LMS/S07225

Site Sustainability Plan
Office of Legacy Management

FY 2010

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1.0 Executive Summary

The U.S. Department of Energy (DOE) Office of Legacy Management (LM) is committed to excellence in environmental stewardship. LM's mission is to manage post-closure responsibilities and ensure the future protection of human health and the environment. Currently, LM is responsible for monitoring, testing, inspecting, and maintaining approximately 58,084 acres of land at more than 87 sites located in 28 states and Puerto Rico, including sites where records and stakeholder support are provided. LM's Environmental Management System (EMS) is a comprehensive method for incorporating life-cycle environmental considerations into all aspects of the LM mission. LM's EMS is a joint program between LM and its prime contractor for the Legacy Management Support (LMS) contract. The EMS helps LM use its finite resources wisely, minimize wastes and adverse environmental impacts, and comply with the laws, regulations, and DOE and applicable requirements that protect the environment, public health, and resources. The EMS enables LM to implement sustainable environmental stewardship practices that enhance the protection of air, water, land, and other natural and cultural resources affected by DOE operations. Implementing the EMS is integral to LM's mission and to achieving excellence.

The purpose of this Site Sustainability Plan is to outline the strategies for managing and implementing various energy-related activities at LM. This plan reflects progress made toward, and strategies in place for, accomplishing the goals and requirements established by:

- Executive Order (EO) 13514, Federal Leadership in Environmental, Energy, and Economic Performance, October 5, 2009.
- EO 13423, Strengthening Federal Environmental, Energy, and Transportation Management, January 26, 2007.
- DOE Order 450.1A, Environmental Protection Program, June 4, 2008.
- DOE Order 430.2B, Departmental Energy, Renewable Energy, and Transportation Management, February 27, 2008.
- Energy Independence and Security Act of 2007 (EISA), Section 432 (Title 42 United States Code Section 8253[f]).
- The Energy Policy Act (EPAct) of 2005, Public Law 109-58.
- EPAct of 1992, 102th Congress H.R.776.ENR.
- DOE Strategic Sustainability Performance Plan (SSPP), September 2010.
- Transformational Energy Action Management Initiative (DOE Headquarters).
- DOE Policy 450.7, Department of Energy Environment, Safety and Health Goals, August 7, 2004.
- LM Policy 450.8, Environment, Safety, and Health Policy, May 29, 2009.

LM's mission is to manage post-closure responsibilities at LM sites and ensure the future protection of human health and the environment. LM has control and custody of legacy land, structures, and facilities and is responsible for maintaining them according to DOE long-term plans.

LM, with its comprehensive approach to fulfilling EO 13514, will advance the DOE sustainability mission with a diverse approach and a concentrated effort toward the goals of fiscal year (FY) 2011 and beyond.

LM's multipronged method to achieving these goals will include training and education to foster behavioral change in the office environment, infrastructure improvements, and an onsite renewable-power-generating project. Priority areas include purchased electricity, fugitive emissions, and fleet vehicles.

To complete the deliverables for these priority areas, LM will work with its EMS core team and program teams, and its operations and maintenance staff, and enlist the technical expertise of its scientists and engineers to enable LM to operate sustainably. This will include continued emphasis on behavior change.

Behavior change is a challenging but potentially rewarding area for sustainability programs. As opposed to physical facility upgrades or technology pursued by functional teams, behavior changes are low- or no-cost actions that employees can carry out themselves. Often in the change process, the most difficult step is the realization that change is needed. Employees need to realize that even though they don't personally receive any savings or aren't penalized for non-participation, their participation can be instrumental in achieving the sustainability goals. LM will continue to train, communicate with, and engage employees so that a continued shift in the cultural perception is realized.

In FY 2010, LM's EMS team continued to review the new EO 13514 and SSPP, and implement EO 13423, DOE Order 450.1A, and DOE Order 430.2B. Progress on activities related to environmental, energy, and transportation management is evaluated and reported quarterly. The EMS team is divided into nine sustainability program teams and two ancillary teams:

- Energy Efficiency
- Renewable Energy
- Water Conservation
- Sustainable Acquisition
- Waste Minimization and Pollution Prevention
- Sustainable Buildings
- Vehicle and Fuel Management
- Electronics Stewardship
- Land Stewardship
- Media (ancillary team)
- Training (ancillary team)

The EMS team's status report encompasses the nine program teams and compares the status of their activities against the goals that have been set.

The EMS team meets regularly and provides critical input to senior management once a month. The input helps establish direction, develop strategies to implement the sustainability programs,

provide status updates, and facilitate the successful execution of the sustainability programs across LM. LM will use this Site Sustainability Plan to ensure that the energy management provisions outlined in previously identified requirements are met.

See Table 1 for a summary of FY 2010 performance and long-term planned actions to attain FY 2020 goals. See Attachment A for a copy of LM's Environment, Safety, and Health policy.

LM will meet the greenhouse gas (GHG) emission reduction goal of 28 percent, based on LM's known expected decrease in the GHG emissions as a result of reduced energy use. LM has a vision to reduce energy intensity by more than 30 percent by FY 2015 in support of the GHG reduction requirements.

Table 1. DOE Goal Summary Table

DOE Goal	Site Goal	FY 2010 Site Performance Status	Site Planned Actions
28% Scope 1 & 2 GHG reduction by FY 2020 from a FY 2008 baseline (related goals indented below)	Same	7% reduction to date	A 28% reduction is planned by FY 2015.
30% energy intensity reduction by FY 2015, from a FY 2003 baseline	Same	21% reduction to date	A 30% reduction is planned by FY 2015.
7.5% of a site's annual electricity consumption from renewable sources by FY 2010 (2x credit if the energy is produced on site)	Same	EPAct of 2005 goal met Did not meet accelerated Goal in DOE Order 430.2B, but requested a waiver last year 5% from onsite renewables and purchased renewable energy credits	Additional funding would be required to meet this goal using onsite generation. LM will continue green energy purchases of electricity at the Fernald Preserve, Ohio, Site; the Monticello, Utah, Site; and the Grand Junction, Colorado, Site. Additional green energy will be purchased at the Fernald Preserve to achieve the 7.5% goal required by EPAct of 2005.
Every site to have at least one onsite renewable energy generating system by FY 2010	Same	Met	LM reports as one site and has more than one onsite renewable-energy-generating system. LM will continue to pursue onsite projects where feasible.
10% annual increase in fleet alternative fuel consumption by FY 2015 relative to a FY 2005 baseline	Same	Met	The FY 2015 goal has been met. However, LM will continue acquiring alternative-fuel vehicles (AFVs) and hybrid vehicles and using E85.
2% annual reduction in fleet petroleum consumption by FY 2015 relative to a FY 2005 baseline	Same	Did not meet	It will be a major challenge for LM to decrease fleet petroleum consumption by 2% compounded annually through FY 2015, as compared to the FY 2005 baseline. In FY 2005, LM had significantly fewer sites and only 23 vehicles. Through LM's mission, the number of sites will continue to increase with expected programmatic growth by FY 2020.
75% of light duty vehicle purchases must consist of alternative fuel vehicles (AFV) by FY 2015	Same	Scheduled to meet	The strategy for light-duty vehicles—replacing 100% of light-duty vehicles with AFVs when it is time to retire them from the fleet—exceeds the requirement of 75% AFV acquisition.

Table 1 (continued). DOE Goal Summary Table

DOE Goal	Site Goal	FY 2010 Site Performance Status	Site Planned Actions
To the maximum extent practicable: advanced metering for electricity (by October 2012), steam, and natural gas (by October 2016); standard meters for water	Same	Installing advanced electric metering; installation will be complete by FY 2012	LM will continue installing advanced meters for electricity and standard meters for water.
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	Same	One building with a cool roof	All future new buildings will have cool roofs. LM will 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).
Training and outreach. DOE facility energy managers to be Certified Energy Managers by September 2012	Same	Identified personnel to pursue becoming certified energy managers	LM will continue to train additional personnel and create an organizational structure to improve and promote energy efficiency.
Sulfur hexafluoride (SF6) capture program by September 2012	N/A	N/A	N/A
13% Scope 3 GHG reduction by FY 2020 from a FY 2008 baseline	Same	Data collection/ calculation ongoing	LM will encourage more employees to carpool to work or participate in alternative work-location agreements.
All new construction and major renovations greater than $5 million to be LEED® [Leadership in Energy and Environmental Design] Gold certified. Meet high-performance and sustainable building (HPSB) Guiding Principles if less than or equal to $5 million	Same	One new building met or exceeded the requirement of LEED gold	All new buildings will meet or exceed these requirements.
15% of existing buildings larger than 5,000 gross square feet to be compliant with the five HPSB Guiding Principles by FY 2015	Same	10% of existing buildings comply with principles	Additional funding would be required to meet this goal. LM plans to assess several leased facilities in FY 2011.
16% potable water intensity reduction by FY 2015 from a FY 2007 baseline, 26% by FY 2020	Same	97% reduction in FY 2010	Additional audits to assess additional water reduction projects are planned.
20% water consumption reduction of non-potable industrial, landscaping, and agricultural water by FY 2020 from a FY 2010 baseline	Same	A baseline was established for this goal in FY 2010; a standard water meter was installed at the Tuba City, Arizona, Site in FY 2010 to track water use	LM will plan projects to reduce industrial and landscaping water use. LM will implement two non-potable freshwater efficiency improvements at the Tuba City Site in FY 2011. LM has no agricultural water use.

2.0 Goal Performance Review and Plans

2.1 Scope 1 and 2 GHG Reduction

LM will reduce its GHG Scope 1 and 2 emissions by 28 percent by FY 2020 as compared to a FY 2008 baseline. On the basis of utility invoices, LM produced about 7 percent less GHG in FY 2010 than in FY 2008. This puts LM ahead of schedule to meet the 28 percent reduction by FY 2020.

In order to achieve this goal, LM will aggressively proceed with projects, operational improvements, and additional actions to meet the GHG requirements. Doing so will involve determining and obtaining funding sources, changing workplace culture, and having management emphasize the importance of GHG reduction.

2.1.1 Energy Intensity Reduction

EISA requires DOE to reduce its energy intensity by 30 percent by FY 2015 from a FY 2003 baseline.

2.1.1.1 Performance Status

LM's current energy intensity, based on its FY 2010 data published in the EMS database (known as EMS 4) is 204 kilo British thermal units per gross square foot (kbtu/gsf), which is a 21 percent reduction as compared to the FY 2003 baseline of 257 kbtu/gsf, as shown below in Table 2. LM is on schedule to meet the 30 percent reduction goal by FY 2015. Attachment B includes the 2010 EMS 4 energy report.

LM excludes several buildings from the energy intensity goal. These buildings are fully serviced leased spaces. Attachment C includes the final Facility Information Management System (FIMS) excluded building list and certification letter.

Table 2. LM Energy Consumption

	DOE Goal FY 2015 (BTU/GSF)	FY 2003 (BTU/GSF)	FY 2008 (BTU/GSF)	FY 2009 (BTU/GSF)	FY 2010 (BTU/GSF)	Energy Reduction (%)
Energy with RECs[a]	178,208	257,137	636, 748	236,202	204,311	20.5
		2003		2010		
Gross Square Feet		3,215,306[b]		114,797[c]		

Note: All values above denote the site-delivered energy, not the source energy.

[a] Renewable energy credits

[b] This baseline number has fluctuated over the past few years due to FIMS reclassifications, appropriate inclusion of buildings in baseline, and corrections for true building SF. Confirmation of the actual number is underway.

[c] This number varies from the gross square footage reported in the snapshot of FIMS taken by Federal Energy Management Program. Two additional buildings came into LM after September 30, 2010. See Attachment D for a listing of LM's gross square footage.

LM has two data centers, one at the Grand Junction, Colorado, Site, and one at the Morgantown, West Virginia, Site. Each of the data centers presents a unique set of challenges. LM's participation in the Federal Data Center Consolidation Initiative (FDCCI) has produced several initiatives for greater efficiency in the areas of cooling and general power consumption. Server reduction via consolidation to virtual machines has been ongoing since FY 2009.

LM developed policies to revise the methods for computer backups and instituted operating-system updates to help reduce electrical energy use.

Setback heating, ventilation, and air-conditioning (HVAC) controls were installed at the Monticello, Utah, office trailer in FY 2010. Through direct and periodic communication from the building manager, building occupants were shown how to use the setback capability and taught why doing so is beneficial. HVAC systems in owned facilities have a preventative maintenance program in place.

2.1.1.2 Planned Actions

LM plans to implement energy efficiency projects through FY 2015 that will significantly reduce energy intensity as compared to the FY 2003 baseline. LM selects projects primarily by evaluating life-cycle costs (less than or equal to 25-year simple payback in the initial goal). See Tab 5 of the Consolidated Energy Data Report (CEDR) spreadsheet, which lists projects that, if implemented, have the potential to reduce energy use by more than 30 percent by the end of FY 2015.

LM plans to:

- Reduce energy use at the Fernald Preserve, Ohio, Site by shutting down well pumps as the groundwater remediation is completed, and minimizing the operating time of the Converted Advanced Wastewater Treatment (CAWWT) facility as the need for groundwater treatment declines.
- Remove a restriction in a discharge line at the Fernald Preserve Site if funding is obtained. Removing the restriction could reduce electricity used for pumping groundwater.
- Reduce energy use by revising the water treatment technology at the Tuba City, Arizona, Site to reduce the amount of energy used to treat groundwater, if funding is obtained.
- Perform two energy audits in FY 2011.
- Transition the Hillshire data center located at the Yucca Mountain Office Site in Las Vegas, Nevada, in FY 2011, and consolidate data centers.
- Design new facilities and major renovations that cost more than $5 million to meet U.S. Green Building Council (USGBC) Leadership in Energy and Environmental Design (LEED) gold certification. Design new facilities and major renovations that cost $5 million or less to meet the high-performance and sustainable buildings (HPSB) Guiding Principles (Guiding Principles).

2.1.2 Increase Departmental Renewable Energy Consumption

LM is required to have 7.5 percent of its electricity consumption from renewable energy sources by FY 2013 per EPAct of 2005.

2.1.2.1 Performance Status

Current renewable energy (electricity) production is less than 2 percent of LM's electricity purchases. Existing renewable energy projects are on DOE property or Native American land controlled by DOE. A 51-kilowatt (kW) photovoltaic (PV) solar array is currently operating at LM's Tuba City Site. A ground-source heat pump was installed at the Fernald Preserve Site. Onsite solar energy is supplied by 20- to 100-watt solar panels that power System Operation and Analysis at Remote Sites (SOARS): a system that allows data to be collected at remote sites telemetrically. The Rocky Flats, Colorado, Site uses a PV solar system to pump water through its water treatment system. A wind turbine was installed at the Weldon Spring, Missouri, Site to power renewable energy displays in the Interpretive Center and demonstrate wind power to visitors. At the Fernald Preserve, PV solar-powered lighting was installed, a PV solar-powered pump was installed to transfer wastewater to the biowetlands, and a renewable energy display was installed at the Visitors Center.

A renewable energy waiver was requested in FY 2010. A copy is provided in Attachment E. No waiver will be required in FY 2011.

2.1.2.2 Planned Actions

The following actions have been proposed for the next 5 years:

- Continue purchasing the renewable energy credits (RECs) needed to meet the 7.5 percent goal.
- Consider renewable energy projects under the Sustainable Buildings Program when a lease or occupancy arrangement expires and a new one is developed.
- Build enough PV solar arrays onsite to generate 120 kW of electricity in FY 2013, which will provide an additional 1.75 percent of the electricity LM uses, if funding is obtained.

2.1.3 Reduce Departmental Fleet Petroleum Use by 2 Percent Annually, and Increase Alternative Fuel Use by 10 Percent Year-Over-Year

It will be a major challenge for LM to decrease fleet petroleum consumption by 2 percent annually through FY 2015 as compared to the FY 2005 baseline. In FY 2005, LM had significantly fewer sites and only 23 vehicles; consequently, the petroleum-consumption baseline was small. Through LM's mission, the number of sites will continue to increase with expected programmatic growth by FY 2020. That mission includes managing all LM sites, some of which are very remote and far from a manned office. Accessing those remote sites and moving equipment there (such as using a 0.75-ton vehicle to tow sampling and testing equipment) requires the use of fuel.

Goal 1: Increase alternative fuel consumption by 10 percent compounded annually through FY 2015 as compared to the FY 2005 baseline.

Goal 2: Acquire alternative-fuel vehicles (AFVs) to replace retired light-duty vehicles at least 75 percent of the time.

Goal 3: Strive to reduce fleet petroleum consumption by 2 percent, as compared to the FY 2005 baseline, by FY 2015.

Goal 4: Increase the ratio of alternative fuel use to conventional fuel use by 10 percent as compared to the FY 2009 ratio.

2.1.3.1 Performance Status

LM's mission is to manage post-closure responsibilities and ensure the future protection of human health and the environment. As more sites move into post-closure and legacy management, LM's number of sites and vehicles will continue to increase, which makes it more difficult for LM to meet the total petroleum use reduction goal. LM's 43 vehicles—42 leased and 1 owned—are located at eight sites in seven states, and the fleet is expected to grow in relation to LM's overall mission. Using the fleet vehicles is necessary to the success of the LM mission.

To comply with the program goals, the Vehicle and Fuel Use team maintains a list of vehicles, monitors the monthly fuel consumption with detailed spreadsheets, monitors vehicle and fuel type, and takes appropriate action to meet program goals for vehicle and fuel use. The team has monthly meetings to discuss the continued fuel use and progress toward the goals. The meeting minutes are documented.

To strengthen the program, the functional responsibility and leadership of the Vehicle and Fuel Use team was transferred from the Environmental Compliance group to the Property group, which includes fleet management.

Goal 1:

- LM has consistently exceeded the 10 percent increase in alternative fuel consumption.
  - The FY 2010 E85 fuel use increased by 42 percent as compared to FY 2009. Based on the DOE O 430.2B goal to increase E85 fuel use by 10 percent each year from FY 2005, LM would only be required to use 259 gallons by FY 2015.
  - LM used 3,145 gallons of E85 fuel in FY 2010. Therefore, the goal for increasing E85 fuel use has been exceeded by 10 percent annually through FY 2015 as compared to the FY 2005 baseline.
- LM has received AFV waivers for all E85-capable vehicles in FY 2010, as there are limited alternative fuel stations within 5 miles of many LM sites.
- An E85 incentive program was initiated in FY 2010 for the contractor's staff, whereby a random drawing of persons using E85 fuel is held monthly and the winner receives a publically presented letter of appreciation and a small monetary award.
- E85 vehicles were designated with stickers so that drivers know what fuel to use, and a listing of local E85 stations was placed in each vehicle.
- LM has not used biodiesel fuel (B20) because of its lack of availability, fuel consistency, and fuel quality.
- Awareness training was provided during FY 2009 and FY 2010.
- Based on these actions, LM is projecting to continue to surpass the 10 percent annual increase in alternative fuel use through FY 2015.

Goal 2:

- LM's current strategy, which consists of acquiring an AFV when a fleet vehicle needs to be replaced, exceeds the EPAct of 1992's requirement that 75 percent of retired vehicles be replaced with AFVs.
- In FY 2010, 11 of the 11 vehicles acquired—or 100 percent—were AFVs, and 4 of the 11 were hybrids.
- AFVs make up 60 percent of LM's fleet of vehicles, which currently consists of 42 U.S. General Services Administration (GSA) leased vehicles and one special-purpose, diesel vehicle that LM owns. The fleet can be broken down further, as follows:

  — 23 E85 vehicles

  — 7 diesel vehicles

  — 10 gasoline vehicles (3 light-duty and 7 medium-duty)

  — 3 hybrid vehicles

Goal 3:

- For the past 5 years, including this year, LM has not met the fleet requirements to achieve a 2 percent reduction in petroleum consumption.
- The total fuel use for FY 2010 was 31,463 gallons, as compared to 30,291 in FY 2005, for a net 4 percent increase. The increase is due to the expansion of LM's scope as sites were added.
- The inability of LM to meet the reduction goals is due primarily to substantial increases in LM's scope (site additions at Rocky Flats; Mound, Ohio; the Fernald Preserve; and the Nevada Offsites).
- LM's shuttle service between the Fernald Preserve and the Mound Site uses an E85-fuel, seven-passenger vehicle to transport employees. Employees are encouraged to use the shuttle instead of their personal vehicles.
- LM has established videoconferencing capabilities at its nine major sites around the country. In addition, virtual-presence meeting software is being used more to reduce travel.
- A column was added to the vehicle log to identify the number of passengers in each GSA vehicle so that trip-consolidation practices can be tracked.

