Programmatic Framework	Planned				
			2020	2021	2022	2023	2024
Tonopah Test Range, NV Site	2	Nevada Offsites	X				
East Tennessee Technology Park, TN, Site	2	CERCLA/RCRA		X			
Durita, CO, Disposal Site	2	UMTRCA Title II			X		
Elemental Mercury Storage Facility	3	CERCLA/RCRA			X		
Panna Maria, TX, Disposal Site	2	UMTRCA Title II			X		
Split Rock, WY, Disposal Site	2	UMTRCA Title II			X		
Bear Creek, WY, Disposal Site	2	UMTRCA Title II				X	
Gas Hills North, WY, Disposal Site	2	UMTRCA Title II				X	
Hazelwood, MO, Site	2	FUSRAP				X	
Ray Point, TX, Disposal Site	2	UMTRCA Title II				X	
Highland, WY, Disposal Site	2	UMTRCA Title II					X
Middletown, IA, Site	2	FUSRAP					X
Tonawanda, NY, Landfill Site	2	FUSRAP					X
		Total	**1**	**1**	**4**	**4**	**3**

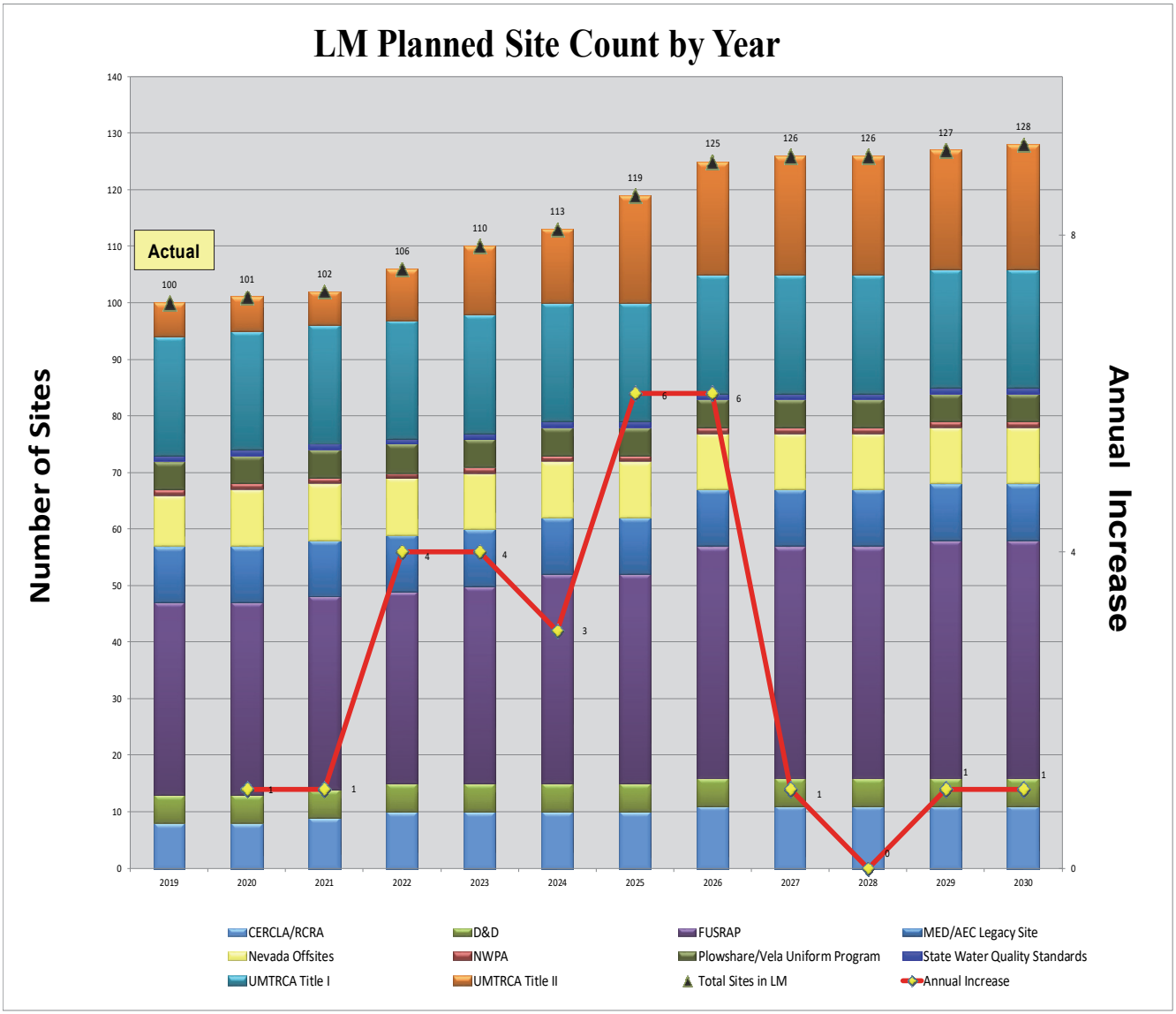
Notes:
Includes sites planned for transfer to LM within the next five years.
As these sites officially transfer to LM, they will then be designated as a Category 1, 2, or 3 site based on expected LTS&M activities.

