



Department of Energy

Washington, DC 20585

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MEMORANDUM FOR GLENN S. PODONSKY
CHIEF HEALTH AND SAFETY AND SECURITY OFFICER
OFFICE OF HEALTH, SAFETY AND SECURITY

FROM: DAVID S. SHAFER, PH. D.
OFFICE OF LEGACY MANAGEMENT
ASSET MANAGEMENT TEAM LEAD

David S Shafer
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**SUBJECT: Annual Site Environmental Reporting for Department of Energy
Legacy Management Sites**

The U.S. Department of Energy Office (DOE) of Legacy Management (LM) was established in 2003 to manage the Department's post-closure responsibilities at sites under LM's care and ensure the future protection of human health and the environment at those sites. LM is submitting this attached summary and attachments to meet the intent of DOE Order 231.1B with a scaled-down approach as identified in the Annual Site Environmental Report preparation guidance. LM is committed to ensuring environmental protection, compliance, sustainability and the LM Site's efforts to ensure the validity and accuracy of the monitoring data. Please review the summary and attachments and contact Tracy Ribeiro at (303) 410-4817 if you have any comments or questions.

cc w/attachment:
D. Geiser, DOE-LM
R. Natoli, DOE
T. Pauling, DOE-LM
T. Ribeiro, DOE-LM
S. Osborn, Stoller
File: ADM 115.02

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Office of Legacy Management's Summary of Annual Site Environmental Reports

1.0 Reporting Requirement

DOE Order 231.1B, Environment, Safety and Health Reporting, requires that each DOE site prepare an Annual Site Environmental Report (ASER) documenting the site's environmental conditions. The ASER is submitted to DOE-Headquarters annually and is available to the public. An attachment, "ASER Reporting and Closure Sites," to DOE's Guidance for the Preparation of Department of Energy Annual Site Environmental Reports for Calendar Year 2011, dated May 7, 2012, recognizes that each LM site has unique characteristics and suggests two alternatives to the preparation of an ASER: (1) prepare a scaled-down or streamlined version of the ASER that reflects the current nature and extent of site operations and monitoring programs, or, (2) submit documentation that provides the results of the relevant environmental monitoring programs. The following summary is submitted to meet the intent of DOE Order 231.1B with a scaled-down approach as identified in the ASER preparation guidance.

2.0 Background

The U.S. Department of Energy Office (DOE) of Legacy Management (LM) was established in 2003 to manage the DOE's post-closure responsibilities at sites under LM's care and ensure the future protection of human health and the environment at those sites. The histories of the legacy sites vary, as do the regulatory regimes under which the sites are managed. Long-term surveillance plans (LTSPs) are prepared for the majority of the sites. These LTSPs, which are available to the public, include site descriptions, information about site history, nature and extent of contamination, institutional controls, closeout condition of the site, present and future monitoring and surveillance programs, and institutional controls. Several examples of the types of sites and their regulatory framework are provided below and in the following link: http://www.lm.doe.gov/pro_doc/references/framework.htm.

- a. LM currently manages sites where remediation was conducted in accordance with Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and/or Resource Conservation and Recovery Act (RCRA) regulations. These sites were radiologically and/or chemically contaminated by federal milling, processing, research, and/or weapons-manufacturing operations.
- b. Underground nuclear testing was conducted at sites in five states for various purposes, including stimulating natural gas production and cataloging seismic detonation signatures. The Nevada Offsites refers to the sites where underground nuclear tests and experiments were performed outside of the Nevada National Security Site (formerly the Nevada Test Site).
- c. The Uranium Mill Tailings Radiation Control Act (UMTRCA) of 1978 (Title 42 *United States Code* Section 7901, as amended) provides for the remediation and regulation of uranium mill tailings at uranium mill sites addressed under Title I and Title II of UMTRCA. Title I sites are former uranium mill sites unlicensed and essentially abandoned when UMTRCA was implemented on January 1, 1978. Title I of UMTRCA designated inactive uranium-ore-processing sites for remediation. Remediation of these sites resulted

in the creation of 19 disposal cells that contain encapsulated uranium mill tailings and associated contaminated material. Title II of UMTRCA addresses reclamation of uranium mill sites that were under specific license on January 1, 1978. LM currently manages six UMTRCA Title II sites. The number will increase as ongoing site reclamations are completed.

- d. DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission operations. DOE assessed more than 600 candidate facilities and determined that 46 would require remediation. DOE remediated 25 sites by 1997; Congress directed the U.S. Army Corps of Engineers to remediate the remaining 21 designated FUSRAP sites. Remediation of FUSRAP sites follows CERCLA protocols. Remediated sites become LM's responsibility.
- e. LM manages five sites in the DOE Defense Decontamination and Decommissioning Program.