Goal 4:

- In FY 2010, LM increased by 48 percent the ratio of alternative fuel use to conventional fuel use as compared to FY 2009.

2.1.3.2 Planned Actions

LM will continue to develop the Vehicle and Fuel Use Program. To comply with the program goals, the Vehicle and Fuel Use team will continue to maintain a list of vehicles, monitor the monthly fuel consumption with detailed spreadsheets, monitor vehicle and fuel type, and take appropriate action to meet program goals for vehicle and fuel use. The team will continue to

have monthly meetings to discuss the continued fuel use and progress toward the goals. The meeting minutes will be documented.

Goal 1:

- Assess the need for AFV waivers where E85 fueling stations are unavailable and apply for waivers as needed.
- Monitor the availability of alternative fuel stations on the DOE website
- Increase awareness of the need to use E85 where it is available.
- Assess the use of B20 in FY 2011 through FY 2015 to determine the status of the current infrastructure, fuel availability, and fuel quality.
- Monitor the DOE website to determine B20 availability.
- Continue educating vehicle users on the benefits and availability of alternative fuel.

Goal 2:

- Increase the overall fuel economy of the fleet by continually working with GSA to acquire smaller vehicles, plug-in hybrid vehicles, or other advanced-technology vehicles.
- Identify the most fuel-efficient vehicle for a given task by taking into account miles driven, fuel used, and vehicle use.

Table 3 lists the vehicle acquisition plans by fiscal year.

Goal 3:

- Reduce miles through methods such as trip consolidation.
- Consider expanding the shuttle service between the Fernald Preserve and the Mound Site.
- Continue using videoconferencing and virtual-presence meeting software capabilities at LM's nine major sites around the country to reduce travel.

Goal 4:

- Have the LMS contractor continue the reward program to give LMS personnel an incentive to use E85 fuel.
- Continue tracking E85 fuel use by each vehicle in FY 2011.
- Continue to monitor the DOE website to determine E85 and B20 availability.

Table 3. Vehicle Acquisition Plans by Fiscal Year

Fiscal Year	Vehicle to Be Replaced	New Vehicle Leased
2011	2 light-duty E85 SUVs 4 light-duty E85 pickups 1 E85 sedan 1 medium-duty gas pickup 1 medium-duty van 1 medium-duty diesel pickup	2 light-duty E85 SUVs 1 hybrid sedan 5 light-duty hybrid pickups 1 light-duty E85 van 1 medium-duty gas pickup
2012	1 light-duty E85 SUV 2 medium-duty gas pickups 5 medium-duty diesel pickups	1 hybrid sedan 2 medium-duty E85 pickups 5 medium-duty diesel pickups
2013	2 light-duty E85 SUVs 1 E85 sedan 2 medium-duty gas pickups 2 light-duty gas pickups 1 medium-duty gas van	2 light-duty hybrid SUVs 1 hybrid sedan 2 medium-duty E85 pickups 2 light-duty E85 pickups 1 medium-duty van
2014	1 light-duty E85 SUV 2 light-duty E85 pickups 2 medium-duty gas pickups 1 medium-duty diesel pickup	1 light-duty hybrid SUV 2 light-duty E85 pickups 2 medium-duty E85 pickups 1 medium-duty B20 diesel pickup
2015	1 light-duty E85 SUV 3 light-duty E85 pickups 2 medium-duty gas pickups 1 medium-duty diesel pickup	1 light-duty hybrid SUV 3 light-duty E85 pickups 2 medium-duty E85 pickups 1 medium-duty B20 diesel pickup

2.1.4 Metering

To the maximum extent practical, LM will install metering devices (either advanced or standard) in each building, in other facilities, and on site grounds to measure electricity, natural gas, steam, and water use.

2.1.4.1 Performance Status

Electrical

- Advanced electrical metering has been installed at two sites.
  - One building was fitted individually (the Fernald Preserve Visitors Center).
  - An advanced meter was installed on the breaker panel at the Tuba City Site. However, the panel feeds two buildings.
- An advanced meter was installed at the Fernald Preserve CAWWT facility (FIMS Other Structures and Facilities).
- A standard electric meter is installed at the Piqua, Ohio, Site. It measures electricity use for two buildings.

Water

- Standard potable water metering has been installed in association with all goal subject buildings, except at the Old Rifle, Colorado, Processing Site, where LM determined that installing a meter would neither be cost-effective nor appreciably improve the collection of

monitoring data. At Old Rifle, water is brought in by tankard truck. Standard non-potable metering was installed at the Tuba City Site in March 2010.

Gas

- A standard gas meter exists at the Fernald Preserve CAWWT facility, the one building that uses natural gas.

Steam

- Steam metering is not applicable for LM.

2.1.4.2 Planned Actions

Electrical

Five meters remain to be installed in buildings. Installation is scheduled for FY 2011 and FY 2012, which will meet the advanced electrical metering requirement.

- In FY 2011, three advanced electrical meters are scheduled to be installed at the Weldon Spring Site.
- In FY 2012, an advanced meter will be installed in one of the buildings at the Piqua Site. The other building is proposed to transition to the City in FY 2015. LM determined that installing a meter would neither be cost-effective nor appreciably improve the collection of monitoring data.
- Also in FY 2012, a second advanced meter will be installed at the Tuba City Site so that both buildings there can be monitored separately.

Water

- No additional actions are planned.

Gas

- No additional actions are planned.

Steam

- Steam metering is not applicable for LM.

2.1.5 Cool Roofs

LM will enhance overall building thermal performance for roofs for new construction and roof replacements, as warranted. The cool roofs shall have a thermal resistance of at least R-30, consistent with Secretary Chu's memorandum of June 1, 2010.

2.1.5.1 Performance Status

LM installed a cool roof on the Fernald Preserve Visitors Center in FY 2008. LM is using the FIMS database to track all of its cool-roof activities.

2.1.5.2 Planned Actions

In FY 2011, a cool-roof life-cycle cost analysis will be performed for all LM-owned and LM-leased buildings to determine the economic feasibility of cool roofs. Engineering standards for roofs will be updated to require cool-roof specifications for facility improvements and the terms and conditions for new construction. In the future, all new roofs and replacement decisions will be made in compliance with Secretary Chu's goal.

2.1.6 Training

DOE Order 430.2B requires the following:

> Goal 1: Train personnel at each site to direct energy and water management programs and dedicate all or a substantial portion of their time to the effective implementation of energy and water management plans.
>
> Goal 2: Ensure accountability by including the successful implementation of this order in the performance evaluations for the Senior Agency Official and relevant staff such as facility managers, energy managers, vehicle fleet managers, contracting officials and facility managers, and others as appropriate.
>
> Goal 3: Implement employee incentive programs to reward exceptional individual and team performance in increasing energy efficiency and water conservation, deploying renewable energy, minimizing waste, reducing utility costs, and reducing greenhouse gas emissions.
>
> Goal 4: Implement outreach programs to motivate employees to become more efficient in their use of energy, water, and green products and services, and to minimize waste.

Additionally, the SSPP commits DOE to the following:

> Goal 5: [By September 2012] DOE will require the Energy Manager of every DOE site to attain a Certified Energy Manager qualification. The Energy Manager position on all sites with greater than 5 million [gross] square feet of building shall be a full time position focused on water, energy and GHG management.
>
> Goal 6: Include energy conservation and recycling in employee orientation programs [by November 2010].

2.1.6.1 Performance Status

Goal 1: Select personnel at each site were given training specific to energy and water management programs and will dedicate all or a substantial portion of their time to the effective implementation of energy and water management plans.

Goal 2: Select managers have results-based energy management written into their performance evaluations.

Goal 3: LM's LMS contractor has implemented employee incentive programs to reward exceptional individual and team performance in increasing energy efficiency and water conservation, deploying renewable energy, minimizing waste, reducing utility costs, and reducing GHG emissions.

Goal 4: Earth Day outreach programs were implemented to motivate employees to become more efficient in their use of energy and water, to use green products and services whenever possible, and to minimize waste.

Goal 5: Staff members have been identified to pursue training as certified energy managers.

Goal 6: Training on energy conservation and recycling are already embedded in the annual EMS training provided to LM and LMS employees. The LMS contractor has included this information in employees' orientation programs. See Table 1-4 in CEDR for FY 2010 training information.

2.1.6.2 Planned Actions

Goal 1: Continue to train additional staff members. Staff members will continue to attend GovEnergy and other workshops or symposiums to enhance their current knowledge base.

Goal 2: Continue to write results-based energy management requirements into select managers' performance evaluations.

Goals 3: Continue to initiate and expand outreach and incentive programs to motivate employees to minimize waste, use energy and water more efficiently, and use green products and services.

Goal 4: See Goal 3.

Goal 5: Have the selected personnel pursue training as certified energy managers.

Goal 6: Have new employees take the annual EMS awareness training, which includes information on energy conservation and recycling, as part of their orientation within 3 months of starting. LM and LMS employees will continue taking annual EMS training.

2.1.7 Sulfur Hexafluoride (SF6) Reduction

LM does not have any SF6.

2.1.7.1 Performance Status

LM has established that no SF6 is being used. Pollution prevention opportunity assessments have been conducted to identify any other ozone-depleting substances and to identify appropriate paths forward to reduce or eliminate them. An inventory was conducted to identify LM's equipment containing ozone-depleting substances. The inventory serves as the basis to identify

opportunities for preventing ozone-depleting substances from leaking into the environment, and decommissioning and recycling equipment that contains ozone-depleting substances. In FY 2010, ozone-depleting substances were reduced by 56.25 percent LM-wide.

2.1.7.2 Planned Actions

No further action is required. LM does not use SF6; however, plans are in place to reduce other ozone-depleting substances. See Section 2.7 of this report.

2.1.8 Overall Reduction of Scope 1 and 2 GHG Emissions

2.1.8.1 Performance Status

Energy use fell about 21 percent from FY 2008 to FY 2010, with a corresponding 7 percent reduction in GHG emissions. Revised FY 2008 GHG emissions are provided in Attachment G.

One way that LM reduced GHG emissions in FY 2010 was by installing 51 kW PV solar equipment at the Tuba City Site. By increasing the number of flex-fuel vehicles and operating them on cleaner-burning fuels—like E85—LM increased the use of alternative fuel from 0 gallons in the baseline year of 2005 to 3,146 gallons in 2010.

LM's SOARS collects data from 16 sites in nine states and transmits the information to servers in Grand Junction. Because of SOARS, travel to LM's remote sites has been greatly reduced, and the operation of active treatment systems has been enhanced. Cutting back on travel and detecting operating problems early has conserved energy and natural resources and reduced GHG emissions.

2.1.8.2 Planned Actions

- Train existing and new staff members to foster behavior changes in the office environment. Install onsite renewable-power-generating projects.
- Continue to make the purchase of RECs a priority.
- Reduce fleet emissions by following better vehicle use guidelines and acquiring additional hybrid and flex-fuel vehicles.
- Use biofuels exclusively to fuel AFVs and flex-fuel vehicles whenever biofuels are available.
- Complete the Rocky Flats Surface Water Configuration Dam Breach Project. Breaching the dams will reduce GHG emissions by eliminating dam maintenance requirements that made vehicle use necessary.
- Continue to expand SOARS, when warranted, to reduce vehicle mileage, reduce GHG emissions, and conserve natural resources.

2.2 Scope 3 GHG Emissions Reductions

DOE has committed to reducing its Scope 3 GHG emissions by 13 percent.

2.2.1 Performance Status

LM has taken a number of steps, such as consolidating trips, holding teleconferences instead of face-to-face meetings, and encouraging carpooling, to reduce GHG emissions. Since DOE Headquarters is still determining the means of data collection and calculation, LM cannot currently determine the status or trend of Scope 3 GHG reduction. However, revised FY 2008 GHG emissions are provided in Attachment G.

2.2.2 Planned Actions

- Continue to use teleconferencing services and virtual-presence software to conduct meetings as a means of reducing business travel.
- Encourage public transportation.
- Make telecommuting agreements with staff members.
- Evaluate contracted (offsite) wastewater treatment and contracted (offsite) municipal waste-disposal practices.
- Develop incentive program to encourage car sharing for employees attending out-of-town meetings.

2.3 Comprehensive GHG Gas Inventory

An analysis of LM's GHG inventory indicates that priority areas for LM should continue to be purchased RECs, fugitive emissions, and fleet vehicles. An inventory was submitted via the Pollution Prevention Tracking and Reporting System and is included as Attachment F. Revised FY 2008 GHG emissions are provided in Attachment G.

2.4 High-Performance Sustainable Design

To address the requirements in DOE Order 430.2B, LM has made a commitment to pursue USGBC leadership in energy and environmental design (LEED gold) and incorporate the Guiding Principles into the construction of future buildings, as addressed in the following sections.

2.4.1 HPSB New Construction

Section 4.d of DOE Order 430.2B stipulates that all new buildings and major renovations at CD-1 or lower, with a value exceeding $5 million, must achieve USGBC LEED gold certification. Any buildings that cost $5 million or less will be required to meet the Guiding Principles for Federal Leadership in the Guiding Principles. In addition, per Section 109 of EPAct of 2005, all new buildings in design shall be designed such that their energy consumption is 30 percent below the American Society of Heating, Refrigerating, and Air-Conditioning Engineers standard.

2.4.1.1 Performance Status

In FY 2008, LM constructed one LEED platinum multiuse facility. No other new-construction buildings or major renovations that fit the criteria of the requirements are planned. In FY 2009,

LM provided additional funds to GSA so that the Legacy Management Business Center (LMBC) in Morgantown could obtain LEED gold certification for its records-management center. In FY 2010, the LMBC received gold certification in both the "Core and Shell" and "Commercial Interiors" categories.

2.4.1.2 Planned Actions

No other new-construction buildings or major renovations that fit the criteria of the requirements are planned. However, if this changes, all new construction or major renovations that cost more than $5 million will be designed to meet USGBC LEED gold certification, and any buildings that cost $5 million or less will be required to meet the Guiding Principles for Federal Leadership in the Guiding Principles.

2.4.2 HPSB Existing Buildings

Section 4.d(1) of DOE Order 430.2B states that "all programs that own or lease real property must develop and implement a plan, as part of the executable plan to ensure that at least 15 percent of their enduring buildings are compliant with the Guiding Principles of Executive Order 13423." The order further states that executable plans shall "establish a time line for execution coupled with specific performance measures and deliverables designed to achieve [the order's goals]." EO 13514 and the SSPP further clarify the goal to be 15 percent of the number of buildings—not square footage—and that only buildings greater than 5,000 gross square feet (gsf) are subject to the goal. The 15 percent requirement in EO 13514 and the SSPP must be met by FY 2015. EO 13514 and the SSPP stipulate that progress must continue toward 100 percent compliance.

2.4.2.1 Performance Status

One hundred percent of all LM-owned buildings greater than 5,000 gsf have been assessed using the Guiding Principles checklist to demonstrate compliance. With the Fernald Preserve Visitors Center being awarded USGBC LEED platinum certification in FY 2008, 10 percent of LM's applicable buildings meet the Guiding Principles.

2.4.2.2 Planned Actions

Existing Buildings

One additional building, the Weldon Spring Interpretive Center, is in initial planning to meet the Guiding Principles by FY 2015; however, additional funding would be required to upgrade this facility.

Leased Facilities

Section 4.d(4) of DOE Order 430.2B states, "Starting in FY 2008, all procurement specifications and selection criteria for acquiring new leased space, including build-to-suit lease solicitations are to include a preference for buildings certified as LEED Gold. When entering into renegotiation or extension of existing leases, the Department must include lease provisions that support the Guiding Principles."

In FY 2011, LM will assess leased facilities at select sites. In addition, LM will identify and evaluate sites transitioning to and from LM by FY 2015.

2.5 Regional and Local Planning

According to the SSPP, LM is to support DOE by pursuing the following actions:

- Ensure that participation in regional transportation planning is incorporated into site policy and guidance documents by September 2011.
- Ensure that the planning of new facilities or new leases includes consideration of sites that are pedestrian-friendly, near existing employment centers, and accessible to public transit, and emphasize existing central cities and, in rural communities, existing or planned town centers.
- Identify and analyze impacts for energy use and alternative energy sources in all Environmental Impact Statements and Environmental Assessments (EAs) for proposals for new or expanded federal facilities under the National Environmental Policy Act of 1969 (NEPA).
- By February 2011, identify regional transportation planning, ecosystem, watershed, and environmental management initiatives affecting sites, and opportunities to work with local authorities to align energy policies and the siting of renewable energy infrastructure.
- Assess the state of interaction between sites and their local or regional organizations by September 2011.

2.5.1 Performance Status

- The addition of a PV solar energy system at the Durango, Colorado, Disposal Site by a private entity is being explored. A draft NEPA EA was prepared. As part of the NEPA process, LM has met with local utility companies, the local county commissioners, local citizens, federal and state regulators, and interested Native Americans. If maximal PV solar energy development (4.5 megawatts) occurred on the disposal site, based on current local energy use, this system would support as many as 900 residential homes. Because this system will be privately owned, it does not appear in CEDR.
- In FY 2010, LM contacted the Navajo Tribal Utility Authority (NTUA) to determine the possibility of connecting into their electrical lines at the Shiprock, New Mexico, Site if LM were to pursue the installation of a renewable energy system. The contact at NTUA said that there were no mechanisms in place to allow for connectivity.
- LM maintains an extensive distribution list of local stakeholders and elected officials for each site. Stakeholders are updated or contacted as site activities warrant.
- At the Weldon Spring Site, an Interpretive Center open to the general public is operated to provide information about the environmental cleanup and the long-term surveillance and maintenance program. Stakeholders are sent updates, such as the *Annual Site Environmental Report*, and notices of site inspections. Customized field trips are provided for students in kindergarten through 12th grade. Additionally, the staff conducts outreach presentations for organizations that do not have funding to travel to the Interpretive Center. In 2010, 26,635 members of the public either visited the Interpretive Center or were involved in an outreach

presentation. A recently completed renewable energy demonstration project features an innovative wind turbine designed to produce energy at much lower wind speeds than a traditional turbine. Numerous volunteers help maintain a native-plant garden at the site.

- At the Fernald Preserve Site, an existing building was rebuilt to meet USGBC LEED platinum standards and functions as a visitors center. Numerous site improvements—including the design and construction of a biowaste treatment plant, and prescribed burns to enhance habitat—are undertaken in coordination with various local resource managers. LM is working with local vocational science and technology schools to encourage and prepare the next generation of scientists and engineers. Personnel at the Fernald Preserve conduct lessons for school groups, from pre-school through college, and utilize active learning. Monthly events for families complement school field trips.
- The Uranium Leasing Program (ULP) traded royalty payments due to DOE for in-kind work to reclaim abandoned mines that LM inherited when lease tract boundaries were redrawn. In FY 2010, DOE reclaimed 2.51 acres of land in seven lease tracts; reclamation is conducted in coordination with three local U.S. Bureau of Land Management (BLM) Offices and the Colorado Division of Wildlife. ULP works with BLM and the Colorado State Division of Reclamation, Mining, and Safety to evaluate proposed exploratory drilling requests.
- At the ULP sites and some of the legacy sites, LM has been working with the local counties and BLM offices to control noxious weeds on a larger scale, including controlling weeds along access roads and on open land surrounding the sites.
- LM continued to coordinate and attend quarterly meetings with representatives of the Navajo Nation and Hopi Tribe. The Shiprock; Monument Valley, Arizona; and Tuba City Sites are on tribal lands, and the quarterly meetings are informational and provide an opportunity to discuss local issues. LM invited representatives of these tribes to Grand Junction to be presenters at a 2-day Tribal Cultural Awareness Training event that was requested to identify cultural sensitivities and supplement training on interactions with Native American tribal governments. The training was also open to LMS contractor staff and other cooperating federal agencies. Approximately 80 individuals attended. In addition, LM works closely with the Navajo Nation to coordinate water withdrawal from the San Juan River for use in irrigating phytoremediation plots at the Shiprock Site.
- LM continued to mentor and work with students from several universities to conduct research on LM properties and expand the students' environmental understanding. Some examples are listed below:

  — In coordination with the LM Environmental Justice Program, five students from the George Washington University Environmental Resource Policy Graduate Program were mentored through projects addressing uranium contamination issues on Navajo Nation land. This was a capstone course for graduating seniors in the program. Their projects consisted of a field trip to a uranium mill tailing site, research, and interviews with Navajo Nation members, and culminated in presenting the group's findings to LM management.