Appendix D: Planned Site Count by Year

BY END OF FISCAL YEAR

Sites by Regulatory Driver/ Programmatic Framework	Actual	Planned										
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
CERCLA/RCRA	8	8	9	10	10	10	10	11	11	11	11	11
D&D	5	5	5	5	5	5	5	5	5	5	5	5
FUSRAP	34	34	34	34	35	37	37	41	41	41	42	42
MED/AEC Legacy Site	10	10	10	10	10	10	10	10	10	10	10	10
Nevada Offsites	9	10	10	10	10	10	10	10	10	10	10	10
NWPA	1	1	1	1	1	1	1	1	1	1	1	1
Plowshare/Vela Uniform Program	5	5	5	5	5	5	5	5	5	5	5	5
State Water Quality Standards	1	1	1	1	1	1	1	1	1	1	1	1
UMTRCA Title I	21	21	21	21	21	21	21	21	21	21	21	21
UMTRCA Title II	6	6	6	9	12	13	19	20	21	21	21	22
Total	**100**	**101**	**102**	**106**	**110**	**113**	**119**	**125**	**126**	**126**	**127**	**128**
Annual Increase		**1**	**1**	**4**	**4**	**3**	**6**	**6**	**1**	**0**	**1**	**1**

Appendix D: Planned Site Count by Year (continued)



Appendix E: Site Count by State

State Site Counts as of March 2020

	State	CAT 1	CAT 2	CAT 3	# of Sites
1	Alaska	1	1		2
2	Arizona [1]		1	1	2
3	California	5	2		7
4	Colorado		11	2	13
5	Connecticut	2			2
6	Florida			1	1
7	Idaho	1	1		2
8	Illinois	4	1		5
9	Kentucky	1			1
10	Massachusetts	3			3
11	Michigan	1			1
12	Mississippi		1		1
13	Missouri	1		1	2
14	Montana		1		1
15	Nebraska		1		1
16	Nevada	1	2		3
17	New Jersey	2	1		3
18	New Mexico [2]	3	6	1	10
19	New York	5	2		7
20	Ohio	7	2	2	11
21	Oregon	1	1		2
22	Pennsylvania	2	2		4
23	South Dakota		1		1
24	Tennessee	1			1
25	Texas		1		1
26	Utah [3]		4	1	5
27	Washington [4]		1		1
28	West Virginia		1		1
29	Wyoming		3		3
30	Puerto Rico	2	1		3
	TOTAL	43	48	9	100

Category 1: Activities typically include records-related activities and stakeholder support.

Category 2: Activities typically include routine inspection (any site visit needed to verify the integrity of engineered or institutional barriers) and monitoring/maintenance, records-related activities, and stakeholder support.

Category 3: Activities typically include operation and maintenance of active remedial action systems, routine inspection (any site visit needed to verify the integrity of engineered or institutional barriers) and monitoring/maintenance, records-related activities, and stakeholder support.

Sites Located on Tribal Land

[1] Monument Valley, AZ, Site resides on Navajo Tribal Land. Tuba City, AZ, Site resides on Navajo and Hopi Tribal Land.