3.0 Summary of General Environmental Reporting

3.1 Oversight

All of the legacy sites have an LM site manager assigned to ensure that the regulatory regime for the site is followed, oversee the long-term activities of the site, and address stakeholder concerns. All reports, including environmental monitoring reports, are reviewed by the site manager and/or the team-lead for the site type. The information is thoroughly reviewed to ensure that accurate data are being reported.

3.2 Summary of Site-Specific Activities

LM currently (as of May 2012) manages the long-term care of 89 sites. LM classifies the sites into one of three categories based on the actual or anticipated long-term surveillance and maintenance activities associated with that site. The sites and their respective categories are listed in the *LM Site Management Guide*, which is issued semiannually. Each geographic site location will be counted as one site. This also 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. Typically, the lower the category number assigned to the site, the fewer activities and environmental monitoring occur at the site, resulting in less documentation and reporting. The three tables in Attachment 1 summarize the associated monitoring and reporting performed for each site. Primary stakeholders, including state and federal regulators for the site-type, are generally sent copies or notices of electronic availability when annual inspection and monitoring reports when issued. The majority of the information identified in the tables is available on site-specific websites that can be reached from the main LM web site (<http://www.lm.doe.gov/default.aspx?id=120>) or from the site specific links provided. Any additional information is available upon request.

LM is providing Attachment 1 as a summarized version of the environmental reporting in lieu of individual reports. The three categories and count of LM sites currently within that category are:

1. Category 1 sites, listed in Table 1, are expected to require records-related activities and stakeholder support.
 - 38 sites.
 - Stakeholders have online access to historical information about these sites.
 - No data are collected for these sites.
 - Information on these sites will not be reported annually unless a change occurs in the activity level at these sites.
2. Category 2 sites, listed in Table 2, are expected to require routine inspection and maintenance, records-related activities, and stakeholder support.
 - 43 sites.
 - Annual site inspections.
 - If monitoring is required, monitoring results are available to the public.
3. Category 3 sites, listed in Table 3, are expected to require operation and maintenance of remedial action systems, routine inspection and maintenance, records-related activities, and stakeholder support.
 - 8 sites.
 - Annual site inspections.
 - Routine monitoring.
 - Includes RCRA and CERCLA sites.
 - Includes sites with active operations.
 - Multiple reports are periodically issued.
 - Routine stakeholder communications.

4.0 Summary of Environmental Management System (EMS) & Sustainability Reports

As required by prior DOE Orders and DOE Order 436.1, Departmental Sustainability, LM has a fully implemented Environmental Management System (EMS). The LM EMS public website http://www.lm.doe.gov/Office_of_Site_Operations/Environmental_Management_System.aspx describes LM's EMS and provides links to many of the documents and reports identified in this section. The LM EMS was formally implemented in October 2005. Full implementation of the EMS was declared by June 30, 2009. As required by DOE Order 436.1, LM had an audit by a 3rd party, outside the scope and realm of the EMS, in early 2012 and LM verified the full implementation of our EMS on June 7, 2012.

The LM EMS is consistent with the framework of the International Organization for Standardization 14001 EMS standard and the Integrated Safety Management System (ISMS). The EMS serves as the platform for tracking and adhering to environmental requirements for compliance and sustainability. The EMS is a set of processes and practices that enable LM to reduce its environmental impacts and increase its operating efficiency. In addition, the LM EMS

implements the LM Site Sustainability Plan, which assists DOE with meeting its sustainability goals, objectives, and targets established in Executive Orders 13514 and 13423, and in DOE Order 436.1. The following programmatic documents, provided on the LM EMS website under the Guiding Documents and Links page/link, describe LM's EMS:

- a. LM's Environment, Safety, and Health Policy (LM P 450.9)
- b. LM's EMS Description
- c. LM's EMS Programs Manual

The LM EMS encompasses all LM sites under cleanup custody, and federal and contractor facilities where work is managed throughout the U.S.; all reports are programmatic summaries. Following is a summary of the submissions and postings for the EMS and Sustainability Requirements most of which are available on the LM EMS website under the Goals/Progress and Plans page/link:

- a. LM Site Sustainability Plan - describes progress towards sustainability goals and future plans. LM's annual submittal for the Pollution Prevention Tracking and Reporting System (PPTRS) is included in this Plan.
- b. Annual Energy Report, a.k.a Consolidated Energy Data Report (CEDR) - gathers information on energy and water usage, renewable energy generation, greenhouse gas emissions, high performance sustainable buildings, and sustainability projects.
- c. Energy Independence and Security Act (EISA) Section 432 Report - reports status on energy and water evaluations, benchmarking, project implementation, and measures follow up.
- d. 2011 Facility EMS Annual Report Data (EO 13423) - collects information on status of Environmental Management Systems.
- e. Pollution Prevention Tracking and Reporting System - collects sustainable acquisition, pollution prevention, electronics stewardship, and waste data including on-site landfill and contracted/off-site municipal solid waste disposal.
- f. Facility Information Management System (FIMS) updates - FIMS Collects real property attributes and use, including a list of assets excluded from the energy intensity reduction goal. The database also stores data on buildings that have been assessed or are planned to be assessed against the High Performance Sustainable Building goals.
- g. Federal Acquisition Statistical Tool (FAST) updates - collects current and past federal fleet fuel use, vehicle inventory, and vehicle acquisitions for the current year in addition to plans two years into the future.
- h. Significant Aspects - The environmental aspect of an activity is that portion of it that creates a possibility for a significant environmental impact if not controlled.

5.0 Summary of Environmental Compliance

As described in the Background section, the LM sites are regulated under different regulatory regimes, with the category 3 sites subject to more regulatory requirements than category 1 and 2 sites. The sites that are considered CERCLA/RCRA sites have been remediated under the

requirements of those statutes, with the majority under CERCLA. Under CERCLA, the sites were subject to meeting or exceeding the applicable or relevant and appropriate requirements (ARARs) of federal, state, and local laws and statutes, such as Superfund Amendments and Reauthorization Act (SARA), RCRA, the Clean Water Act (CWA), the Clean Air Act (CAA), the Safe Drinking Water Act (SDWA), UMTRCA, the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), the National Historic Preservation Act, the Endangered Species Act, and the associated state regulations. Because DOE is a federal agency, NEPA is also an applicable requirement.

- No Notices of Violation were issued to LM sites during calendar year (CY) 2011.
- During CY 2011, LM maintained three NPDES permits and two RCRA permits. Many permits were issued for the installation of groundwater monitoring wells at LM sites. LM maintained 1,960 groundwater monitoring wells in CY 2011.

5.1 Major Laws

The following summarizes LM compliance with major laws and related reporting during CY 2011:

- CERCLA:** The CERCLA sites have completed remedial actions for the most part, with the exception of long-term monitoring, and have integrated the procedural and documentation requirements of CERCLA. The sites are now conducting long-term surveillance and maintenance under this regulation. The status of these activities for each site is available on the associated websites and in the documents as listed. The CERCLA sites are required to prepare Five-Year Review reports to ensure that the remedies at the sites remain protective of human health and the environment.
 - Five-Year Review reports were issued by the Weldon Spring, Missouri, Site and the Fernald Preserve and Mound, Ohio, Sites in CY 2011.
- SARA:** Emergency Planning and Community Right to Know Act (EPCRA) reports under SARA 312 are required annually for sites that store chemicals in amounts that exceed threshold planning quantities.
 - The following sites submitted EPCRA reports under SARA 312 in CY 2011: Tuba City, Arizona; Grand Junction, Colorado, Disposal Site and Grand Junction Office; and Hillshire Building, Las Vegas Office.
- UMTRCA Title I and II:** UMTRCA provides for the remediation and regulation of uranium mill tailings at uranium mill sites addressed under Title I and Title II of UMTRCA. As discussed in the Background section, LM manages sites under UMTRCA Title I and II, including inspecting, monitoring, and maintenance at each of the sites.
 - Two summary reports of activities on UMTRCA sites, one for Title I and one for Title II, are submitted annually to the Nuclear Regulatory Commission at the conclusion of the calendar year.
- RCRA:** The majority of the CERCLA/RCRA sites managed hazardous wastes during the active remediation in compliance with RCRA. Each site met the status of Conditionally Exempt Small Quantity Generator during CY 2011. No RCRA wastes were manifested offsite during CY 2011 for any of the sites. RCRA remains an ARAR at many of the sites

for disposal cell maintenance and groundwater monitoring, and the sites maintain compliance with these ARARs.