  — LM hosted two interns during the summer of 2010—one from the Spokane Tribe, and one from the Navajo Nation—under the DOE Student Diversity Partnership Program to promote internships for Native American and Hispanic students.

  — Through educational outreach efforts by LM's Applied Science and Technology (AS&T) group, Native American students at Diné College in the Navajo Nation are provided

environmental education opportunities. The AS&T group provided training, led field trips (which included the sampling of soils and biota), and assisted in research projects at various uranium mill tailing sites across the Navajo Nation.

— One of the LMS contractor's scientists retained adjunct faculty appointments with Vanderbilt University and the University of Arizona. In such positions, he assists master's and doctoral students with their research projects.

2.5.2 Planned Actions

- By September 2011, review site policy and guidance documents to ensure that participation in regional transportation planning is incorporated into site policy and guidance documents.
- Ensure that planning for new federal facilities or new leases includes consideration of sites that are pedestrian-friendly, near existing employment centers, and accessible to public transit, and emphasize existing central cities and, in rural communities, existing or planned town centers.
- By February 2011, evaluate local transportation infrastructure near offices in largely populated areas where LM or its contractors employ at least 10 people. Many of the LM sites are unmanned or only have a few people working there. In additional, several of the manned sites are in remote locations where local transportation is not available.
- Continue to hold quarterly meetings with the Navajo Nation and Hopi Tribe.
- Work more closely with state historic preservation offices (SHPOs) to complete a series of programmatic agreements that would enhance coordination with SHPOs. Coordination with SHPOs is an ongoing effort for each new ground-disturbing action.
- Meet with one BLM office to discuss mutual concerns and program requirements related to ULP. ULP anticipates more coordination with local BLM offices to ensure that ULP continues to run smoothly.
- Continue to encourage public participation and offer educational programs at LM sites with visitors centers.
- Continue educational outreach programs.
- Have site employees continue to work with local building managers and owners to incorporate sustainable building operations and practices into their own operations.
- To meet NEPA requirements, continue to evaluate proposed projects for impacts on the physical, biological, and human environments. This evaluation requires consideration of federal, state, and, where applicable, local programs and requirements.
- Continue to pursue the larger-scale control of noxious weeds through coordination with local and regional agencies.

2.6 Water Use Efficiency and Management

2.6.1 Water Efficiency

LM will reduce water consumption at goal subject sites for the following areas:

- Goal 1: Potable water intensity by no less than 26 percent by FY 2020 relative to the established FY 2007 baseline.

- Goal 2: Non-potable freshwater used for industrial, landscaping, and agriculture (ILA) purposes by no less than 20 percent FY 2020 relative to the established FY 2010 baseline.

2.6.1.1 Performance Status

Goal 1:

- The potable water intensity reduction goal of 6 percent (2 percent per year for 3 years) has been exceeded by far. There has been a 97.3 percent reduction for FY 2010 as compared to the baseline year of FY 2007.
- LM has developed a water management plan.
- LM has identified budgeting needs for FY 2011 and FY 2012.
- LM has implemented water conservation technologies and practices to achieve, at a minimum, 2 percent or greater annual potable water intensity reductions.

Goal 2:

- LM has begun implementing water conservation technologies and practices to achieve a 2 percent or greater reduction in annual non-potable freshwater used for ILA purposes, so that the overall reduction goals are achieved by the FY 2020 deadline.
- FY 2010 baseline use data was established for non-potable freshwater use at all LM goal subject sites.
- A standard water meter was installed at the Tuba City Site to measure non-potable water use.
- A water audit was conducted at the Tuba City Site to understand use and to identify opportunities to improve water efficiency.

Table 4 shows LM goal subject sites' water use performance since FY 2007.

Table 4. LM Combined-Sites Water Use since FY 2007

FY	GSF	Water Use (gallons)		Potable Water Use Intensity (WUI) Percent Reduction
		Potable	Non-potable Freshwater	
FY 2007	10,992	1,497,098	N/A	N/A
FY 2008	11,712	1,070,768	N/A	32.9% reduction
FY 2009	22,512	549,462	N/A[a]	82.1% reduction
FY 2010	22,464[c]	80,358	503,336[b]	97.3% reduction
FY 2010: Combined-Sites WUI = (80,358 ÷ 22,464) = 3.6				
Combined-Sites Percent WUI Reduction = [(FY 2007 WUI – FY 2010 WUI) ÷ FY 2007 WUI] × 100 = [(136.2 – 3.6) ÷ 136.2] × 100 = 97.3% reduction				

[a] The definition is freshwater was expanded to include non-potable freshwater in mid-2009, so non-potable use was included in the overall water use category. In FY 2010, direction was given that non-potable water should not be included in the EO 13514 reduction goal but that past years' non-potable use did not have to be eliminated from reported data.
[b] Non-potable freshwater used for ILA was defined with its own goal for which FY 2010 is the baseline year.
[c] See Attachment D for a listing of LM's gross square footage.

2.6.1.2 Planned Actions

Goal 1:

- Since LM has already achieved this goal, additional actions are not necessary. However, LM will consider additional measures, identified in past audits, such as installing high-efficiency urinals and retrofitting high-efficiency toilets in all owned facilities.
- Since LM has achieved the potable water reduction goals to date, near-term improvements in water use efficiency will likely focus more on the non-potable ILA use reduction program.

Goal 2:

- LM will implement two non-potable water efficiency improvements by the end of FY 2011. One water efficiency improvement has already been implemented in FY 2011 at the Tuba City Site, a site that uses non-potable water: a high-water-use toilet was replaced with a WaterSense water-efficient toilet. At least one other ILA improvement will be made at the Tuba City Site during FY 2011.
- LM may reduce non-potable water use by revising the groundwater treatment technology at the Tuba City Site. LM will also continue to use low-water-use landscaping technologies and practices.

2.6.2 Stormwater Management

EISA Section 438 stipulates, "The sponsor of any development or redevelopment project involving a Federal facility with a footprint that exceeds 5,000 square feet shall use site planning, design, construction, and maintenance strategies for the property to maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with regard to the temperature, rate, volume, and duration of flow."

2.6.2.1 Performance Status

The design and construction of the Fernald Preserve Visitors Center incorporated stormwater management that met or exceeded the requirements of EISA Section 438.

2.6.2.2 Planned Actions

Future new or upgraded roofs will either be green or use rainwater cisterns. Concrete paving blocks that are designed to infiltrate runoff will be considered for new parking lots. Bioswales will be considered for use adjacent to asphalt roadways and other hard surfaces to facilitate infiltration when future upgrades are planned. The EISA 438 requirement will be put into design procedures for development or redevelopment projects that exceed 5,000 square feet. No additional new construction is planned.

2.7 Pollution Prevention

LM has established the following goals, consistent with the pollution prevention goals outlined in the SSPP:

Goal 1: Minimize the generation of waste and pollutants through source reduction.

Goal 2: Divert at least 50 percent of non-hazardous solid waste, excluding construction and demolition debris, by the end of FY 2015.

Goal 3: Divert at least 50 percent of construction and demolition materials and debris by the end of FY 2015.

Goal 4: Reduce printing paper use and purchase uncoated paper containing at least 30 percent post-consumer fiber.

Goal 5: Reduce and minimize sources and quantities of toxic and hazardous chemicals and materials acquired, used, or disposed of.

Goal 6: Increase the diversion of compostable and organic material from the waste stream.

Goal 7: Implement integrated pest management and other appropriate landscape management practices.

Goal 8: Increase the use of acceptable alternative chemicals and processes in keeping with LM's procurement policies.

Goal 9: Decrease the use of chemicals where such decreases will help LM achieve GHG reduction targets.

Goal 10: Ensure that Sections 301 through 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) are fully implemented, as applicable.

Goal 11: Implement an SF6 capture program by September 2012.

The SSPP also commits sites to the following:

Goal 12: Verify the effectiveness and reliability of sites' clearance-of-property procedures to identify those materials that cannot be cleared for unrestricted reuse or recycling (initiated in September 2011; to be complete by September 2012).

Goal 13: By December 2010, develop a plan for retiring LM printers incapable of duplex printing.

2.7.1 Performance Status

Performance related to these goals is reported in the LMS contractor's *Quarterly Performance Assurance Report* and LM's annual Pollution Prevention Tracking and Reporting System (PPTRS). A copy of the PPTRS in included as Attachment F.

Goal 1: LM's job planning process takes into account minimizing the generation of waste and pollutants through source reduction.

Goal 2: This year, LM recycled 330,257 pounds of material (a diversion of 56 percent of materials). Recycling contracts are in place for all manned sites under LM for waste streams such as electronics, batteries, scrap metal, wood, paper, plastic, glass, aluminum, and cardboard. Specific language was added to statement of work templates, requiring subcontractors to report solid waste disposal and recycling volumes.

Goal 3: This year, LM diverted 186,257 pounds of debris (a diversion of 79 percent of debris). Specific language was added to construction statement of work templates, requiring subcontractors to report construction and demolition debris disposal and recycling volumes.

Goal 4: Printing continues to be an essential element for conducting mission-related work. However, several improvements have been made, and the culture is continuing to evolve toward the use of various types of electronic media. Paper use was reduced 35 percent as compared to FY 2009. LM exceeded the internal goal of a 10 percent overall paper reduction across the LM complex.

Goal 5: LM continues to improve chemical-management activities by maintaining an accurate inventory management, identifying and sharing excess chemicals, and planning chemical quantities better. Chemical inventories are updated quarterly, and each site maintains an accurate material safety data sheets logbook. Examples of chemical reduction and minimization efforts in FY 2010 include the following: (1) Nitrogen and P-10 gas cylinders were reallocated between the Grand Junction Site and the Environmental Remediation Sciences Program. This resulted in the reuse of cylinders and caused a monetary credit to be applied to future Grand Junction Site gas purchases. (2) The Grand Junction Site lab chemist continually checks and reuses expired standards for noncritical analyses. (3) All sites equipped with labs continue to share re-aging–grade preservatives with the Environmental Monitoring group.

Goal 6: LM installed compost bins and began tracking composting at the Weldon Spring and Fernald Preserve Sites. In FY 2010, 428 pounds of material was composted from food wastes, and 20,800 pounds of hay was used as a soil amendment.

Goal 7: The job planning process considers the implementation of integrated pest management and other appropriate landscape management practices.

Goal 8: LM reviews and approves of acceptable alternative chemicals and processes through the procurement and job planning processes.

Goal 9: An LM-wide total ozone-depleting-substance reduction of 56.25 percent was achieved in FY 2010. A total of 22 old refrigerators from eight different sites were properly recycled and resulted in recycling more than 2,400 pounds of scrap metal and 31.9 pounds of ozone-depleting substances. Documentation verifying the compliant management and recycling of scrap metals and refrigerants was obtained from the procured companies.

Goal 10: LM currently submits reports for Section 312 of EPCRA for four sites. No EPCRA Section 313 reports are required. An LM-wide battery inventory is underway to ensure that sites are meeting EPCRA requirements for reporting sulfuric acid quantities, if applicable. EPCRA reports are tracked through a monthly update to the regulatory compliance schedule.

Goal 11: A survey of SF6 was conducted for all LM sites. LM determined that SF6 is not used for any LM operations. LM also determined that no SF6 is present at LM sites. Pollution prevention opportunity assessments have been conducted to identify other ozone-depleting substances and to identify appropriate paths forward to reduce or eliminate ozone-depleting-substance emissions.

Goal 12: LM requested information from DOE Headquarters on releasing recycled materials.

Goal 13: As part of the process of phasing out single-sided printers, a survey of printers without duplexing capability was conducted in FY 2010, and employees are encouraged to use network duplex printers.

2.7.2 Planned Actions

Goal 1:

- Continue to minimize the use of waste and pollutants through source reduction when planning jobs.

Goal 2:

- Continue to measure sanitary waste and recycling volumes.
- Assess compliance with reporting recycling activities from subcontractors.
- Assess the feasibility of commingled recycling streams.
- Develop a solid waste diversion strategy, and conduct a pollution prevention opportunity assessment to determine cost-effectiveness.

Goal 3:

- Continue Environmental Compliance review of adequate language in the statement of work templates and in the project evaluation forms.
- Improve the data collection process for construction recycling activities.
- Conduct a pollution prevention opportunity assessment on a large construction activity, if available.

Goal 4:

- Continue to phase out single-sided printers and encourage employees to use network duplex printers.
- Encourage the use of electronic-presentation equipment to minimize hardcopy handouts.
- Implement electronic records software.
- Set network printers and multifunction devices to duplex printing by default.
- Encourage the electronic storage of records and files wherever the law allows.
- Continue to procure uncoated printing and writing paper that contains at least 30 percent post-consumer content.
- Continue to utilize technology and encourage behavior to minimize paper use, and enable automatic purchasing of 30 percent or better post-consumer recycled-content paper.
- Conduct a pollution prevention opportunity assessment on a group that uses a large volume of paper.

Goal 5:

- Continue improving the life-cycle approach to chemical management.
- Report EPCRA data.
- Maintain and continually improve the chemical inventory system.
- Evaluate chemical redistribution through local community programs.
- Assess chemical recycling through local community programs.
- Evaluate site-specific inventories to determine how toxic chemicals can be reduced.

Goal 6:

- Continue composting at the Fernald Preserve and Weldon Springs Sites.
- Continue educational programs to present composting facts to the public and teach visitors and students the benefits of composting.
- Increase employee awareness on types of materials that can be composted.
- Install additional portable compost bins at the Grand Junction and Rocky Flats Sites.
- Assess barriers to and evaluate resources necessary for expanding the composting program.

Goal 7:

- Continue implementing integrated pest management and other appropriate landscape management practices.

Goal 8:

- Continue improving the life-cycle approach to chemical management.

Goal 9:

- Continue replacing and recycling any remaining equipment that contains ozone-depleting substances and was manufactured before 1995.
- Continue reviewing chemical procurement packages to evaluate quantities and recommend greener chemical alternatives.
- Continue to replace LM equipment containing ozone-depleting substances as equipment reaches its end-of-use criteria.
- Continue to track existing ozone-depleting substances and, to the extent practicable, replace them with more energy-efficient and environmentally friendly alternatives as equipment approaches the end of its life cycle.
- Maintain a toxic chemical inventory.
- Continue to reduce toxic chemicals.
- Continue to maintain awareness of ozone-depleting substances and GHG regulatory changes through the quarterly regulatory review process.

Goal 10:

- Complete the annual EPCRA report for applicable sites.
- Complete and maintain a battery inventory and report any applicable hazardous or toxic chemicals under EPCRA requirements, as necessary.
- Maintain and update the regulatory compliance schedule and quarterly regulatory review process.

Goal 11:

- Evaluate the effectiveness and reliability of LM's clearance-of-property procedures to identify those materials that cannot be cleared for unrestricted reuse or recycling.

Goal 12:

- Continue to phase out single-sided printers and encourage the use of network duplex printers.
- Develop a plan to retire printers incapable of duplex printing.

2.8 Sustainable Acquisition

LM has established the following goals to support sustainable acquisition:

Goal 1: Ensure that 95 percent of new contract actions, including task and delivery orders under new contracts and existing contracts, require the supply or use of products and services that are energy efficient (Energy Star or Federal Energy Management Program [FEMP]–designated), water-efficient, biobased, environmentally preferable (including Electronic Product Environmental Assessment Tool [EPEAT]–registered products), or non-ozone-depleting; contain recycled content; or are nontoxic or less toxic alternatives.

Goal 2: Update LM affirmative procurement plans (also known as green purchasing plans or environmentally preferable purchasing plans), policies, and programs to ensure that all federally mandated designated products and services are included in all relevant acquisitions.

LM also commits sites to the following:

Goal 3: Strive to make 95 percent of new LM contract actions for products and services—including task/release and blanket orders, but excluding all credit card purchases—environmentally preferable, in accordance with EO 13514 (subject to certain qualifications and limitations).

2.8.1 Performance Status

LM strengthened the program by transferring functional responsibility and leadership of the sustainable acquisition team from the Environmental Compliance group to the Purchasing department.

Goal 1 and Goal 3:

- In FY 2010, 100 percent of purchase orders and credit card transactions were given green alternative consideration.
- One hundred percent of the computer systems purchased during FY 2010 were rated gold by EPEAT. This percentage exceeds the requirement in EO 13423 of purchasing 95 percent EPEAT silver or gold equipment.
- Currently, all new solicitations or contracts contain requirements for products and services to be energy-efficient (Energy Star or FEMP-designated), water-efficient, biobased, environmentally preferable (including EPEAT-registered products), non-ozone-depleting, and nontoxic or less toxic, and to contain recycled content.

Goal 2:

- The current LM affirmative procurement plans, policies, and programs ensure that all federally mandated designated products and services are included in all relevant acquisitions.
- The current procurement process allows for review by the subject matter expert to identify applicable sustainable acquisition requirements.

2.8.2 Planned Actions

Goal 1 and Goal 3:

- Develop appropriate mechanisms to fulfill PPTRS reporting requirements and track compliance with this goal.
- Continue to strengthen the requirement for federally mandated designated products in all purchasing programs as necessary.
- Make requisitions of noncompliant energy-efficient products require written preapproval from the subject matter expert.

Goal 2:

- Establish guidelines for purchasing allowances of green products instead of non-green products.

2.9 Electronics Stewardship and Data Centers

For the purposes of the FDCCI, a data center is defined as:

- Any room that is greater than 500 square feet and devoted to data processing, and
- Any room that meets one of the tier (I, II, II, or IV) classifications defined by the Uptime Institute.

In concert with the FDCCI, LM has established the following goals to perform sound electronics stewardship and data center management:

Goal 1: Continually work to intelligently reduce the energy consumed by computing resources.

Goal 2: Increase or maintain the quantity of electronic assets disposed of through sound disposition practices.

Goal 3: Ensure that 95 percent of newly purchased computer systems are EPEAT silver or gold.

2.9.1 Performance Status

In FY 2010, LM enrolled in the Federal Electronics Challenge. To further strengthen the program, functional responsibility and leadership of the Electronics Stewardship team was transferred from the Environmental Compliance group to the IT department.

LM was not required to participate in the FY 2010 data center survey because LM data centers operate at less than the required 100 kW power criteria to participate. However, LM did provide information for additional data calls on data centers.

Goal 1:

- LM has conducted an energy assessment of its data centers to identify potential energy improvements.

Goal 2:

- LM has established a policy to manage all excess or surplus electronic products in an environmentally responsible manner. Best practices to manage those products are:
  - Redeploying equipment to other staff members if it meets LM's requirements.
  - Donating equipment to nonprofit organizations, such as schools and community groups, if it does not meet LM's requirements.
  - Recycling computers and other devices with no redeemable value.

Goal 3:

- LM purchased 100 percent EPEAT gold computer systems in FY 2010.

2.9.2 Planned Actions

LM is planning on applying for a Federal Electronics Challenge Bronze Award in FY 2011 for activities conducted in FY 2010.

Goal 1:

- Manage power.
- Optimize the configurations of data centers.
- Monitor power consumption in data centers.
- Minimize the number of systems that exist in general office space.
- Educate users on how they can be conscientious consumers.

Goal 2:

- Continue to manage surplus or excess electronic products in an environmentally responsible manner.

Goal 3:

- Continue to purchase EPEAT silver or gold computer systems.

2.10 Site Innovation

LM's staff members are focused on advancing sustainable practices and distributing those practices complex-wide.

