

## 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, contracts, and to using best management practices as deemed necessary to achieve protection of the environment and to 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 respective 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.

Environmental aspects were reevaluated for any changes in FY 2012 activities. Shiprock raised its groundwater contamination aspect to high. Since the groundwater contamination aspect at several other sites already had scored high no additional actions were required.

The EC Web page was updated with current and applicable information pertaining to the EC program. In addition, the newly developed NEPA Web page is now accessible from the EC Web page.

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) 5-Year Review reports for Weldon and Mound, and the annual site environmental report for Weldon, were completed and issued. The combined Annual Institutional Control (IC) Assessment and the CERCLA 5-Year Review was completed at Mound. Environmental Protection Agency (EPA) approved the final Mound CERCLA 5-Year Review report on September 28, 2011.

Rocky Flats kicked off the third CERCLA 5-Year Review with an informational presentation to the Rocky Flats Stewardship Council on September 12, 2011, and with the publication of newspaper notices. The 5-Year Review must be completed for EPA approval by September 14, 2012.

EC personnel supported the contaminated-culvert project at Weldon Spring. They have provided DOT, CERCLA, storm-water, waste disposal, cultural resource, and NEPA support for this project. EC personnel began coordination on the disposal of the low-level radioactive culvert wastes and additional wastes stored at the site.

EC personnel prepared and submitted an RCRA HSWA permit application for the Pinellas Site. The draft permit was issued in September, and EC personnel reviewed and commented on it.

EC personnel assessed environmental compliance at Pinellas and assisted Pinellas with several activities, including preparing for the road construction dewatering, evaluating a new constituent of concern (1,4-dioxane), conducting plume delineation, coordinating the shipment of drums of drill cuttings, providing alternatives analysis documentation, reviewing the LTS&M Plan, and resolving miscellaneous regulatory issues.

NEPA documentation was completed for proposed site actions at 12 LM sites. This documentation included the submittal and approval of ten Environmental Checklists and two NEPA Action review forms. Environmental Checklists were completed for routine and specific actions at Bear Creek, Slick Rock, Canonsburg, Burrell, Parkersburg, uranium lease tracts (two Environmental Checklists), Lowman, Sherwood, and Naturita. NEPA action reviews were completed for proposed actions at Fernald and Mound. In addition to these NEPA actions, the DOE NEPA Compliance Officer and LMS NEPA team have had several meetings to discuss (among other topics) the NEPA online training. DOE is reviewing the slides based on discussions in these meetings and will submit the training package back to LMS.

EC staff prepared a cultural resources summary report, *Preserve America*, for DOE's submittal to the Advisory Council on Historic Preservation (ACHP). ACHP prepares a summary report of all federal agencies' cultural resource program activities on a 3-year basis. LM continues to be proactive in protecting cultural resources.

At Rocky Flats, notification and reporting in accordance with the June 2011 *Surface Water Configuration Adaptive Management Plan*, LMS/RFS/S07698 (AMP), began in this quarter. The AMP supports the implementation of the proposed action evaluated in the May 2011 *Rocky Flats Surface Water Configuration Environmental Assessment and Finding of No Significant Impact*. The AMP provides for a monitoring and data evaluation program to assist in deciding whether to implement the final steps of the proposed action by breaching the terminal dams during the planned timeframe of 2018–2020, or to delay the completion of the proposed action to gather additional information for evaluation. The AMP requires that quarterly and annual summary reports be provided to the public. The first AMP-required quarterly summary report was posted to the Rocky Flats public website on schedule on July 31, 2011.

The *Rocky Flats Site Quarterly Report of Site Surveillance and Maintenance Activities, First Quarter Calendar Year 2011* was posted on the LM website on July 12, 2011, ahead of the July 15 milestone due date.

At Rocky Flats, a Proposed Plan to amend the CAD/ROD to clarify ICs related to soil disturbance and excavation activities was released by the RFLMA Parties for public comment on June 3. The Proposed Plan also included a proposed modification to RFLMA Attachment 2 to incorporate the CAD/ROD IC clarifications once approved. The public comment period ended on August 2, 2011. Besides the initial public meeting on June 16, 2011, two additional meetings were held on July 13 and 20, 2011. The amendment to the Rocky Flats CAD/ROD (to clarify ICs related to soil disturbance and excavation activities) and a modification to RFLMA Attachment 2 (to incorporate the CAD/ROD IC clarifications) were approved on September 21, 2010.

EC helped DOE prepare the final CAD/ROD amendment and RFLMA Attachment 2 modification based on consideration of public comments and consultation with CDPHE and EPA. A comment responsiveness summary was also prepared and released with the final CAD/ROD amendment. Approval by the three parties of the CAD/ROD amendment and the RFLMA Attachment 2 modification was completed on September 21, 2011, and the final approved versions were posted to the Rocky Flats website on September 26, 2011.

At Mound, the NESHAPs air monitoring ended on July 5, 2011, per the agreement with EPA Region V. Mound will need to prepare two NESHAPs reports, per the agreement covering the time periods July 2009 through June 2010 and July 2010 through June 2011. This will give EPA two 12-month reports that cover a year of excavation and a year of no excavation, respectively. These reports are in addition to the required 2010 report that has already been submitted.

Notification to renew the Mound RCRA permit was received. The renewal process is also the termination process. Since the permit is no longer needed, EC began working with Ohio Environmental Protection Agency (OEPA) in July 2011 to find out exactly what steps needed to be taken to have the permit terminated through the renewal process. A special form needs to be completed, and a letter of explanation is required with the form. OEPA will not consider termination until the final ROD at Mound is signed. The response to the renewal was required by September 23, 2011. Since it was unknown if the final ROD would be signed prior to that date, an extension was requested and granted for “several” months. The final ROD was signed on September 19, 2011. A draft of the form and wording of the letter were submitted to OEPA for review. The letter and form will be finalized and submitted to OEPA, which will terminate the RCRA permit.

