DOE/LM-0512



# 2011–2020 STRATEGIC PLAN



Managing Today's Change, Protecting Tomorrow's Future



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Cover, top row, left to right:

*Participants at the 2010 Long-Term Surveillance and Maintenance Conference held in Grand Junction, Colorado, in November listen to one of over 50 presentations made by technical experts during the 3-day conference.* 

*Contractors sample water at the Salmon, Mississippi, Site, as part of the site's* Long-Term Surveillance and Maintenance Plan.

The Edgemont, South Dakota, Disposal Site was a uranium ore–processing site addressed by Title II of the Uranium Mill Tailings Radiation Control Act. Part of the annual inspection process is to ensure no animal or human intrusions have resulted in adverse impacts at the site.

Revegetation activities at the Rocky Flats, Colorado, Site include reseeding with native species to restore the natural vegetative cover.

Second and third row, left to right:

The disposal cell at the Lowman, Idaho, Disposal Site occupies approximately 8 acres of the 18-acre site.

The Legacy Management Business Center (LMBC) in Morgantown, West Virginia, received two Leadership in Energy and Environmental Design Gold certifications and is a National Archives and Records Administration-certified Federal records storage facility with a 150,000-cubic-foot storage capacity to preserve, protect, and store legacy records, including those of the contractor work force.

Bottom row, left to right:

*The Office of Legacy Management (LM) has installed solar photovoltaic projects at 15 sites, including the Tuba City, Arizona, Site.* 

An LM employee checks the control box of a monitoring telemetry base station at the Rifle, Colorado, Disposal Site.

LM received one of five DOE Management Awards in 2010, presented for outstanding contributions to energy, water, and vehicle fleet management and associated cost savings for the System Operation and Analysis at Remote Sites (SOARS) project.

The LMBC opened on December 22, 2009, and has capacity for 27 Federal and 68 contractor staff.

DOE/LM-0512



# 2011–2020 STRATEGIC PLAN

January 2011

www.lm.doe.gov

Managing Today's Change, Protecting Tomorrow's Future

## **Organizational Core Values**

**People** – People are our most important resource. We respect and use our experience and skills and appreciate our diversity.

**Business Excellence** – We are fiscally responsible and actively pursue best business practices.

*Safety* – We protect our human and material resources and promote safe work practices within the office and at our sites.

**Communication** – We take full advantage of our virtual organization's strengths and share information freely across all levels of the organization.

**Leadership and Teamwork** – We encourage leadership and teamwork at all levels of the organization. We value active participation and demonstrate respect for each other.

**Customer Focus** – We openly communicate with all our customers in a timely manner and actively seek opportunities to improve our services.

**Environmental Stewardship** – We consult with our communities to make informed decisions that comply with environmental laws, regulations and agreements; support environmental justice; and demonstrate respect for the environment.







Top to bottom: LMBC employees display the award and certificate won for recycling efforts at the LMBC.

An LM employee conducts a tour of the Grand Junction, Colorado, Disposal Site. LM employees tour the Fernald Preserve in Ohio.

## Letter to the Reader

Our Office of Legacy Management (LM) 2011–2020 Strategic Plan resembles the 2007 version but is not identical. We have, we hope, learned and grown since then, adopting more and better ways to carry out our responsibilities to you and to the land. To give you a quick idea of how this plan has evolved, we'll start by observing that the job of a strategic plan is not to suggest that we keep on doing the same thing as before; it is, instead, a resource allocation plan on behalf of our mission and toward our vision—the vision of a world made better, by our efforts, in certain distinct ways.

Therefore, the point is not to put the same number of eggs in each of our baskets but rather to put our money your money—where it can have the greatest impact on accomplishing our mission and goals. You'll see that we're now planning to do more of some things, less of others, none of one thing we used to do, and some new things entirely.



- Received 16 additional sites (the number will continue to grow) since 2007 and therefore had to, and did, meet more goals for environmental compliance and efficiency.
- Opened the Fernald Preserve Visitors Center in Ohio and welcomed 20,000 visitors. After 7 years of operation the Weldon Spring Interpretive Center in Missouri hit the 100,000-visitor mark.
- Met requirements to sustain our Office of Management and Budget (OMB) designation as a high performing organization and set additional sustainability goals.
- Expanded environmental justice activities to include Tribal Nations in the Southwest.
- Expanded uranium leasing through a competitive, web-based solicitation.

### Less

 Reduced funding requirements for the Employment Retirement Income Security Act (ERISA) minimum pension payment from approximately \$40 million in fiscal year (FY) 2007 to a projected \$4 million in FY 2012 due to an influx of funds and strong investment returns.

*The Weldon Spring Interpretive Center has had more than 120,000 visitors since opening in 2004.* 



- Disposed of four Federal properties (New Brunswick, New Jersey, Site; Salmon, Mississippi, Site; Wayne, New Jersey, Site; and, a portion of the Canonsburg, Pennsylvania, Site).
- Reduced efforts associated with U.S. Department of Energy (DOE or Department) work force restructuring due to the American Recovery and Reinvestment Act.

### None

• Transferred responsibility for labor relations and labor standards to the Office of General Counsel.

### New

- Supporting the establishment of energy parks at LM sites.
- Assigned to operate a mercury storage facility (2013).
- Assigned to manage the Office of Civilian Radioactive Waste Management's records, Information Technology (IT), Licensing Support Network, and U.S. Repository Services (USRS) pensions and post-retirement benefits (2011).
- Opened the LM Business Center (LMBC), in Morgantown, West Virginia; moved the Data Center; and began the transfer of closure site hard copy records. The LMBC also created an opportunity to manage other programs' records.
- Working to reduce the impacts of future uranium mining and milling on the environment.



Top: LM dispositioned a portion of the Canonsburg, Pennsylvania, Disposal Site.

Bottom: The LM Asset Management Team Leader signs documents transferring the Salmon, Mississippi, Site to the State of Mississippi.

