



Department of Energy
Washington, DC 20585

October 3, 2011

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

FROM:

STEVEN SCHIESSWOHL
OFFICE OF LEGACY MANAGEMENT
ASSET MANAGEMENT TEAM LEAD

Steven R. Schiesswohl
2011.10.03 09:17:55 -06'00'

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 strategy 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. Please review the strategy and attachments and contact Tracy Ribeiro at 970-248-6621 if you have any comments or questions.

cc:

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

Schiesswohl/10-3-11 ASER Strategy Memo Podonsky.doc



Proposed Strategy to meet DOE Order 231.1B, *Preparation of Annual Site Environmental Reports*

Background

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. The histories of the legacy sites vary, as does the regulatory regime 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 are provided below.

- At most DOE sites undergoing cleanup, some residual hazards remain at the time cleanup is completed due to financial constraints and technical impracticability. However, DOE still has an obligation to protect human health and the environment after the cleanup is complete. To meet this post-closure obligation, the management responsibility for DOE sites that have no continuing mission will be transitioned to LM for long-term management.
- In addition to DOE sites, LM is responsible for sites under the Formerly Utilized Sites Remedial Action Program (FUSRAP). Currently, the U.S. Army Corps of Engineers is responsible for site surveys and remediation at FUSRAP sites. Once remediation is completed, LM becomes responsible for long-term surveillance and maintenance.
- LM also assumes responsibility for uranium-ore processing sites addressed by Title II of the Uranium Mill Tailings Radiation Control Act (UMTRCA). UMTRCA Title II sites are sites that were commercially owned and were under active license by the U.S. Nuclear Regulatory Commission (NRC) or an Agreement State in or after 1978.

All of the legacy sites have a LM Site Manager assigned to ensure 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. To the best of our ability, the information is thoroughly reviewed to ensure accurate data is being reported. 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 activities at the LM sites and at the subcontracted off-site laboratories. The environmental quality assurance program provides the LM sites with reliable, accurate, and precise monitoring data. The program furnishes guidance and directives to detect and prevent quality problems from the time a sample is collected until the associated data are evaluated and utilized. 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; and reviews of data documentation for precision, accuracy, and completeness (data validation).

Reporting Requirement

DOE Order 231.1B, *Environment, Safety and Health Reporting*, requires that each LM 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 for Closure Sites," to the DOE Memorandum *Guidance for Preparation of the 2009 Department of Energy Annual Site Environmental Reports*, dated June 30, 2010, 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 strategy is proposed to meet the intent of DOE Order 231.1B with a scaled-down approach as identified in the ASER preparation guidance.

Strategy to Document Environmental Reporting

LM currently manages the long-term care of 87 sites (as of June 2011). 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. 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 categories and count of LM sites currently within that category are:

- 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.
- Category 2 sites, listed in Table 2, are expected to require routine inspection and maintenance, records-related activities, and stakeholder support.
 - 41 sites.
 - Annual site inspections.
 - If monitoring is required, monitoring results are available to the public.
- 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 Resource Conservation and Recovery Act and Comprehensive Environmental Response, Compensation, and Liability Act sites.

- Includes sites with active operations.
- Multiple reports are periodically issued.
- Routine stakeholder communications.

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>), and any additional information is available upon request.

LM will provide Attachment 1 as a summarized version of the environmental reporting in lieu of individual reports.

Additionally, LM will provide a second attachment that will list the programmatic and 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 would be identified on Attachment 2:

- Environmental Monitoring System/sustainability reports
- Annual National Environmental Policy Act report
- Cultural resource reports
- Awards, violations, or lawsuits (if applicable)
- Environmental reports related to non-legacy sites under LM's management, if applicable (e.g., Calibration Models/Pads and Uranium Leasing Program)

Attachment 1
Legacy Management Sites and Related Reports

*Table 1: Category 1 Sites
(Typically involves records-related activities and stakeholder support)*

Acid/Pueblo Canyon, NM, Site
Adrian, MI, Site
Albany, OR, Site
Aliquippa, PA, Site
Ashtabula, OH, Site
Bayo Canyon, NM, Site
Berkeley, CA, Site
Beverly, MA, Site
Buffalo, NY, Site
Center for Energy and Environmental Research, PR, Site
Chariot, AK, Site
Chicago North, IL, Site
Chicago South, IL, Site
Chupadera Mesa, NM, Site
Columbus East, OH, Site
Columbus, OH, Site
El Verde, PR, Site
Fairfield, OH, Site
General Atomics Hot Cell Facility, CA, Site
Geothermal Test Facility, CA, Site
Granite City, IL, Site
Hamilton, OH, Site
Indian Orchard, MA, Site
Jersey City, NJ, Site
Madison, IL, Site
Maxey Flats, KY, Disposal Site
Middlesex North, NJ, Site
Missouri University Research Reactor, MO, Site
New York, NY, Site
Niagara Falls Vicinity Properties, NY, Site
Oak Ridge, TN, Warehouses Site
Oxford, OH, Site
Oxnard, CA, Site
Seymour, CT, Site
Springdale, PA, Site
Toledo, OH, Site
Tonawanda North, NY, Site Unit 1
Tonawanda North, NY, Site Unit 2