- The Pinellas, Florida, Site maintains an active RCRA Hazardous and Solid Waste Act corrective action permit issued by the State of Florida, which includes requirements for remedial action at the site under the state Global Risk-Based Corrective Action regulations. Pinellas maintains compliance with this permit. Mound also retained a RCRA permit during CY 2011, which remained from the time the plant was in operation. The permit was terminated in March 2012.
- e. **CWA:** Some of the sites maintain National Pollutant Discharge Elimination System (NPDES) permits issued under the CWA.
- Weldon Spring and the Fernald Preserve maintain NPDES permits
 - The Rocky Flats, Colorado, Site was issued a storm water permit in CY 2011.
 - The Mound site discharges under a CERCLA authorization to demonstrate compliance with the CWA.
- f. **SDWA:** The SDWA is an ARAR for many sites in regard to groundwater contamination. This information is detailed in the environmental monitoring reports for each site.
- g. **CAA:** National Emission Standards for Hazardous Air Pollutants (NESHAPs) monitoring has occurred at the LM Sites in the past.
- Mound conducted NESHAPS monitoring during 2011. The monitoring was terminated in June 2011.
 - None of the other sites have air emissions that are regulated by the CAA.
- h. **NEPA:** NEPA requirements were integrated into many of the CERCLA documents during the ongoing cleanups. NEPA activities for the LM sites, including the Annual NEPA Planning Summary which is submitted to the DOE General Council are tracked and reported on the following website:
http://www.lm.doe.gov/Office_of_Site_Operations/Environmental_Management_System/NEPA.aspx
- i. **FIFRA:** Herbicides and pesticides are used at LM sites, and policies and procedures are in place to ensure that they are used in compliance with FIFRA.

5.2 Regulations related to Cultural and Natural Resources

5.2.1 Cultural Resources

- LM annually submits a Report on Federal Archaeology Program Activities to the DOE Office of Health, Safety and Security (HS-22) for submittal with other DOE reports to the National Park Service. The report summarizes annual activities and also reports the cumulative total on acreage surveyed to date, the number of sites on agency managed lands that were determined to be eligible, or ineligible to the National Register of Historic Places, costs associated with managing the cultural resources program, etc.
- An Assessment of Historic Properties and Preservation Activities (for fiscal years 2008-2011) was submitted to DOE-MA-75, Office of Management in 2011. This report, which is completed every three years, directs federal agencies to summarize how they identify, protect, and use their historic properties.

- DOE has a programmatic agreement with the Advisory Council on Historic Preservation and the Ohio Historic Preservation Office that requires an annual submittal of the results of cultural resource surveys at the Fernald Preserve in Ohio.
- In 2010, the Calamity Camp, which is found on one of DOE's uranium lease tracts, was nominated by the BLM to the National Register of Historic Places and received official register status in 2011.
- LM subcontracts for cultural resources inventories prior to commencing ground disturbing activities if the area has not been previously inventoried or if it is in need of updated inventory. In 2011, one cultural resource inventory was undertaken and several informational letters were submitted to State Historic Preservation Offices for work in areas that were not subject to a cultural resource inventory.

5.2.2 Natural Resources

- LM annually submits the 'Annual Accomplishments Questionnaire' to DOE-HS-22. Departmental annual reports are combined and submitted to the USFWS, Council for the Conservation of Migratory Birds. This report summarizes all bird conservation activities and coordination or exchange of information with state and USFWS regional or field offices.
- LM evaluates the presence or potential presence of listed species or their habitat during the NEPA process. The U.S Fish and Wildlife Service (USFWS) website is used to obtain information on species occurrence and habitat. This information is combined with site knowledge, conversations with other federal agency wildlife biologists, records, and, as needed, and a site visit to determine if consultation is required under the ESA. The evaluation is documented and attached to the NEPA document prepared for the proposed action.
- In some instances, water depletions from river basins may have an adverse effect on listed species inhabiting the river (e.g., fish) or river corridor (e.g., birds). In CY2011, LM initiated evaluations of water depletion related to LM activities within identified water basins. Discussions with local USFWS staff and an evaluation of water withdrawn for LM activities in for the Upper Colorado River Basin was completed in CY2011 with a determination of no adverse effects.
- In CY 2011, LM activities did not affect any listed species.
- The USFWS also requires permits for various actions that may occur on national wildlife refuge (NWR) areas (such as Amchitka or Adak Islands, which are within the Alaska Maritime NWR, Aleutian Islands Unit) or for collections of migratory bird eggs.
- In CY 2011, A Special Use Permit for conducting various activities on Amchitka and Adak Islands and in the surrounding marine waters was obtained. One of the permit restrictions included using a 3-mile buffer to avoid the listed Steller sea lion rookery sites offshore of both islands.
- The USFWS considers the collections of migratory bird eggs a potential loss of migratory birds. LM intended to collect glaucous-winged gull eggs as part of their biological sample collection in CY 2011 and submitted the necessary permit to the USFWS.