LM operates in ways that improve the staff's quality of life, enhance LM's community, and protect the environment.

Recognizing that LM's staff members are its greatest asset, LM creates a work environment where they are intellectually challenged, supported in their work, and valued for their contributions to LM's nationally important mission.

3.0 Return-on-Investment (ROI) Evaluation

3.1 Performance Status

Based on the ROI criteria and the level of development of scope and implementation cost estimates of the projects listed on Tab 5 in the CEDR worksheet, LM will pursue three major renewable energy or energy conservation projects. As noted on Tab 5 of CEDR, all proposed or planned energy projects have undergone technical and economic analysis for consideration during the budget evaluation process.

3.2 Planned Actions

Currently planned and anticipated site projects are forecasted to achieve the DOE goals in energy reduction, alternative fuel use and acquisition of hybrid vehicles, and water reduction by FY 2015. LM's renewable power percentage for FY 2010 was 5.0 percent from onsite renewable energy projects and purchase of RECs. LM will examine the remaining three identified energy reduction projects (LM-1501-022, Tuba City Photovoltaic; LM-1501-0023, Tuba City Reverse Osmosis; and LM-1501-0038, Fernald Preserve Pipeline Modification) that still need additional financial or technical rigor before they are ready to submit in the budget. LM will continue to refine the scope and estimated implementation costs and evaluate funding sources for financial and technical rigor, and seek appropriate funding sources over the next 3 years for those that are life-cycle cost-effective. LM's next budget request will be updated to include projects that will allow sustainability goals to be met.

LM will perform an ROI evaluation on modifying the Weldon Spring Interpretive Center to meet the Guiding Principles.

In the future, LM will not only determine the cost-effectiveness of projects but also consider the implementation of new technologies for demonstration purposes, the facilitation of technology transfer, and the reduction of deferred maintenance.

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Attachment A

Environment, Safety, and Health Policy

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Summary of Changes
to
Policy 450.7
Environment, Safety, and Health
Revised Version Issued as Policy 450.8

LM Policy 450.7, Environment, Safety, and Health of 02/24/09, has undergone minor revisions. This Policy has been revised to include pollution prevention as an environmental commitment and broaden the scope of directives that LM abides by, as identified during our EMS audit. Please replace LM Policy 450.7 with **LM Policy 450.8**.

INITIATED BY: [Office of Site Operations]
NO. OF PAGES/ATTACHMENTS: 2 pages, 0 attachment

U.S. Department of Energy
Office of Legacy Management

POLICY

LM P 450.8

Approved: **5-29-09**

SUBJECT: ENVIRONMENT, SAFETY, AND HEALTH POLICY

1. OBJECTIVE. This policy reaffirms the Department of Energy (DOE), Office of Legacy Management's (LM) commitment to safety of our workers, respect for the environment, and protection of public health and safety through our environment, safety and health (ES&H) program.

2. CANCELLATION. This policy cancels LM P 450.7, *Environment, Safety, and Health Policy*, dated 02-24-09.

3. APPLICABILITY. This Policy applies to all LM contractor and federal employees.

4. REQUIREMENTS. Not Applicable

5. RESPONSIBILITIES. It is the responsibility of all LM personnel to support the ES&H policy to the utmost of their abilities. This policy, as set forth and supported by all members of senior management, will be reviewed annually and updated as necessary. Senior management will ensure that these expectations are made clear and available to all LM personnel, including DOE-LM employees and contractors, research associates, LM stakeholders, and the public.

6. POLICY. It is DOE policy that the safety of our workers, respect for the environment and protection of public health and safety are paramount to all that we do. LM has a diversity of Goals, which support our mission "To manage the Department's post-closure responsibilities and ensure the future protection of human health and the environment." In support of our mission and goals, proper management of the impacts of our operations and facilities on worker and public safety and the environment is essential.

   With this policy, LM is pledging to protect the public, workers, and the environment by complying with all applicable requirements, committing to prevention of pollution, and achieving continual improvement. LM continues to make ES&H an integral part of our day-to-day decision-making and long-term planning processes across all goals, activities and functions by following an Integrated Safety Management System (ISMS) and an Environmental Management System (EMS) that are integrated to the fullest extent practicable. LM will strive to improve our ES&H programs and sustain compliance through the concerted process of continuous performance improvements using performance measurements such as objectives and targets.

INITIATED BY: [Office of Site Operations]
NO. OF PAGES/ATTACHMENTS: 2 pages, 0 attachment

7. REFERENCES.

a. DOE Order 430.2. Departmental Energy, Renewable Energy and Transportation Management.
b. DOE Order 450.1, Environmental Protection Program.
c. DOE P 411.1, Safety Management Functions, Responsibilities, and Authorities Policy.
d. DOE P 450.4, Safety Management System Policy.
e. DOE P 450.7, Department of Energy Environment, Safety and Health (ES&H) Goals.
f. Executive Order 13423, Strengthening Federal Environmental, Energy, and Transportation Management.

Approved: Original signed by 5/29/09
David W. Geiser Date
Deputy Director
Office of Legacy Management

Distribution: As required

INITIATED BY: [Office of Site Operations]
NO. OF PAGES/ATTACHMENTS: 2 pages, 0 attachment

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Attachment B

EMS 4 Data Printouts

(The gross square footage used for energy intensity and water use intensity number varies from the gross square footage reported in the snapshot of FIMS taken by the Federal Energy Management Program. Two additional buildings came into LM after September 30, 2010. See Attachment D for a listing of LM's gross square footage.)

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Produced: 12/13/2010

Energy Consumption and Cost Report

Quarter 1 - 4

Site: 1501 LEGACY MANAGEMENT SITES

Program LM

	Consumption 2009 Standard Units	2009 BTU x 10 9	Consumption 2010 Standard Units	2010 BTU x 10 9	% Change	Cost (x 1000) 2009	2010	% Change
BUILDINGS								
Electricity-MWH	7,804.603	26.629	6,848.000	23.366	-12.26%	611.065	692.000	13.24%
Fuel Oil-(K Gal)	0.000	0.000	0.000	0.000	0.0%	0.000	0.000	0.0%
Natural Gas-(MCF)	412.000	0.425	344.000	0.355	-16.5%	11.200	3.482	-68.91%
LPG-(K Gal)	0.000	0.000	1.774	0.000	0.0%	0.000	5.847	0.0%
Coal-Short Tons	0.000	0.000	0.000	0.000	0.0%	0.000	0.000	0.0%
Steam-(Btu X 10 9)	0.000	0.000	0.000	0.000	0.0%	0.000	0.000	0.0%
Other-(Btu X 10 9)	0.000	0.000	0.000	0.000	0.0%	0.000	0.000	0.0%
Purch Renew Electric-	131.200	0.448	0.000	0.000	-100.0%	3.400	0.000	-100.0%
Purch Renew Other-BBtu	0.000	0.000	0.000	0.000	0.0%	0.000	0.000	0.0%
Total :		27.502		23.721	-13.75%	625.665	701.329	12.09%
Square Footage		115.374		178.160	54.42%			
Btu/GSF		238.373		133.144	-44.14%			
RE offset credit (BBtu)		0.000		0.000				
Btu/GSF w/RE Purchase		238.373		133.144	-44.14%			
Btu/GSF w/RE & Source		238.373		133.144	-44.14%			
EXCLUDED								
Electricity-MWH	0.000	0.000	0.000	0.000	0.0%	0.000	0.000	0.0%
Fuel Oil-(K Gal)	0.000	0.000	0.000	0.000	0.0%	0.000	0.000	0.0%
Natural Gas-(MCF)	0.000	0.000	0.000	0.000	0.0%	0.000	0.000	0.0%
LPG-(K Gal)	0.000	0.000	0.000	0.000	0.0%	0.000	0.000	0.0%
Coal-Short Tons	0.000	0.000	0.000	0.000	0.0%	0.000	0.000	0.0%
Steam-(Btu X 10 9)	0.000	0.000	0.000	0.000	0.0%	0.000	0.000	0.0%
Other-(Btu X 10 9)	0.000	0.000	0.000	0.000	0.0%	0.000	0.000	0.0%
Purch Renew Electric-	0.000	0.000	0.000	0.000	0.0%	0.000	0.000	0.0%
Purch Renew Other-BBtu	0.000	0.000	0.000	0.000	0.0%	0.000	0.000	0.0%
Total :		0.000		0.000	0.0%	0.000	0.000	0.0%
Square Footage		112.699		1.008	-99.11%			
Btu/GSF		0.000		0.000	0.0%			
RE offset credit (BBtu)		0.000		0.000				
Btu/GSF w/RE Purchase		0.000		0.000	0.0%			
Btu/GSF w/RE & Source		0.000		0.000	0.0%			
Site Wide Total (BTU)		27.502		23.721	-13.75%	625.665	701.329	12.09%

Produced: 11/22/2010

Energy Consumption and Cost Report

Quarter 1 - 4

Site: 1501 LEGACY MANAGEMENT SITES

Program LM

	Consumption 2009 Standard Units	2009 BTU x 10 9	Consumption 2010 Standard Units	2010 BTU x 10 9	% Change	Cost (x 1000) 2009	2010	% Change
WATER								
Potable (Mgal)	0.542	0.000	0.080	0.000	-85.24%	25.400	3.200	-87.4%
ILA non-potable fresh	0.025	0.000	0.400	0.000	1500.0%	0.300	1.000	233.33%
Re claimed/cycled (Mgal)	0.000	0.000	0.000	0.000	0.0%	0.000	0.000	0.0%
Aquifer Replinish (Mgal)	0.000	0.000	0.000	0.000	0.0%	0.000	0.000	0.0%
Total :		0.000		0.000	0.0%	25.700	4.200	-83.66%
Square Footage		0.000		0.000	0.0%			
Btu/GSF		0.000		0.000	0.0%			
RE offset credit (BBtu)		0.000		0.000				
Btu/GSF w/RE Purchase		0.000		0.000	0.0%			
Btu/GSF w/RE & Source		0.000		0.000	0.0%			
Site Wide Total (BTU)		0.000		0.000	0.0%	25.700	4.200	-83.66%

Attachment C

FIMS Excluded Building List and Certification Letter

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Department of Energy
Office of Legacy Management

DOE BUILDING EXCLUSION
SELF-CERTIFICATION FORM
FY 2010
FOR THE ENERGY INTENSITY GOAL OF EISA 2007

Name of DOE Sites: Legacy Management Sites
Program Office Landlord: Legacy Management

Contact Information:

Name: Tracy Ribeiro
Title: Energy Program Manager
Phone: 970.248.6621
E-mail: tracy.ribeiro@lm.doe.gov

Each buildings or group of buildings excluded under the criteria for Part C exclusion are fully serviced leases. One building that is excluded is privately owned but located on LM property.

I certify that the buildings listed on the Excluded Buildings List produced by FIMS as Report 063 dated November 15, 2010, for Office of Legacy Management on pages 38 through 42 meet the exclusion criteria in *Guidelines Establishing Criteria for Excluding Buildings* published by FEMP on January 27, 2006. A more detailed EXCEL file is attached.

Steven R. Schiesswohl
DOE Office of Legacy Management Official

DOE Office of Legacy Management Official (signature) Date

U. S. Department of Energy
Facilities Information Management System
Energy Consuming Excluded Buildings and Trailers List

HQ Program Office LM

FIMS Site Name - Number Fernald, OH, Site 08052

Property ID	Prop Sequence	Property Name	Exclusion Part	Property Type	Gross Sqft	Excluded Sqft
FER01	203707	Delta Building	C - Fully serviced lease	B	10,108	10,108

Justification Comment: Lease

This report qualifies DOE Owned, DOE Leased, and Contractor Leased buildings and trailers (real property and personal property) where the Energy Consuming Metered Process (Excluded) Facilities gsft is greater than zero.

U. S. Department of Energy
Facilities Information Management System
Energy Consuming Excluded Buildings and Trailers List

HQ Program Office LM

FIMS Site Name - Number Grand Junction, CO, Site 08066

Property ID	Prop Sequence	Property Name	Exclusion Part	Property Type	Gross Sqft	Excluded Sqft
GJO-BLDG-B12	208138	RTC Lease-Building12	C - Fully serviced lease	B	4,443	4,443
Justification Comment: Fully Services Lease						
GJO-BLDG-B12A	208136	RTC Lease-Building12A	C - Fully serviced lease	B	6,757	6,757
Justification Comment: Fully Service Lease						
GJO-BLDG-B2	208140	RTC Lease-Building2	C - Fully serviced lease	B	1,684	1,684
Justification Comment: Fully Service Lease						
GJO-BLDG-B32	208137	RTC Lease-Building32	C - Fully serviced lease	B	4,616	4,616
Justification Comment: Fully Serviced Lease						
GJO-BLDG-B810	204554	RTC Lease-Building810	C - Fully serviced lease	B	25,495	25,495
Justification Comment: rent includes all utilities						
GJO-BLDG-B938	208135	RTC Lease-Building938	C - Fully serviced lease	B	19,834	19,834
Justification Comment: Fully Service Lease						
GJO-BLDG-STORSHED	207408	Storage Shed	F - Lease some energy provided	B	336	336
Justification Comment: Meter exists on leased building						

This report qualifies DOE Owned, DOE Leased, and Contractor Leased buildings and trailers (real property and personal property) where the Energy Consuming Metered Process (Excluded) Facilities gsft is greater than zero.

U. S. Department of Energy
Facilities Information Management System
Energy Consuming Excluded Buildings and Trailers List

HQ Program Office LM

FIMS Site Name - Number Pinellas County, FL, Site 08031

Property ID	Prop Sequence	Property Name	Exclusion Part	Property Type	Gross Sqft	Excluded Sqft
PIN-STAR	143457	STAR Ctr Office Portion of Lease	C - Fully serviced lease	B	1,613	1,613

Justification Comment: Fully serviced lease

This report qualifies DOE Owned, DOE Leased, and Contractor Leased buildings and trailers (real property and personal property) where the Energy Consuming Metered Process (Excluded) Facilities gsft is greater than zero.

U. S. Department of Energy
Facilities Information Management System
Energy Consuming Excluded Buildings and Trailers List

HQ Program Office LM

FIMS Site Name - Number Rifle, CO, Disposal/Processing Site 08035

Property ID	Prop Sequence	Property Name	Exclusion Part	Property Type	Gross Sqft	Excluded Sqft
RFO-TRLR-ERSP	207375	Single Wide Trailer - ERSP	B - Privately owned	T	672	672

Justification Comment: Rental Agreement

This report qualifies DOE Owned, DOE Leased, and Contractor Leased buildings and trailers (real property and personal property) where the Energy Consuming Metered Process (Excluded) Facilities gsft is greater than zero.

U. S. Department of Energy
Facilities Information Management System
Energy Consuming Excluded Buildings and Trailers List

HQ Program Office LM

FIMS Site Name - Number Rocky Flats, CO, Site 08034

Property ID	Prop Sequence	Property Name	Exclusion Part	Property Type	Gross Sqft	Excluded Sqft
RFS03	204031	Rocky Flats Office Space	C - Fully serviced lease	B	13,010	13,010

Justification Comment: utilities paid by Lessor

This report qualifies DOE Owned, DOE Leased, and Contractor Leased buildings and trailers (real property and personal property) where the Energy Consuming Metered Process (Excluded) Facilities gsft is greater than zero.

Attachment D

LM’s List of Buildings and Gross Square Footage Used for Reporting

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Office of Legacy Management
Buildings Included on EMS Reports