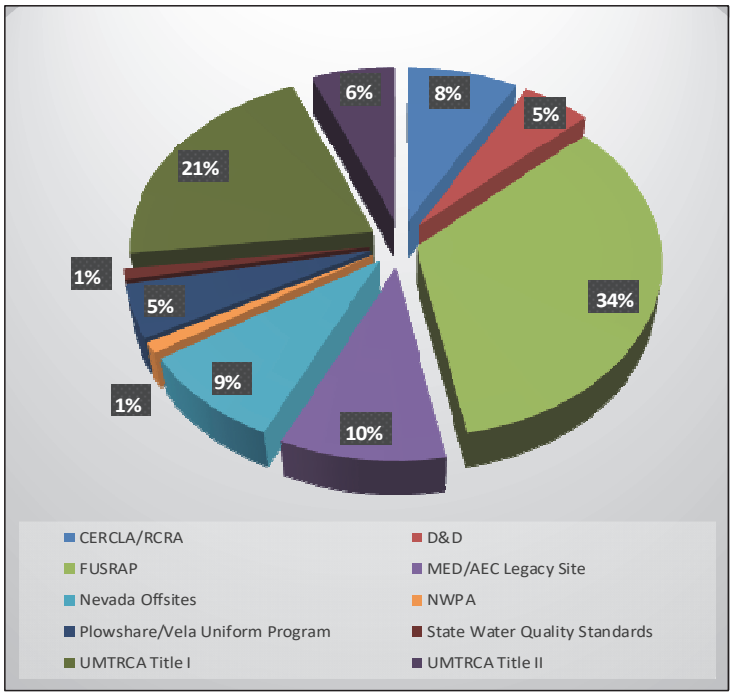
[2] Shiprock, NM, Site resides on Navajo Tribal Land.

[3] Mexican Hat, UT, Site resides on Navajo Tribal Land.

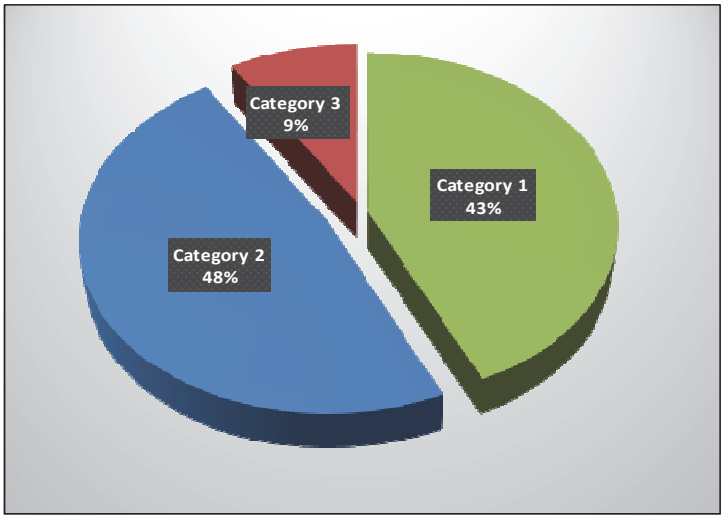
[4] Sherwood, WA, Site resides on Spokane Tribal Land.

Appendix F: Site Count by Regulatory Driver/Programmatic Framework and Site Category

Sites by Regulatory Driver/Programmatic Framework	Actual Through March 2020
CERCLA/RCRA	8
D&D	5
FUSRAP	34
MED/AEC Legacy Site	10
Nevada Offsites	9
NWPA	1
Plowshare/Vela Uniform Program	5
State Water Quality Standards	1
UMTRCA Title I	21
UMTRCA Title II	6
TOTAL	100



Sites by Category	Actual Through March 2020
Category 1	43
Category 2	48
Category 3	9
TOTAL	100