6.0 Summary of Environmental Radiological Protection Program

LM has a radiological protection program in place that is documented in the *Radiation Protection Program Plan* and *Radiological Control Manual*. LM uses this program to ensure that radiation exposure to workers and the public and releases of radioactivity to the environment are maintained below regulatory limits and to further reduce exposures and releases to levels as low as reasonably achievable. Environmental cleanup at LM sites was completed according to all applicable statutes and regulations, and LM conducts long-term monitoring and surveillance to verify that site conditions have not changed and that established institutional controls remain effective.

7.0 Summary of Quality Assurance

Quality assurance for sampling activities at LM sites follows the *Sampling and Analysis Plan for U.S. Department of Energy Office of Legacy Management Sites* (LMS/PLNM/S04351). The environmental quality assurance program includes management of the plans and procedures governing environmental monitoring at LM sites and at the subcontracted offsite laboratories. The environmental quality assurance program provides LM sites with reliable, accurate, and precise monitoring data. The environmental quality assurance program furnishes guidance, directives, and quality control procedures to detect and prevent quality control problems from the time of sample collection through analysis and reporting of data. Key elements in achieving the goals of this program are compliance with the quality assurance program and environmental quality assurance program procedures; the use of quality control samples; complete documentation of field activities and laboratory analyses; sample analysis by subcontracted offsite laboratories that participate in the Consolidated Audit Program and the Mixed Analyte Performance Evaluation Program; and reviews of data documentation for precision, accuracy, and completeness (data validation).

8.0 Summary of Unique Occurrences

This section identifies unique environmental activities and reports that LM generates in any given year, as requested by the ASER preparation guidance. The following are examples of what may be identified (as applicable): Awards, violations, lawsuits, environmental reports related to non-legacy sites under LM's management (e.g., Calibration Models/Pads and Uranium Leasing Program), and environmental occurrences

a. Occurrence Reports:

- 3/23/11: Fernald – Legacy Radioactive Debris Found

b. Lawsuits:

LM is currently party to three lawsuits. Summary language for the lawsuits is being reviewed by General Counsel and will be provided as an addendum to this summary report once approved.

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Attachment 1

Legacy Management Sites and Related Reports

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TABLE 1: CATEGORY 1 SITES

(Typically involves records-related activities and stakeholder support)

Acid/Pueblo Canyon, NM, Site http://www.lm.doe.gov/Acid/Sites.aspx
Adrian, MI, Site http://www.lm.doe.gov/Adrian/Sites.aspx
Albany, OR, Site http://www.lm.doe.gov/Albany/Sites.aspx
Aliquippa, PA, Site http://www.lm.doe.gov/Aliquippa/Sites.aspx
Ashtabula, OH, Site
Bayo Canyon, NM, Site http://www.lm.doe.gov/bayo/Sites.aspx
Berkeley, CA, Site http://www.lm.doe.gov/berkeley/Sites.aspx
Beverly, MA, Site http://www.lm.doe.gov/beverly/Sites.aspx
Buffalo, NY, Site http://www.lm.doe.gov/buffalo/Sites.aspx
Center for Energy and Environmental Research, PR, Site
Chariot, AK, Site http://www.lm.doe.gov/chariot/Sites.aspx
Chicago North, IL, Site http://www.lm.doe.gov/chicago_north/Sites.aspx
Chicago South, IL, Site http://www.lm.doe.gov/chicago_south/Sites.aspx
Chupadera Mesa, NM, Site http://www.lm.doe.gov/chupadera/Sites.aspx
Columbus East, OH, Site http://www.lm.doe.gov/columbus_east/Sites.aspx
Columbus, OH, Site
El Verde, PR, Site
Fairfield, OH, Site http://www.lm.doe.gov/fairfield/Sites.aspx
General Atomics Hot Cell Facility, CA, Site http://www.lm.doe.gov/general_atomic/Sites.aspx
Geothermal Test Facility, CA, Site http://www.lm.doe.gov/geothermal/Sites.aspx
Granite City, IL, Site http://www.lm.doe.gov/granite_city/Sites.aspx
Hamilton, OH, Site http://www.lm.doe.gov/hamilton/Sites.aspx
Indian Orchard, MA, Site http://www.lm.doe.gov/indian_orchard/Sites.aspx
Jersey City, NJ, Site http://www.lm.doe.gov/jersey_city/Sites.aspx
Madison, IL, Site http://www.lm.doe.gov/madison/Sites.aspx
Maxey Flats, KY, Disposal Site http://www.lm.doe.gov/maxey_flats/Sites.aspx
Middlesex North, NJ, Site http://www.lm.doe.gov/middlesex_north/Sites.aspx
Missouri University Research Reactor, MO, Site http://www.lm.doe.gov/murr/Sites.aspx
New York, NY, Site http://www.lm.doe.gov/new_york/Sites.aspx
Niagara Falls Vicinity Properties, NY, Site http://www.lm.doe.gov/niagara/vicinity/Sites.aspx
Oak Ridge, TN, Warehouses Site http://www.lm.doe.gov/oakridge/Sites.aspx
Oxford, OH, Site http://www.lm.doe.gov/oxford/Sites.aspx
Oxnard, CA, Site http://www.lm.doe.gov/oxnard/Sites.aspx
Seymour, CT, Site http://www.lm.doe.gov/seymour/Sites.aspx
Springdale, PA, Site http://www.lm.doe.gov/springdale/Sites.aspx
Toledo, OH, Site http://www.lm.doe.gov/toledo/Sites.aspx
Tonawanda North, NY, Site Unit 1 http://www.lm.doe.gov/tonawanda/Sites.aspx
Tonawanda North, NY, Site Unit 2 http://www.lm.doe.gov/tonawanda/Sites.aspx