A notification to renew the CERCLA Authorization to Discharge (ATD) outfall 003 and the aRc frac tank outfall 004 was received. The aRc frac tank was removed 3 years ago, but OEPA would remove the outfall. Even though both of these outfalls are in NPDES, they are CERCLA discharges, and DOE does not pay a fee for either discharge. After discussion with OEPA, it was determined that OEPA was unwilling to terminate ATD outfall 003 even though the pump-and-treat (P&T) system is shut down for a 1-year rebound test in OU-1. The offer of reporting any future discharge from the CERCLA remedy in the *ER Monthly Report*, if the P&T system is ever activated, was rejected. OEPA indicated that the renewal was sent in error and that a reply was not required. In March or April 2012, OEPA will notify DOE when OEPA automatically extends the ATD outfall 003 that the frac tank outfall 004 has been removed from the permit. Until then, DOE is obligated to report through the electronic Discharge Monthly Report (eDMR) a no-discharge code for each outfall. When the frac tank outfall 004 is removed, DOE will still need to file a no-discharge eDMR for the ATD outfall 003 until MNA conditions are achieved or the P&T system is activated.

EC participated in numerous activities associated with the Tuba City Site water treatment plant restart, including:

- Finalized a new spill prevention/response procedure and developed a mock-up spill response drill. The spill response drill, which was conducted in September 2011, was overseen by the Readiness Review Team, including the Technical Services Manager.

- Removed excess chemicals from the site and delivered them to a qualified recycling and waste management facility in Flagstaff, Arizona.
- Participated in numerous scheduling and Readiness Review Team meetings.
- Assisted the Technical Services Manager with completing a self-assessment of EC support for the Tuba City Site over the previous 6 months; there was no significant negative findings.
- Prepared a Tuba City Environmental Compliance Oversight Plan, which documents an annual schedule for EC activities at the Tuba City Site, such as determining the site's waste generator status and conducting a comprehensive EC assessment of site operations.

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

- Transportation of 67.5 cubic yards of low-level radioactive waste groundwater treatment system media from Rocky Flats to the Energy Solutions disposal facility in Clive, Utah.
- Determined DOT shipping requirements for transporting non-spillable lead acid batteries from the Hillshire/Yucca Mountain Office's data center to the Grand Junction Office.
- Facilitated the disposal of radioactive material from a Durango, Colorado, vicinity property at the Grand Junction Disposal Site.

EC provided other technical support as follows:

- EC conducted quarterly air monitoring at the Grand Junction Disposal Site.
- EC facilitated the disposal of radioactive material from the UMETCO property located adjacent to LM's Green River Disposal Site at the Grand Junction Disposal Site.
- EC participated in the Monticello Site's annual inspection.
- EC assisted with the annual revision of Section 5.0 of the Monticello Site Management Plan.
- EC evaluated radioactive material located on UMETCO property adjacent to LM's Green River Disposal Site and determined that the material is acceptable for disposal at the Grand Junction Disposal Site.

EC completed the *Draft Mercury Baseline Report for Long-Term Mercury Storage Impacts to Mercury Recycling*. This report supports Section 5 of MEBA, which requires a report to Congress describing the impacts of the DOE long-term mercury storage program on mercury recyclers. MEBA prohibits the export of elemental mercury from the United States, with limited exceptions for small research quantities.

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

Significant Environmental Aspects	Targets	Status
1. Land Use	Perform 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 Ambrosia Lake, Bluewater, Edgemont, L-Bar, Lakeview, Lowman, Maybell, Maybell West, Monticello, the Rifle Disposal Site, Sherwood, Slick Rock, and the Grants Test Pits.
2. Releases to the Environment	Continue to treat and monitor groundwater at Fernald, Tuba City, Shiprock, and Monticello.	<ul style="list-style-type: none"> <li>• At Fernald, 2,964,652 gallons (gal) of groundwater were treated.</li> <li>• At Tuba City, 781,800 gal of groundwater were pumped from the well field to the evaporation pond.</li> <li>• At Monticello, 1,295,000 gal of groundwater were treated.</li> <li>• At Mound, 0 gal of groundwater were treated. The P&amp;T system was shut down on June 20, 2011, for a rebound test and may be offline for 18 to 24 months.</li> <li>• At Pinellas, 567,826 gal of groundwater were treated. The groundwater was generated from dewatering to support the County waterline construction project.</li> <li>• At Rocky Flats, 625,003 gal of groundwater were treated.</li> <li>• At Shiprock, 3,656,968 gal of groundwater were treated.</li> </ul>
3. Resource Consumption, Use, and Storage	Complete an evaluation of the reverse-osmosis process at Tuba City.	The evaluation of the reverse-osmosis process is still on hold and likely will remain so until the performance of the restarted water treatment plant is evaluated over a number of months.
4. Waste Generation and Minimization	Perform a Pollution Prevention Opportunity Assessment on one radioactive-waste-generation activity.	A Pollution Prevention Opportunity Assessment was performed on the Durango Uranium Mill Tailings Radiation Control Act (UMTRCA) Title I Disposal Site permeable reactive barrier (PRB) system removal. This assessment focused on the minimization of radioactive waste generation, if any, that resulted from the activity, as well as any noteworthy practices and opportunities for improvement.

