

## Environmental Compliance

All EC activities are performed in such a manner that the safety of workers and the public and the protection of the environment are given the highest priority. EC is committed to complying with all applicable environmental regulations and requirements, policy directives, and contracts, and to using best management practices as deemed necessary to protect the environment and ensure conformance with both the letter and spirit of regulatory requirements.

The EC team has consistently met regulatory-compliance permitting and reporting requirements and provided regulatory updates and expertise as requested. During this reporting quarter, the EC team completed EC deliverables and regulatory reports on or ahead of schedule, including the quarterly regulation review report and monthly NPDES discharge monitoring reports. Project/activity evaluations and job safety analysis reviews were conducted routinely and in a timely fashion to support project work.

EC personnel assisted DOE with preparation of a strategy and associated attachments to meet the requirements of DOE Order 231.1B. The strategy employed a scaled-down approach as identified in the preparation guidance for the ASER. This strategy was submitted to DOE Headquarters on schedule.

EC submitted final draft of the *U.S. Department of Energy Office of Legacy Management Programmatic Cultural Resource Management Plan* to LM. The purpose of this CRMP is to identify, summarize, and explain the procedures and actions LM managers will implement to meet the intent and spirit of the wide array of cultural resource mandates and policies.

EC personnel reviewed the new rule, effective October 31, 2011, regarding the U.S. Environmental Protection Agency (EPA) General Permit for NPDES pesticide discharges. The 2011 site survey done for the draft rule was reviewed, and the new rule was reviewed to determine its applicability to LM site operations. Regulatory reviews were provided, and several people participated in an informational webinar, hosted by EPA, regarding General Permit applications.

EC provided the Navajo Nation Water Code Administration with a summary of annual water use at the Navajo Nation LM sites in accordance with a Flat Rate Water Use Agreement (dated August 5, 2009), between DOE and the Navajo Nation.

EC staff attended the Overview of Colorado's Hazardous Waste Regulations Workshop in Montrose, Colorado.

The EC Web page was updated with current and applicable information pertaining to the EC program.

EC personnel supported the contaminated-culvert project at Weldon Spring. Support was provided for the aspects of this project related to the U.S. Department of Transportation; the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA); storm water; waste disposal; cultural resources; and NEPA. EC personnel have been managing

the coordination of the disposal of low-level radioactive culvert wastes and additional wastes stored at the site.

EC personnel coordinated the annual long-term surveillance and maintenance (LTS&M) inspection at the Weldon Spring site. Stakeholders and EPA and State regulators attended. The inspection was held from October 25 through 27, 2011. The inspection report was prepared, and a draft was submitted to DOE for review on November 29, 2011.

EC personnel prepared and submitted a Resource Conservation and Recovery Act (RCRA) Hazardous and Solid Waste Amendments Permit application for the Pinellas site. The draft permit was issued in September 2011, and EC personnel reviewed and commented on it. The public notice regarding the permit was published in the local newspaper on November 23, 2011.

NEPA documentation was completed for proposed site actions at 17 LM sites. This documentation included the submittal and approval by DOE of 10 Environmental Checklists; the other seven checklists were submitted to, and are under review by, DOE. Environmental Checklists were completed and approved by DOE for routine and specific actions at the Casper calibration model site, the Central Nevada Test Area, the Grand Junction calibration model site, the Grand Junction Regional Airport calibration model site, the George West calibration model site, the Grants calibration model site, Hallam, Rulison, Shirley Basin South, and Shoal. Environmental Checklists were submitted to LM for review and approval for the Gasbuggy, Green River, Laboratory for Energy-Related Health Research, Piqua, Rio Blanco, Riverton, and Site A/Plot M sites. Several revisions to the Environmental Checklist template were completed according to LM direction.

At Rocky Flats, notification and reporting in accordance with the June 2011 *Surface Water Configuration Adaptive Management Plan*, LMS/RFS/S07698 (AMP), continued in this quarter. The AMP-required quarterly summary report due October 31, 2011, was posted on the Rocky Flats public website ahead of schedule on October 24, 2011. Also, in accordance with the AMP, vegetation and erosion controls installed in 2010 as part of the actions to address elevated plutonium-239/240 levels at Point of Evaluation SW027 were evaluated after one full growing season. In 2011, the end of the growing season was near the end of September 2011. The evaluation report, *SW027 Hillside and South Interceptor Ditch (SID) Vegetation/Erosion Controls Evaluation*, was posted on the Rocky Flats public website on October 28, 2011. The Rocky Flats EC staff also supported the LM site manager with a public meeting held on December 5, 2011, which several stakeholders requested to discuss various details of the AMP sampling program.