Site	Property Name	Property ID	GSF	Incl. in Water Baseline (FY2007)	Water Baseline (sq. ft.)	Water FY2008 (sq. ft.)	Water FY2009 (sq. ft.)	Water FY2010 (sq. ft.)	Water Notes	Incl. in Energy Baseline (FY2003)	Energy Baseline (sq. ft.)	FY2008 Energy (sq. ft.)	FY2009 Energy (sq. ft.)	FY2010 Energy (sq. ft.)	Energy Notes	FY2010 Existing Building	FY2010 Existing Building (sq. ft.)	Reason for Building Exclusion
Column Totals		**Totals**	**2,542,396**		**10,579**	**10,579**	**22,512**	**22,464**			**3,219,395**	**26,374**	**115,374**	**114,797**			**99,476**	
Durango, CO, Disposal/Processing Site																		
Durango, CO, Disposal/Processing Site	Storage Shed	DUD-BLDG-STORSHED	100	no					no potable water use	no					OSF	no		Less than 5,000 GSF
Fernald, OH, Site																		
Fernald, OH, Site	Restoration Storage Shed	FER-BLDG-RESTSTORSHED	450	no					no potable water use	no			450	600	incorrectly reported previously	no		Less than 5,000 GSF
Fernald, OH, Site	Warehouse (Old D.O. Bldg.) 18P	FER-BLDG-DO18P	900	no			0	0	no potable water use	no			900	900		no		Less than 5,000 GSF
Fernald, OH, Site	Warehouse (Old Comm. Bldg) 23B	FER-BLDG-COMM23B	750	no			0	0	no potable water use	no			750	750		no		Less than 5,000 GSF
Fernald, OH, Site	Visitor Center Building	FER-BLDG-VISITORCNTR	10,800	no			10,800	10,800	Not included in FY 07 or FY 08 data. FY 09 water use at the new Visitor Center will be included for Fernald. The FY 09 sq. ft. and water use data (first year) will be added to the baseline to adjust the baseline for future comparisons.	yes	10,800	10,000	10,800	10,800		yes	10,800	
Fernald, OH, Site	Grndwtrsys			yes	7,200	7,200	7,200	7,200		yes	7,200	7,200	0	0	OSF (total gross square footage is 12,757 which includes 7,200 previously known as 51A, but called CAWWT)	no		OSF
Fernald, other										yes	680,579	6,980	0	0	Buildings were removed as part of remediation. Additional buildngs were included as part of an OSF CAWWT (51A, 18Q, 18R, 18S, 18VH, 18V1, and CWWHouse)	no		OSF
Grand Junction, CO, Disposal/Processing/Office Site																		
Grand Junction, CO, Disposal/Processing Site	Decontamination Building A	GRJ-BLDG-DECON	1,272	yes	1,272	1,272	1,272	1,272	See also information for the GJDS trailer (under separate spreadsheet tab). The sq. ft. for both the trailer (662 sq. ft) and Decon Building A (1,272 sq. ft) used for this site's water data is 1,934 sq. ft. No changes since baseline year.	no			1,272	1,272		no		Less than 5,000 sq. feet
Grand Junction, CO, Disposal/Processing Site	Storage Building D	GRJ-BLDG-STORAGE	1,308	no			0	0	no potable water use	no			1,308	1,308		no		Less than 5,000 sq. feet
Grand Junction, CO, Disposal/Processing Site	Three Sided Storage Shed	GRJ-BLDG-3SIDED STOR	1,280	no			0	0	no potable water use	no			1,280	1,280		no		Less than 5,000 sq. feet
Grand Junction, CO, Disposal/Processing Site	Storage Shed	GRJ-BLDG-STORSHED	64	no			0	0	no potable water use	no			64	64		no		Less than 1,000 GSF
Grand Junction, CO, Disposal/Processing Site	Single Wide Trailer, Building B	GRJ-TRLR-OFFICE	720	yes	662	662	720	720	Potable water used in this trailer. See information pertaining to Decon Building A (under separate spreadsheet tab). The sq. ft. for both the trailer (662 sq. ft) and Decon Building A (1,272 sq. ft) used for this site's water data is 1,934 sq. ft. No changes since baseline year.	no			720	720		no		Less than 5,000 GSF
Grand Junction, CO, Office Site	Storage Shed	GJO-BLDG_STORSHED	336	no				0	no potable water use	no				336	Added in 2010	no		Less than 5,000 GSF
Monument Valley, AZ, Processing Site																		
Monument Valley, AZ, Processing Site	Storage Shed 1	MON-BLDG-STORSHED1	72	no			0	0	no potable water use	no			0	0	OSF	no		Less than 5,000 GSF
Monument Valley, AZ, Processing Site	Storage Shed 2	MON-BLDG-STORSHED2	48	no			0	0	no potable water use	no			0	0	OSF	no		Less than 5,000 GSF
Monticello, UT, Disposal and Processing Sites																		
Monticello, UT, Disposal and Processing Sites	Triple Wide Trailer	MNT01-TR	1,800	yes	725	725	1,800	1,800	The sq. ft. reported in the Exec. Plan and on previous reports was incorrectly reported as 725. The actual (corrected) building size information currently used is 1,800 sq. ft. No physical changes were made to the size of the building.	no			1,800	1,800		no		Less than 5,000 GSF
Monticello, UT, Disposal and Processing Sites	Storage Hopper	MNT-OSFS-STORHOP	725	no					no potable water use	no			725	0	Actually a storage hopper converted to OSF in FY2010	no		Less than 5,000 GSF
Monticello, UT, Disposal and Processing Sites	STORAGE SHED	MNT-BLDG-STORSHED	240							no				240	Added in 2010	no		Less than 5,000 GSF
Mound, OH Site																		
Mound, OH Site				no	0	0	0	0	Mound buildings were not included in baseline because site belonged to EM. Currently determining whether to include the LM building as a site for potable water use tracking purposes.	no			0	0	Mound buildings were not included in baseline because site belonged to EM. Transfer to LM is imminent.			
Pinellas County, FL, Site																		
Pinellas County, FL, Site	Storage Shed 1	PIN-BLDG-STORSHED1	120	no			0	0	no potable water use	no			120	120	powered but not individually metered	no		Less than 5,000 GSF
Pinellas County, FL, Site	Storage Shed 2	PIN-BLDG-STORSHED2	120	no			0	0	no potable water use	no			120	120	powered but not individually metered	no		Less than 5,000 GSF
Piqua, OH Decommissioned Reactor																		
Piqua, OH Decommissioned Reactor	Administration Building	PIQ-BLDG-ADMIN	17,971	no			0	0	Buildings used by City of Piqua.	yes	17,971		17,971	17,971	leased out, but LM owned	yes	17,971	
Piqua, OH Decommissioned Reactor	Reactor Containment Building	PIQ-BLDG-REACTORCON	25,197	no			0	0	Buildings used by City of Piqua.	yes	25,197		25,197	25,197	leased out, but LM owned	yes	25,197	
Rifle, CO, Disposal/Processing Site																		
Rifle, CO, Disposal/Processing Site	Single Wide Trailer (rented)	RFO-TRLR-ERSP	672	yes	720	720	720	672	Old Rifle Processing Site trailer new in June 2008. Sq. ft and water use added to baseline information as adjustment for comparison purposes.	no			0	0	rental agreement	no		Less than 5,000 GSF
Rocky Flats, CO Site																		
Rocky Flats, CO Site	Other Buildings	RFS-BLDG-EQUIPSTOR	2,426,033	no						yes	2,426,033		0	0	Total area in 2003 was 2,427,101 square feet. All except one building demolished between 2003 and 2008. Only RE used for this building.	no		Previously demolished.
Rocky Flats, CO Site	Equipment Storage Building	RFS-BLDG-EQUIPSTOR	1,068	no			0	0	no potable water use	yes	1,068		1,068	1,068	Only RE used for this building.	no		Less than 5,000 sq. feet
Tuba City, AZ, Disposal Site																		
Tuba City, AZ, Disposal Site	Control Building	TUB-BLDG-CONTROL	1,018	no			0	0	Non-potable water used at Tuba City site. Water would require treatment prior to use.	yes	1,018	1,018	1,018	1,018		no		Less than 5,000 sq. feet
Tuba City, AZ, Disposal Site	Greenhouse	TUB01-GH	0	no			0	0	Non-potable water used at Tuba City site. Water would require treatment prior to use.	yes	761		761	0	sold to private entity	no		Less than 5,000 sq. feet
Tuba City, AZ, Disposal Site	Shop/Laboratory Building	TUB-BLDG-SHOPLAB	1,176	no			0	0	Non-potable water used at Tuba City site. Water would require treatment prior to use.	yes	1,176	1,176	1,176	1,176		no		Less than 5,000 sq. feet
Tuba City, AZ, Disposal Site	Storage Shed	TUB-BLDG-STORSHED1	282	no			0	0	no potable water use	no			282	282	no power	no		Less than 5,000 sq. feet
Tuba City, AZ, Disposal Site	Storage Shed 2	TUB-BLDG-STORSHED2	282	no				0	no potable water use	no				282	Added in FY2010.	no		Less than 5,000 sq. feet
Weldon Spring, MO, Site																		
Weldon Spring, MO, Site	Administration Building	WEL-BLDG-ADMIN	36,030	no			0	0	Buildings' utilities and maintenance provided by university. LM owns buildings.	yes	36,030		36,030	36,030	leased	yes	36,030	
Weldon Spring, MO, Site	Interpretive Center	WEL-BLDG-INTERPCNTR	9,478	no			0	0	Buildings' utilities and maintenance provided by university. LM owns buildings.	yes	9,478		9,478	10,663	Utilities paid by university, but LM owned; SF changed in 2010 reporting due to remodeling addition	yes	9,478	
Weldon Spring, MO, Site	Leachate Collection & Removal Facility	WEL01-LCRS	1,284	no			0	0	no potable water use	yes	1,284		1,284	0	Identified as an OSF in 2010; utilities paid by uni	no		Less than 5,000 sq. feet
Weldon Spring, MO, Site	Storage Shed	WEL01-SS	800	no			0	0	no potable water use	yes	800		800	800	utilities paid by university, but LM owned	no		Less than 5,000 sq. feet

Notes: Some OSFs are part of remedial systems. The area (in SF) is identified as zero on this page, but energy used by the system is identified in other data reports. Facilities that LM leases are not included on this list. This baseline number has fluctuated over the past few years due to FIMS reclassifications, appropriate inclusion of buildings in baseline, and corrections for true building SF. Confirmation of the actual number is underway.

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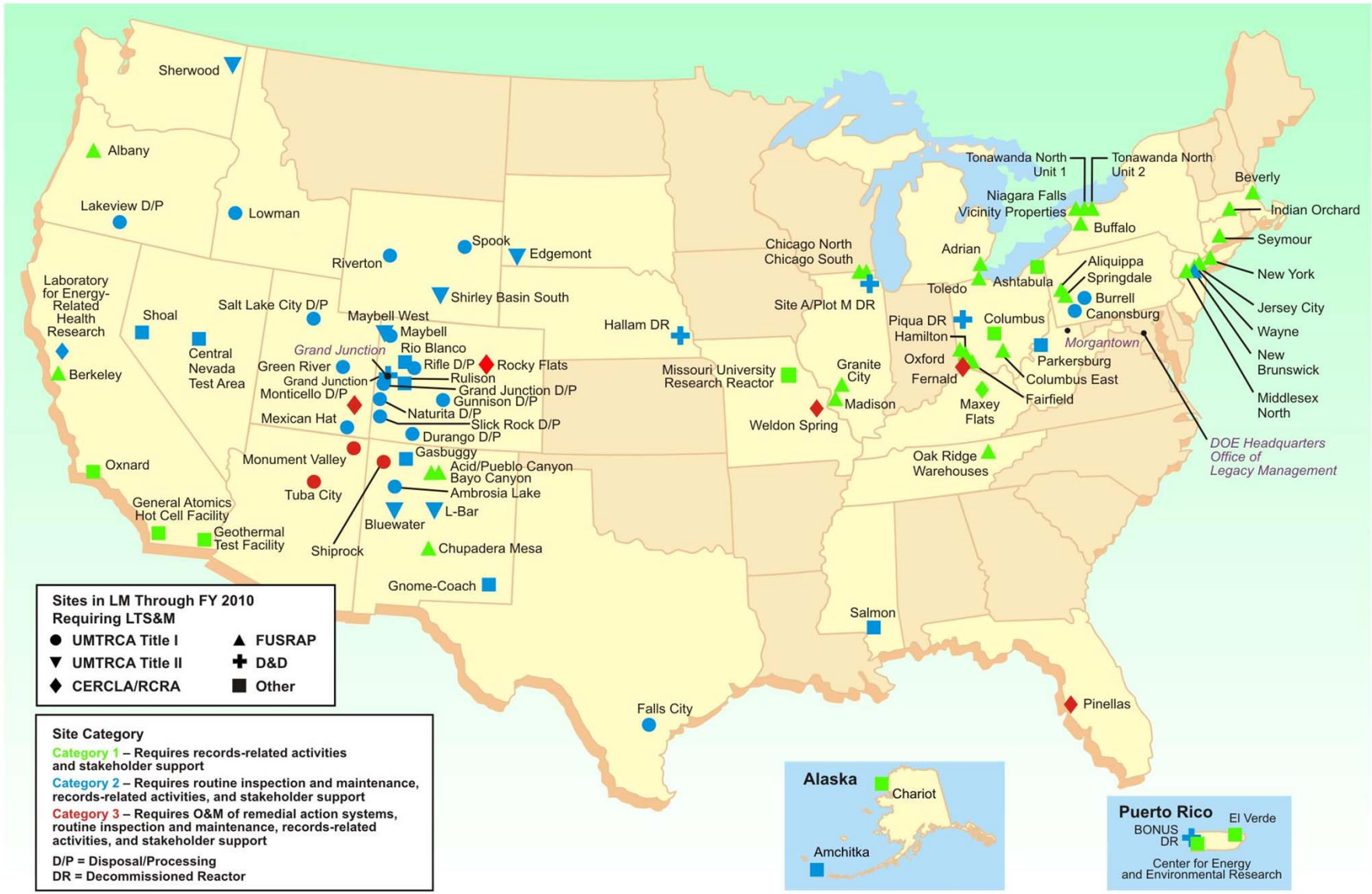
End of FY	Number of LM Sites	Refr.	Notes
2003	33	a	Baseline for Energy data
2004	63	a	LM established Dec. 15, 2003
2005	67	a	Baseline for Fleet data
2006	70	b	
2007	71	b	Baseline for Water data
2008	83	b	Baseline for GHG data
2009	85	b	
2010	87	b	

References:

a. Office of Legacy Management - The First Five Years FY 2004-2008

b. LM Site Mangement Guide (aka Blue Book)


Sherwood
Albany
Lakeview D/P
Lowman
Riverton
Spook
Edgemont
Shirley Basin South
Laboratory for Energy-Related Health Research
Shoal
Salt Lake City D/P
Maybell West
Maybell
Rio Blanco
Rifle D/P
Rocky Flats
Rulison
Grand Junction D/P
Gunnison D/P
Naturita D/P
Slick Rock D/P
Durango D/P
Grand Junction
Green River
Monticello D/P
Mexican Hat
Central Nevada Test Area
Berkeley
Oxnard
Monument Valley
Tuba City
Gasbuggy
Acid/Pueblo Canyon
Bayo Canyon
Ambrosia Lake
L-Bar
Bluewater
Shiprock
Chupadera Mesa
Gnome-Coach
General Atomics Hot Cell Facility
Geothermal Test Facility
Hallam DR
Missouri University Research Reactor
Site A/Plot M DR
Chicago North
Chicago South
Weldon Spring
Granite City
Madison
Falls City
Salmon
Oak Ridge Warehouses
Tonawanda North Unit 1
Tonawanda North Unit 2
Niagara Falls Vicinity Properties
Buffalo
Adrian
Toledo
Ashtabula
Aliquippa
Springdale
Burrell
Canonsburg
Piqua DR
Columbus
Hamilton
Oxford
Fernald
Columbus East
Fairfield
Maxey Flats
Morgantown
Parkersburg
Beverly
Indian Orchard
Seymour
New York
Jersey City
Wayne
New Brunswick
Middlesex North
DOE Headquarters Office of Legacy Management
Pinellas
Alaska
Chariot
Amchitka
Puerto Rico
BONUS DR
El Verde
Center for Energy and Environmental Research
Sites in LM Through FY 2010 Requiring LTS&M
UMTRCA Title I
UMTRCA Title II
CERCLA/RCRA
FUSRAP
D&D
Other
Site Category
Category 1 – Requires records-related activities and stakeholder support
Category 2 – Requires routine inspection and maintenance, records-related activities, and stakeholder support
Category 3 – Requires O&M of remedial action systems, routine inspection and maintenance, records-related activities, and stakeholder support
D/P = Disposal/Processing
DR = Decommissioned Reactor

Attachment E

Request for Renewable Energy Waiver for FY 2010

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On-Site Renewable Energy Waiver Request
Office of Legacy Management

A request for a waiver to the requirement of DOE Order 430.2B is required if the office of Legacy Management (LM) does not acquire 7.5% of its total annual electricity consumption from on-site renewable sources by 2010. EPACT 2005 allows the on-site generated renewable electric energy be counted at two times the actual thus lowering the goal to 3.75%.

An evaluation of the six LM sites where electricity is purchased was performed and documented in the report *Renewable Energy Project Evaluations, LMS/505800*.

1. The report concluded that renewable energy projects were not cost effective at the midwestern site (Fernald, OH) because the solar and wind resources were not adequate to justify a renewable energy project. With current technology, no project was found that could generate 3.75% of Fernald's annual electricity consumption with a payout less than 30 years.

2. & 3. Renewable energy projects at two western sites (Shiprock, NM; and Monument Valley, AZ) are not viable because the electricity utility does not allow renewable energy projects to be connected to the grid.

4. The Monticello, UT, will not require significant electricity after 2-3 years which is less than the payout for a project.

5. & 6. The two remaining sites (Tuba City, AZ; and Grand Junction Disposal Site, CO) have good solar resources and long mission lives. Payouts for the projects, if funded by LM funds, are 15-20 years.

LM's electricity consumption is approximately 7,800 kWhr/year of which 21.5 kWhr/year is produced with solar photovoltaic systems. Production will increase by about 80 kWhr/year when the solar photovoltaic system under construction at Tuba City, AZ, is completed. An additional 190 kWhr/year must be generated to meet the 3.75% goal. The additional electricity could be generated by a 125 kW system at Grand Junction or a 120 kW system at Tuba City. Since funding, design, utility approval, construction, and start up probably could not occur in FY2010, a waiver is requested.

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Attachment F

PPTRS Printouts

Note: First three pages are revised GHG emissions for FY2010.
Use instead of PPTRS 2010 GHG printouts.

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LM 2010

4 Scope 3: M&O Contractor Business Air Travel

Must be filled in

	Total distance flown (miles)	C02 (kg CO2 per Passenger mile)	CH4 (kg CH4 per Passenger mile)	N20 (kg N20 per Passenger mile)	Total Quantity Emitted CO2	Total Quantity Emitted CH4	Total Quantity Emitted N2O	Unit of Measure	GWP Factor for CO2	GWP Factor for CH4	GWP Factor for N2O	Unit of Measure	Total Quantity Emitted (CO2e)	Unit of Measure	Total Quantity Emitted (CO2e)	Unit of Measure
Short	250	0.277	0.0000104	0.0000085	69.3	0.0	0.0	kg	1	21	310	CO2e	70.0	kg CO2e	0.1	MT CO2e
Medium	30598	0.229	0.0000104	0.0000085	7,006.9	0.3	0.3	kg	1	21	310	CO2e	7,094.3	kg CO2e	7.1	MT CO2e
Long	1340881	0.185	0.0000104	0.0000085	248,063.0	13.9	11.4	kg	1	21	310	CO2e	251,889.1	kg CO2e	251.9	MT CO2e
Unknown	0	0.271	0.0000104	0.0000085	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
Total GHGs (mtCO2e)															259.1	MT CO2e

1371729

Short	**<300 miles**
Medium	**300 - <700 miles**
Long	**>700 miles**

OR:

		Taxes	Resulting fare	$ per mile	Miles	C02 (kg CO2 per Passenger mile)	CH4 (kg CH4 per Passenger mile)	N20 (kg N20 per Passenger mile)	Total Quantity Emitted CO2	Total Quantity Emitted CH4	Total Quantity Emitted N2O	Unit of Measure	GWP Factor for CO2	GWP Factor for CH4	GWP Factor for N2O	Unit of Measure	Total Quantity Emitted (CO2e)	Unit of Measure	Total Quantity Emitted (CO2e)	Unit of Measure
Contractor spend on domestic business air travel:	$ -	15.50%	0	0.1475	-	0.271	0.0000104	0.0000085	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
Contractor spend on international air travel	$ -	15.50%	0	0.128	-	0.271	0.0000104	0.0000085	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
Total GHGs (mtCO2e)																			0.0	MT CO2e

OR:

If you are unable to calculate GHG emissions from contractor air travel using either Option 1 or 2 you may use an alternative method of your choosing. Please detail the methd used, any assumptions made and the calculated GHGs in this text box. Please also provide references to any external tools used.

Method used:

Assumptions made:

Calculated GHGs:

References:

Comments:

LM 2010

6 Scope 3: Employee (Federal and M&O Contractor) Commuting

Must be filled in
May be filled in

Process Type	Vehicle Type	Fuel Type	Total Daily Commute Distance Traveled (miles)	Number of Commute Days per Year	Total Mileage by Vehicle Type	Unit of Measure	Emission Factor CO2	Unit of Measure	Emission Factor CH4	Unit of Measure	Emission Factor N2O	Unit of Measure	Total Quantity Emitted CO2	Total Quantity Emitted CH4	Total Quantity Emitted N2O	Unit of Measure	GWP Factor for CO2	GWP Factor for CH4	GWP Factor for N2O	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure
Commuter Travel - Personal Owned Vehicles	POV Passenger Car	Gasoline	6,144.0	214.8	1,319,854.1	Miles	0.364	kg CO2/Mile	0.000031	kg CH4/Mile	0.000032	kg N2O/Mile	480,426.9	40.9	42.2	kg	1	21	310	CO2e	494,379.1	kg CO2e	494.4	MT CO2e
	POV Passenger Car	Hybrid	140.0	161.0	22,540.0	Miles	0.192	kg CO2/Mile	0.000008	kg CH4/Mile	0.000005	kg N2O/Mile	4,327.7	0.2	0.1	kg	1	21	310	CO2e	4,366.0	kg CO2e	4.4	MT CO2e
	POV SUV or Truck	Gasoline	3,471.0	218.0	756,816.8	Miles	0.519	kg CO2/Mile	0.000036	kg CH4/Mile	0.000047	kg N2O/Mile	392,787.9	27.2	35.6	kg	1	21	310	CO2e	404,386.9	kg CO2e	404.4	MT CO2e
	POV SUV or Truck	Diesel	99.0	214.8	21,267.2	Miles	0.561	kg CO2/Mile	0.000001	kg CH4/Mile	0.0000015	kg N2O/Mile	11,926.1	0.0	0.0	kg	1	21	310	CO2e	11,936.4	kg CO2e	11.9	MT CO2e
	POV SUV or Truck	Hybrid	0.0	230.0	0.0	Miles	0.35	kg CO2/Mile	0.00001	kg CH4/Mile	0.000005	kg N2O/Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
	POV Motorcycle	Gasoline	83.0	218.5	18,135.5	Miles	0.167	kg CO2/Mile	0.00007	kg CH4/Mile	0.000007	kg N2O/Mile	3,028.6	1.3	0.1	kg	1	21	310	CO2e	3,094.6	kg CO2e	3.1	MT CO2e
Commuter Travel - Car / Van Pools	Car Pool	Gasoline	1,081.0	230.0	248,630.0	Miles	0.182	kg CO2/Passenger Mile	0.0000155	kg CH4/Passer	0.000016	kg N2O/Passenger Mile	45,250.7	3.9	4.0	kg	1	21	310	CO2e	46,564.8	kg CO2e	46.6	MT CO2e
	Van Pool	Gasoline	0.0	230.0	0.0	Miles	0.130	kg CO2/Passenger Mile	0.000009	kg CH4/Passer	0.00001175	kg N2O/Passenger Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
Commuter Travel - Mass Transit	Bus	Diesel	0.0	230.0	0.0	Miles	0.107	kg CO2/Passenger Mile	0.0000006	kg CH4/Passer	0.0000005	kg N2O/Passenger Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
	Metro / Transit Rail	Electric	0.0	230.0	0.0	Miles	0.163	kg CO2/Passenger Mile	0.000004	kg CH4/Passer	0.000002	kg N2O/Passenger Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
	Commuter Rail	Diesel	0.0	230.0	0.0	Miles	0.172	kg CO2/Passenger Mile	0.000002	kg CH4/Passer	0.000001	kg N2O/Passenger Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
	Intercity Rail	Diesel	0.0	230.0	0.0	Miles	0.185	kg CO2/Passenger Mile	0.000002	kg CH4/Passer	0.000001	kg N2O/Passenger Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
Commuter Travel - Human Powered	Walking and/or Bicycling		24.0	230.0	5,520.0	Miles	0	kg CO2/Mile	0	kg CH4/Mile	0	kg N2O/Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e

Total Commuter Travel Emissions	964.7	MT CO2e

Total Commuter Travel Emissions	964.7	MT CO2e

Source: *U.S. EPA Climate Leaders Program, Technical Guidance, Optional Emissions from Commuting, Business Travel, and Product Transport, see: http://www.epa.gov/stateply/documents/resources/commute_travel_product.pdf*

Source: *U.K. Defra Company Reporting Guidelines emissions factors for Hybrid vehicles http://www.defra.gov.uk/environment/business/reporting/conversion-factors.htm*

Comments/Assumptions:

Same % of vehicle type is consistent between those taking survey and those not taking survey.