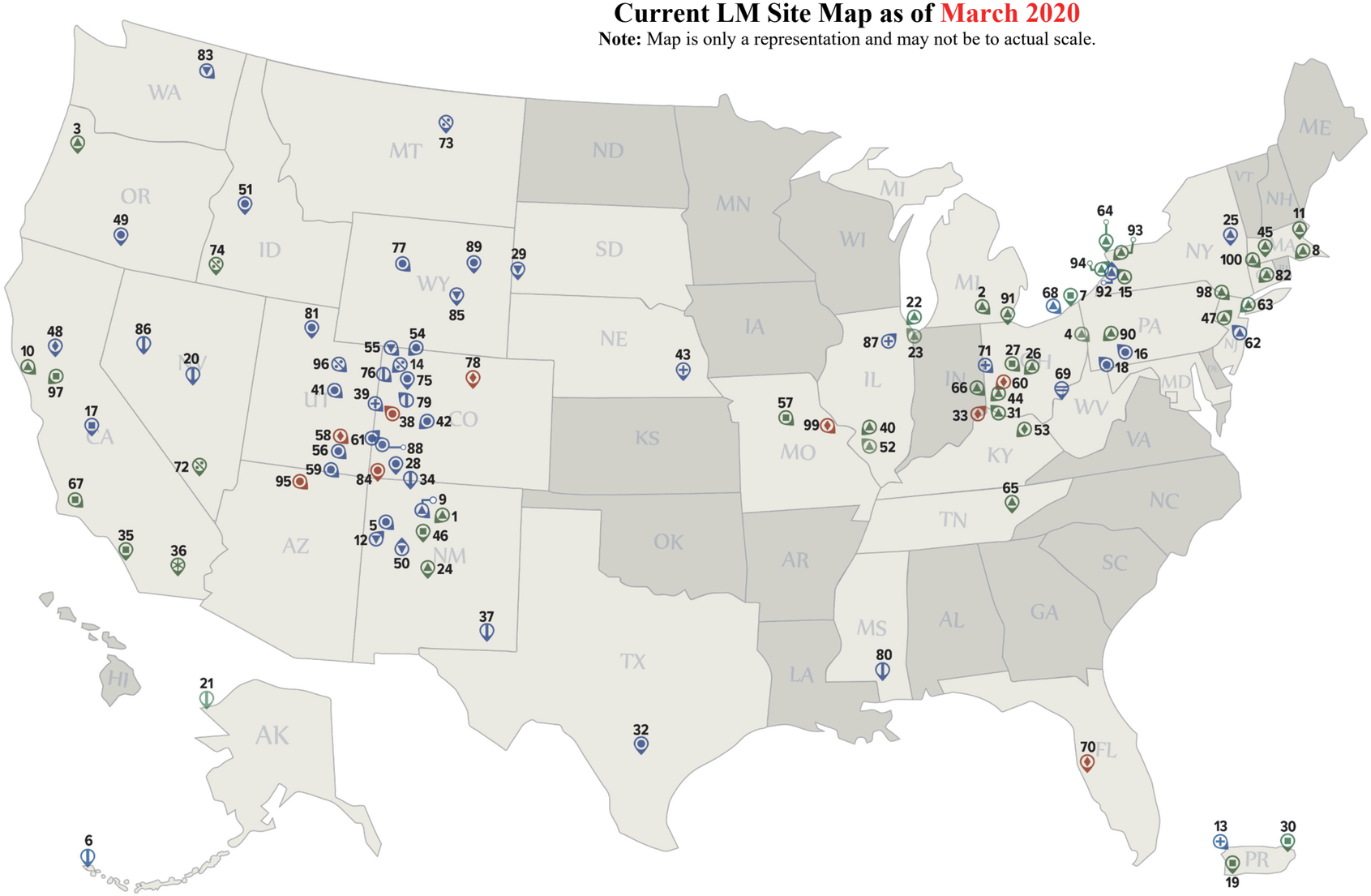
Category 1: Activities typically include records-related activities and stakeholder support.

Category 2: Activities typically include routine inspection (any site visit needed to verify the integrity of engineered or institutional barriers) and monitoring/maintenance, records-related activities, and stakeholder support.

Category 3: Activities typically include operation and maintenance of active remedial action systems, routine inspection (any site visit needed to verify the integrity of engineered or institutional barriers) and monitoring/maintenance, records-related activities, and stakeholder support.

Appendix G: LM Site Maps
Current LM Site Map as of March 2020

Note: Map is only a representation and may not be to actual scale.



Current LM sites Requiring LTS&M

- CERCLA/ RCRA
- D&D
- FUSRAP
- MED/AEC Legacy Site
- Nevada Offsites
- NWPA
- Plowshare/ Vela Uniform Program
- State Water Quality Standards
- UMTRCA Title I
- UMTRCA Title II

Site Categories

Category 1 activities typically include records-related activities and stakeholder support

Category 2 activities typically include routine inspection (any site visit needed to verify the integrity of engineered or institutional barriers) and monitoring/maintenance, records-related activities, and stakeholder support

Category 3 activities typically include operation and maintenance of active remedial action systems, routine inspection (any site visit needed to verify the integrity of engineered or institutional barriers) and monitoring/maintenance, records-related activities, and stakeholder support