The *Rocky Flats Site Quarterly Report of Site Surveillance and Maintenance Activities, Second Quarter Calendar Year 2011* was posted on the LM website on October 13, 2011, ahead of the October 15 milestone due date.

The Rocky Flats EC staff supported the LM site manager with the Rocky Flats Legacy Management Agreement (RFLMA) consultative process with the RFLMA regulatory agencies during the quarter and prepared RFLMA Contact Records for the approved activities resulting

from consultation. The following Contact Records were approved by the RFLMA regulators and posted on the Rocky Flats public website in this quarter:

- **Contact Record 2011-05:** Update for Reportable Condition for Uranium at Point of Evaluation GS10 (approved October 4, 2011)
- **Contact Record 2011-06:** Soil Disturbance Review Plan—Roads upgrade project involving reconfiguration of a sharp curve west of Functional Channel 1 (approved October 18, 2011)
- **Contact Record 2011-07:** Soil Disturbance Review Plan—Pond A-3 and Present Landfill Pond Dam Breach Project (approved December 5, 2011)
- **Contact Record 2011-08:** Reportable Condition for Americium-241 at Point of Evaluation GS10 (approved December 23, 2011)

Contact Records 2011-05 and 2011-08 describe the plan and schedule to address the reportable conditions and the status of actions related to the plan.

At Rocky Flats, EC prepared the Storm Water Pollution Prevention Plan for the Construction General Permit related to the dam breach project, and EPA approved the Notice of Intent for the permit on December 22, 2011. Also related to the dam breach project, EC coordinated obtaining concurrence from the U.S. Army Corps of Engineers, received on November 18, 2011, that Clean Water Act Nationwide Permit #43 applies to the dredge and fill work.

The third CERCLA Five-Year Review for Rocky Flats continues, and EC briefed the Rocky Flats Stewardship Council on the status of the review at the Council meeting on November 14, 2011.

EC personnel are helping to prepare the fourth CERCLA Five-Year Review for the Monticello mill tailings site, which is due in June 2012.

The first special Mound National Emission Standards for Hazardous Air Pollutants report, covering July 2009 through July 2011, was written and ready for editing on November 30, 2011.

The Mound pump-and-treat (P&T) system was promptly started up according to the rebound test decision tree, which regulators agreed to. The CERCLA Authorization to Discharge was reactivated, the Surface Water Division of the Ohio Environmental Protection Agency (Ohio EPA) was notified, and discharge monitoring began. Before the rebound test, the DOE Office of Environmental Management, the Ohio EPA, and EPA agreed that if certain criteria were met, either the rebound test would continue, or it would be stopped and the P&T system would be restarted. All of the variations were described in a decision tree that the DOE Office of Environmental Management, the Ohio EPA, and EPA agreed to in advance. One of the trigger levels was exceeded during the rebound test, which initially caused an increase in sampling frequency and in the number of sampling locations. The exceedance was still observed during the rebound test. The next step was restarting the P&T system. The P&T system was restarted without delay, in accordance with the decision tree; this was possible because of the safe shutdown and standby conditions that Stoller put the P&T system in when it was shut down.

Stoller composed a letter for LM declaring the completion or removal of all of the provisions listed in Module B of the Mound current hazardous waste permit. This letter, with the completion status of Module B requirements, was sent to the Ohio EPA on October 17, 2011. The letter requested non-renewal status for the Miamisburg Closure Project RCRA permit. On November 15, 2011, LM received a letter confirming that the Ohio EPA would grant LM's request and that on March 12, 2012, the Miamisburg Closure Project RCRA permit would expire without renewal. A management assessment (MA-12-06, Termination/Non-renewal of Mound RCRA Permit) was completed on December 15, 2011.