Total # of employees = 374 and did not include employees working at Forrestal or Yucca.

# of commuter days was adjusted to account for avg. # of days the workers travelled per week.

LM 2010

5 Scope 3: Employee (Federal and M&O Contractor) Business Ground Travel

Must be filled in
May be filled in

Default Methodology (A)

Process Type	Vehicle Type	Fuel Type	Annual number of vehicle rentals	Average Rental Mileage per Trip			Total Mileage by Vehicle Type	Unit of Measure	Emission Factor CO2	Unit of Measure	Emission Factor CH4	Unit of Measure	Emission Factor N2O	Unit of Measure	Total Quantity Emitted CO2	Total Quantity Emitted CH4	Total Quantity Emitted N2O	Unit of Measure	GWP Factor for CO2	GWP Factor for CH4	GWP Factor for N2O	Unit of Measure	Total Quantity Emitted (CO2e)	Unit of Measure	Total Quantity Emitted (CO2e)	Unit of Measure
Ground Business Travel Emissions - Rentals Emissions	Passenger Car	Gasoline	0.0	419.0			0.0	Miles	0.364	kg CO2/Mile	0.000031	kg CH4/Mile	0.000032	kg N2O/Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
	SUV or Truck	Gasoline	0.0	419.0			0.0	Miles	0.519	kg CO2/Mile	0.000036	kg CH4/Mile	0.000047	kg N2O/Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
Personal Vehicle Use	Passenger Car	Gasoline					0.0	Miles	0.364	kg CO2/Mile	0.000031	kg CH4/Mile	0.000032	kg N2O/Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
	SUV or Truck	Gasoline					0.0	Miles	0.519	kg CO2/Mile	0.000036	kg CH4/Mile	0.000047	kg N2O/Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e

Sub-Total Rental Emissions	0.0	MT CO2e

Or:

Advanced Methodology (B)

Process Type	Vehicle Type	Fuel Type	Total Quantity Fuel Purchased	Unit of Measure	Average MPG	Unit of Measure	Total Mileage by Vehicle Type	Unit of Measure	Emission Factor CO2	Unit of Measure	Emission Factor CH4	Unit of Measure	Emission Factor N2O	Unit of Measure	Total Quantity Emitted CO2	Total Quantity Emitted CH4	Total Quantity Emitted N2O	Unit of Measure	GWP Factor for CO2	GWP Factor for CH4	GWP Factor for N2O	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure
Ground Business Travel Emissions - Direct Fuel Purchase Emissions (rental Vehicle used for business purposes)	Passenger Car	Gasoline	6,516.2	Gallons	22.5	Miles / Gallon	146,614.7	Miles	0.364	kg CO2/Mile	0.000031	kg CH4/Mile	0.000032	kg N2O/Mile	53,367.8	4.5	4.7	kg	1	21	310	CO2e	54,917.6	kg CO2e	54.9	MT CO2e
	SUV or Truck	Gasoline	0.0	Gallons	16.2	Miles / Gallon	0.0	Miles	0.519	kg CO2/Mile	0.000036	kg CH4/Mile	0.000047	kg N2O/Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
	SUV or Truck	Diesel	0.0	Gallons	18.1	Miles / Gallon	0.0	Miles	0.561	kg CO2/Mile	0.000001	kg CH4/Mile	0.0000015	kg N2O/Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
Personal Vehicle Use	Passenger Car	Gasoline					95,115.5	Miles	0.364	kg CO2/Mile	0.000031	kg CH4/Mile	0.000032	kg N2O/Mile	34,622.0	2.9	3.0	kg	1	21	310	CO2e	35,627.5	kg CO2e	35.6	MT CO2e
	SUV or Truck	Gasoline					55,861.5	Miles	0.519	kg CO2/Mile	0.000036	kg CH4/Mile	0.000047	kg N2O/Mile	28,992.1	2.0	2.6	kg	1	21	310	CO2e	29,848.2	kg CO2e	29.8	MT CO2e

Sub-Total Rental Direct Fuel Purchase Emissions	120.4	MT CO2e

Optional but Encouraged:

Advanced Methodology (C)

Process Type	Vehicle Type	Fuel Type	Number of Agency Business Trip	Average Passenger Miles per Trip	Average MPG	Unit of Measure	Total Mileage by Vehicle Type	Unit of Measure	Emission Factor CO2	Unit of Measure	Emission Factor CH4	Unit of Measure	Emission Factor N2O	Unit of Measure	Total Quantity Emitted CO2	Total Quantity Emitted CH4	Total Quantity Emitted N2O	Unit of Measure	GWP Factor for CO2	GWP Factor for CH4	GWP Factor for N2O	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure
Ground Business Travel - Mass Transit	Bus	Diesel	0.0	0.0			0.0	Miles	0.107	kg CO2/Passenger Mi	0.0000006	kg CH4/Passenger Mile	0.0000005	kg N2O/Passe	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
	Metro / Transit R	Electric	0.0	0.0			0.0	Miles	0.163	kg CO2/Passenger Mi	0.000004	kg CH4/Passenger Mile	0.000002	kg N2O/Passe	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
	Commuter Rail	Diesel	0.0	0.0			0.0	Miles	0.172	kg CO2/Passenger Mi	0.000002	kg CH4/Passenger Mile	0.000001	kg N2O/Passe	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
	Intercity Rail	Diesel	0.0	0.0			0.0	Miles	0.185	kg CO2/Passenger Mi	0.000002	kg CH4/Passenger Mile	0.000001	kg N2O/Passe	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e

Sub-Total Rental Direct Fuel Purchase Emissions	0.0	MT CO2e

Total Ground Business Travel Emissions	**120.4**	**MT CO2e**

Total Ground Business Travel Emissions	120.4	MT CO2e

Source: *U.S. EPA Climate Leaders Program, Technical Guidance, Optional Emissions from Commuting, Business Travel, and Product Transport, see: http://www.epa.gov/stateply/documents/resources/commute_travel_product.pdf*

Commetns:

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Site Profile

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Pollution Prevention Tracking and Reporting System

Guidance

Site Name: Office of Legacy Management
FY Year: 2010

Site Information:

Site Name:	Office of Legacy Management
Lead PSO:	LM
Other PSOs with reportable activities at this site:	--Select-- EE EM FE NE NA PM RW SC MA

Note: Please keep holding the CTRL key to make a multiple selection.

DOE Point of Contact Information:

DOE Point of Contact:	Tracy Ribeiro
DOE Phone #:	970-248-6621 (nnn) nnn-nnnn or nnn-nnn-nnnn
DOE Email Address:	tracy.ribeiro@lm.doe.gov
DOE Fax #:	970-248-6023
DOE Employee Address:	DOE Grand Junction Office 2597 B3/4 Road

Contractor Point of Contact Information:

Company Name:	S.M. Stoller
Contractor Point of Contact:	Darlene DePinho
Contractor Phone #:	970-248-6576 (nnn) nnn-nnnn or nnn-nnn-nnnn
Contractor Email Address:	darlene.depinho@lm.doe.gov
Contractor Fax #:	970-248-6040
Contractor Address:	2597 B3/4 Road Grand Junction, CO 81503

Additional Question

Indicate local, state, regional, and/or national awards (not including DOE/NNSA recognition) received during the reporting period

for environmental sustainability and environmental compliance efforts:

Check Spelling

DOE Federal Energy Management Program (FEMP), 2010 Department of Energy Management Award honoring outstanding achievements in energy, water, and fleet management in FY 2009. The Office of Legacy Management was selected to receive an award for System Operation and Analysis at Remote Sites (SOARS).

Check Validation Submit

Last updated October 1, 2010
Return to Home Page

Technical questions? E-mail us at: P2support@hq.doe.gov
or call HSS InfoCenter at 800-473-4375

Electronics Entry

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Pollution Prevention Tracking and Reporting System

Guidance

Site Name: Office of Legacy Management
FY Year: 2010

This record has been approved by cbuffo at 12/15/2010 and cannot be edited. If this data is incorrect, please contact P2 Support at 800-473-4375 or email to p2support@eh.doe.gov

ELECTRONICS

EPEAT Data Entry

	Desktop Computers # of Units	CRT Monitors # of Units	LCD Monitors # of Units	Laptop Computers # of Units
EPEAT - Registered (Bronze)	0	0	0	0
EPEAT - Registered (Silver)	0	0	3	0
EPEAT - Registered (Gold)	44	0	64	59
Not EPEAT - Registered	0	0	0	0

Electronics Data Entry

Electronics Recycling:

Conversion factors: Use the average measures below to convert gross weights into number of units for P2 reporting. These values are used by the Federal Electronics Challenge and authorized by the EPA.

CPU - 27 lbs
CRT Monitor - 14" - 15 lbs, 15" - 17 lbs, 17" - 25 lbs, 20" - 70 lbs
LCD Monitor - 25 lbs
Laptop - 7 lbs

Did your site dispose of any mixed electronics (not segregated by type)?	Yes

How did your site manage computer equipment taken out of service in fiscal year 2010?

	Desktop Computers # of units	CRT Monitors # of units	LCD Monitors # of units	Laptop Computers # of units
Transfer or Donate for Reuse:	0	0	0	0

Sent for Recycling:	0	0	0	0
Sent for Disposal (e.g., Landfill Facilities):	0	0	0	0

Optional Electronics Data Entry

	Printers # of units	Multifunction devices (MFDs) # of units	Televisions # of units	Servers # of units	Cellular/mobile telephones # of units	Personal digital assistants (PDAs) # of units
Transfer or Donate for Reuse:	0	0	0	0	0	0
Sent for Recycling:	0	0	0	0	0	0
Sent for Disposal (e.g., Landfill Facilities):	0	0	0	0	0	0

If your site did not segregate electronics by product type prior to disposition, please indicate the gross weight sent to each of the following:

Transfer or Donate for Reuse:	1.07428	mt
Sent for Recycling:	1.28321	mt
Sent for Disposal:	0	mt

Note: DO NOT include items segregated by product type. These should be reported in the previous section.

Additional Questions

1. How many computers and monitors are in use at your organization?

494 Desktop computers; 0 CRT Monitors; 752 LCD Monitors; 228 Laptop/notebook computers;

2. Are ENERGY STAR® power management features enabled on non-exempt computers (desktops and laptops/notebooks) and/or monitors at your organization? Yes

If yes, estimated percentage of enabled non-exempt monitors: 100 %

3. Are eligible computers, printers, copiers, and multifunction devices at your organization set to default to double-sided printing? Yes

4. Estimated percentage of eligible computers set to double-sided printing by default: 50 %

5. Estimated percentage of eligible printers, copiers and multifunction devices set to double-sided printing by default: 50 %

6. Number of printers, copiers and multifunction devices incapable of duplex printing: 52

7. If your organization sent electronic equipment to be recycled, which of the following did you use? (Check all that apply.)

- [ ] Responsible Recycling (R2) or e-Stewards Certified Recycler
- [ ] UNICOR
- [ ] Manufacturer Take-Back Program (for EPEAT registered products)
- [ ] Manufacturer Take-Back Program (for non-EPEAT registered products)
- [ ] Defense Reutilization and Marketing Service (DRMS)
- [x] Other (e.g., a local non-certified recycler)

(If you checked "Manufacturer Take-Back Program (for non-EPEAT registered products)," "DRMS," or "Other") What, if any, due diligence measures did your organization take to ensure that the equipment was recycled in an environmentally sound manner? (Check all that apply.)

- [ ] Conducted onsite review of the recycler
- [ ] Relied on onsite review conducted by another federal facility or agency
- [x] Other, Please specify:

```
Contracted recyclers that were certified by or members of electronic recycling
organizations as required by DOE Order 450.1A.
```

General Comments:

```
Question # 1: Based on the best information available in the DOE-LM 'personal property'
database ('personal property' is a GSA term).

Question # 2: Though power management features are enabled, technical shortcomings with the
Windows XP operating system may not allow these features to be fully operable.
```

Approved and Lock Submit

Last updated October 1, 2010
Return to Home Page

Technical questions? E-mail us at: P2support@hq.doe.gov
or call HSS InfoCenter at 800-473-4375

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Waste and Toxics

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Pollution Prevention Tracking and Reporting System

Guidance

Site Name: Office of Legacy Management
FY Year: 2010

This record has been approved by ddepinho at 12/1/2010 and cannot be edited. If this data is incorrect, please contact P2 Support at 800-473-4375 or email to p2support@eh.doe.gov

Waste and Toxics Management Data Entry

Notes:

- Municipal Solid Waste

Municipal solid waste consists of unwanted materials, such as trash, that are generated by normal housekeeping activities and are not considered hazardous, radioactive, or covered under the Toxic Substance Control Act (TSCA). The term "municipal solid waste" is replacing the term "sanitary waste" from prior reporting years to avoid confusion with new 2010 waste reporting categories and to mirror the terms used by EPA and OMB.
- Sites should report these totals in metric tons.
- Diversion does not include waste-to-energy activity.

Construction and Demolition debris landfilled:	22.13
Construction and Demolition debris diverted from waste stream:	84.48
Organic materials composted on-site:	9.63
Organic materials composted off-site:	1.14
Total municipal solid waste diverted (not including C & D):	147.8
Total municipal solid waste (excluding C & D debris) sent to landfill: Of this amount % sent to off-site landfill: 100 % Of this amount % sent to on-site landfill: 0 %	119.6
Material and debris generated from posted radiological areas including wastes identified by regulatory agreement as potentially contaminated with hazardous or radioactive constituents:	0

Comment:

Additional Questions

1. Please describe your site's progress in achieving its toxic chemical reduction goals. Include description of the chemicals being targeted, the reduction goals, efforts completed to date, and next steps, if any.

Chemical inventory maintained for all sites. Ability to share chemicals is in place, although not very cost effective if shipping is involved. SF6 questionaire resulted in no SF6 at DOE-LM sites. Next steps - assess chemical recycling through local community programs; evaluate site

2. Does your site have an integrated pest management program that covers buildings and grounds?

Yes

If not, please explain:

Integrated pest management controls are used at a few LM sites, but not implemented consistently at all sites.

Approved and Lock | Submit

Last updated October 1, 2010
Return to Home Page

Technical questions? E-mail us at: P2support@hq.doe.gov
or call HSS InfoCenter at 800-473-4375

Sustainable Acquisitions

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Pollution Prevention Tracking and Reporting System

Guidance

Site Name: Office of Legacy Management
FY Year: 2010

This record has been approved by ddepinho at 12/1/2010 and cannot be edited. If this data is incorrect, please contact P2 Support at 800-473-4375 or email to p2support@eh.doe.gov

Sustainable Acquisition Data Entry
Contract Actions

	# Total contract actions	# Total with sustainable acquisition requirements	# FEMP-Designated or Energy Star	# Low standby power devices	# WaterSense	# Non-ozone depleting substances	# Biobased	# EPEAT	# Recycled content	# Environmentally Preferable	Comments
Prime contracts (Including M & O)	0	0	0	0	0	0	0	0	0	0	
Architect-Engineer	0	0	0	0	0	0	0	0	0	0	
Construction	25	25	0	0	0	0	0	0	2	1	
Janitorial	1	1	0	0	0	0	0	0	0	0	
Computer	13	13	0	0	0	0	0	13	0	0	
Service (including energy service company contracts)	88	88	0	0	0	0	0	0	0	0	
Other (please	0	0	0	0	0	0	0	0	0	0	

describe)											

Energy-Efficient Products Data Entry

Product Qualifying Requirements chart see here	**Total # purchased**	**Total # with designated attribute**	**Reason for any Exception**	**OPTIONAL: Describe any other impediments to product's purchase**	**OPTIONAL: Describe any plans to Increase the purchase of qualifying product**	**Comments**
FEMP-designated Air-Cooled Chillers (Scroll or Screw compressor)	0	0	☐ Life-cycle cost ☐ Performance			
NEMA Premium Electric Motors (Induction Motors Rated ≤600V, Random Wound, ≥1 HP)	0	0	☐ Life-cycle cost ☐ Performance			
ENERGY STAR Cool Roofs	0	0	☐ Life-cycle cost ☐ Performance			
FEMP-designated Commercial Downlight Luminaires (CFL or Metal Halide)	0	0	☐ Life-cycle cost ☐ Performance			
ENERGY STAR Enterprise Servers	0	0	☐ Life-cycle cost ☐ Performance			

Comment:

Additional Questions

1. Did your site purchase any of the following environmentally preferable products and/or services, including those used at facilities managed by GSA and leased facilities, in FY 2010?

- Carpet with multiple attributes (e.g. recycled content, biobased, recyclable materials, low- or no- VOCs) — No
- Green conference and meeting services — Yes
- Green janitorial products and services — Yes
- Low or no VOC paints — Yes
- Other (please describe) — No

Comment:

Internal meetings that are not contracted out are given green consideration for recycled content materials, recycling opportunities and carpooling.

2. In FY 2010, did your site purchase showerheads, water faucets or toilets?

No

If so, what percentage of each were WaterSense labeled products?

Showerheads: 0 %

Waterfaucets: 0 %

Toilets: 0 %

Comment:

Designated Biobased Products: FSRI 9002/EO13514

Note: Before submit Biobased Products, please make sure that the 'Site Contacts' have been filled out in 'Recycled Content Products'.
To submit the 'Site Contacts' data you have to:
- click here;
- select your site from the drop down box;
- click on the 'Access Report' button;
- click on the 'Site Contacts' link;
- fill out all REQUIRED fields;
- submit the form.

Approved and Lock | Submit

Last updated October 1, 2010
Return to Home Page

Technical questions? E-mail us at: P2support@hq.doe.gov or call HSS InfoCenter at 800-473-4375

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DOE FY 2010 RCRA/EO 13514 Completed Report
Construction Products

Grand Junction

Building Insulation Products

NOTE: GSA will provide data for DOE purchases of this product from its stock program. DO NOT include electronics obtained directly from GSA. Only provide amounts for your purchases from other sources (i.e. NONFEDERAL), including GSA schedule contracts.

Include only building insulation, not pipe or electrical insulation.

Total dollar amount of building insulation products (rock wool, fiberglass, cellulose loose-fill and spray-on, perlite composite board, or plastic rigid foams) purchased by your organization from NONFEDERAL sources:

$ 0.00

Dollar amount of building insulation products **containing recovered materials** purchased by your organization from NONFEDERAL sources:

$ 0.00

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

- ○ Yes
- ○ No
- ○ Not Applicable

Did you purchase building insulation products containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

Executive Order 13514 requires that 100 percent of purchases of designated items meet or exceed the EPA guideline standards unless written justification is provided of the following: (check all those that apply)

- ☐ the item made with recovered materials is not available competitively within a reasonable period of time
- ☐ the item made with recovered materials is not available at a reasonable price
- ☐ the item made with recovered materials is not available within the performance requirements

- ☐ None of the above (Justification does not conform with valid reasons per EO 13514. Corrective action should be taken to prevent re-occurrence.)

Although this report does not require that you provide detailed documentation of the justification for not purchasing 100 percent of the designated item with recommended levels of recovered materials, EO

13514 requires that written justification be provided. Thus, documentation should be maintained at your site for future reference.