# LETTER TO THE READER

We appreciate the many people who contributed to, and commented on, this plan. We know you'll tell us where you think we've gone astray, and we need that, but we wouldn't mind hearing about some instances where you caught us doing something important right.

Sincerely,

The Office of Legacy Management Leadership Team



David W. Geiser Director, Office of Legacy Management



toyd

Barbara McNeal Lloyd Director, Business Operations



Thomas C.

Tom Pauling Director, Site Operations

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LM opened the Fernald Preserve Visitors Center in Ohio in 2008.

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FERNALE PRESIDE VIEW

## Mission, Vision, and Operating Principles







Top to bottom:

Solar panels power the telemetry unit at the Rifle, Colorado, Site.

An LM employee speaks at the 2010 LTS&M Conference.

LM employees begin a site tour of the Fernald Preserve in Ohio.

## **Mission Statement**

The mission of the U.S. Department of Energy (DOE or Department) Office of Legacy Management (LM) is to fulfill the Department's post-closure responsibilities and ensure the future protection of human health and the environment.

### Vision

The Department's legacy work force, communities, and the environment are well-protected and served.

- Consistent and effective long-term surveillance and maintenance protects people and the environment.
- The public has easy access to relevant records and information.
- Because we work together, stakeholders, Tribal Nations, and state and local governments trust us.
- The Department's former contractor work force receives mandated benefits on time.
- Work force restructuring actions are conducted fairly and in accordance with requirements; contractors who lose their jobs get help finding new work.
- People are treated fairly and have meaningful involvement.

## **Operating Principles**

Six principles guide the implementation of this strategic plan:

- We operate safely with protection of human health (worker and public) and the environment as a priority.
- We are serious about our responsibility, as a Federal trustee, to safeguard land and resources.
- We recognize that legacy activities are local. We are flexible in tailoring site-specific solutions to short- and long-term issues facing our sites and the affected communities.
- Stakeholder involvement is integral to our operations: we can succeed only by doing things *with* our communities and Tribal Nations, not to them.
- We operate in an open and transparent manner.
- We are fiscally conservative in managing the taxpayer's money.

## Summary of Goals and Objectives

# 1. Protect human health and the environment

#### **Objectives**

- 1. Comply with environmental laws and regulations.
- 2. Reduce health risks and long-term surveillance and maintenance (LTS&M) costs.
- 3. Partner with other Federal programs to make environmental remedies better and last longer.
- 4. Oversee DOE implementation of Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.

# 2. Preserve, protect, and share records and information

#### **Objectives**

- 1. Meet public expectations for outreach activities.
- 2. Protect records and make them accessible.
- 3. Protect and ensure access to information.

# 3. Meet commitments to the contractor work force

#### **Objectives**

- 1. Safeguard contractor pension plans.
- 2. Fund contractor health and life insurance.
- 3. Oversee compliance with DOE's work force restructuring policy.

# 4. Optimize the use of land and assets

#### **Objectives**

- 1. Optimize public use of Federal lands and properties.
- 2. Transfer excess government property.
- 3. Improve domestic uranium mining and milling operations.

# 5. Sustain management excellence

#### **Objectives**

- 1. Renew LM's designation as a high performing organization (HPO).
- 2. Implement LM's Human Capital Management Plan.
- 3. Operate in a sustainable manner and reduce LM's carbon footprint.

## **Resource Strategies**



LM's operations are transhemispheric! At the close of FY 2010 we were protecting human health and the environment at 87 sites in 29 states and territories from Puerto Rico (longitude 65° west) in the Caribbean Sea to Amchitka Island (longitude 179° east) in the Bering Sea. We also had commitments to over 12,000 retired contractor workers, and managed more than 100,000 cubic feet of records and tens of thousands of acres of land. With constrained budgets, LM must strategically acquire and allocate our resources to achieve our mission and

meet our goals and objectives. Our resource strategy is best described in three broad areas: people and organizations, technology and processes, and funding and acquisition.

## People and Organizations

LM has 60 Federal employees and approximately 350 contractors. We have permanent staff (Federal and/or contractor) in Grand Junction, Colorado; Monticello, Utah; Morgantown, West Virginia; Pinellas, Florida; Southwest Ohio (the Fernald and Mound sites); St. Charles, Missouri (the Weldon Spring site); Tuba City, Arizona; Washington, DC; and Westminster, Colorado (the Rocky Flats site). This organization of professionals is connected through state-of-the-art teleconferencing, videoconferencing, and Internet capabilities.

Our resource strategy is best described in three broad areas: people and organizations, technology and processes, and funding and acquisition. LM staff has a broad range of skills and abilities. We have geologists, hydrologists, and engineers to ensure long-term environmental protection; actuaries, financial managers, and procurement specialists to provide for retired contractor pension payments and postretirement benefits; certified realty officers and property specialists to manage Federal property and dispose of it; IT specialists and records professionals to capture, safeguard, and share information; and human resource and administrative staff to support personnel and work-flow needs.

Management of 87 separate sites (the number increases each year) requires close cooperation with local, state, and Federal government agencies and Tribal Nations. We also have agreements with private land owners, commercial operators, public utilities, and DOE national laboratories. Each of these arrangements provides LM with resources and/or relationships to conduct our mission and meet our goals.

# **RESOURCE STRATEGIES**

## Technology and Processes

Through the Internet, LM can remotely view instrumentation and operate equipment. The systems we have installed allow one LM operator to simultaneously monitor the performance of environmental remedies at over a dozen sites. This has significantly expanded our surveillance capabilities while allowing staff to focus on other mission-critical functions. LM actively seeks to study and apply new technologies that enhance protectiveness and are cost effective.

Environmental remedies installed by the Department are conservative in nature and often include multiple layers of protection. Billions of dollars were spent to perform cleanup and establish long-term sustainable remedies. LM acts to protect those investments through active maintenance.