EC provided technical support pertaining to LM hazardous material shipping for the following activities:

- Facilitated the transportation of radioactive groundwater treatment media (zero-valent iron) from the Monticello site. The material was disposed of at the Grand Junction disposal site.
- Disposition and shipping of contaminated-culvert material from the Weldon Site.

EC provided other technical support as follows:

- EC conducted quarterly air monitoring at the Grand Junction disposal site.
- EC completed the 2012 RCRA 3016 report for the Monticello site.
- EC provided "Proof of Beneficial Use" to the Utah Division of Water Rights for groundwater used in association with DOE water right number 09-2120 at the Monticello site.
- EC facilitated a land survey of the elevations of settlement plates on the cover of the Monticello Repository.
- EC performed a quarterly EC visit at the Tuba City site. Among other activities, the site's hazardous waste generator status for 2011 was confirmed (conditionally exempt small quantity generator).
- EC continued to provide support for LM to evaluate the need for biological assessments related to water depletion from western river basins.

In response to corrective actions resulting from the 2011 EMS Annual Management Review Meeting, EC personnel developed a list of elements that contribute to LM's environmental compliance status of zero violations.

EC personnel submitted a change-of-address form to the Nevada State fire marshal because the lease at the Yucca Mountain Hillshire Building has ended and because personnel have been moved to a new facility in Las Vegas, Nevada. Due to the recent move, the quantity of hazardous materials was reduced and is no longer considered reportable according to regulatory thresholds, as specified in Title 40 *Code of Federal Regulations* Part 355 (40 CFR 355), Appendix A, and 40 CFR 370.10. However, because the hazardous materials were onsite during the calendar year 2011, Emergency Planning and Community Right-to-Know Act reporting must still be completed by March 1, 2012. Once this reporting is completed, the hazardous material permit will be terminated through the Nevada State fire marshal.

Table 3 summarizes the progress that the LMS team has made toward meeting significant environmental-aspect targets.

*Table 3. Progress on Significant Environmental-Aspect Targets*

<b>Significant Environmental Aspects</b>	<b>Targets</b>	<b>Status</b>
1. Land Use	Perform Institutional controls (IC) surveillances and quarterly or annual site inspections to ensure that site access controls are implemented and IC prohibitions are followed at 20 sites.	IC surveillances and site inspections were performed at Burrell, Canonsburg, Fernald, Parkersburg, and Weldon Spring.
2. Releases to the Environment	Continue to treat and monitor groundwater at Fernald, Monticello, Mound, Pinellas, Rocky Flats, Shiprock, and Tuba City.	During the reporting period: <ul style="list-style-type: none"> <li>• 1,168,043 gallons of groundwater were treated at Fernald.</li> <li>• 385,800 gallons of groundwater was pumped from the well field to the evaporation pond at Tuba City.</li> <li>• 1,054,982 gallons of groundwater was treated at Monticello.</li> <li>• 1,319,000 gallons of groundwater were treated at Mound.</li> <li>• 17,617 gallons of groundwater were treated at Pinellas.</li> <li>• 586,138 gallons of groundwater were treated at Rocky Flats.</li> <li>• 3,204,126 gallons of groundwater were treated at Shiprock.</li> </ul>
3. Resource Consumption, Use, and Storage	Develop an incentive program to encourage sharing business rental cars while attending out of town meetings and events.	The WM/P2 team held a meeting to discuss options
4. Waste Generation and Minimization	Perform a pollution prevention opportunity assessment on the purchasing process to evaluate the option of going paperless.	None. Scheduled for later this year.

Table 4 summarizes some key activities and accomplishments.