In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Carpet

Total dollar amount of polyester carpet for light and moderate wear applications purchased by your organization from NONFEDERAL sources:

$ 0.00

Dollar amount of polyester carpet for light and moderate wear applications **containing recovered materials** purchased by your organization from NONFEDERAL sources:

$ 0.00

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

- ○ Yes
- ○ No
- ○ Not Applicable

Did you purchase polyester carpet for light and moderate wear applications containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

Executive Order 13514 requires that 100 percent of purchases of designated items meet or exceed the EPA guideline standards unless written justification is provided of the following: (check all those that apply)

- ☐ the item made with recovered materials is not available competitively within a reasonable period of time
- ☐ the item made with recovered materials is not available at a reasonable price
- ☐ the item made with recovered materials is not available within the performance requirements

☐ None of the above (Justification does not conform with valid reasons per EO 13514. Corrective action should be taken to prevent re-occurrence.)

Although this report does not require that you provide detailed documentation of the justification for not purchasing 100 percent of the designated item with recommended levels of recovered materials, EO 13514 requires that written justification be provided. Thus, documentation should be maintained at your site for future reference.

In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Carpet Cushion

Total dollar amount of carpet cushion (bonded polyurethane, jute, synthetic fibers, rubber) by your organization from NONFEDERAL sources:

$ 0.00

Dollar amount of carpet cushion (bonded polyurethane, jute, synthetic fibers, rubber) **containing recovered materials** purchased by your organization from NONFEDERAL sources:

$ 0.00

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

- ○ Yes
- ○ No
- ○ Not Applicable

Did you purchase carpet cushion (bonded polyurethane, jute, synthetic fibers, rubber) containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

Executive Order 13514 requires that 100 percent of purchases of designated items meet or exceed the

EPA guideline standards unless written justification is provided of the following: (check all those that apply)

☐ the item made with recovered materials is not available competitively within a reasonable period of time
☐ the item made with recovered materials is not available at a reasonable price
☐ the item made with recovered materials is not available within the performance requirements

☐ None of the above (Justification does not conform with valid reasons per EO 13514. Corrective action should be taken to prevent re-occurrence.)

Although this report does not require that you provide detailed documentation of the justification for not purchasing 100 percent of the designated item with recommended levels of recovered materials, EO 13514 requires that written justification be provided. Thus, documentation should be maintained at your site for future reference.

In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Cement and Concrete

NOTE: GSA will provide data for DOE purchases of this product from its stock program. DO NOT include electronics obtained directly from GSA. Only provide amounts for your purchases from other sources (i.e. NONFEDERAL), including GSA schedule contracts.

Total dollar amount of cement and concrete purchased by your organization from NONFEDERAL sources:

$ 1,127.00

Dollar amount of cement and concrete containing **fly ash** purchased by your organization from NONFEDERAL sources:

$ 0.00

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

- ○ Yes
- ○ No
- ◉ Not Applicable

Dollar amount of cement and concrete containing **blast furnace slag** purchased by your organization from NONFEDERAL sources:

$ 217.00

Did you purchase cement and concrete containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

Executive Order 13514 requires that 100 percent of purchases of designated items meet or exceed the EPA guideline standards unless written justification is provided of the following: (check all those that apply)

- ☐ the item made with recovered materials is not available competitively within a reasonable period of time
- ☐ the item made with recovered materials is not available at a reasonable price
- ☑ the item made with recovered materials is not available within the performance requirements

- ☐ None of the above (Justification does not conform with valid reasons per EO 13514. Corrective action should be taken to prevent re-occurrence.)

Although this report does not require that you provide detailed documentation of the justification for not purchasing 100 percent of the designated item with recommended levels of recovered materials, EO 13514 requires that written justification be provided. Thus, documentation should be maintained at your site for future reference.

In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Consolidated and Reprocessed Latex Paint

NOTE: GSA will provide data for DOE purchases of this product from its stock program. DO NOT include electronics obtained directly from GSA. Only provide amounts for your purchases from other sources (i.e. NONFEDERAL), including GSA schedule contracts.

Total dollar amount of latex paint purchased by your organization from NONFEDERAL sources:

$ 0.00

Dollar amount of **consolidated and reprocessed** latex paint purchased by your organization from NONFEDERAL sources:

$ 0.00

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

- ○ Yes
- ○ No
- ○ Not Applicable

Did you purchase latex paint containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

Executive Order 13514 requires that 100 percent of purchases of designated items meet or exceed the EPA guideline standards unless written justification is provided of the following: (check all those that apply)

- ☐ the item made with recovered materials is not available competitively within a reasonable period of time
- ☐ the item made with recovered materials is not available at a reasonable price
- ☐ the item made with recovered materials is not available within the performance requirements

- ☐ None of the above (Justification does not conform with valid reasons per EO 13514. Corrective action should be taken to prevent re-occurrence.)

Although this report does not require that you provide detailed documentation of the justification for not purchasing 100 percent of the designated item with recommended levels of recovered materials, EO 13514 requires that written justification be provided. Thus, documentation should be maintained at your site for future reference.

In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA

designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Floor Tiles

Total dollar amount of rubber or plastic floor tiles (heavy duty/commercial use only) purchased by your organization from NONFEDERAL sources:

$ 0.00

Dollar amount of rubber or plastic floor tiles **containing recovered materials** purchased by your organization from NONFEDERAL sources:

$ 0.00

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

- ○ Yes
- ○ No
- ○ Not Applicable

Did you purchase rubber or plastic floor tiles (heavy duty/commercial use only) containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

Executive Order 13514 requires that 100 percent of purchases of designated items meet or exceed the EPA guideline standards unless written justification is provided of the following: (check all those that apply)

- ☐ the item made with recovered materials is not available competitively within a reasonable period of time
- ☐ the item made with recovered materials is not available at a reasonable price
- ☐ the item made with recovered materials is not available within the performance requirements

- ☐ None of the above (Justification does not conform with valid reasons per EO 13514. Corrective action should be taken to prevent re-occurrence.)

Although this report does not require that you provide detailed documentation of the justification for not purchasing 100 percent of the designated item with recommended levels of recovered materials, EO 13514 requires that written justification be provided. Thus, documentation should be maintained at your site for future reference.

In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514

justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Flowable Fill

Total dollar amount of flowable fill purchased by your organization from NONFEDERAL sources:

$ 0.00

Dollar amount of flowable fill **containing recovered materials (coal fly ash and/or ferrous foundry sands)** purchased by your organization from NONFEDERAL sources:

$ 0.00

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

- ○ Yes
- ○ No
- ○ Not Applicable

Did you purchase flowable fill containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

Executive Order 13514 requires that 100 percent of purchases of designated items meet or exceed the EPA guideline standards unless written justification is provided of the following: (check all those that apply)

- ☐ the item made with recovered materials is not available competitively within a reasonable period of time
- ☐ the item made with recovered materials is not available at a reasonable price
- ☐ the item made with recovered materials is not available within the performance requirements

- ☐ None of the above (Justification does not conform with valid reasons per EO 13514. Corrective action should be taken to prevent re-occurrence.)

Although this report does not require that you provide detailed documentation of the justification for not purchasing 100 percent of the designated item with recommended levels of recovered materials, EO 13514 requires that written justification be provided. Thus, documentation should be maintained at your site for future reference.

In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications

(technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Laminated Paperboard

NOTE: GSA will provide data for DOE purchases of this product from its stock program. DO NOT include electronics obtained directly from GSA. Only provide amounts for your purchases from other sources (i.e. NONFEDERAL), including GSA schedule contracts.

Total dollar amount of laminated paperboard purchased by your organization from NONFEDERAL sources:

$ 0.00

Dollar amount of laminated paperboard **containing recovered materials** purchased by your organization from NONFEDERAL sources:

$ 0.00

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

- ○ Yes
- ○ No
- ○ Not Applicable

Did you purchase laminated paperboard containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

Executive Order 13514 requires that 100 percent of purchases of designated items meet or exceed the EPA guideline standards unless written justification is provided of the following: (check all those that apply)

- ☐ the item made with recovered materials is not available competitively within a reasonable period of time
- ☐ the item made with recovered materials is not available at a reasonable price

☐ the item made with recovered materials is not available within the performance requirements

☐ None of the above (Justification does not conform with valid reasons per EO 13514. Corrective action should be taken to prevent re-occurrence.)

Although this report does not require that you provide detailed documentation of the justification for not purchasing 100 percent of the designated item with recommended levels of recovered materials, EO 13514 requires that written justification be provided. Thus, documentation should be maintained at your site for future reference.

In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Patio Blocks

NOTE: GSA will provide data for DOE purchases of this product from its stock program. DO NOT include electronics obtained directly from GSA. Only provide amounts for your purchases from other sources (i.e. NONFEDERAL), including GSA schedule contracts.

Total dollar amount of rubber or plastic patio blocks purchased by your organization from NONFEDERAL sources:

$ 0.00

Dollar amount of rubber or plastic patio blocks **containing recovered materials** purchased by your organization from NONFEDERAL sources:

$ 0.00

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

○ Yes
○ No
○ Not Applicable

Did you purchase rubber or plastic patio blocks containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

Executive Order 13514 requires that 100 percent of purchases of designated items meet or exceed the EPA guideline standards unless written justification is provided of the following: (check all those that apply)

☐ the item made with recovered materials is not available competitively within a reasonable period of time
☐ the item made with recovered materials is not available at a reasonable price
☐ the item made with recovered materials is not available within the performance requirements

☐ None of the above (Justification does not conform with valid reasons per EO 13514. Corrective action should be taken to prevent re-occurrence.)

Although this report does not require that you provide detailed documentation of the justification for not purchasing 100 percent of the designated item with recommended levels of recovered materials, EO 13514 requires that written justification be provided. Thus, documentation should be maintained at your site for future reference.

In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Railroad Grade Crossing Surfaces

Total dollar amount of Railroad Grade Crossing Surfaces (containing concrete, rubber, or steel) purchased by your organization from NONFEDERAL sources:

$ 0.00

Dollar amount of Railroad Grade Crossing Surfaces (containing concrete, rubber, or steel) **containing recovered materials (coal fly ash, tire rubber, steel)** purchased by your organization from NONFEDERAL sources:

$ 0.00

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

- ○ Yes
- ○ No
- ○ Not Applicable

Did you purchase Railroad Grade Crossing Surfaces containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

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- ☐ the item made with recovered materials is not available competitively within a reasonable period of time
- ☐ the item made with recovered materials is not available at a reasonable price
- ☐ the item made with recovered materials is not available within the performance requirements

- ☐ None of the above (Justification does not conform with valid reasons per EO 13514. Corrective action should be taken to prevent re-occurrence.)

Although this report does not require that you provide detailed documentation of the justification for not purchasing 100 percent of the designated item with recommended levels of recovered materials, EO 13514 requires that written justification be provided. Thus, documentation should be maintained at your site for future reference.

In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Shower and Restroom Dividers/Partitions

NOTE: GSA will provide data for DOE purchases of this product from its stock program. DO

NOT include electronics obtained directly from GSA. Only provide amounts for your purchases from other sources (i.e. NONFEDERAL), including GSA schedule contracts.

Total dollar amount of shower and restroom dividers/partitions purchased by your organization from NONFEDERAL sources:

$ 0.00

Dollar amount of shower and restroom dividers/partitions **containing recovered materials** purchased by your organization from NONFEDERAL sources:

$ 0.00

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

- ○ Yes
- ○ No
- ○ Not Applicable

Did you purchase shower and restroom dividers/partitions containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

Executive Order 13514 requires that 100 percent of purchases of designated items meet or exceed the EPA guideline standards unless written justification is provided of the following: (check all those that apply)

- ☐ the item made with recovered materials is not available competitively within a reasonable period of time
- ☐ the item made with recovered materials is not available at a reasonable price
- ☐ the item made with recovered materials is not available within the performance requirements

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In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Structural Fiberboard

NOTE: GSA will provide data for DOE purchases of this product from its stock program. DO NOT include electronics obtained directly from GSA. Only provide amounts for your purchases from other sources (i.e. NONFEDERAL), including GSA schedule contracts.

Dollar amount of structural fiberboard purchased by your organization from NONFEDERAL sources:

$ 0.00

Total dollar amount of structural fiberboard **containing recovered materials** purchased by your organization from NONFEDERAL sources:

$ 0.00

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

- ○ Yes
- ○ No
- ○ Not Applicable

Did you purchase structural fiberboard containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

Executive Order 13514 requires that 100 percent of purchases of designated items meet or exceed the EPA guideline standards unless written justification is provided of the following: (check all those that apply)

- ☐ the item made with recovered materials is not available competitively within a reasonable period of time
- ☐ the item made with recovered materials is not available at a reasonable price
- ☐ the item made with recovered materials is not available within the performance requirements

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site for future reference.

In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Modular Threshold Ramps

NOTE: GSA will provide data for DOE purchases of this product from its stock program. DO NOT include electronics obtained directly from GSA. Only provide amounts for your purchases from other sources (i.e. NONFEDERAL), including GSA schedule contracts.

Dollar amount of Modular Threshold Ramps purchased by your organization from NONFEDERAL sources:

$ 0.00

Total dollar amount of Modular Threshold Ramps **containing recovered materials** purchased by your organization from NONFEDERAL sources:

$ 0.00

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

- Yes
- No
- Not Applicable

Did you purchase Modular Threshold Ramps containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

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☐ the item made with recovered materials is not available competitively within a reasonable period of time
☐ the item made with recovered materials is not available at a reasonable price
☐ the item made with recovered materials is not available within the performance requirements

☐ None of the above (Justification does not conform with valid reasons per EO 13514. Corrective action should be taken to prevent re-occurrence.)

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In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Nonpressure Pipe

NOTE: GSA will provide data for DOE purchases of this product from its stock program. DO NOT include electronics obtained directly from GSA. Only provide amounts for your purchases from other sources (i.e. NONFEDERAL), including GSA schedule contracts.

Dollar amount of Nonpressure Pipe purchased by your organization from NONFEDERAL sources:

$ 0.00

Total dollar amount of Nonpressure Pipe **containing recovered materials** purchased by your organization from NONFEDERAL sources:

$ 0.00

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

- ○ Yes
- ○ No
- ○ Not Applicable

Did you purchase Nonpressure Pipe containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

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- ☐ the item made with recovered materials is not available competitively within a reasonable period of time
- ☐ the item made with recovered materials is not available at a reasonable price
- ☐ the item made with recovered materials is not available within the performance requirements

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In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Roofing Materials

NOTE: GSA will provide data for DOE purchases of this product from its stock program. DO NOT include electronics obtained directly from GSA. Only provide amounts for your purchases from other sources (i.e. NONFEDERAL), including GSA schedule contracts.

Dollar amount of Roofing Materials purchased by your organization from NONFEDERAL sources:

$ 0.00

Total dollar amount of Roofing Materials **containing recovered materials** purchased by your organization from NONFEDERAL sources:

$ 0.00

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

- ○ Yes
- ○ No
- ○ Not Applicable

Did you purchase Roofing Materials containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

Executive Order 13514 requires that 100 percent of purchases of designated items meet or exceed the EPA guideline standards unless written justification is provided of the following: (check all those that apply)

- ☐ the item made with recovered materials is not available competitively within a reasonable period of time
- ☐ the item made with recovered materials is not available at a reasonable price
- ☐ the item made with recovered materials is not available within the performance requirements

- ☐ None of the above (Justification does not conform with valid reasons per EO 13514. Corrective action should be taken to prevent re-occurrence.)

Although this report does not require that you provide detailed documentation of the justification for not purchasing 100 percent of the designated item with recommended levels of recovered materials, EO 13514 requires that written justification be provided. Thus, documentation should be maintained at your site for future reference.

In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

To print more categories, use the BACK button.

 Questions or Comments? E-mail us at: P2Support@eh.doe.gov

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Last updated October 1, 2009

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U.S. Department of Energy's
Pollution Prevention (P2) Program
FY 2010 RCRA/EO 13514 Reporting System

Data Entry - Designated Biobased Products

NOTE: GSA will provide data for DOE purchases of this product from its stock program. DO NOT include electronics obtained directly from GSA. Only provide amounts for your purchases from other sources (i.e. NONFEDERAL), including GSA schedule contracts.

**May overlap with recycled content requirements.
Recycled content requirements have precedence.

Product	Purchased Y/N	Purchased Conforming to Biobased Requirements Y/N	Total Dollar Amount of Biobased Product	Brand Name (including comments on performance)	Impediments to Use of Biobased Product
			OPTIONAL REPORTING CATEGORIES		
Cleaners/Solvents					
Adhesives & Mastic Removers	○ Yes ◉ No	○ Yes ◉ No	$ 0.00		
Bath & Spa Cleaners	◉ Yes ○ No	◉ Yes ○ No	$ 35.50	Elements E03	
Carpet & Upholstery Cleaners	◉ Yes ○ No	◉ Yes ○ No	$ 26.35	Elements E05	
Floor Strippers	○ Yes ◉ No	○ Yes ◉ No	$ 0.00		
Glass Cleaners	◉ Yes ○ No	◉ Yes ○ No	$ 51.60	Elements E02	
Graffiti & Grease Removers	◉ Yes ○ No	◉ Yes ○ No	$ 9.30	Elements E12	
Hand Cleaners & Sanitizers	◉ Yes ○ No	◉ Yes ○ No	$ 9.00	Elements E04	
Laundry Products	○ Yes ◉ No	○ Yes ◉ No	$ 0.00		
Construction Materials					
**Carpets	○ Yes ◉ No	○ Yes ◉ No	$ 0.00		
**Insulating Foam-Residential & Commercial	○ Yes ◉ No	○ Yes ◉ No	$ 0.00		
**Panels- Composite	○ Yes ◉ No	○ Yes ◉ No	$ 0.00		
Release Fluids- Concrete & Asphalt	○ Yes ◉ No	○ Yes ◉ No	$ 0.00		
Sealant- Urethane Roof Coating	○ Yes ◉ No	○ Yes ◉ No	$ 0.00		
Sealant- Water Tank Coating	○ Yes ◉ No	○ Yes ◉ No	$ 0.00		
Sealant- Wood &	○ Yes	○ Yes	$		

Concrete	◉ No	◉ No	0.00		
Dishware					
Cutlery- Disposable	○ Yes ◉ No	○ Yes ◉ No	$ 0.00		
**Disposable Containers	○ Yes ◉ No	○ Yes ◉ No	$ 0.00		
Lubricants					
2-Cycle Engine Oil	○ Yes ◉ No	○ Yes ◉ No	$ 0.00		
Firearm Lubricant	○ Yes ◉ No	○ Yes ◉ No	$ 0.00		
Greases	○ Yes ◉ No	○ Yes ◉ No	$ 0.00		
Metalworking Fluids	○ Yes ◉ No	○ Yes ◉ No	$ 0.00		
Penetrating Lubricant	○ Yes ◉ No	○ Yes ◉ No	$ 0.00		
Miscellaneous					
Bedding, Bed Linens, & Towels	○ Yes ◉ No	○ Yes ◉ No	$ 0.00		
De-Icers- General Purpose	○ Yes ◉ No	○ Yes ◉ No	$ 0.00		
Dust Suppressants	◉ Yes ○ No	○ Yes ◉ No	$ 11071.50	Soil Seal Concentrate	A biobased dust suppressant was
**Fertilizers	○ Yes ◉ No	○ Yes ◉ No	$ 0.00		
Films	○ Yes ◉ No	○ Yes ◉ No	$ 0.00		
Fluid Filled Transformers	○ Yes ◉ No	○ Yes ◉ No	$ 0.00		
Fuel Additives- Diesel	○ Yes ◉ No	○ Yes ◉ No	$ 0.00		
Hydraulic Fluids- Mobile Equipment	○ Yes ◉ No	○ Yes ◉ No	$ 0.00		
Hydraulic Fluids- Stationary Equipment	○ Yes ◉ No	○ Yes ◉ No	$ 0.00		
Lip Care Products	○ Yes ◉ No	○ Yes ◉ No	$ 0.00		
Sorbents	○ Yes ◉ No	○ Yes ◉ No	$ 0.00		
Other					
Insert Product	○ Yes ◉ No	○ Yes ◉ No	$ 0.00		
Insert Product	○ Yes ◉ No	○ Yes ◉ No	$ 0.00		
	○ Yes	○ Yes	$		

Insert Product	◉ No	◉ No	0.00		
Insert Product	○ Yes ◉ No	○ Yes ◉ No	$ 0.00		
Insert Product	○ Yes ◉ No	○ Yes ◉ No	$ 0.00		

Submit

Technical questions? E-mail us at: P2support@hq.doe.gov or call HSS InfoCenter at 800-473-4375

Last updated October 1, 2010

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DOE FY 2010 RCRA/EO 13514 Completed Report
Paper Products

Grand Junction

Bristols

NOTE: GSA and GPO will provide data for DOE purchases of this product from their stock programs. Please provide amounts for your purchases from other sources (i.e., NONFEDERAL), including GSA schedule contracts.