03/2020

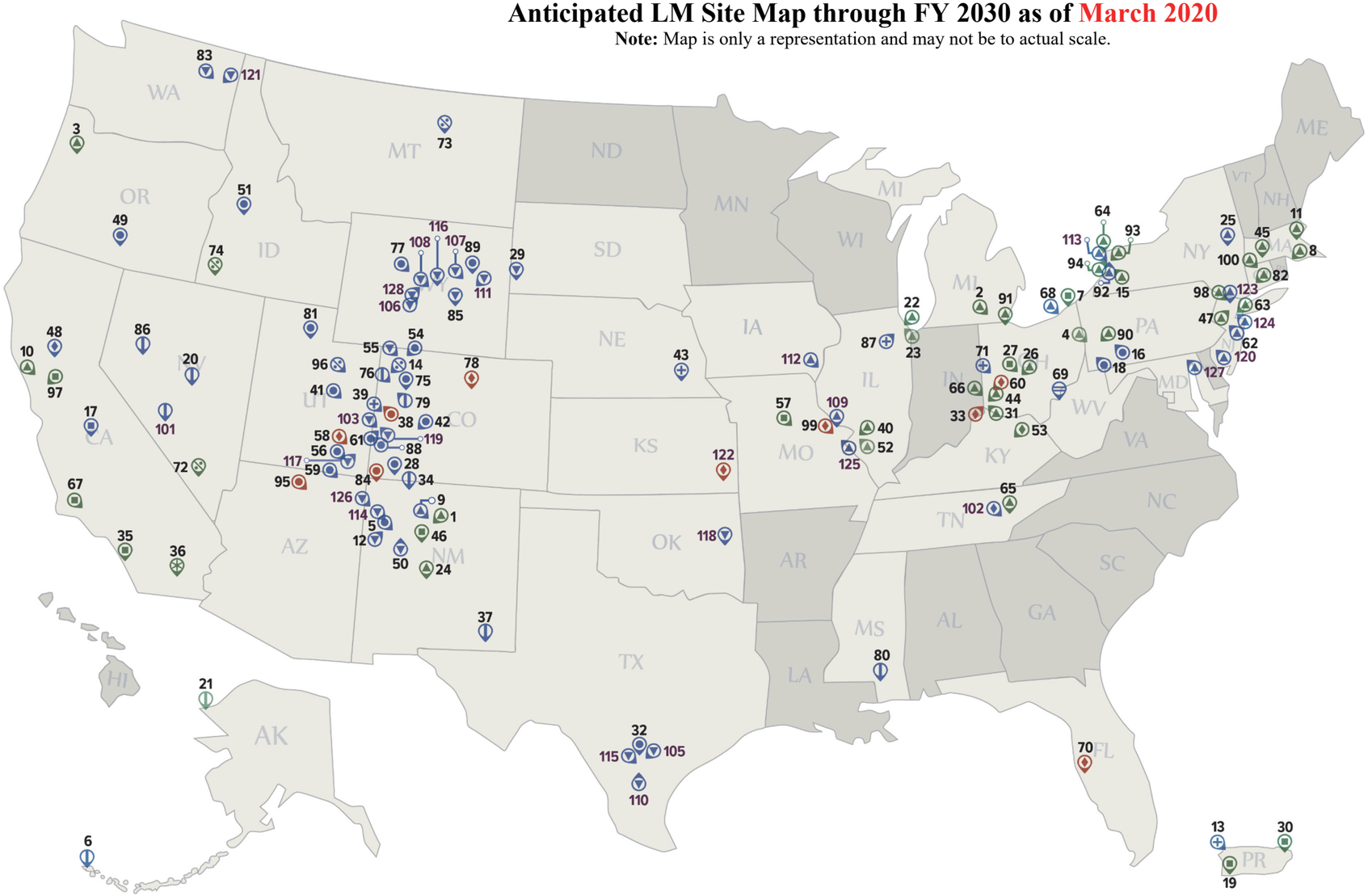
Site Name and Transfer Date (FY)