Table 4. Summary of Key Activities and Accomplishments

Type of Activity	Number	Site-Specific Activities
Monitoring (# of samples/# of analyses performed by off-site and on-site labs)	1,532/3320	Ambrosia (3/24), AS&T: Subsurface Projects (17/17), Bluewater (11/99), Canonsburg (7/7), Durango (28/28), Fernald (447/888), Monticello (123/380), Mound (279/317), Pinellas (5/15), Rifle Disposal /Processing Site (48/102), Riverton (19/65), Rocky Flats (301/788), Rulison (19/65), Shiprock (2/10), and Weldon Spring (125/222)
Reporting Related to Permitting	47	Burrell (1, LTS&M); Canonsburg (1, LTS&M); Fernald (3, NPDES; 3, LMICP), Grand Junction Disposal Site (1, BMP), Monticello (1, LTS&M; 1,UDWR); Mound (3, NPDES; 3, ER; 3, Rad Effluent; 1 well installation), Parkersburg (1, LTS&M); Pinellas (3, NPDES), Rocky Flats (5, RFLMA), Salmon (1, LTS&M); Shiprock (10, well logs submitted); and Weldon Spring (2, NPDES; 2, MSD; 1, CERCLA, 1, LTS&M)
Type of Activity	Number	Non-Site-Specific Activities
Controlled Documents (revised or issued)	10	<ul style="list-style-type: none"> <li>• <i>Functions, Responsibilities, and Authorities Manual</i></li> <li>• <i>Comprehensive Emergency Management System</i></li> <li>• <i>Environmental Protection Manual</i></li> <li>• <i>Environmental Support Services 2012 – 2014 Strategic Plan</i></li> <li>• <i>Fernald Preserve Analytical Laboratory Procedures Manual</i></li> <li>• <i>Fernald Preserve Environmental Monitoring Procedures</i></li> <li>• <i>Fernald Preserve Laboratory Chemical Hygiene Plan</i></li> <li>• <i>(Morgantown, WV) Legacy Management Business Center Facility Emergency Power Generator Operation, Testing, and Maintenance</i></li> <li>• <i>(Morgantown, WV) Legacy Management Business Center Facility Operations and Maintenance Plan</i></li> <li>• <i>Sampling and Analysis Plan for U.S. Department of Energy Office of Legacy Management Sites</i></li> </ul>
Reuse and Recycling	N/A	LM and the LMS workforce continue to recycle solid waste, construction waste, and electronic waste.



## Environmental Management System

The LMS contractor continued to collaborate with LM to more fully implement the joint EMS in accordance with the requirements of the DOE Strategic Sustainability Performance Plan, Executive Order 13514, Executive Order 13423, and DOE Order 436.1. To accomplish this, most EMS efforts this quarter were directed toward end-of-year reporting, revisions to manuals to close out corrective actions from an internal audit, and closing actions from a management review.

Both the Sustainable Building team and Real Property are working with the building owners of LM-leased facilities who are interested in improving their buildings to bring them into compliance with the high-performance and sustainable building (HPSB) Guiding Principles (GPs). These improvements included replacing a boiler at the Grand Junction office, and installing insulated garage doors and low-flow and low-flush restroom fixtures, and purchasing renewable energy credits at Delta Building at Fernald.

In support of Executive Order 13514, the Office of Sustainability is moving forward on efforts to evaluate LM climate change risks and vulnerabilities for DOE. A member of the LMS EC team was identified as the point of contact for climate change adaptation and began reviewing climate change resources. DOE requested LM's feedback on a document titled *Preliminary High Level Analysis of Vulnerability to Climate Change*.

EC personnel initiated work on a baseline change proposal for FY 2012 to implement Executive Order 13514 and address any new actions identified in the DOE Strategic Sustainability Performance Plan.

Four EMS manuals were revised to reflect changes resulting from DOE Order 436.1. All four manuals were submitted to senior management for review and approval. One, the *Environmental Protection Program Manual*, was issued, and the others are in the comment/resolution state.

The Pollution Prevention Tracking and Reporting System data entry was completed and submitted to the DOE Office of Health, Safety, and Security's online database before the December 1, 2011, deadline. The requested data that the report comprised included electronic reuse and recycling data, data on waste and toxic materials (such as construction debris, material from posted radiological areas, and mixed wastes) that were disposed of in—or diverted from—landfills, information on contract tracking, information on priority product purchasing, and waste generation data.

EMS/EC team members continue to participate in Clean Air Working Group, Federal Electronic Challenge Partner, Sustainability Assistance Network, Facilities Information Management System, and Data Centers teleconferences and Federal Energy Management Program training webinars. A couple of members of the EMS team attended the annual GreenGov Symposium and the annual DOE Sustainability Workshop in Washington, D.C. in October.