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 labs)	2,543/6,678	Adak (102/204), Amchitka (401/638), AS&T: Subsurface Projects (24/72), Bluewater (11/110), Durango (50/92), Fernald (725/1,682), Grand Junction Disposal Cell (4/20), Monticello (27/68), Mound (164/764), Naturita (15/30), Pinellas (401/616), Rifle Disposal /Processing Site (11/25), Rocky Flats (230/708), Rulison (10/39), Sherwood (4/12), Shiprock (124/1,172), Slick Rock (27/58), Tuba City (107/740), and Weldon Spring (93/162)
Reporting Related to Permitting	69	Ambrosia Lake (3, well-related), Bluewater (2, well-related), Fernald (4, NPDES; 5, CERCLA; 1, EPCRA), Grand Junction Disposal Site (1, BMP), LEHR (1, LTS&M), Mound (1, 2010 NESHAPs; 3, NPDES; 3, ER; 3, Rad Effluent; 1, dispute resolution report), New Rifle (2, well-related), Old Rifle (25, well-related) Pinellas (3, NPDES), Rocky Flats (5, RFLMA), Salmon (1, LTS&M); Shiprock (20, well permits) Slick Rock (3, well permits), and Weldon Spring (1, NPDES; 1, MSD; 1, LTS&M)
Type of Activity	Number	Non-Site-Specific Activities
Controlled Documents (revised or issued)	18	<ul style="list-style-type: none"> <li>• <i>Functions, Responsibilities, and Authorities Manual</i></li> <li>• <i>Stoller Legacy Management Support (LMS) 2011 Strategic Plan</i></li> <li>• <i>Communications Programs Manual</i></li> <li>• <i>Conduct of Operations Manual</i></li> <li>• <i>Engineering Configuration Management Manual</i></li> <li>• <i>Fernald Preserve, Ohio, Site Maintenance and calibration Program Manual</i></li> <li>• <i>Health and Safety Manual</i></li> <li>• <i>Long-Term Surveillance and Maintenance Plan for the Former Laboratory for energy-Related Health Research Federal Facility University of California, Davis</i></li> <li>• <i>Long-Term Surveillance and Maintenance Plan for the Pinellas Site</i></li> <li>• <i>Procurement Manual</i></li> <li>• <i>Readiness Review Plan Tuba city, Arizona, Water Treatment Plant Restart</i></li> <li>• <i>Rocky Flats, Colorado, Additional field Implementation Detail for Selected non-RFLMA Objectives</i></li> <li>• <i>Tuba City, Arizona, Disposal Site Operating Manual</i></li> <li>• <i>Tuba City, Arizona, Disposal Site Spill Prevention and Response Procedure</i></li> <li>• <i>Tuba City, Arizona, Disposal Site – Water Treatment Plant Operator Training and qualification Program Description</i></li> <li>• <i>Tuba City, Arizona, Disposal Site – Water Treatment Plant Restart Plan</i></li> <li>• <i>Training Manual</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. Total quantities are reported in the DOE Goal Summary Table and in Figure 3.

## 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 finalizing the budget; evaluating significant environmental aspects; conducting management reviews; and implementing DOE Order 436.1.

An EMS Annual Management Review was conducted in September. It evaluated the joint LM/LMS EMS against eight criteria determined by ISO 14001:2004 and resulted in several commendations, zero observations, and five opportunities for improvement. Senior management assigned responsible parties for each opportunity for improvement and set due dates. Status will be provided at the quarterly Goal 1 and Goal 4 Programs Review Meeting and at the EMS Core team meetings.

LMS personnel developed a LM metering plan that LM submitted to DOE Headquarters. DOE Headquarters requested permission from LM to use its metering plan as an example for a possible approach to Southwestern Power Administration, who was working on its first DOE metering plan.

The Sustainable Building Team worked closely with the Real Property organization and finalized standard “sustainability preference” lease verbiage to be included in future leases. Two current lease renewals included this verbiage that support the high-performance and sustainable building (HPSB) Guiding Principles (GPs). Both the Sustainable Building team and Real Property are currently working with the building owner who is interested in taking action to comply with the HPSB GPs.

Energy audits at the Fernald Delta Building and Visitors Center were performed. An energy audit with recommended improvements was performed on the Fernald groundwater extraction well system. The extraction wells are the largest consumer of power in LM. Consistent with EISA requirements, water audits were also conducted at the Weldon Spring and Grand Junction Disposal Sites.

Members of the EMS Training and Media team worked with Training, Stakeholder Relations, Enterprise Architecture, and Public Relations to develop and issue the E-COMM training and guidance.

Resources necessary for implementing Executive Order 13514 were identified, and a baseline change proposal was submitted and approved. 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.

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, relative to fuel consumption, but also to improving data sharing and continuing to educate LMS vehicle drivers who use either the 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. Any LMS employee may choose to participate in the initiative.

Budget numbers associated with implementing Executive Order 13514 were finalized. A baseline change proposal was submitted and approved after including Executive Order 13514 and new DOE Order 436.1 in the contract. DOE Order 436.1 replaces DOE Orders 450.1A and 430.2B.

The summer issue of *ECHOutlook* (volume 3, issue 1) was posted on the Intranet. The theme of this issue was sustainable acquisition. 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.

In response to corrective actions resulting from the 2010 EMS Annual Management Review Meeting, a summit was held on May 24, 2011. The summit included with members of the Waste Management/Pollution Prevention, Sustainable Acquisition, and Electronic Stewardship teams. The purpose of the summit was to identify innovative ways to reduce consumables, including fuel, office supplies, and paper. One such action resulted in establishing and promoting small office supply reuse centers at major sites to reduce the purchase of new office consumables such as pads, pencils, pens, hanging folders, binders, etc. This activity was coordinated with DOE during the month of September and scheduled along with a “Clean-out Your Office” promotion. E-mails and posters were developed, extra paper recycling bins were provided and areas were selected for the reuse centers. The promotion was conducted during the first week in October and was very successful. A second promotion will occur before the end of the year. The remaining actions resulting from the summit will be addressed during FY 2012.

The LM EMS Sustainable Buildings group initiated and completed an update for all LM buildings previously assessed to determine if any changes had been made to the GPs for each building. Presently, HPSB assessments have been performed on all LM leased and owned buildings that are greater than 5,000 gross square feet. Two buildings at Piqua have been reclassified as “Other Structure or Facility” (OSF). Of LM’s leased and owned buildings, 12.5 percent of existing buildings are now compliant with the HPSB GPs.