(1) Acid/Pueblo Canyon, NM (1985)
(2) Adrian, MI (1996)
(3) Albany, OR (1993)
(4) Aliquippa, PA (1997)
(5) Ambrosia Lake, NM (1998)
(6) Amchitka, AK (2008)
(7) Ashtabula, OH (2010)
(8) Attleboro, MA (2019)
(9) Bayo Canyon, NM (1984)
(10) Berkeley, CA (1985)
(11) Beverly, MA (2004)
(12) Bluewater, NM (1997)
(13) BONUS, PR, DR (2004)
(14) Bronco, CO (2019)
(15) Buffalo, NY (2002)
(16) Burrell, PA (1994)
(17) Burris Park, CA (2015)
(18) Canonsburg, PA (1996)
(19) Center for Energy and Environmental Research, PR (2006)
(20) Central Nevada Test Area, NV (2008)
(21) Chariot, AK (2005)
(22) Chicago North, IL (1989)
(23) Chicago South, IL (1989)
(24) Chupadera Mesa, NM (1986)
(25) Colonie, NY (2019)
(26) Columbus East, OH (2001)
(27) Columbus, OH (2008)
(28) Durango, CO, D/P (1996)
(29) Edgemont, SD (1996)
(30) El Verde, PR (2006)
(31) Fairfield, OH (1996)
(32) Falls City, TX (1997)
(33) Fernald, OH (2008)
(34) Gasbuggy, NM (2008)
(35) General Atomics Hot Cell Facility, CA (2005)
(36) Geothermal Test Facility, CA (2005)
(37) Gnome-Coach, NM (2008)
(38) Grand Junction, CO, D/P (1999)
(39) Grand Junction, CO (2002)
(40) Granite City, IL (1994)
(41) Green River, UT (1998)
(42) Gunnison, CO, D/P (1997)
(43) Hallam, NE, DR (1998)
(44) Hamilton, OH (1997)
(45) Indian Orchard, MA (2004)
(46) Inhalation Toxicology Laboratory, NM (2012)
(47) Jersey City, NJ (1983)
(48) Laboratory for Energy-Related Health Research, CA (2006)
(49) Lakeview, OR, D/P (1995)
(50) L-Bar, NM (2004)
(51) Lowman, ID (1994)
(52) Madison, IL (2002)
(53) Maxey Flats, KY (2004)
(54) Maybell, CO (1999)
(55) Maybell West, CO (2010)
(56) Mexican Hat, UT (1997)
(57) Missouri University Research Reactor, MO (2005)
(58) Monticello, UT, D/P (2002)
(59) Monument Valley, AZ (1997)
(60) Mound, OH (2012)
(61) Naturita, CO, D/P (1999)
(62) New Brunswick, NJ (2001)
(63) New York, NY (1996)
(64) Niagara Falls Storage Vicinity Properties, NY (1992)
(65) Oak Ridge, TN, Warehouses (1994)
(66) Oxford, OH (1997)
(67) Oxnard, CA (2008)
(68) Painesville, OH (2016)
(69) Parkersburg, WV (1994)
(70) Pinellas County, FL (2004)
(71) Piqua, OH, DR (1998)
(72) Plowshare/Vela Uniform Records, NV (2019)
(73) Pre-Gondola and Trencher, MT (2019)
(74) Pre-Schooner II, ID (2019)
(75) Rifle, CO, D/P (1998)
(76) Rio Blanco, CO (2008)
(77) Riverton, WY, Processing (1991)
(78) Rocky Flats, CO (2008)
(79) Rulison, CO (2008)
(80) Salmon, MS (2008)
(81) Salt Lake City, UT, D/P (1997)
(82) Seymour, CT (1995)
(83) Sherwood, WA (2001)
(84) Shiprock, NM (1996)
(85) Shirley Basin South, WY (2005)
(86) Shoal, NV (2008)
(87) Site A/Plot M, IL, DR (1998)
(88) Slick Rock, CO, D/P (1998)
(89) Spook, WY (1993)
(90) Springdale, PA (1996)
(91) Toledo, OH (2001)
(92) Tonawanda, NY (2017)
(93) Tonawanda North, NY, Unit 1 (2009)
(94) Tonawanda North, NY, Unit 2 (2009)
(95) Tuba City, AZ (1996)
(96) Utah, UT (2019)
(97) Vallecitos Nuclear Center, CA (2013)
(98) Wayne, NJ (2007)
(99) Weldon Spring, MO (2003)
(100) Windsor, CT (2019)

D/P = Disposal/Processing **DR = Decommissioned Reactor**

Appendix G: LM Site Maps (continued)
Anticipated LM Site Map through FY 2030 as of March 2020

Note: Map is only a representation and may not be to actual scale.



Anticipated Sites in LM Through FY 2030 Requiring LTS&M

- CERCLA/ RCRA
- D&D
- FUSRAP
- MED/AEC Legacy Site
- Nevada Offsites
- NWPA
- Plowshare/ Vela Uniform Program
- State Water Quality Standards
- UMTRCA Title I
- UMTRCA Title II

Site Categories

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(97) Vallecitos Nuclear Center, CA (2013)
(98) Wayne, NJ (2007)
(99) Weldon Spring, MO (2003)
(100) Windsor, CT (2019)