LM uses a single contractor for protecting human health and the environment. Using a single contractor ensures consistency and accountability for protecting human health and the environment and managing land and assets.

Where possible LM uses existing DOE management and operating contractors to manage pension plan assets and provide post-retirement benefits to retired contractor workers. This approach reduces cost and ensures timely and accurate payment of benefits.

## Congressional Appropriations and Other Funding Sources

Funding for LM's mission is requested by the Administration and appropriated by the Congress. These funds constitute the bulk of LM's financial resources. LM works closely with DOE management, OMB, and Congress to communicate LM's goals and objectives and resource requirements.

LM operations also generate revenue for the Federal government. Money is provided to the U.S. Department of the Treasury through site transition [private licensees must make payments under the Uranium Mill Tailings Radiation Control Act (UMTRCA) when transferring a site to DOE], disposal of real property, lease payments, and royalties from the uranium leasing program, and starting in FY 2013, we expect to collect fees for storing elemental mercury.

LM also works closely with adjacent land owners to minimize cost; collaborative action is taken where ever possible. This includes construction and maintenance of roads, bridges, trails, signs, fences, weed and animal control, and other common aspects of land management.



Environmental remedies installed by the Department are conservative in nature and often include multiple layers of protection.

### Protect Human Health and the Environment Goal 1

## Situation Analysis

As of the end of FY 2010, LM conducted LTS&M at 87 sites including private sector or DOE Formerly Utilized Sites Remedial Action Program (FUSRAP) sites, UMTRCA sites, former nuclear weapons test sites and nuclear reactors, and Departmental sites where all closure and short-term cleanups have been completed.

The Department recognizes that, as environmental remediation efforts accelerate and facilities close, its LTS&M responsibilities will increase, thereby requiring continual improvement in management to protect human health and the environment. The charts on pages 27 and 28 list the sites in LM's responsibility. Maps of current and future LM sites are on pages 25 and 26.

Technical or economic limitations, or worker health and safety considerations, prevent many facilities and Cold War sites from being remediated for unrestricted use. These sites must nevertheless meet regulatory standards for, and agreements on, engineered and institutional controls for in-place remedy integrity and for

The Department recognizes that, as environmental remediation efforts accelerate and facilities close, its long-term surveillance and maintenance responsibilities will increase, thereby requiring continual improvement in management to protect human health and the environment.

the protection of human health, the environment, and heritage resources (natural, cultural, and historical). LM will see to it that these controls remain effective.

Given the long-lived nature of radionuclides, long-term surveillance, monitoring, and maintenance at some sites will be required for hundreds or even thousands of years. As time goes on, we will take any corrective actions necessary to modify engineered cells, treat contaminated groundwater, and sustain institutional controls. Further, concerns about site protectiveness and integrity and future technological development or future land-use changes may lead to changes in the selected remedies. By 2020, some inplace remedy components and controls may need to be replaced or repaired.

Environmental justice is a Departmentwide effort with specific activities conducted by a variety of DOE program



## Projected Number of Sites in LM by Fiscal Year

# **GOAL 1**

offices. LM leads this effort and is responsible for assuring that the Department conducts all of its activities in compliance with Executive Order 12898.

LM's current environmental justice activities include the Community Leaders Institute to empower communities; the annual State of Environmental Justice in America Conference to bring diverse organizations together; activities with individual academic institutions (e.g., Tennessee State University and Tougaloo College); and support for a broad network of Historically Black Colleges and Universities and Hispanic Institutions. LM's environmental justice activities to date have focused mostly on communities near the Savannah River Site in South Carolina and the Oak Ridge Reservation in Tennessee. Recently, LM has included affected Tribal Nations in the Southwest. LM has also been successful in working through the Federal Interagency Working Group on Environmental Justice to promote interagency collaboration.



## 1. Comply with environmental laws and regulations.

#### Strategies

- Prepare, update, and implement LTS&M plans that protect human health and the environment.
- Work closely with Federal, state, local, and Tribal governments to set clear expectations and monitor results.
- Monitor, and prepare to act on, proposed changes to environmental laws and regulations.

## 2. Reduce health risks and LTS&M costs.

### Strategies

- Evaluate the range of risks and address the highest ones first.
- Negotiate changes to LTS&M plans that maintain compliance objectives and reduce cost.



Top: LM employees tour the Tuba City, Arizona, UMTRCA Title I Site, and learn about its features.

Bottom: A solar telemetry unit used at the Mound, Ohio, Site.





### 3. Improve the long-term sustainability of environmental remedies.

#### Strategies

- Record and analyze data on long-term performance of disposal cells, groundwater treatment systems, and institutional controls.
- Collaborate with, and offer "test beds" to organizations that fund LTS&M research and development.

### 4. Oversee DOE implementation of Executive Order 12898.

#### Strategies

- Identify, fund, and manage a core set of environmental justice activities within LM.
- · Promote and coordinate environmental justice activities across the Department.
- Find and support interagency and intergovernmental environmental justice projects.

## Performance Measures

- Periodic reviews and monitoring are completed on time with regulator concurrence and acceptance of remedy performance.
- Post-closure requirements are met and final remedies are maintained in accordance with applicable laws. Institutional controls are effective, durable, visible, and are either enforceable or compel compliance.
  - The cost to operate, monitor, and maintain environmental remedies is reduced.
  - Periodic independent programmatic reviews validate the scientific and engineering soundness of site baselines and identify opportunities for risk and cost reduction.



Left top: Roundtable discussions were conducted during lunch presentations at the 2010 State of Environmental Justice in America Conference.

Bottom: The annual conference allows groups and interested parties to share information and ideas.