The tracking of compliance with the Federal HPSB GPs Checklist for LM-owned and LM-leased buildings greater than 5,000 gross square feet is now monitored in Portfolio Manager and FIMS.

Members of the EMS Training and Media team worked with the Training department and Public Relations to finalize and issue the Environmental-Related E-COMM Tracking System training and guidance. E-COMM is a Web-based application used to track, search, and view relevant environmental-related external communications originating from external, interested parties, which relate to DOE’s environmental performance and result in an official, written response from DOE. E-COMM fulfills the ISO 14001:2004, Section 4.4.3 requirement for organizations to establish, implement, and maintain a procedure for receiving, documenting, and responding to relevant communication from external interested parties regarding environmental performance (environmental aspects and EMS).

See Table 5 for a summary of performance toward obtaining DOE FY 2020 goals and selected LM FY 2011 EMS targets and initiatives.

Table 5. DOE Goal Summary Table

DOE Goal	Long-Term Status	FY 2010 Site Performance Status	FY 2011 Targets	Actions Taken This Quarter	Current Performance Status
28 percent Scope 1 and 2 greenhouse gas (GHG) reduction by FY 2020 from a FY 2008 baseline (related goals indented below).		7 percent reduction to date.	Continue to reduce electricity consumption.	A metering plan was completed. LM sites are being evaluated, and appropriate meters will be installed in FY 2012.	
30 percent energy intensity reduction by FY 2015, from a FY 2003 baseline.		21 percent reduction to date.	Safely modify treatment operations at the Fernald treatment facility to reduce electricity consumption.	An engineering design was prepared to remove blockage in the Fernald outfall line. Work will be performed in the third quarter of FY 2012.  A variable-speed drive was installed on an extraction well to reduce pumping power.	
7.5 percent of a site's annual electricity consumption from renewable sources by FY 2010 (2x credit if the energy is produced on site).		EPAAct goal met. Did not meet accelerated goal in DOE Order 430.2B but requested a waiver last year.  5 percent from on-site renewables and purchased renewable energy credits (RECs).	Evaluate the installation of photovoltaic systems at western LM sites.  NOTE: Initial target will not be pursued. Able to meet 7.5 percent goal through increased purchase of RECs.	RECs continue to be purchased at the Fernald Site, Mound Site, Grand Junction Disposal Site, and Monticello Site.	
Every site to have at least one on-site renewable energy generating system by FY 2010.		Met.	Continue to pursue on-site projects where feasible.	This goal has been met. LM reports as one site and has more than one on-site renewable-energy-generating system. LM will continue to pursue on-site projects where feasible.	

Stoplight status =  Excellent,  Satisfactory,  Requires Improvement

Table 5 (continued). DOE Goal Summary Table

DOE Goal	Long-Term Status	FY 2010 Site Performance Status	FY 2011 Targets	Actions Taken This Quarter	Current Performance Status
10 percent annual increase in fleet alternative fuel consumption by FY 2015 relative to a FY 2005 baseline.		Met.	Increase the ratio of alternative fuel use to conventional fuel use by 20 percent compared to the FY 2009 ratio.	<p>This goal has been met. As there was no alternative fuel purchased in the baseline year (2005), the goal is met. Alternative fuel is purchased throughout LM where it is available.</p> <p>In FY 2011, 3,060.76 gal of E85 fuel were used. In FY 2010, 3,145.56 gal of E85 fuel were used, for a decrease of 2.7 percent.</p> <p>Our EMS goal is to increase the ratio of alternative fuel use to conventional fuel use by 20 percent compared to the FY 2009 ratio. For this time period, our ratio was a 43 percent increase.</p>	
2 percent annual reduction in fleet petroleum consumption by FY 2015 relative to a FY 2005 baseline.*		Not scheduled to meet.	Increase the ratio of alternative fuel use to conventional fuel use by 20 percent compared to the FY 2009 ratio.	<p>Total petroleum use for 2011 is 31,703.49 gal. For FY 2005, the fuel use was 30,291 gal, for an increase of 4.6 percent.</p> <p>Total petroleum use in the fourth quarter was 9,034 gal, bringing the total for the year to 31,703 gal. In the baseline year, 2005, 30,291 gal were used. The goal for 2011 is, therefore, a 12 percent reduction, or a reduction of 3,635 gal, for a total use of 26,656 for 2011. This goal was not met in 2011 due to the growth of the LM mission.</p>	

Stoplight status =  Excellent,  Satisfactory,  Requires Improvement

\* Status on the goal of a 2 percent annual reduction in fleet petroleum consumption by FY 2015 relative to a FY 2005 baseline is red because in 2005, the LMS contractor had fewer employees, offices, and sites to manage than in 2010. LM's scope has grown and will continue to grow as DOE sites are added to the LM mission. In 2005, total petroleum use was only 30,291 gal, and in 2010, it was 31,462 gal. At a 2 percent reduction per year, the goal in 2011 is 26,657 gal. Most likely, this goal will not be achievable.

Table 5 (continued). DOE Goal Summary Table

DOE Goal	Long-Term Status	FY 2010 Site Performance Status	FY 2011 Targets	Actions Taken This Quarter	Current Performance Status
75 percent of light-duty vehicle purchases must consist of alternative fuel vehicles by FY 2015.		Scheduled to meet.	Continue acquiring alternative fuel vehicles.	Seven light-duty vehicles were updated in the GSA fleet in FY 2011. All were alternative fuel hybrid vehicles.  The Vehicle and Fuel Use team completed a deliverable to provide LM with final recommendations regarding potential distribution and reduction of GSA vehicles, which was due in the fourth quarter.	
To the maximum extent practicable: advanced metering for electricity (by October 2012), steam, and natural gas (by October 2016); standard meters for water.		Installing advanced electric metering. Installation will be complete by FY 2012.	Continue to evaluate LM sites to determine appropriate meters on the basis of metering plan criteria.	The metering plan was completed.	
Cool roofs, unless uneconomical, for roof replacements unless project already has CD-2 approval. New roofs must have thermal resistance of at least R-30.		One building with a cool roof.	Perform a life-cycle cost analysis of cool roofs and identify 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).	This target has been met.	
Training and outreach. DOE facility energy managers to be certified energy managers by September 2012.		Identified personnel to pursue becoming certified energy managers.	Pursue energy manager certification for identified personnel.	LM and the LMS team researched certified energy management training courses and requirements.	