The EMS Vehicle and Fuel Use team is committed, not only to complying with Executive Order 13423, Executive Order 13514, and DOE Order 436.1 as they apply to fuel consumption, but also to improving data sharing and continuing to educate LMS vehicle drivers who use either

the U.S. General Services Administration (GSA) fleet or rental cars for business purposes. The team educates drivers in several ways, one of which is the promotion of safe driving. LMS senior management reviewed and approved a safety initiative by the Vehicle and Fuel Use team. The initiative was implemented at LMS-occupied sites. The initiative was successful through the first quarter of FY 2012, and the team hopes to increase the LMS vehicle driver involvement to continue promoting safe driving practices. Any LMS employee may choose to participate in the initiative.

The fall issue of *ECHOutlook* (volume 3, issue 2) was posted on the Intranet. The theme of this issue was WM/P2. In addition to the publication of *ECHOutlook*, posters that included information on the EMS Sustainable Acquisition team were distributed to the EMS distribution contacts at all selected locations.

See Table 5 for a summary of performance toward obtaining DOE FY 2020 goals and selected LM FY 2012 EMS targets.

Table 5. DOE Goal Summary Table







DOE Goal	Long-Term Status	FY 2011 Site Performance Status	FY 2012 Targets	Actions Taken This Quarter	Current Performance Status
28 percent Scope 1 and 2 GHG reduction by 2020 from a 2008 baseline.		There has been a 27.4 percent reduction to date.	A 28 percent reduction is planned by 2015.	Continue purchasing renewable energy credits.	
30 percent energy intensity reduction by 2015, from a 2003 baseline.*		There has been a 3.3 percent increase to date.  An energy audit was conducted in FY 2011 at the Fernald site.	LM will complete the installation of cost-effective electric meters in FY 2012.	Two meters were installed at Tuba City, and all materials were purchased for installing two meters at Weldon Spring.	
Individual buildings or processes metering for 90 percent of electricity (by October 1, 2012); for 90 percent of steam, natural gas, and chilled water (by October 1, 2015).		A metering plan was completed.  At present, 67 percent of electricity is metered, and 100 percent of natural gas is metered.  LM does not use steam or chilled water.	LM will continue installing advanced meters for electricity.	Two meters were installed at Tuba City, and all materials were purchased for installing two meters at Weldon Spring.	

Stoplight status =  Excellent,  Satisfactory,  Requires Improvement

\* The 37.6 percent reduction in LM's building area will make the goal of 30 percent reduction in energy intensity by 2015 very difficult to achieve. The reclassification reduced LM's building area by 37.6 percent from 2010 to 2011. The increase is due to the change in classification of the Piqua site buildings to another structure and facility.







Table 5 (continued). DOE Goal Summary Table

DOE Goal	Long-Term Status	FY 2011 Site Performance Status	FY 2012 Targets	Actions Taken This Quarter	Current Performance Status
Cool roofs, unless uneconomical, for roof replacements unless project already CD-2 approval. New roofs must have thermal resistance of at least R-30.		<p>One building has a cool roof.</p> <p>In an effort to capture more specific cool-roof data, cool-roof assessments were completed on all existing buildings.</p> <p>LM performed a life-cycle cost analysis of cool roofs and identified LM-owned and LM-leased buildings on which it may be economically feasible to install a cool-roof coating, rather than maintaining the roofs in their existing condition.</p>	<p>All future new buildings will have cool roofs, if economically feasible.</p> <p>In an effort to capture more specific cool-roof data, cool-roof assessments for each LM building will be combined with HPSB assessments in FY 2012.</p>	None.	
7.5 percent of a site's annual electricity consumption from renewable sources by 2013 and thereafter (5 percent 2010 – 2012).		<p>The Energy Policy Act of 2005 goal was met.</p> <p>Onsite renewable sources generated 2.1 percent of the electricity consumed annually, and 6.8 percent of annual electricity consumption was from purchased renewable energy credits.</p>	LM will increase its purchase of renewable energy credits by 10 percent.	Continue purchasing renewable energy credits	
Every site to have at least one onsite renewable energy generating system by 2010.		<p>This goal was met.</p> <p>LM reports as one site and has more than one onsite renewable-energy-generating system.</p>	LM will continue to pursue onsite projects where feasible.	None.	