TRANSITION SITES

(101) Tonopah Test Range, NV (2020)
(102) East Tennessee Technology Park (Phase I)**, TN (2021)
(103) Durita, CO (2022)
(104) Elemental Mercury Storage Facility (2022)*
(105) Panna Maria, TX (2022)
(106) Split Rock, WY (2022)
(107) Bear Creek, WY (2023)
(108) Gas Hills North, WY (2023)
(109) Hazelwood, MO (2023)
(110) Ray Point, TX (2023)
(111) Highland, WY (2024)
(112) Middletown, IA (2024)
(113) Tonawanda, NY, Landfill (2024)
(114) Ambrosia Lake West, NM (2025)
(115) Conquista, TX (2025)
(116) Gas Hills East, WY (2025)
(117) Lisbon Valley, UT (2025)
(118) Sequoyah County, OK (2025)
(119) Uravan, CO (2025)
(120) Deepwater, NJ (2026)
(121) Ford, WA (2026)
(122) Kansas City Plant, KS (2026)
(123) Maywood, NJ (2026)
(124) Middlesex South, NJ (2026)
(125) St. Louis, MO (2026)
(126) Church Rock, NM (2027)
(127) Curtis Bay, MD (2029)
(128) Gas Hills West, WY (2030)

*Location of future site undetermined as of date of issuance.

**East Tennessee Technology Park (Phase II) will transition in FY25.

D/P = Disposal/Processing

DR = Decommissioned Reactor

Appendix H: Site Information Summary

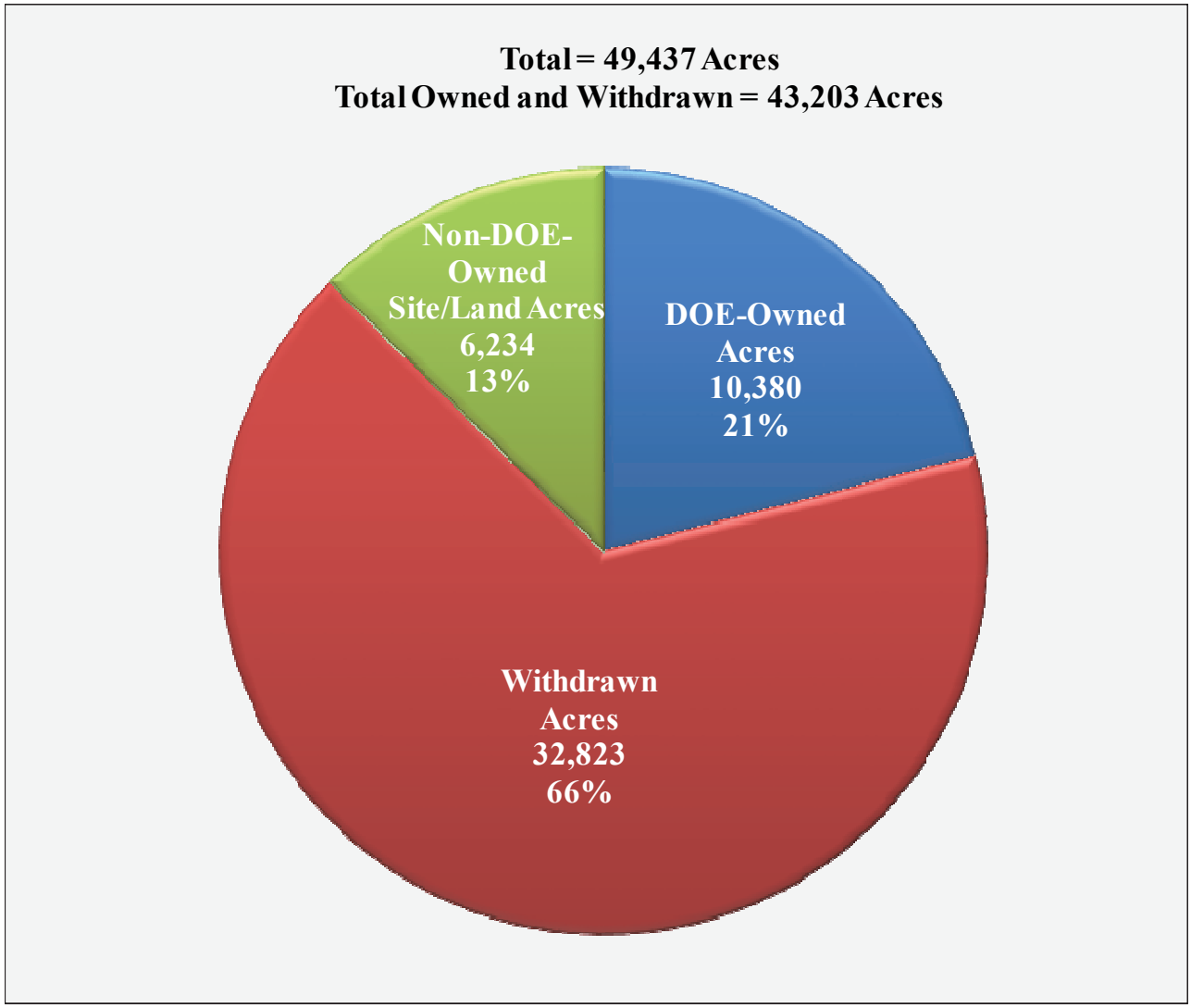
Site Information Summary as of March 2020