## Preserve, Protect, and Share Records and Information

## Goal 2

## Situation Analysis

LM has more than 6,000 local, regional, and national stakeholders. Working with our site neighbors, local governments, communities, and Tribal Nations is integral to our success. LM's outreach efforts rely primarily on public meetings, local mailings, a DOE website, and electronic mail. LM also operates the Weldon Spring Interpretive Center (more than 120,000 visitors since opening in 2004) and the Fernald Preserve Visitors Center (over 20,000 visitors since 2009). LM is evaluating new communication methods (the "new media") to keep interested people and organizations up to date.

The Department manages records consistent with legal and regulatory requirements, following National Archives and Records Administration and DOE guidance. As sites are identified for mission closure, remediated, and transferred into LM authority, the associated records and information are preserved. Recently, LM enhanced its ability to fulfill records preservation and information management duties by consolidating operations in the new LMBC facility.

The LMBC furnishes direct access to physical records and information under LM custodianship. Physical records will be moved to the center from six locations. LM is working to enhance electronic records accessibility through a centralized data center. The data center manages more than 13 terabytes of electronic record material and information. Cyber security is a significant concern for the Department; varied and numerous attacks are made on DOE information systems every day. LM must continuously improve our ability to ensure the confidentiality, integrity, and availability of LM information through appropriate cyber security measures.

As sites are identified for mission closure, remediated, and transferred into LM authority, the associated records and information are preserved.

LM is in the process of preserving records collections with the availability of a stateof-the-art, climate-controlled storage area designed to maximize LM's preservation capabilities. The facility has the capacity to house 150,000 cubic feet of record materials. Climate-controlled storage ensures the long-term availability of physical records in LM custody. LM is also applying approved and consistent physical protection measures to ensure the trustworthiness, integrity, and availability of the records LM maintains.



The LMBC houses physical records and office space for numerous employees.

Preserve, protect, and share records and information

LM's records and information management program continues to enhance its capabilities to protect, preserve, and provide access to records and information systems. The program effectively and efficiently identifies, collects, and disseminates information from record sources to internal and external stakeholders. The LMBC lowers the cost of records storage and improves efficiencies and responsiveness to stakeholders seeking information about America's Cold War-era nuclear sites.

## Objectives

## 1. Focus outreach activities to increase public trust.

### Strategies

- Engage and inform affected local governments, land owners, and members of the community about site conditions and planned actions.
- Operate visitors centers and collaborate with local stakeholder organizations to ensure local communities understand site-specific activities.
- Communicate with national and site-specific stakeholders through the Internet, electronic mail, conferences, publications, and new media.
- Analyze feedback from Internet use, new media, and direct input from stakeholders to modify approaches and improve outreach.



More than 50,000 cubic feet of records have been archived in the LMBC since it opened.

## 2. Protect records and make them accessible.

### Strategies

- Consolidate LM records collections within the LMBC and use a single electronic system to manage them.
- Continually pursue more efficient and effective physical warehousing design and management processes.
- Enable additional, and more userfriendly, public search and retrieval.
- Offer warehouse services to other DOE programs to reduce cost per volume.

# GOAL 2

#### Information Requests Received and Processed by LM



### Strategies

- Install, test, and update cyber security systems to protect the integrity of LM's information.
- Wherever possible, use off-theshelf, commercially available software and hardware.
- Plan for and adopt processes to support the growth of electronic data and information.
- Make sure LM workers have the best information and communication tools available.

## Performance Measures

- Stakeholder surveys show LM is operating in an open and transparent manner and is responsive to stakeholder recommendations and concerns.
- Requests for information [Freedom of Information Act (FOIA), Privacy Act (PA), Energy Employees Occupational Illness Compensation Program Act (EEOICPA), and litigation] are answered with high-quality, timely responses that meet or exceed legally mandated time requirements.
- LM's information technology up-time meets or exceeds industry standards.
- The cost of managing hard copy records decreases each year on a per-unit volume.
- The cost to manage electronic data and information decreases each year on a per-terabyte basis.



## Situation Analysis

LM funds pensions and post-retirement benefits (medical and life insurance) for over 12,000 former contractors. The Department's oversight of benefits for its former work force is unique in the Federal government in that the agency continues to fund the benefit programs after contract closeout while maintaining and improving the quality of service to post-closure plan participants. As such, DOE must continue to deal with the risks of investment return and volatility,

interest rates, medical inflation, and changes in Federal pension law long after the contract work is over.

In FY 2008, closure site contractors shifted their pension plan assets to a conservative investment portfolio appropriate for a "closed" population of

*LM* has the responsibility to oversee work force restructuring actions to ensure that they are fair

and meet requirements.

workers. The combination of this investment approach, changes to the stock and bond markets, and Federal funding to meet the minimum requirements of ERISA resulted in pension plan assets rising to 90 percent or more of liabilities, significantly reducing LM's out-year budget requirements. However, efforts to anticipate changes in market conditions continue to affect budget formulation. As a result, the closure site contractors are evaluating the use of liability-driven

> investment strategies (e.g., insurance company annuities) to ensure long-term sustainability.

In FY 2011, more than half of LM's budget will be used to fund contractor post-retirement benefits, with medical insurance being the single largest

outlay. In general, the cost of health care has been increasing faster than inflation and above OMB's allowance for increases in Federal spending. Furthermore, a growing Federal deficit has contributed to increased pressure to reduce or maintain the current level of Federal spending, and the full effects of the recently passed healthcare legislation on contractor health insurance plans are as yet unknown. LM will work closely with contractor staff and independent actuarial firms to understand and budget for future contractor health care costs.



## LM Retirees and Spouses from LM Closure Sites

# GOAL 3

The Department is committed to mitigating the impacts of contractor layoffs. LM has the responsibility to oversee work force restructuring actions to ensure that they are fair and meet requirements. Since 1993, more than 50,000 contractors have been separated without disrupting work or inviting legal action, yielding an estimated savings of almost \$4 billion.

## Objectives

## 1. Safeguard contractor pension plans.

### Strategies

- Use multi-year pension projections by Federal actuaries and independent consultants to review annual contractor estimates.
- Use a fiscally conservative approach to estimate and budget for ERISA minimum pension plan payments.
- Review, and support as appropriate, contractor efforts to safeguard and/or annuitize pension plan assets.