Stoplight status =  Excellent,  Satisfactory,  Requires Improvement







Table 5 (continued). DOE Goal Summary Table

DOE Goal	Long-Term Status	FY 2011 Site Performance Status	FY 2012 Targets	Actions Taken This Quarter	Current Performance Status
10 percent annual increase in fleet alternative fuel consumption by 2015 relative to a 2005 baseline.		This goal was met.	LM will increase the ratio of alternative fuel use to conventional fuel use by 25 percent compared to FY 2009 values.	<p>The 2015 goal has been met. However, LM will continue acquiring alternative fuel vehicles (AFVs) and hybrid vehicles and using E85 (ethanol fuel blend) fuel.</p> <p>During the first quarter of FY 2012, 750.18 gallons of E85 fuel were used. In the first quarter of FY 2011, 816.11 gallons of E-85 were used, a decrease of 8.1 percent.</p> <p>Our EMS goal is to increase the ratio of alternative fuel to conventional fuel use by 25 percent compared to the FY 2009 ratio. For this time period, our ratio shows a 45 percent increase.</p>	
2 percent annual reduction in fleet petroleum consumption by 2020 relative to a 2005 baseline.		<p>This goal was not met.**</p> <p>Through LM's mission, the number of sites will continue to increase. If the program grows as expected, the number of LM sites will grow to approximately 130 sites by 2020.</p>	LM will increase the ratio of alternative fuel use to conventional fuel use by 25 percent compared to FY 2009 values.	During the first quarter of FY 2012, a total of 6,110.37 gallons of petroleum was used. In the first quarter of FY 2005, 6,695 gallons were used, a decrease of 8.7 percent.	

Stoplight status =  Excellent,  Satisfactory,  Requires Improvement

\*\* It will be a major challenge for LM to decrease fleet petroleum consumption by 2 percent compounded annually through 2020, as compared to the 2005 baseline. In 2005, LM had significantly fewer sites and vehicles than at the end of 2011. In 2005, LM had 63 sites, but by the end of 2011, LM had 87; in 2005, LM's fleet contained 28 vehicles, but by the end of 2011, it contained 43.







Table 5 (continued). DOE Goal Summary Table

DOE Goal	Long-Term Status	FY 2011 Site Performance Status	FY 2012 Targets	Actions Taken This Quarter	Current Performance Status
75 percent of light-duty vehicle purchases must consist of AFVs by 2015.		This goal was met.	The strategy for replacing 100 percent of light-duty vehicles with AFVs, when it is time to retire them from the fleet, exceeds the requirement of 75 percent AFV acquisition. In 2011, all seven light-duty vehicle acquisitions were AFV E85-fuel vehicles.	LM will continue to replace light-duty conventional fuel vehicles with hybrid AFVs. LM's current light-duty fleet comprises 28 vehicles. Of those 28, 26 are hybrid AFVs, making 92.9 percent of the light-duty fleet AFVs.	
Reduce fleet inventory by 35 percent within the next 3 years relative to a 2005 baseline.		LM is not scheduled to meet this goal.●●●  Based on discussions with DOE Headquarters–Fleet, the impact of LM's inability to reduce its inventory will be more than compensated for at the "corporate level" by the reductions in vehicles by the DOE Office of Environmental Management as the Office of Environmental Management transitions sites to LM.	On January 27, 2011, Secretary of Energy Dr. Steven Chu proposed that his agency reduce vehicle fleets by 35 percent over 3 years (2012, 2013, and 2014) based on 2005 numbers "without sacrificing either critical mission elements or our commitment to operating in a safe, secure and environmentally sound manner."	In the first quarter of FY 2012, there has been no reduction in the fleet. The fleet is currently being reviewed in an attempt at "right-sizing" without sacrificing mission, scope, elements, and safety.	
Training and outreach. DOE facility energy managers to be Certified Energy Managers by September 2012.		One LMS individual took Certified Energy Managers training, passed the exam, and submitted an application for approval of certification.	LM will continue to train additional personnel and create an organizational structure to improve and promote energy efficiency.	Pending approval of application.	

Stoplight status =  Excellent,  Satisfactory,  Requires Improvement







●●● In 2005, LM had 63 sites—far fewer than the 102 that were projected to constitute the LM network by the end of 2014. Furthermore, while LM had only 28 vehicles in 2005, its fleet was expected to increase to 43 vehicles by the end of 2014.