TABLE 2: CATEGORY 2 SITES

(Typically involves routine inspection and maintenance, records-related activities, and stakeholder support)

SITE NAME	Type of Data Collected					Where Data is Reported				
	Inspection	Groundwater and/or surface water monitoring	Production Water and Gas Monitoring	Air Monitoring	Other Environmental Monitoring (Biological, soil, etc.)	Site Inspection Report	CERCLA Five-Year Review Report	Annual Site Inspection and Monitoring Report for UMTRCA Title I or Title II Sites	Environmental Monitoring Report *	GEMS**
UMTRCA Sites										
Ambrosia Lake, NM, Disposal Site http://www.lm.doe.gov/Ambrosia/Sites.aspx	x	x						x	x	x
Bluewater, NM, Disposal Site http://www.lm.doe.gov/bluewater/Sites.aspx	x	x						x	x	x
Burrell, PA, Disposal Site http://www.lm.doe.gov/burrell/Sites.aspx	x	x						x	x	x
Canonsburg, PA, Disposal Site http://www.lm.doe.gov/canonsburg/Sites.aspx	x	x						x	x	x
Durango, CO, Processing Site http://www.lm.doe.gov/Durango/Processing/Sites.aspx		x						x	x	x
Durango, CO, Disposal Site http://www.lm.doe.gov/Durango/Disposal/Sites.aspx	x	x		x				x	x	x
Edgemont, SD, Disposal Site http://www.lm.doe.gov/edgemont/Sites.aspx	x				x			x		x
Falls City, TX, Disposal Site http://www.lm.doe.gov/falls/Sites.aspx	x	x						x		x
Green River, UT, Disposal Site http://www.lm.doe.gov/green_river/Sites.aspx	x	x						x	x	x
Gunnison, CO, Processing Site http://www.lm.doe.gov/Gunnison/Processing/Sites.aspx	x	x							x	x
Gunnison, CO, Disposal Site http://www.lm.doe.gov/Gunnison/Disposal/Sites.aspx	x	x						x	x	x
Lakeview, OR, Processing Site http://www.lm.doe.gov/Lakeview/Processing/Sites.aspx		x							x	x
Lakeview, OR, Disposal Site http://www.lm.doe.gov/Lakeview/Disposal/Sites.aspx	x	x						x	x	x
L-Bar, NM, Disposal Site http://www.lm.doe.gov/Lbar/Sites.aspx	x	x						x	x	x
Lowman, ID, Disposal Site http://www.lm.doe.gov/lowman/Sites.aspx	x							x		x
Maybell, CO, Disposal Site http://www.lm.doe.gov/Maybell/Sites.aspx	x							x		x
Maybell West, CO, Disposal Site http://www.lm.doe.gov/Maybell_West/Sites.aspx	x							x		x
Mexican Hat, UT, Disposal Site http://www.lm.doe.gov/Mexican_Hat/Sites.aspx	x							x		x
Monument Valley, AZ, Processing Site		x			x				x	x

TABLE 2: CATEGORY 2 SITES

(Typically involves routine inspection and maintenance, records-related activities, and stakeholder support)