Stoplight status =  Excellent,  Satisfactory,  Requires Improvement

Table 5 (continued). DOE Goal Summary Table

DOE Goal	Long-Term Status	FY 2010 Site Performance Status	FY 2011 Targets	Actions Taken This Quarter	Current Performance Status
13 percent Scope 3 GHG reduction by FY 2020 from a FY 2008 baseline.		Data collection and calculations were ongoing at time the System Security Plan (SSP) was issued last year.  LM achieved an 11.8 percent reduction in Scope 3 GHGs in 2010, measured against the 2008 baseline.	Develop an incentive program to encourage car sharing for employees attending out-of-town meetings.	LM achieved a 4.7 percent Scope 3 GHG reduction in FY 2011 compared to an FY 2008 baseline, which exceeds the required minimum Scope 3 GHG reduction of 2 percent by FY 2011 year end.  Note: this percent reduction is based on preliminary calculations using FY2008 Scope 3 GHG baseline data provided in the FY2012 CEDR, as well as FY 2011 Scope 3 GHG data entered into the FY 2012 CEDR.  An incentive program is in place for employees to use biofuels.	
All new construction and major renovations greater than \$5 million to be LEED [Leadership in Energy and Environmental Design] Gold certified.  Meet HPSB Guiding Principles if less than or equal to \$5 million.		One new building met or exceeded the requirement of LEED gold.	None. No buildings are planned.	Additional options, including new construction, are being considered at Weldon Spring to contribute to meeting the 15 percent HPSB GP compliance goal by FY 2015.	

Stoplight status =  Excellent,  Satisfactory,  Requires Improvement

Table 5 (continued). DOE Goal Summary Table

DOE Goal	Long-Term Status	FY 2010 Site Performance Status	FY 2011 Targets	Actions Taken This Quarter	Current Performance Status
<p>15 percent of existing buildings larger than 5,000 gross square feet to be compliant with the five HPSB Guiding Principles by FY 2015. **</p>		<p>10 percent of existing buildings comply with principles.</p>	<p>Identify and evaluate sites transitioning to and from LM by FY 2015.</p>	<p>This target has been met. An HPSB assessment was performed on the Westminster office building. HPSB assessments have now been completed on all leased and owned buildings greater than 5,000 gross square feet.</p> <p>Significant work was accomplished in conjunction with the Real Property group, LM personnel, the Delta Building manager, and Sustainable Building Program members. Their efforts resulted in lease provisions for the Delta Building that support the HPSB GPs. This proposed language will be included in future leases, where possible.</p> <p>Two buildings at Piqua were reclassified as OSF.</p> <p>Upgrading leased facilities, new construction, building additions, and demolitions are being considered at various sites.</p> <p>12.5 percent of existing buildings comply with the guiding principles. (This percentage is based on 8 buildings, 1 of which has LEED Platinum certification.)</p> <p>Indoor Environmental Quality Surveys were developed for the Delta Building in Fernald, and at Buildings 810 and 938 in Grand Junction.</p>	

Stoplight status =  Excellent,  Satisfactory,  Requires Improvement

\*\* The status of this goal was red in FY 2010. To improve the status, alternatives, including new construction, an upgraded lease facility, and the reclassification of two buildings as an OSF, are being considered.

Table 5 (continued). DOE Goal Summary Table

DOE Goal	Long-Term Status	FY 2010 Site Performance Status	FY 2011 Targets	Actions Taken This Quarter	Current Performance Status
<p>2 percent annual and 26 percent by 2020 from a FY 2007 baseline potable water intensity reduction.</p>		<p>97 percent reduction in FY 2010.</p>	<p>Continue to monitor potable water intensity and achieve at least a 2 percent annual reduction.</p>	<p>The LMS team continued tracking water use at Goal Metrics sites.</p> <p>EMS compiled the following potable water use data for FY 2011 for the Goal Metrics Program Sites:</p> <p>All sites combined: WUI = 16.09 (gal/gross building square footage) with a corresponding total potable water use of 1,112,688 gal.●●●</p> <p>The following potable water use data show the WUI percentage change during FY 2011, as compared to the FY 2007 baseline (the change in total gal used is also provided):</p> <p>All sites combined: Percentage WUI changes = 88.2 percent (use reduction), and 384,410 gal saved (use reduction) during FY 2011.</p> <p>(Executive and DOE Order goal performance is based on the combined-sites WUI percentage change and required an 8 percent reduction by the end of FY 2011.)</p>	

Stoplight status =  Excellent,  Satisfactory,  Requires Improvement

●●● Fernald Site: WUI = 9.84 with a total potable water use of 177,127 gal.

Grand Junction Disposal Site: WUI = 340.86 with a total potable water use of 679,000 gal.

Monticello Site: WUI = 50.37 with a total potable water use of 90,661 gal.

Old Rifle Processing Site: WUI = 1.49 with a total potable water use of 1,000 gal.

Weldon Spring Site: WUI = 3.53 with a total potable water use of 164,900 gal.