Table 5 (continued). DOE Goal Summary Table

DOE Goal	Long-Term Status	FY 2011 Site Performance Status	FY 2012 Targets	Actions Taken This Quarter	Current Performance Status
Sulfur hexafluoride (SF <sub>6</sub> ) capture program by September 2012. SF <sub>6</sub> is primarily used to insulate electrical equipment such as circuit breakers, transmission lines, transformers and substations. Atmospheric emissions occur during equipment maintenance or from leaks.		LM did not have any SF <sub>6</sub> when the baseline was established. LM continues to not have any SF <sub>6</sub> since LM does not manage the maintenance of major electrical equipment such as transmission lines, transformers, or substations that require SF <sub>6</sub> at any LM sites.	LM will check any electrical maintenance contracts to ensure that companies contracted to perform electrical work have a process in place for collecting SF <sub>6</sub> and checking for leaks of SF <sub>6</sub> should LM require that service in the future.	None.	
13 percent Scope 3 GHG reduction by 2020 from a 2008 baseline.		In 2010, Scope 3 GHGs were reduced by 11.5 percent, and in 2011, a reduction of 8.5 percent was calculated based on the information provided in Tab 3.2 of the CEDR spreadsheet. These reductions exceed the expected targets for both years.  Since the number of employees is steadily increasing across the country, and since the number of factors considered under Scope 3 is increasing, LM may not be able to sustain this level of reduction.	LM will encourage employees to carpool to work, to participate in alternative work-location agreements, and to use more video- and teleconferencing instead of flying to locations for face-to-face meetings.	A WM/P2 poster developed in December 2011 emphasized that videoconferencing and carpooling reduce GHGs.	
15 percent of existing buildings larger than 5,000 gross square feet (GSF) to be compliant with the five HPSB Guiding Principles (GP) by 2015.		12.5 percent of existing buildings comply with the GPs.  All existing LM-owned and LM-leased buildings have been assessed.	By the end of FY 2012, LM will update data systems (i.e., Portfolio Managers and FIMS) for all previously assessed LM-owned and LM-leased buildings to reflect changes in GPs.	Began entering utility information for Delta building into Portfolio Manager.	







Stoplight status =  Excellent,  Satisfactory,  Requires Improvement

Table 5 (continued). DOE Goal Summary Table

DOE Goal	Long-Term Status	FY 2011 Site Performance Status	FY 2012 Targets	Actions Taken This Quarter	Current Performance Status
All new construction, major renovations, and alterations of buildings greater than 5,000 GSF must comply with the GPs and where the work exceeds \$5 million, each are Leadership in Energy and Environmental Design–New Construction (LEED-NC) Gold certification or equivalent.		One new building met or exceeded the requirement for a LEED-NC Gold certification.	All new buildings and major renovations will meet or exceed these requirements.	A proposed new building, greater than 5,000 GSF, is under consideration at Weldon Spring. It would be designed and built to meet the Guiding Principles (minimum); if costs exceed \$5 million it would achieve LEED-NC Gold certification or equivalent.	
26 percent water intensity reduction by 2020 from a 2007 baseline.		An 88.2 percent reduction in water intensity was achieved in 2011, which exceeds the required minimum reduction of 8 percent by the end of 2011.  Water audits were conducted in 2011 at the Grand Junction and Weldon Spring sites.	LM will implement two water efficiency improvements. At least one improvement will be implemented at the Weldon Spring site.	LM continued tracking water use at Goal Metrics sites. Two water efficiency improvements still need to be implemented in the remainder of FY 2012, including one at the Weldon Spring site.	
20 percent water consumption reduction of non-potable industrial, landscaping, and agricultural (ILA) water by 2020 from a 2010 baseline.		A 9.39 percent reduction was achieved in 2011, which exceeds the required minimum ILA reduction of 2 percent by the end of 2011.  Two efficiency improvements were implemented at the Tuba City site in 2011.	LM will continue to track use and performance, and will plan projects to reduce industrial and landscaping water use through improved use practices and water-efficient products.  Water audits will continue to be performed to assess water use and to identify additional water reduction and reuse opportunities.	LM continued tracking water use at Goal Metrics sites.  Two water audits will be performed in the remainder of FY 2012.	