## 2. Fund contractor health and life insurance.

### Strategies

- Use multi-year post-retirement benefit projections by Federal actuaries and independent consultants to review annual contractor estimates.
- Use a fiscally conservative approach to estimate and budget for health care costs.
- Review and evaluate the potential impacts of health care legislation and out-year funding restrictions on the ability to maintain contractor health care plans at current levels.



## 3. Oversee compliance with DOE's work force restructuring policy.

#### Strategies

- Monitor DOE programs and sites for work force restructuring consistent with Section 3161 of the National Defense Authorization Act for Fiscal Year 1993 and Departmental policy.
- For necessary work force reductions, encourage voluntary separations and help displaced workers find new jobs. Oversee the payment of basic benefits and ensure that DOE and our contractors conform to cost guidance and best business practices.
- Support policies that retain critical skills and forecast human resource needs for future mission requirements.

## Performance Measures

- Legacy benefits (retired contractor pension checks and medical and life insurance payments) are delivered on time.
- The systems in place to predict pension and post-retirement benefit funding requirements are reliable.
- Fewer worker separations prior to mission completion and closure.
- Fewer displaced workers forced to collect unemployment.



## Optimize the Use of Land and Assets

## Goal 4

## Situation Analysis

The Department is among the 4 largest Federal land managers, conducting its mission at 50 major sites on 3 million acres. In addition to land, the Department's assets include distinctive world-class facilities and irreplaceable natural, historical, and cultural heritage resources. Many sites and tens of thousands of acres will continue to be transferred to LM at the end of cleanup. LM is a trustee for Federal lands and assures private landowners' compliance with institutional controls.

LM will follow Departmental land-use planning processes and take into account economic, ecological, social, and cultural factors associated with each site or parcel of land.

LM will plan and implement environmentally sound future land use. LM will follow Departmental land-use planning processes and take into account economic, ecological, social, and cultural factors associated with each site or parcel of land. LM will make excess lands and facilities (i.e., real property) available for government, public, and private use consistent with the tenets of sustainability and for best practices for heritage resource management. Real property reuse or disposition must be protective of people, environmental media, and cultural resources, and meet long-term surveillance and maintenance requirements.

LM will also benefit communities by promoting the transfer of Departmental personal property that has been declared excess. Such property can bring in new business, expand existing business, or fund community economic development programs.

Although most LM space is leased we acquire and manage all our facilities so as to promote sustainable infrastructure, meet Leadership in Energy and Environmental Design (LEED) goals, and enhance cost and environmental efficiencies.

LM currently manages 32 uranium lease tracts (approximately 25,000 acres), all located within the Uravan Mineral Belt in southwestern Colorado. The lease tracts were awarded on a competitive basis and LM collects royalties (paid to the U.S. Department of the Treasury) from the mining companies that operate under the lease agreements.

The ore reserves associated with the Department's lease tracts are estimated to contain 13.5 million pounds of uranium. This is approximately 1.5 percent of the United States' known reserves (approximately 900 million pounds of uranium) and the United States' reserves are approximately 8.5 percent of the known world reserves (approximately 10.5 billion pounds of uranium).



## Objectives

## 1. Optimize public use of Federal lands and properties.



## Strategies

- Promote the development of renewable energy projects and energy parks on LM land.
- Collaborate with governmental entities, private entities, and nonprofit conservation organizations to enhance land use and heritage resource management planning and reuse.
  - Be alert for emerging land-use opportunities and work with neighbors, developers, and local governments and communities to update existing plans to take advantage of them.



# **GOAL 4**

## 2. Transfer excess government property.

### Strategies

- Work with organizations installing cleanup remedies to maximize the ability to transfer real property for beneficial reuse.
- Make grants to community reuse organizations or otherwise promote economic development, including selling or donating surplus real property for reuse.



## 3. Improve domestic uranium mining and milling operations.

### Strategies

- Seek authority and use the proceeds from real property sales and uranium lease royalties to support mined-land reclamation and other LM reclamation goals.
- Work with affected organizations to propose national standards for uranium mine reclamation requirements.
- Consolidate, enhance, and share information on uranium mine and mill inventories, hazards analyses and mitigation, reconnaissance, reclamation, and the scientific bases for state-of-the-art programs and practices.

## Performance Measures

- Federal land is leased, converted to beneficial use, or set aside for preservation.
- Excess Federal real property (measured by number of sites or portions of sites) is transferred (disposed of).
- A consolidated inventory of uranium mine and mill locations, scientific data and papers, points of contact for hazards mitigation, and regulatory frameworks is available for use by Federal, state, and Tribal Nations and the public.
- The cost and environmental impacts of the front end of the nuclear fuel cycle (mining and milling) are reduced.

## Goal 5 Sustain Management Excellence

## Situation Analysis

In February 2007, OMB designated LM as the second HPO in the Federal government. Sustaining that designation requires LM to operate within a set of parameters negotiated among LM, the DOE Office of Management, and OMB. Those parameters include Federal staffing levels, budget allocations, acquisition strategies, and program outcomes and performance measures. Since LM's HPO designation is limited to 5 years (ending February 2012), we have started work on a renewal.

LM anticipates continued growth in mission scope and functions as sites are cleaned up, closed, and transferred. LM also plans to receive the post-closure work scope associated with the Yucca Mountain



LM anticipates continued growth in mission scope and functions as sites are cleaned up, closed, and transferred.

Project in Nevada and the operation of a national storage facility for elemental mercury. We'll need both more Federal staff and broader Federal and contractor skill sets to accept these new responsibilities and continue operation as an HPO. Because the Department is committed to integrating operational decision-making with strategic and performance planning, LM will use performance-based contracts whenever possible.