Table 5 (continued). DOE Goal Summary Table

DOE Goal	Long-Term Status	FY 2010 Site Performance Status	FY 2011 Targets	Actions Taken This Quarter	Current Performance Status
<p>2 percent annual and 20 percent by FY 2020 from a FY 2010 baseline water consumption reduction of non-potable industrial, landscaping, and agricultural water.</p>		<p>A baseline was established for this goal in FY 2010.</p> <p>A standard water meter was installed at the Tuba City Site in FY 2010 to track water use.</p>	<p>Implement two non-potable freshwater efficiency improvements at the Tuba City Site, and achieve at least a 2 percent annual reduction.</p>	<p>Non-potable fresh water was used for industrial and landscaping purposes at two Goal Metrics Program sites during FY 2011, for a combined-sites total of 456,093 gal.</p> <p>At the Tuba City Site, 452,893 gal were used for industrial purposes. At the Fernald Site, 3,200 gal were used for landscaping. The L-Bar Site's non-potable water use, previously reported in FY 2010, was a short-term project that ended in FY 2010. Therefore, no non-potable water was used for L-Bar in FY 2011.</p> <p>The following ILA non-potable water use data shows the percentage change during FY 2011, as compared to the FY 2010 baseline (the change in total gallons used is also provided):</p> <p>All sites combined:                      Percentage change = 9.39 percent (use reduction), and 47,243 gal saved (use reduction) during FY 2011.</p> <p>In addition, two non-potable freshwater efficiency improvements were accomplished: (1) a leaking emergency shower and eyewash station was replaced, eliminating water waste, and (2) an existing toilet was replaced with a low-flow unit, reducing the amount of water used per flush.</p>	

Stoplight status =  Excellent,  Satisfactory,  Requires Improvement

Table 5 (continued). DOE Goal Summary Table

DOE Goal	Long-Term Status	FY 2010 Site Performance Status	FY 2011 Targets	Actions Taken This Quarter	Current Performance Status
<p><b>EO 13514 (2)(e)</b>                      promote pollution prevention and eliminate waste by:</p> <ul style="list-style-type: none"> <li>(i) minimizing the generation of waste and pollutants through source reduction;</li> <li>(ii) diverting at least 50 percent of non-hazardous solid waste, excluding construction and demolition debris, by the end of fiscal year 2015;</li> <li>(iii) diverting at least 50 percent of construction and demolition materials and debris by the end of fiscal year 2015.</li> </ul>		<p>LM recycled 330,257 pounds (lbs) of material (a diversion of 56 percent of solid waste) by the end of FY 2010.</p> <p>LM diverted 79 percent of construction and demolition materials and debris by the end of FY 2010.</p>	<p>Achieve 50 percent waste diversion for the combined total of construction and demolition debris and non-hazardous solid waste.</p>	<p>LM recycled 440,416 lbs of material (a diversion of 66.5 percent of solid waste) by the end of FY 2011, exceeding the 50 percent diversion target.</p> <p>LM diverted 77.3 percent of construction and demolition materials and debris by the end of FY 2011, exceeding the 50 percent diversion target.</p> <p>LM diverted 67.2 percent of the combined total of construction and demolition debris and non-hazardous solid waste, exceeding the 50 percent diversion target.</p> <p>In addition, LM reused 12,737 lbs (18,436 lbs total for FY 2011) and recycled 1,608 lbs (5,984 lbs total for FY 2011) of electronic equipment during the third and fourth quarters of FY 2011.</p> <p>A Pollution Prevention Opportunity Assessment was performed on the Durango UMTRCA Title I Disposal Site PRB system removal. This assessment focused on the minimization of radioactive waste generation, if any, that resulted from the activity, as well as any noteworthy practices and opportunities for improvement.</p>	

Stoplight status =  Excellent,  Satisfactory,  Requires Improvement

Table 5 (continued). DOE Goal Summary Table

DOE Goal	Long-Term Status	FY 2010 Site Performance Status	FY 2011 Targets	Actions Taken This Quarter	Current Performance Status
EO 13514 (2)(e) (Continued)				Action to purchase two small composters to facilitate the diversion of compostable wastes from landfills is in progress. A survey was sent out to determine the need/want of composters at the Grand Junction office sites. The Rocky Flats office began composting in early June 2011. The LMS contractor is awaiting the survey results from the Grand Junction office.	
Implementing best management practices for energy-efficient management of servers and federal data centers.		LM developed policies to revise the methods for computer backups and instituted operating system updates to help reduce electrical energy use.  LM conducted an energy assessment of its data centers to identify potential energy improvements.	Complete actions that conserve energy in the Morgantown and Grand Junction data centers.	Following up to a finding from the Federal Data Center Consolidation Initiative, the allowable temperature in the data center located at the LMBC in Morgantown was raised to reduce cooling energy needed at that location  Additionally, the data center at the LMBC was retrofitted with separate power metering from the rest of the complex, which will serve as a guide to reducing power consumption at the data center. 50 percent of LM's data centers are now metered exceeding the requirement to meter 40 percent by October 2011.	