Regulatory Driver/Programmatic Framework	Number of Sites		Number of DOE Wells Associated with Site		Number of Disposal Cells, Landfills, and other Impoundments		Institutional Controls (Yes or No)	
	Sep-19	Mar-20	Sep-19	Mar-20	Sep-19	Mar-20	Sep-19	Mar-20
CERCLA/RCRA Sites	8	8	969	947	5	5	Yes (7 sites)	Yes (7 sites)
D&D Sites	5	5	44	44	3	3	Yes (5 sites)	Yes (5 sites)
FUSRAP Sites	34	34	0	8	0	0	Yes (2 sites)	Yes (1 sites)
MED/AEC Legacy Site	10	10	0	0	0	0	Yes (1 site)	Yes (1 site)
Nevada Offsites	9	9	79	79	9	9	Yes (8 sites)	Yes (8 sites)
NWPA	1	1	6	6	1	1	Yes (1 site)	Yes (1 site)
Plowshare/Vela Uniform Program	5	5	0	0	0	0	No	No
State Water Quality Standards	1	1	0	0	0	0	No	No
UMTRCA Title I Sites	21	21	914	891	19	19	Yes (21 sites)	Yes (21 sites)
UMTRCA Title II Sites	6	6	46	46	7	7	Yes (6 sites)	Yes (6 sites)
TOTALS	**100**	**100**	**2,058**	**2,021**	**44**	**44**	**Yes (51 sites)**	**Yes (51 sites)**
INCREASE/(DECREASE)		**0**		**-37**		**0**		

Notes:
Comparison of last reporting period (September 2019) to data through March 2020.

Appendix I: Land Having Legacy Management

Sites With LTS&M Activities as of March 2020



DOE-Owned (Fee Simple)

Withdrawn (Includes 25,141 acres withdrawn for uranium/vanadium mineral development and mining, of which roughly 260 acres have been affected by DOE's mineral-leasing activities. The U.S. Bureau of Land Management manages all other surface uses of these lands.)

Non-DOE-Owned Site/Land with Rights to Conduct Activities (e.g., environmental monitoring, maintenance, inspections)

Note:
The fee land and wells for the Bear Creek and Gas Hills North, WY, sites have transferred to DOE, but the Title II private license has not been terminated. These sites are not yet under the DOE general license.

LM is the owner of record at the following FUSRAP sites: Maywood, NJ; Middlesex South, NJ; and Niagara Falls Storage Site, NY. The USACE is responsible for protectiveness at these sites until remedial action is completed and LM assumes LTS&M responsibility for the sites.

Appendix J: Environmental Liabilities

Environmental Liabilities as of 2019

Regulatory Driver/ Programmatic Framework	75-Year Constant Dollar Total
CERCLA/RCRA Sites	$1,247,918,204
D&D Sites	$11,879,229
FUSRAP Sites	$19,507,932
MED/AEC Legacy Sites	$999,514
Nevada Offsites	$96,102,607
NWPA	$6,608,035
Plowshare/Vela Uniform Program Sites	$1,749,455
State Water Quality Standards	$0
UMTRCA Title I Sites	$388,403,078
UMTRCA Title II Sites	$58,686,305
Transitioning Sites	$534,270,692
Total	**$2,366,125,052**

Note: Constant dollar totals from FY 2019 Environmental Liability reporting for LM Goal 1 sites and sites planned for transition. Costs for LTS&M support activities and direct funded agreements are not included.

Appendix K: Abbreviations

AEC	Atomic Energy Commission
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
D&D	Decontamination and Decommissioning
DOE	U.S. Department of Energy
EM	Office of Environmental Management
FUSRAP	Formerly Utilized Sites Remedial Action Program
FY	Fiscal Year
LM	Office of Legacy Management
LTS&M	Long-Term Surveillance and Maintenance
MED	Manhattan Engineer District
NRC	U.S. Nuclear Regulatory Commission
NWPA	Nuclear Waste Policy Act
RCRA	Resource Conservation and Recovery Act
UMTRCA	Uranium Mill Tailings Radiation Control Act
USACE	U.S. Army Corps of Engineers

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U.S. DEPARTMENT OF ENERGY | Legacy Management

Site Management Guide

March 2020 Update

Managing Today's Change, Protecting Tomorrow's Future