SITE NAME	Type of Data Collected					Where Data is Reported				
	Inspection	Groundwater and/or surface water monitoring	Production Water and Gas Monitoring	Air Monitoring	Other Environmental Monitoring (Biological, soil, etc.)	Site Inspection Report	CERCLA Five-Year Review Report	Annual Site Inspection and Monitoring Report for UMTRCA Title I or Title II Sites	Environmental Monitoring Report *	GEMS**
http://www.lm.doe.gov/MonValley/Sites.aspx										
Naturita, CO, Processing Site http://www.lm.doe.gov/Naturita/Processing/Sites.aspx		x							x	x
Naturita, CO, Disposal Site http://www.lm.doe.gov/Naturita/Disposal/Sites.aspx	x	x						x	x	x
Rifle, CO, Old Rifle Processing Site http://www.lm.doe.gov/Rifle/Old_Processing/Sites.aspx		x							x	x
Rifle, CO, New Processing Site http://www.lm.doe.gov/Rifle/New_Processing/Sites.aspx		x							x	x
Rifle, CO, Rifle Disposal Site http://www.lm.doe.gov/Rifle/Disposal/Sites.aspx	x	x						x	x	x
Riverton, WY, Processing Site http://www.lm.doe.gov/Riverton/Sites.aspx		x							x	x
Salt Lake City, UT, Processing Site*** http://www.lm.doe.gov/Salt_Lake/Processing/Sites.aspx										
Salt Lake City, UT, Disposal Site http://www.lm.doe.gov/Salt_Lake/Disposal/Sites.aspx	x							x	x	x
Sherwood, WA, Disposal Site http://www.lm.doe.gov/sherwood/Sites.aspx	x	x			x			x		x
Shirley Basin South, WY, Disposal Site http://www.lm.doe.gov/Shirley_Basin/Sites.aspx	x	x						x	x	x
Slick Rock, CO, Processing Site http://www.lm.doe.gov/Slick_Rock/Processing/Sites.aspx		x							x	x
Slick Rock, CO, Disposal Site http://www.lm.doe.gov/Slick_Rock/Disposal/Sites.aspx	x							x		x
Spook, WY, Disposal Site http://www.lm.doe.gov/Spook/Sites.aspx	x							x		x
Decontamination and Decommissioning (D&D)										
BONUS, PR, Decommissioned Reactor, Site http://www.lm.doe.gov/bonus/Sites.aspx	x					x				x
Grand Junction, CO, Site http://www.lm.doe.gov/Grand_Junction/Sites.aspx		x							x	x
Hallam, NE, Decommissioned Reactor, Site http://www.lm.doe.gov/hallam/Sites.aspx	x	x							x	x
Piqua, OH, Decommissioned Reactor, Site http://www.lm.doe.gov/Piqua/Sites.aspx	x					x				x
Site A / Plot M, IL, Decommissioned Reactor, Site http://www.lm.doe.gov/SiteA_PlotM/Sites.aspx	x	x				x			x	x
Other										

TABLE 2: CATEGORY 2 SITES

(Typically involves routine inspection and maintenance, records-related activities, and stakeholder support)

SITE NAME	Type of Data Collected					Where Data is Reported				
	Inspection	Groundwater and/or surface water monitoring	Production Water and Gas Monitoring	Air Monitoring	Other Environmental Monitoring (Biological, soil, etc.)	Site Inspection Report	CERCLA Five-Year Review Report	Annual Site Inspection and Monitoring Report for UMTRCA Title I or Title II Sites	Environmental Monitoring Report *	GEMS**
Amchitka, AK, Site http://www.lm.doe.gov/Amchitka/Sites.aspx	x				x				x	x
Central Nevada Test Area, NV, Site http://www.lm.doe.gov/CNTA/Sites.aspx	x	x							x	x
Gasbuggy, NM, Site http://www.lm.doe.gov/Gasbuggy/Sites.aspx	x	x	x			x			x	x
Gnome-Coach, NM, Site http://www.lm.doe.gov/Gnome/Sites.aspx	x	x				x			x	x
Inhalation Toxicology Laboratory, NM, Site http://www.lm.doe.gov/ITL.pdf										
Parkersburg, WV, Disposal Site http://www.lm.doe.gov/parkersburg/Sites.aspx	x	x				x			x	x
Rio Blanco, CO, Site http://www.lm.doe.gov/Rio_Blanco/Sites.aspx			x						x	x
Rulison, CO, Site http://www.lm.doe.gov/Rulison/Sites.aspx			x						x	x
Salmon, MS, Site http://www.lm.doe.gov/salmon/Sites.aspx	x	x				x			x	x
Shoal, NV, Site http://www.lm.doe.gov/Shoal/Sites.aspx	x	x							x	x
FUSRAP Sites										
New Brunswick, NJ, Site http://www.lm.doe.gov/New_Brunswick/Sites.aspx	x								x	
Wayne, NJ, Site http://www.lm.doe.gov/Wayne/Sites.aspx	x									
CERCLA/RCRA Sites										
Laboratory for Energy Related Health Research, CA, Site http://www.lm.doe.gov/LEHR/Sites.aspx	x	x					x		x	x