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	x	x						x	x	x
Bluewater, NM, Disposal Site	x	x						x	x	x
Burrell, PA, Disposal Site	x	x						x	x	x
Canonsburg, PA, Disposal Site	x	x						x	x	x
Durango, CO, Processing Site		x						x	x	x
Durango, CO, Disposal Site	x	x		x				x	x	x
Edgemont, SD, Disposal Site	x				x			x		x
Falls City, TX, Disposal Site	x	x						x		x
Grand Junction, CO, Processing Site	x	x							x	x
Grand Junction, CO, Disposal Site	x	x		x				x	x	x
Green River, UT, Disposal Site	x	x						x	x	x
Gunnison, CO, Processing Site	x	x							x	x
Gunnison, CO, Disposal Site	x	x						x	x	x
Lakeview, OR, Processing Site		x							x	x
Lakeview, OR, Disposal Site	x	x						x	x	x
L-Bar, NM, Disposal Site	x	x						x	x	x
Lowman, ID, Disposal Site	x							x		x
Maybell, CO, Disposal Site	x							x		x
Maybell West, CO, Disposal Site	x							x		x
Mexican Hat, UT, Disposal Site	x							x		x
Naturita, CO, Processing Site		x							x	x
Naturita, CO, Disposal Site	x	x						x	x	x
Rifle, CO, Old Rifle Processing Site		x							x	x
Rifle, CO, New Processing Site		x							x	x
Rifle, CO, Rifle Disposal Site	x	x						x	x	x
Riverton, WY, Processing Site		x							x	x
Salt Lake City, UT, Processing Site***										
Salt Lake City, UT, Disposal Site	x							x	x	x
Sherwood, WA, Disposal Site	x	x			x			x		x
Shirley Basin South, WY, Disposal Site	x	x						x	x	x
Slick Rock, CO, Processing Site		x							x	x
Slick Rock, CO, Disposal Site	x							x		x
Spook, WY, Disposal Site	x							x		x

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**
Decontamination and Decommissioning (D&D)										
BONUS, PR, Decommissioned Reactor, Site	x					x				x
Grand Junction, CO, Site		x							x	x
Hallam, NE, Decommissioned Reactor, Site	x	x						x	x	x
Piqua, OH, Decommissioned Reactor, Site	x					x				x
Site A / Plot M, IL, Decommissioned Reactor, Site	x	x				x			x	x
Other										
Amchitka, AK, Site	x				x				x	x
Central Nevada Test Area, NV, Site	x	x							x	x
Gasbuggy, NM, Site	x	x	x			x			x	x
Gnome-Coach, NM, Site	x	x				x			x	x
Parkersburg, WV, Disposal Site	x	x				x			x	x
Rio Blanco, CO, Site			x						x	x
Rulison, CO, Site			x						x	x
Salmon, MS, Site	x	x				x			x	x
Shoal, NV, Site	x	x							x	x
FUSRAP Sites										
New Brunswick, NJ, Site ****	x									
Wayne, NJ, Site	x									
RCRA/CERCLA Sites										
Laboratory for Energy Related Health Research, CA, Site	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 the U.S. Department of Energy Office of Legacy Management. Site-specific data is available via GEMS on the respective site webpage.

***Managed with the Salt Lake City Disposal Facility

****Protectiveness Certification sent to State of New Jersey based on biennial inspection

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													
Monument Valley, AZ, Processing Site		x			x							x	x
Shiprock, NM, Disposal Site	x	x			x					x		x	x
Tuba City, AZ, Disposal Site	x	x	x			x				x	x	x	x
RCRA/CERCLA Sites													
Fernald, OH, Site***	x	x	x		x	x	x	x		x	x	x	x
Monticello, UT, Processing Sites	x	x	x		x		x	x				x	x
Monticello, UT, Disposal Sites	x	x	x				x	x				x	x
Pinellas County, FL, Site		x	x			x						x	x
Rocky Flats, CO, Site	x	x	x		x	x	x	x				x	x
Weldon Spring, MO, Site***	x	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.

Attachment 2
Legacy Management Program-Wide and
Unique Reports and Issues

LM Program-Wide Reports

Environmental Management System (EMS) Reports, Plans and Databases:

- Site Sustainability Plan
- Consolidated Energy Data Report
- Pollution Prevention Tracking and Reporting System

Other Environmental Reports:

- Annual National Environmental Policy Act (NEPA) Planning Summary
- Questionnaire on Federal Archeology Program Activities

Site-Specific Environmental Reports

Unique Reports:

- Yucca Mountain Office Space EPRCA Report (computer battery back-up)

Awards:

- Legacy Management Center was presented with a recycling award by the Monongalia County Solid Waste Authority for keeping a large volume of waste out of West Virginia Landfills

Occurrence Reports:

- 3/25/10: Rifle - Notice of Intent Alleged Statute/Rule Violation to Subcontractor
- 3/26/10: Monument Valley – Elevated Uranium
- 5/26/10: Fernald – Legacy Radioactive Debris Found
- 9/14/10: Fernald – Legacy Radioactive Debris Found

Notice of Violations:

- 03/12/2010: Rifle - Notice of Intent alleged rule violation for failure to obtain proper notice prior to construction of a monitoring hole.

Lawsuits:

- On July 31, 2008, a lawsuit was filed against the U.S. Department of Energy (DOE) in United States District Court for the District of Colorado (CEC v. DOE), on behalf of four environmental organizations (Colorado Environmental Coalition, Information Network for Responsible Mining, Center for Native Ecosystems, and Center for Biological Diversity). The complaint alleged that (1) DOE violated the National Environmental Policy Act (NEPA) multiple times during the last few years by its actions taken in conjunction with the DOE Uranium Leasing Program, including the entire programmatic environmental assessment process; and (2) through its actions, DOE is responsible for the resurgence of activity within the domestic uranium industry.

On March 26, 2010, the plaintiffs in the lawsuit, CEC v DOE, amended their complaint to add alleged violations of the Endangered Species Act. Additionally, as part of the amended complaint, a fifth environmental organization (Sheep Mountain Alliance) joined the plaintiffs.