The need to achieve long-term sustainability is becoming more and more important as the nation attempts to manage increasing energy demands while reducing environmental impacts. Recent Executive Orders and changes to Federal laws and regulations require that LM use less energy, increase recycling efforts, restore lands, and improve environmental quality. We are in the process of implementing operational changes that will reduce our carbon footprint and enhance overall performance.

An LM employee leads a group discussion on teamwork at an LM training meeting.

# GOAL 5

## **Objectives**

## **1.** Renew LM's designation as a high performing organization.

### Strategies

- Establish, report, and meet performance measures that drive the organization to achieve program goals.
- Use competitive procurement practices that incentivize contractors to achieve LM goals safely, efficiently, and effectively.
- Formulate and execute budgets in a fiscally conservative manner.
- Collect and leverage mission-critical knowledge to ensure long-term sustainability.
- 2. Improve our ability to hire, develop, empower, and retain our work force.

### Strategies

- Recruit, develop, and retain a best-in-class work force.
- Promote a performance-based culture; ensure both the Federal and contractor work force are properly incentivized and rewarded.
- Actively develop strong leaders throughout LM.
- Encourage employee development by using rotational assignments, supporting intra-agency details, and providing funding for training.







Above: LM employees provided conference support and information on long-term surveillance and maintenance of LM sites at the 2010 LTS&M Conference.

Below: LM employees collaborate on a project.





3. Operate in a sustainable manner and reduce LM's carbon footprint.

### Strategies

- Replace our transportation fleet with energy-efficient vehicles.
- Increase the percentage of renewable energy for site operations and transportation, eventually to 85 percent.
- Consider green alternatives in all LM purchases for supplies and materials.
- Use ecosystem and habitat improvements to lower the cost or enhance the effectiveness of LTS&M.



• Adopt LEED Silver certification as a minimum standard for building improvements and new construction.

## Performance Measures

- OMB extends LM's designation as a HPO for 5 more years.
- Over 90 percent of actions identified in the LM *Human Capital Management Plan* are implemented.
- The Office of Personnel Management survey results show that LM is one of the best organizations to work for, not only in DOE but in the Federal government.
- LM achieves a full "green" status on OMB's Environmental Stewardship scorecard.



*An LM employee refuels a fleet vehicle with E85 motor fuel in Grand Junction, Colorado.* 

## **Performance Measures**

Performance information is used to lead, learn, and improve outcomes. We need to carefully consider and then monitor the implementation of performance measures as they can heavily influence program priorities and direction. As a relatively small Federal program, LM is usually limited to one or two performance measures in the President's budget. However, we can establish additional performance measures as part of our HPO commitments with OMB as well as internal measures as part of our normal procedures.

Performance information is used to lead, learn, and improve outcomes.

In this plan, performance measures (program level and lower tier) were identified for each goal. LM is working within the Department and with OMB to establish program-level performance measures for the next 5 years (FY 2012 through FY 2016). The measures listed below are under consideration as the primary indicators of LM's overall programmatic performance. LM will use the other performance measures identified in this plan at various levels within the organization.

### Goal 1

- Post-closure requirements are met and final remedies are maintained in accordance with applicable laws.
- The cost to maintain environmental remedies is reduced from an approved and validated baseline.

#### Goal 2

- The cost of managing hard copy records decreases each year on a per-unit volume basis.
- The cost to manage electronic data and information decreases each year on a per-terabyte basis.

### Goal 3

 Legacy benefits (retired contractor pension checks and medical and life insurance) are delivered on time.

#### Goal 4

- Federal land is leased, converted to beneficial use, or set aside for preservation.
- Excess Federal real property is transferred (disposed of).

### Goal 5

• Full "green" status achieved on OMB's Environmental Stewardship scorecard.



Stakeholders tour the Solar Ponds Plume Treatment System at the Rocky Flats, Colorado, Site.

## **Program Evaluation**

LM's performance is evaluated by a diverse group of organizations in a variety of ways. The evaluation processes, both internal and external to the Department, serve as a constant reminder that we must not only do the job we are assigned to do, but do it well. LM and our contractors also have self-assessments and internal audits to determine performance and cost effectiveness.

The evaluation processes, both internal and external to the Department, serve as a constant reminder that we must not only do the job we are assigned to do, but do it well. Organizations that review LM performance include local, State, and Federal government agencies and Tribal Nations. Local governments participate in a bi-annual survey conducted by the Energy Communities Alliance; the survey evaluates the major DOE programs with site (and therefore community) responsibilities. At many of our

sites, State agencies serve as either an environmental regulator or own land adjacent to our sites. At the Federal level, we are regulated by the U.S. Environmental Protection Agency and the U.S. Nuclear Regulatory Commission. General Accountability Office reviews touch on several aspects of LM's mission.

Within the Department, specific areas of performance are evaluated by the Inspector General; the Chief Financial Officer; the Office of Health, Safety and Security; the Chief Information Officer; the Office of Engineering and Construction Management; the Office of Human Capital; as well as other organizations. The Office of the Under Secretary of Energy reviews LM's overall programmatic performance on a regular basis. Finally, LM receives feedback (formal and informal) from members of the communities near our sites and from retired contractor workers who receive pension checks and health benefits from contractors funded by LM. The individual stakeholders near LM sites and the retirees are the taxpayers most impacted by LM's activities.

LM's internal evaluations and audits include reviews of our contractors' performance, our own assessment of programmatic performance, and individual Federal employee reviews within the context of a Federal employee performance management system. In February 2007, LM was designated as an HPO by OMB. The designation established requirements associated with Federal staffing and funding levels and performance. LM reports on those requirements on a quarterly basis.

After OMB completed its review of LM using the Program Assessment Rating Tool, LM initiated a series of independent evaluations on our work at the goal level. In 2009, LM contracted with McBride Tax Solutions to evaluate our management of pensions and post-retirement benefits. In 2010, we asked the General Services Administration to review our real and personal property programs and in 2011 the National Archives and Records Administration will review our management of records. These additional, independent reviews should help LM improve our performance over the long term.