*Types of Environmental Monitoring Reports include

- Data Validation Packages
- Verification Monitoring Reports
- Groundwater Monitoring Reports
- Hydrologic and Natural Gas Sampling and Analysis Report
- Protectiveness Certification sent to State of New Jersey based on biennial inspection.

** GEMS—Geospatial Environmental Mapping System: Designed to provide dynamic mapping and environmental monitoring data display for sites managed by LM. Site-specific data are available via GEMS on the site webpage.

***Managed with the Salt Lake City disposal facility

TABLE 3: CATEGORY 3 SITES

(Typically involves operation and maintenance of remedial action system, routine inspection and maintenance, records-related activities, and stakeholder support)

SITE NAME	TYPE OF DATA COLLECTED						WHERE DATA IS REPORTED						
	Inspection	Groundwater and/or surface water monitoring Data	Discharge Monitoring	Air Monitoring	Other Environmental Monitoring (Biological, soil, etc.)	Chemical inventories	Annual Site Inspection Report	CERCLA Five-Year Report	Annual Title I or Title II Compliance Report	EPCRA Report	NPDES Report	Environmental Monitoring Report*	GEMS**
UMTRCA Sites													
Grand Junction, CO, Processing Site http://www.lm.doe.gov/Grand_Junction_DP/Processing/Sites.aspx	x	x											
Grand Junction, CO, Disposal Site http://www.lm.doe.gov/Grand_Junction_DP/Disposal/Sites.aspx	x	x		x		x			x	x		x	x
Shiprock, NM, Disposal Site http://www.lm.doe.gov/Shiprock/Sites.aspx	x	x			x							x	x
Tuba City, AZ, Disposal Site http://www.lm.doe.gov/Tuba/Sites.aspx	x	x	x			x			x	x		x	x
CERCLA/RCRA Sites													
Fernald, OH, Site*** http://www.lm.doe.gov/Fernald/Sites.aspx	x	x	x		x	x	x	x			x	x	x
Monticello, UT, Processing Site http://www.lm.doe.gov/Monticello/Sites.aspx	x	x	x		x		x	x				x	x
Monticello, UT, Disposal Site	x	x	x				x	x				x	x

TABLE 3: CATEGORY 3 SITES

(Typically involves operation and maintenance of remedial action system, routine inspection and maintenance, records-related activities, and stakeholder support)

SITE NAME	TYPE OF DATA COLLECTED						WHERE DATA IS REPORTED						
	Inspection	Groundwater and/or surface water monitoring Data	Discharge Monitoring	Air Monitoring	Other Environmental Monitoring (Biological, soil, etc.)	Chemical inventories	Annual Site Inspection Report	CERCLA Five-Year Report	Annual Title I or Title II Compliance Report	EPCRA Report	NPDES Report	Environmental Monitoring Report*	GEMS**
http://www.lm.doe.gov/Monticello/Sites.aspx													
Mound, OH, Site http://www.lm.doe.gov/Mound/Sites.aspx	X	X	X	X		X	X			X	X	X	
Pinellas County, FL, Site http://www.lm.doe.gov/pinellas/Sites.aspx		X	X			X					X	X	
Rocky Flats, CO, Site http://www.lm.doe.gov/Rocky_Flats/Sites.aspx	X	X	X		X	X	X				X	X	
Weldon Spring, MO, Site*** http://www.lm.doe.gov/Weldon/Sites.aspx	X	X	X			X	X			X	X	X	

*Types of Environmental Monitoring Reports include

- Data Validation Packages
- Verification Monitoring Reports
- Groundwater Monitoring Reports
- Hydrologic and Natural Gas Sampling and Analysis Report

** GEMS – Geospatial Environmental Mapping System: Designed to provide dynamic mapping and environmental monitoring data display for sites managed by the U.S. Department of Energy Office of Legacy Management. Site-specific data is available via GEMS on the respective site webpage.

*** These sites have Annual Site Environmental Reports.