Stoplight status =  Excellent,  Satisfactory,  Requires Improvement

Table 5 (continued). DOE Goal Summary Table









DOE Goal	Long-Term Status	FY 2011 Site Performance Status	FY 2012 Targets	Actions Taken This Quarter	Current Performance Status
Divert at least 50 percent of non-hazardous solid waste, excluding construction and demolition debris by 2015.		LM recycled 440,416 pounds of material by the end of 2011. This amount was a diversion of 66.5 percent of solid waste.	LM will achieve a 50 percent waste diversion for two waste streams: construction and demolition debris, and nonhazardous solid waste. ....	Performance is measured at 6-months intervals.  However, here are a couple of highlighted activities that occurred during this quarter: 1) 600 pounds of sheet metal was recycled at Fernald 2) 3 Cisco Core-switches were 'harvested' from Yucca, and put in place at GJO, the LMBC, and Westminster which prevented purchasing of 3 new switches. 3) 35 desktop computers were donated.	
Divert at least 50 percent of construction and demolition debris by 2015.		LM diverted 77.3 percent of construction and demolition materials and debris by the end of 2011.	LM will achieve a 50 percent waste diversion for two waste streams: construction and demolition debris, and nonhazardous solid waste. ....	Performance is measured at 6-months intervals.	
Procurements meet sustainability requirements and include sustainable acquisition clause (95 percent each year).		Excluding credit card purchases, 100 percent of the products and services LM purchased met sustainability requirements. All solicitations, subcontracts, and purchase orders contained the sustainable acquisition clause.	LM will advance sustainable acquisition by striving to make 95 percent of its new contract actions for products and services (including task/release and blanket orders, but excluding all credit card purchases) environmentally preferable, in accordance with Executive Order 13514 (subject to certain qualifications and limitations).	All of the products and services LM purchased were sustainable. All solicitations, subcontracts, and purchase orders contained the sustainable acquisition clause. Management guidelines were issued for sustainable products. The guidelines address sustainable products that cost more than their conventional counterparts.	

Stoplight status =  Excellent,  Satisfactory,  Requires Improvement

.... The DOE Office of Health, Safety, and Security has modified the definition of debris to include bulk material from road, bridge, and building construction and demolition. It is unclear how to factor in remediation waste as opposed to sanitary waste. This may reduce solid waste diversion and increase construction debris diversion in 2012.



Table 5 (continued). DOE Goal Summary Table

DOE Goal	Long-Term Status	FY 2011 Site Performance Status	FY 2012 Targets	Actions Taken This Quarter	Current Performance Status
All data centers are metered to measure a monthly power utilization effectiveness (PUE); 100 percent by 2015.		LM has metered 50 percent of its data centers.	The remaining data center is scheduled to be metered in FY 2012.	Separate metering at the Grand Junction site is planned for mid-2012.	
All data centers should have a maximum annual weighted average PUE of 1.4 by 2015.		Separate metering of data-processing equipment in the Legacy Management Business Center (LMBC) data center is installed so that LM can accurately measure and improve its PUE.	LM will complete actions that conserve energy in the LMBC and Grand Junction data centers.  In 2012, LM will extend separate metering to the Grand Junction data center to measure and improve PUE there.	Separate metering equipment at the LMBC has been programmed and is being monitored.	
Electronics Stewardship – 100 percent of eligible personal computers, laptops, and monitors with power management actively implemented and in use by 2012.		All desktop and laptop systems in LM are imaged with power management settings configured per the government standard.  The controls for power management on all LM systems are “locked down,” which prohibits users from changing them.	LM will roll out Windows 7 in 2012. The appropriate power management controls will be in place and locked down.	Windows 7 is currently being tested and is on target for rollout in spring 2012.	
Protect human health and the environment through effective and efficient long-term surveillance and maintenance.		LM documented ecosystem improvements at LM sites in the ecology tracking log, including improvements in ecosystem health, land management, and remedy performance.	LM will complete a grazing management proposal for the Monticello disposal site. The proposal will emphasize habitat improvement, cover performance enhancement, and land reuse acreage.  <i>Stretch goal:</i> LM will acquire regulatory approval and project funding to begin implementing the proposal.	A pre-proposal was completed and reviewed by the DOE program advocate and site lead in preparation for conversations with site regulators.	

Stoplight status =  Excellent,  Satisfactory,  Requires Improvement