# Acronym List

DOE, Department	U.S. Department of Energy
ERISA	Employment Retirement Income Security Act
FUSRAP	Formerly Utilized Sites Remedial Action Program
FY	Fiscal year
НРО	High performing organization
IT	Information Technology
LEED	Leadership in Energy and Environmental Design
LM	Office of Legacy Management
LMBC	Legacy Management Business Center
LTS&M	Long-term surveillance and maintenance
OMB	Office of Management and Budget
UMTRCA	Uranium Mill Tailings Radiation Control Act
USRS	U.S. Repository Services

Ereman, Idaho, Disposal Site.

## Strategic Plan Definitions

**Cleanup.** The process of addressing contaminated facilities and materials in accordance with applicable requirements. Cleanup does not imply that all hazards will be removed from a site. This function encompasses a wide range of activities, such as stabilizing contaminated soil; treating groundwater; decommissioning process buildings, nuclear reactors, chemical separations plants, and many other facilities; and excavating sludge and buried waste drums. The term "remediation" is often used synonymously with cleanup.

**Disposition.** Reuse, recycling, sale, transfer, storage, treatment, or disposal.

**Engineered Controls.** Includes radioactive, hazardous, and sanitary landfills; vaults; repositories; in situ stabilization; caps on residual contamination; or other man-made controls designed to isolate or contain waste or materials.

**Environmental Management.** An office of DOE that was created in 1989 to oversee the Department's waste management and environmental cleanup efforts.

**Hazards.** Site materials or conditions that have the potential to cause adverse effects to health, safety, or the environment. Residual hazards may include radionuclides and other hazardous constituents in entombed facilities and landfills, groundwater, and other media that are restricted from exposure to people and the environment by long-term surveillance and maintenance within the long-term site boundary. These hazards may persist for generations.

**Legacy Management.** An office of DOE that was created in 2003 to manage the long-term responsibilities of closed sites, especially the sites selected for Accelerated Cleanup. The long-term responsibilities include long-term surveillance and maintenance as well as physical management of the site. Conditions sometimes permit compatible reuse of the site. Long-term responsibilities also include managing site records and electronic information, overseeing the pension and benefit programs for retired contractor personnel, and responding to stakeholder inquiries.

Long-Term Surveillance and Maintenance

(LTS&M). The site-specific physical or engineering controls, institutions, information, and other mechanisms needed to ensure protection of people and the environment at Legacy Management custodian sites where cleanup (e.g., landfill closures, remedial actions, removal actions, and facility stabilization) has occurred. The scope of LTS&M includes land-use controls, monitoring, maintenance of in-place remedies, monitoring systems and information management, and requesting adequate funding to implement the specific plans. The term "long-term stewardship" is often used synonymously with LTS&M. The duration of activities is defined in the *Long-Term Surveillance and Maintenance Plan*.

**Long-Term Surveillance and Maintenance Plan.** Includes those actions, agreements, and legal documentation that define the plan for LTS&M; including contingency plans.

**Radionuclide.** An unstable isotope that undergoes spontaneous nuclear transformation, emitting radiation.

**Radiation.** Energy emitted by unstable (radioactive) atoms. Unstable atoms contain extra energy that is released as invisible particles or waves as the atoms change, or decay, into more stable forms. Particles and waves are referred to as radiation, and their emission is called radioactivity.

**Real Property.** Includes land and structures on the land such as buildings, mission-related infrastructure, waste disposal facilities, and other waste management units. For the purpose of long-term surveillance and maintenance, real property also includes groundwater, surface water, natural resources, and cultural resources; however, rights to water and mineral resources may be managed differently than surface property rights.

**Residual Hazards.** Hazards that remain on a site after cleanup is completed to the extent practicable. Typical hazards include deep radioactive contamination that is below any usable water table, or a low-level plume of groundwater contamination. Residual hazards are allowed to remain if the cost of removing these hazards is very high and disproportionate compared to the low risk they pose to human health and the environment.

**Unrestricted Use.** Land use status upon which there are no restrictions on the types of activities that may occur, including permanent residential use.

**Uranium Mill Tailings.** Tailings or waste produced by the extraction or concentration of uranium or thorium from ore. Mill tailings are one type of by-product material and typically contain about 85 percent of the radioactivity present in unprocessed ore. Uranium mill tailings sites undergo cleanup by the company with oversight from the State and the U.S. Nuclear Regulatory Commission under the Atomic Energy Act laws and regulations. Legacy Management provides long-term surveillance and maintenance for sites that are transferred to the Federal government for custodial care.

Drilling at the Central Nevada Test Area.



## Sites in LM at the Start of FY 2011



The Weldon Spring, Missouri, Disposal Cell and prairie.



# Anticipated LM Sites by FY 2020



Site	State	FY
Acid/Pueblo Canyon Site	NM	2004
Adrian Site	MI	2004
Albany Site	OR	2004
Aliquippa Site	PA	2004
Ambrosia Lake Disposal Site	NM	1998
Ambrosia Lake West Disposal Site	NM	2020
Amchitka Site	AK	2008
Ashtabula Site	ОН	2010
Attleboro Site	MA	2014
Bayo Canyon Site	NM	2004
Bear Creek Disposal Site	WY	2012
Berkeley Site	CA	2004
Beverly Site	MA	2004
Bluewater Disposal Site	NM	1997
BONUS Decommissioned Reactor Site	PR	2004
Buffalo Site	NY	2002
Burrell Disposal Site	PA	1994
Canonsburg Disposal Site	PA	1996
Center for Energy and Environmental Research Site	PR	2006
Central Nevada Test Area Site	NV	2008
Chariot Site	AK	2005
Chicago North Site	IL	2004
Chicago South Site	IL	2004
Chupadera Mesa Site	NM	2004
Church Rock Disposal Site	NM	2015
Colonie Site	NY	2017
Columbus East Site	ОН	2004
Columbus Site	ОН	2008
Combustion Engineering Site	CT	2015
Conquista Disposal Site	TX	2017
Durango Disposal/Processing Sites	СО	1996
Durita Disposal Site	СО	2013
E.I. Du Pont Site	NJ	2019
Edgemont Disposal Site	SD	1996
El Verde Site	PR	2006
Energy Technology Engineering Center Site	CA	2019
Fairfield Site	ОН	2004
Falls City Disposal Site	ΤX	1997
Fernald Site	OH	2008
Ford Disposal Site	WA	2015
Gas Hills East Disposal Site	WY	2012
Gas Hills North Disposal Site	WY	2011