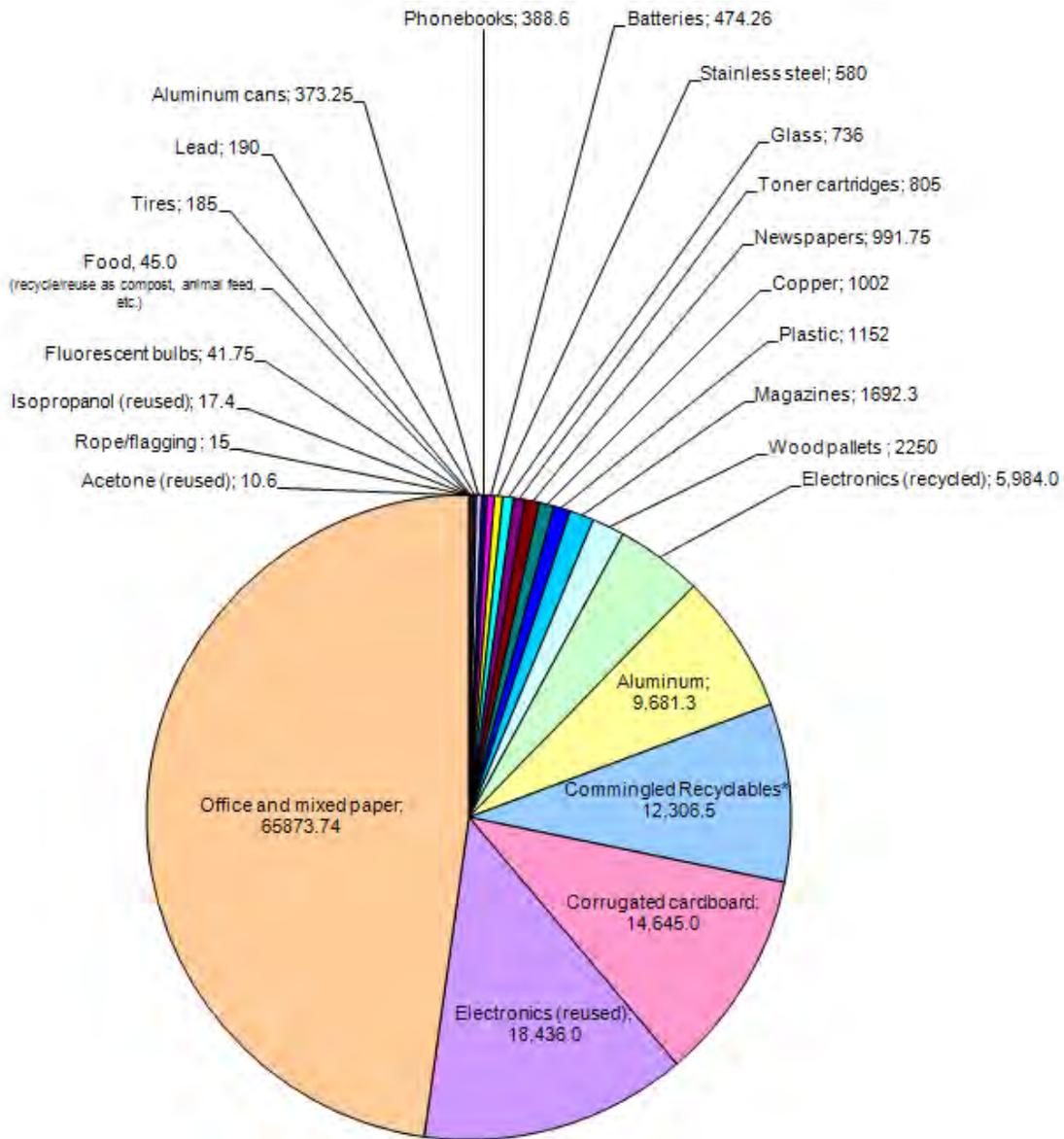
Stoplight status =  Excellent,  Satisfactory,  Requires Improvement

Table 5 (continued). DOE Goal Summary Table

DOE Goal	Long-Term Status	FY 2010 Site Performance Status	FY 2011 Targets	Actions Taken This Quarter	Current Performance Status
Advance sustainable acquisition to ensure that 95 percent of new contract actions, including task and delivery orders, for products and services with the exception of acquisition of weapon systems, are energy-efficient (Energy Star or Federal Energy Management Program designated), are water-efficient, are biobased, are environmentally preferable (e.g., Electronic Product Environmental Assessment Tool [EPEAT] certified), are non-ozone-depleting, contain recycled content, or are nontoxic or less-toxic alternatives, where such products and services meet agency performance requirements.		100 percent of purchase orders and credit card transactions were given green alternative consideration.	Advance sustainable acquisition by striving for 95 percent of new contract actions, including task/release and blanket orders, but excluding all credit card purchases, for products and services to be environmentally preferable, in accordance with Executive Order 13514 (subject to certain qualifications and limitations).	100 percent of products and services purchased by the LMS contractor were environmentally preferable or advanced sustainable acquisitions (does not include credit card purchases).  100 percent of computer systems purchased during the fourth quarter were rated EPEAT silver or gold. This exceeds the Executive Order 13423 requirement that 95 percent of newly purchased computer systems be rated EPEAT silver or gold.	
Protect human health and the environment through effective and efficient long-term surveillance and maintenance.		Documented ecosystem improvements at LM sites in the ecology tracking log, including improvements in ecosystem health, land management, and remedy performance.	Complete grazing management proposal for Monticello with emphasis on habitat improvement, cover enhancement, and land reuse acreage.	The LMS contractor drafted a pre-proposal on the grazing plan for the Monticello disposal cell cover to be used for discussion with DOE and EPA.	

Stoplight status =  Excellent,  Satisfactory,  Requires Improvement

A total of 418,916 pounds of materials was recycled and reused in FY 2011. Municipal solid waste, excluding construction and demolition debris, diverted from solid waste landfills through recycling and reuse totaled 65.4 percent. Figure 3 shows the composition of this year’s recycled materials, including electronic equipment (universal waste) recycling and reuse data. In addition, Figure 4 compares our annual recycling and solid waste totals since 2008.



\*Commingled recyclables include glass, plastic, and aluminum.

All weights are in pounds.

The following materials are not included on this chart, since they would underwhelm or overwhelm the graph:

- 1.5 pounds of Styrofoam, 2.0 pounds of engine oil, 4.0 pounds of mercury, and 5.0 pounds of brass were recycled/reused at numerous sites.
- A total of 77,240 pounds of hay bales were recycled/reused at Fernald and Rocky Flats Sites
- A total of 79,029 pounds of Iron/Steel was recycled/reused at numerous sites.
- A total of 170,678 pounds of concrete/asphalt were recycled/reused at numerous sites.

Figure 3. Recycling Totals by Category

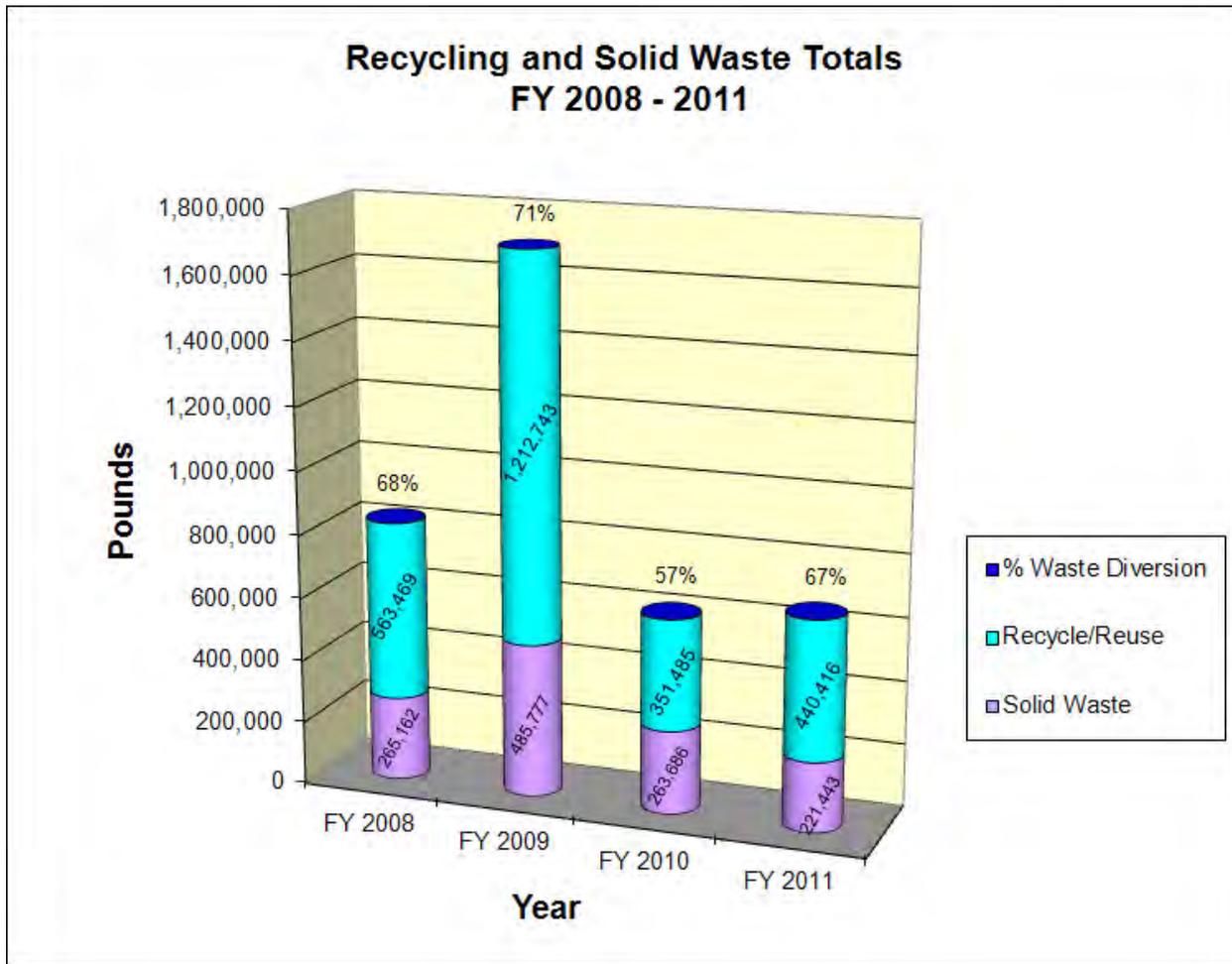


Figure 4. Recycling and Solid Waste Totals, FY 2008 Through FY 2011

Table 6 reflects the third- and fourth-quarter performance toward sustainable purchases for purchase order/subcontracts and credit card transactions for each EMS program. Through the last two quarters of FY 2011, \$342,352 of sustainable products and services were purchased.

The LMS contractor’s commitment to implementing a complex-wide comprehensive program for tracking procurement actions continues to succeed. Of the purchase orders that the LMS contractor issues for sustainable products and services, the LMS contractor strives to place 95 percent of them with vendors who are included on the mandated list. This year, the LMS contractor exceeded that goal by using vendors from the list 100 percent of the time.

Table 6. FY 2011 Third- and Fourth-Quarter Sustainable Acquisition Tracking Results

EPP Tracking System	Program Description	Value of Purchase Order or Credit Card Purchase of Item for the Reporting Period
<b>Buying Green</b>		
Y1	Energy Efficiency and Greenhouse Gases Program	\$5,762.39
Y2	Renewable Energy Program	\$21,957.80
Y3	Water Conservation Program	\$160.50
Y5	Pollution Prevention Program	\$84,297.91
Y6	Sustainable Buildings	\$2,750.00
Y7	Vehicle and Fuel Management Program	\$9,790.23
Y8	Electronics Stewardship Program	\$119,289.27
Y9	Land Stewardship Program	\$98,344.05
	Total Y1 through Y9 Green purchases	\$342,352.15
<b>Exceptions to Buying Green</b>		
Y4-1	Exception, Emergency exists	\$158.35
Y4-2	Exception, Cost or schedule concerns far exceed the benefit	\$0.00
Y4-3	Exception, Does not perform as well or is an unproven product for high-risk operation	\$4,950.66
Y4-4	Exception, Existing warranty could be impacted	\$0.00
Y4-5	Exception, No green alternatives available for consideration	\$3,873,542.01
Y4-6	Exception, Other exceptions approved by EC and task order manager	\$98,344.05
	Total Y4-1 through Y4-6 Exceptions	\$3,976,995.07
<b>FY 2011 Third- and Fourth-Quarter Purchase Order and Purchase Card Purchases (LMS only)</b>		\$4,221,003.17
<b>FY 2011 Year-to-Date Purchase Order and Purchase Card Total Purchases (LMS only)</b>		\$6,968,345.31