Site	State	FY
Gas Hills West Disposal Site	WY	201
Gasbuggy Site	NM	2008
General Atomics Hot Cell Facility Site	CA	2005
General Electric Vallecitos Nuclear Center Site	CA	2013
Geothermal Test Facility Site	CA	2005
Gnome-Coach Site	NM	2008
Grand Junction Disposal/Processing Sites	СО	1999
Grand Junction Site	СО	2002
Granite City Site	IL	200-
Grants Disposal Site	NM	201
Green River Disposal Site	UT	1998
Gunnison Disposal/Processing Sites	СО	1992
Guterl Specialty Steel Site	NY	201
Hallam Decommissioned Reactor Site	NE	199
Hamilton Site	OH	200
Harshaw Chemical Company Site	OH	201
Highland Disposal Site	WY	201
Indian Orchard Site	MA	200
Inhalation Toxicology Laboratory Site	NM	201
Iowa Army Ammunition Plant Site	IA	201
Jersey City Site	NJ	200
Joslyn Manufacturing and Supply Company Site	IN	201
Laboratory for Energy-Related Health Research Site	CA	200
Lakeview Disposal/Processing Sites	OR	199
Latty Avenue Properties Site	МО	201
L-Bar Disposal Site	NM	200
Linde Air Products Division Site	NY	201
Lisbon Valley Disposal Site	UT	201
Lowman Disposal Site	ID	199
Madison Site	IL	200
Maxey Flats Disposal Site	KY	200
Maybell Disposal Site	СО	199
Maybell West Disposal Site	со	201
Mercury Storage Facility	TBD	201
Mexican Hat Disposal Site	UT	199
Middlesex North Site	NJ	200
Middlesex Sampling Plant Site	NJ	202
Missouri University Research Reactor Site	МО	200
Monticello Disposal/Processing Site	UT	200
Monument Valley Processing Site	AZ	199
Mound Site	OH	201
Naturita Disposal/Processing Sites	СО	199
New Brunswick Site	NJ	200

Site	State	FY
New York Site	NY	2004
Niagara Falls Vicinity Properties Site	NY	2004
Niagra Falls Storage Site	NY	2020
Oak Ridge Warehouses Site	TN	2004
Oxford Site	ОН	2004
Oxnard Site	CA	2008
Painesville Site	ОН	2014
Panna Maria Disposal Site	TX	2013
Parkersburg Disposal Site	WV	1994
Pinellas County Site	FL	2004
Piqua Decommissioned Reactor Site	ОН	1998
Ray Point Disposal Site	TX	2013
Rifle Disposal/Processing Sites	СО	1998
Rio Blanco Site	СО	2008
Riverton Processing Site	WY	1991
Rocky Flats Site	СО	2008
Rulison Site	СО	2008
Salmon Site	MS	2008
Salt Lake City Disposal/Processing Sites	UT	1997
Sequoyah Fuels Disposal Site	OK	2015
Seymour Site	СТ	2004
Sherwood Disposal Site	WA	2001
Shiprock Disposal Site	NM	1996
Shirley Basin South Disposal Site	WY	2005
Shoal Site	NV	2008
Site A/Plot M Decommissioned Reactor Site	IL	1998
Slick Rock Disposal/Processing Sites	СО	1998
Split Rock Disposal Site	WY	2011
Spook Disposal Site	WY	1993
Springdale Site	PA	2004
St. Louis Airport Site	МО	2016
St. Louis Airport Vicinity Properties Site	МО	2016
St. Louis Downtown Site	МО	2016
Staten Island Warehouse Site	NY	2020
Superior Steel Site	PA	2018
Sylvania-Corning Site	NY	2018
Toledo Site	ОН	2004
Tonawanda North Site Unit 1	NY	2009
Tonawanda North Site Unit 2	NY	2009
Tuba City Disposal Site	AZ	1996
Uravan Disposal Site	СО	2013
W.R. Grace Co. Site	MD	2017
Wayne Site	NJ	2007
Weldon Spring Site	МО	2003

## **Key Legacy Management References**

Supporting documents regarding LM activities are maintained in an electronic library. Please visit our website at www.lm.doe.gov or contact us at:

U.S. Department of Energy Office of Legacy Management 1000 Independence Avenue, SW Washington, DC 20585

These references provide additional information about LM's activities:

The LM website Library page includes a list of links to access a comprehensive library of materials related to the LM program from its inception to the present, as well as historical documents from worker and community transition and environmental management programs.

Site Transition Process Upon Cleanup Completion, May 2007. This fact sheet provides details on transferring site management from DOE's Office of Environmental Management to the Office of Legacy Management.

Potential Health Hazards of Radiation, May 2007. This fact sheet explains the potential health hazards associated with the radioactive decay of uranium and other elements found in ore and mill tailings.

Office of Legacy Management Public Outreach, May 2007. This fact sheet provides information about LM's public outreach principles and approaches.

Sign up for LM's mailing list by sending an e-mail to lm@hq.doe.gov to receive information about upcoming public meetings and opportunities to provide comments on draft planning documents.



Salmon, Mississippi, Site.



Managing Today's Change, Protecting Tomorrow's Future