Total dollar amount of bristols (file folders, dyed filing products, index and card stock, pressboard, and tags and tickets) purchased by your organization from NONFEDERAL sources:

$ 1,555.21

Dollar amount of bristols **containing recovered materials** purchased by your organization from NONFEDERAL sources:

$ 1,555.21

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

- ○ Yes
- ○ No
- ◉ Not Applicable

Did you purchase bristols containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

Executive Order 13514 requires that 100 percent of purchases of designated items meet or exceed the EPA guideline standards unless written justification is provided of the following: (check all those that apply)

- ☐ the item made with recovered materials is not available competitively within a reasonable period of time
- ☐ the item made with recovered materials is not available at a reasonable price
- ☐ the item made with recovered materials is not available within the performance requirements

- ☐ None of the above (Justification does not conform with valid reasons per EO 13514. Corrective action should be taken to prevent re-occurrence.)

Although this report does not require that you provide detailed documentation of the justification for not purchasing 100 percent of the designated item with recommended levels of recovered materials, EO 13514 requires that written justification be provided. Thus, documentation should be maintained at your site for future reference.

In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Coated Printing Papers

NOTE: GSA and GPO will provide data for DOE purchases of this product from their stock programs. Please provide amounts for your purchases from other sources (i.e., NONFEDERAL), including GSA schedule contracts.

Total dollar amount of coated printing and writing papers (coated printing paper such as glossy paper and carbonless) purchased by your organization from NONFEDERAL sources:

$ 0.00

Dollar amount of coated printing and writing papers (coated printing paper such as glossy paper and carbonless) **containing recovered materials** purchased by your organization from NONFEDERAL sources:

$ 0.00

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

- ○ Yes
- ○ No
- ○ Not Applicable

Did you purchase coated printing and writing papers containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

Executive Order 13514 requires that 100 percent of purchases of designated items meet or exceed the EPA guideline standards unless written justification is provided of the following: (check all those that apply)

- ☐ the item made with recovered materials is not available competitively within a reasonable period of time
- ☐ the item made with recovered materials is not available at a reasonable price

☐ the item made with recovered materials is not available within the performance requirements

☐ None of the above (Justification does not conform with valid reasons per EO 13514. Corrective action should be taken to prevent re-occurrence.)

Although this report does not require that you provide detailed documentation of the justification for not purchasing 100 percent of the designated item with recommended levels of recovered materials, EO 13514 requires that written justification be provided. Thus, documentation should be maintained at your site for future reference.

In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Commercial/Industrial Sanitary Tissue Products

NOTE: GSA and GPO will provide data for DOE purchases of this product from their stock programs. Please provide amounts for your purchases from other sources (i.e., NONFEDERAL), including GSA schedule contracts.

Total dollar amount of sanitary tissue products (bathroom tissue, paper towels, paper napkins, facial tissue, and general purpose industrial wipes) purchased by your organization from NONFEDERAL sources:

$ 173.12

Dollar amount of commercial/industrial sanitary tissue products **containing recovered materials** purchased by your organization from NONFEDERAL sources:

$ 173.12

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

◉ Yes
○ No
○ Not Applicable

Did you purchase sanitary tissue products containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

Executive Order 13514 requires that 100 percent of purchases of designated items meet or exceed the EPA guideline standards unless written justification is provided of the following: (check all those that apply)

☐ the item made with recovered materials is not available competitively within a reasonable period of time
☐ the item made with recovered materials is not available at a reasonable price
☐ the item made with recovered materials is not available within the performance requirements

☐ None of the above (Justification does not conform with valid reasons per EO 13514. Corrective action should be taken to prevent re-occurrence.)

Although this report does not require that you provide detailed documentation of the justification for not purchasing 100 percent of the designated item with recommended levels of recovered materials, EO 13514 requires that written justification be provided. Thus, documentation should be maintained at your site for future reference.

In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Miscellaneous Paper Products (Tray Liners)

NOTE: GSA and GPO will provide data for DOE purchases of this product from their stock programs. Please provide amounts for your purchases from other sources (i.e., NONFEDERAL), including GSA schedule contracts.

Total dollar amount of Miscellaneous Paper Products - tray liners (used to line food service trays) purchased by your organization from NONFEDERAL sources:

$ 0.00

Dollar amount of Miscellaneous Paper Products - tray liners **containing recovered materials** purchased

by your organization from NONFEDERAL sources:

$ 0.00

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

- ○ Yes
- ○ No
- ○ Not Applicable

Did you purchase tray liners containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

Executive Order 13514 requires that 100 percent of purchases of designated items meet or exceed the EPA guideline standards unless written justification is provided of the following: (check all those that apply)

- ☐ the item made with recovered materials is not available competitively within a reasonable period of time
- ☐ the item made with recovered materials is not available at a reasonable price
- ☐ the item made with recovered materials is not available within the performance requirements

- ☐ None of the above (Justification does not conform with valid reasons per EO 13514. Corrective action should be taken to prevent re-occurrence.)

Although this report does not require that you provide detailed documentation of the justification for not purchasing 100 percent of the designated item with recommended levels of recovered materials, EO 13514 requires that written justification be provided. Thus, documentation should be maintained at your site for future reference.

In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Newsprint

NOTE: GSA and GPO will provide data for DOE purchases of this product from their stock programs. Please provide amounts for your purchases from other sources (i.e., NONFEDERAL), including GSA schedule contracts.

Total dollar amount of newsprint purchased by your organization from NONFEDERAL sources:

$ 0.00

Dollar amount of newsprint **containing recovered materials** purchased by your organization from NONFEDERAL sources:

$ 0.00

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

- ○ Yes
- ○ No
- ○ Not Applicable

Did you purchase newsprint containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

Executive Order 13514 requires that 100 percent of purchases of designated items meet or exceed the EPA guideline standards unless written justification is provided of the following: (check all those that apply)

- ☐ the item made with recovered materials is not available competitively within a reasonable period of time
- ☐ the item made with recovered materials is not available at a reasonable price
- ☐ the item made with recovered materials is not available within the performance requirements

- ☐ None of the above (Justification does not conform with valid reasons per EO 13514. Corrective action should be taken to prevent re-occurrence.)

Although this report does not require that you provide detailed documentation of the justification for not purchasing 100 percent of the designated item with recommended levels of recovered materials, EO 13514 requires that written justification be provided. Thus, documentation should be maintained at your site for future reference.

In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Paperboard & Packaging Products

NOTE: GSA and GPO will provide data for DOE purchases of this product from their stock programs. Please provide amounts for your purchases from other sources (i.e., NONFEDERAL), including GSA schedule contracts.

Total dollar amount of paperboard and packaging products (corrugated containers, solid fiber boxes, folding cartons, industrial paperboard, padded mailers, carrierboard, brown papers) purchased by your organization from NONFEDERAL sources:

$ 0.00

Dollar amount of paperboard and packaging products **containing recovered materials** purchased by your organization from NONFEDERAL sources:

$ 0.00

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

- ○ Yes
- ○ No
- ○ Not Applicable

Did you purchase paperboard and packaging products containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

Executive Order 13514 requires that 100 percent of purchases of designated items meet or exceed the EPA guideline standards unless written justification is provided of the following: (check all those that apply)

- ☐ the item made with recovered materials is not available competitively within a reasonable period of time
- ☐ the item made with recovered materials is not available at a reasonable price
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- ☐ None of the above (Justification does not conform with valid reasons per EO 13514. Corrective action should be taken to prevent re-occurrence.)

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In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Uncoated Printing and Writing Papers

NOTE: GSA and GPO will provide data for DOE purchases of this product from their stock programs. Please provide amounts for your purchases from other sources (i.e., NONFEDERAL), including GSA schedule contracts.

Total dollar amount of uncoated printing and writing papers (cotton fiber, text and cover, papeteries, offset, reprographic, forms bond, tablet, envelope, supercalendered, machine finished groundwood, check safety) purchased by your organization from NONFEDERAL sources :

$ 14,162.18

Dollar amount of uncoated printing and writing papers **containing recovered materials** purchased by your organization from NONFEDERAL sources:

$ 13,242.03

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

- ○ Yes
- ○ No
- ◉ Not Applicable

Did you purchase uncoated printing and writing papers containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

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☐ the item made with recovered materials is not available competitively within a reasonable period of time

☐ the item made with recovered materials is not available at a reasonable price
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In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

To print more categories, use the BACK button.

 Questions or Comments? E-mail us at: P2Support@eh.doe.gov

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Last updated October 1, 2009

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DOE FY 2010 RCRA/EO 13514 Completed Report
Non Paper Products

Grand Junction

Binders

NOTE: GSA will provide data for DOE purchases of this product from its stock program. DO NOT include electronics obtained directly from GSA. Only provide amounts for your purchases from other sources (i.e. NONFEDERAL), including GSA schedule contracts.

Total dollar amount of plastic-covered or chipboard, paperboard, or pressboard binders purchased by your organization from NONFEDERAL sources: $

$ 0.00

Dollar amount of plastic-covered or chipboard, paperboard, or pressboard binders **containing recovered materials** purchased by your organization from NONFEDERAL sources: $

$ 0.00

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

- ○ Yes
- ○ No
- ○ Not Applicable

Did you purchase plastic-covered or chipboard, paperboard, or pressboard binders containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

Executive Order 13514 requires that 100 percent of purchases of designated items meet or exceed the EPA guideline standards unless written justification is provided of the following: (check all those that apply)

- ☐ the item made with recovered materials is not available competitively within a reasonable period of time
- ☐ the item made with recovered materials is not available at a reasonable price
- ☐ the item made with recovered materials is not available within the performance requirements

- ☐ None of the above (Justification does not conform with valid reasons per EO 13514. Corrective action should be taken to prevent re-occurrence.)

Although this report does not require that you provide detailed documentation of the justification for not purchasing 100 percent of the designated item with recommended levels of recovered materials, EO 13514 requires that written justification be provided. Thus, documentation should be maintained at your site for future reference.

In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Office Recycling Containers

NOTE: GSA will provide data for DOE purchases of this product from its stock program. DO NOT include electronics obtained directly from GSA. Only provide amounts for your purchases from other sources (i.e. NONFEDERAL), including GSA schedule contracts.

Total dollar amount of office recycling containers (plastic, paper or steel) purchased by your organization from NONFEDERAL sources:

$ 0.00

Dollar amount of office recycling containers (plastic, paper or steel) **containing recovered materials** purchased by your organization from NONFEDERAL sources:

$ 0.00

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

- ○ Yes
- ○ No
- ○ Not Applicable

Did you purchase office recycling containers (plastic, paper or steel) containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

Executive Order 13514 requires that 100 percent of purchases of designated items meet or exceed the EPA guideline standards unless written justification is provided of the following: (check all those that apply)

- ☐ the item made with recovered materials is not available competitively within a reasonable period of time
- ☐ the item made with recovered materials is not available at a reasonable price

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In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Office Waste Receptacles

NOTE: GSA will provide data for DOE purchases of this product from its stock program. DO NOT include electronics obtained directly from GSA. Only provide amounts for your purchases from other sources (i.e. NONFEDERAL), including GSA schedule contracts.

Total dollar amount of office waste receptacles (plastic, paper or steel) purchased by your organization from NONFEDERAL sources:

$ 0.00

Dollar amount of office waste receptacles (plastic, paper or steel) **containing recovered materials** purchased by your organization from NONFEDERAL sources:

$ 0.00

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

○ Yes
○ No
○ Not Applicable

Did you purchase office waste receptacles (plastic, paper or steel) containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

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☐ the item made with recovered materials is not available competitively within a reasonable period of time
☐ the item made with recovered materials is not available at a reasonable price
☐ the item made with recovered materials is not available within the performance requirements

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In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Plastic Clip Portfolios

NOTE: GSA will provide data for DOE purchases of this product from its stock program. DO NOT include electronics obtained directly from GSA. Only provide amounts for your purchases from other sources (i.e. NONFEDERAL), including GSA schedule contracts.

Total dollar amount of plastic clip portfolios purchased by your organization from NONFEDERAL sources:

$ 0.00

Dollar amount of plastic clip portfolios containing recovered materials purchased by your organization

from NONFEDERAL sources:

$ 0.00

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

- ○ Yes
- ○ No
- ○ Not Applicable

Did you purchase plastic clip portfolios containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

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- ☐ the item made with recovered materials is not available competitively within a reasonable period of time
- ☐ the item made with recovered materials is not available at a reasonable price
- ☐ the item made with recovered materials is not available within the performance requirements

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Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Plastic Clipboards

NOTE: GSA will provide data for DOE purchases of this product from its stock program. DO NOT include electronics obtained directly from GSA. Only provide amounts for your purchases from other sources (i.e. NONFEDERAL), including GSA schedule contracts.

Total dollar amount of plastic clipboards purchased by your organization from NONFEDERAL sources:
$

$ 0.00

Dollar amount of plastic clipboards containing recovered materials purchased by your organization from NONFEDERAL sources:

$ 0.00

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

- ○ Yes
- ○ No
- ○ Not Applicable

Did you purchase plastic clipboards containing virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

Executive Order 13514 requires that 100 percent of purchases of designated items meet or exceed the EPA guideline standards unless written justification is provided of the following: (check all those that apply)

- ☐ the item made with recovered materials is not available competitively within a reasonable period of time
- ☐ the item made with recovered materials is not available at a reasonable price
- ☐ the item made with recovered materials is not available within the performance requirements

- ☐ None of the above (Justification does not conform with valid reasons per EO 13514. Corrective action should be taken to prevent re-occurrence.)

Although this report does not require that you provide detailed documentation of the justification for not purchasing 100 percent of the designated item with recommended levels of recovered materials, EO 13514 requires that written justification be provided. Thus, documentation should be maintained at your site for future reference.

In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Plastic Desktop Accessories

NOTE: GSA will provide data for DOE purchases of this product from its stock program. DO NOT include electronics obtained directly from GSA. Only provide amounts for your purchases from other sources (i.e. NONFEDERAL), including GSA schedule contracts.

Total dollar amount of plastic desktop accessories purchased by your organization from NONFEDERAL sources:

$ 0.00

Dollar amount of plastic desktop accessories **containing recovered materials** purchased by your organization from NONFEDERAL sources:

$ 0.00

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

- ○ Yes
- ○ No
- ○ Not Applicable

Did you purchase plastic desktop accessories containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

Executive Order 13514 requires that 100 percent of purchases of designated items meet or exceed the EPA guideline standards unless written justification is provided of the following: (check all those that apply)

- ☐ the item made with recovered materials is not available competitively within a reasonable period of time
- ☐ the item made with recovered materials is not available at a reasonable price
- ☐ the item made with recovered materials is not available within the performance requirements

- ☐ None of the above (Justification does not conform with valid reasons per EO 13514. Corrective action should be taken to prevent re-occurrence.)

Although this report does not require that you provide detailed documentation of the justification for not purchasing 100 percent of the designated item with recommended levels of recovered materials, EO 13514 requires that written justification be provided. Thus, documentation should be maintained at your site for future reference.

In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Plastic Envelopes

NOTE: GSA will provide data for DOE purchases of this product from its stock program. DO NOT include electronics obtained directly from GSA. Only provide amounts for your purchases from other sources (i.e. NONFEDERAL), including GSA schedule contracts.

Total dollar amount of plastic envelopes (Tyvek) purchased by your organization from NONFEDERAL sources:

$ 0.00

Dollar amount of plastic envelopes (Tyvek) **containing recovered materials** purchased by your organization from NONFEDERAL sources:

$ 0.00

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

- ○ Yes
- ○ No
- ○ Not Applicable

Did you purchase plastic envelopes (Tyvek) containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

Executive Order 13514 requires that 100 percent of purchases of designated items meet or exceed the EPA guideline standards unless written justification is provided of the following: (check all those that apply)

- ☐ the item made with recovered materials is not available competitively within a reasonable period of time
- ☐ the item made with recovered materials is not available at a reasonable price

☐ the item made with recovered materials is not available within the performance requirements

☐ None of the above (Justification does not conform with valid reasons per EO 13514. Corrective action should be taken to prevent re-occurrence.)

Although this report does not require that you provide detailed documentation of the justification for not purchasing 100 percent of the designated item with recommended levels of recovered materials, EO 13514 requires that written justification be provided. Thus, documentation should be maintained at your site for future reference.

In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Plastic File Folders

NOTE: GSA will provide data for DOE purchases of this product from its stock program. DO NOT include electronics obtained directly from GSA. Only provide amounts for your purchases from other sources (i.e. NONFEDERAL), including GSA schedule contracts.

Total dollar amount of plastic file folders purchased by your organization from NONFEDERAL sources:

$ 0.00

Dollar amount of plastic file folders containing recovered materials purchased by your organization from NONFEDERAL sources:

$ 0.00

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

○ Yes
○ No
○ Not Applicable

Did you purchase plastic file folders containing virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

Executive Order 13514 requires that 100 percent of purchases of designated items meet or exceed the EPA guideline standards unless written justification is provided of the following: (check all those that apply)

☐ the item made with recovered materials is not available competitively within a reasonable period of time
☐ the item made with recovered materials is not available at a reasonable price
☐ the item made with recovered materials is not available within the performance requirements

☐ None of the above (Justification does not conform with valid reasons per EO 13514. Corrective action should be taken to prevent re-occurrence.)

Although this report does not require that you provide detailed documentation of the justification for not purchasing 100 percent of the designated item with recommended levels of recovered materials, EO 13514 requires that written justification be provided. Thus, documentation should be maintained at your site for future reference.

In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Plastic Presentation Folders

NOTE: GSA will provide data for DOE purchases of this product from its stock program. DO NOT include electronics obtained directly from GSA. Only provide amounts for your purchases from other sources (i.e. NONFEDERAL), including GSA schedule contracts.

Total dollar amount of plastic presentation folders purchased by your organization from NONFEDERAL sources:

$ 0.00

Dollar amount of plastic presentation folders containing recovered materials purchased by your

organization from NONFEDERAL sources:

$ 0.00

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

- Yes
- No
- Not Applicable

Did you purchase plastic presentation folders containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

Executive Order 13514 requires that 100 percent of purchases of designated items meet or exceed the EPA guideline standards unless written justification is provided of the following: (check all those that apply)

- the item made with recovered materials is not available competitively within a reasonable period of time
- the item made with recovered materials is not available at a reasonable price
- the item made with recovered materials is not available within the performance requirements

- None of the above (Justification does not conform with valid reasons per EO 13514. Corrective action should be taken to prevent re-occurrence.)

Although this report does not require that you provide detailed documentation of the justification for not purchasing 100 percent of the designated item with recommended levels of recovered materials, EO 13514 requires that written justification be provided. Thus, documentation should be maintained at your site for future reference.

In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Plastic Trash Bags

NOTE: GSA will provide data for DOE purchases of this product from its stock program. DO NOT include electronics obtained directly from GSA. Only provide amounts for your purchases from other sources (i.e. NONFEDERAL), including GSA schedule contracts.

Total dollar amount of plastic trash bags purchased by your organization from NONFEDERAL sources:

$ 92.91

Dollar amount of plastic trash bags **containing recovered materials** purchased by your organization from NONFEDERAL sources:

$ 92.91

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

- (●) Yes
- ( ) No
- ( ) Not Applicable

Did you purchase plastic trash bags containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

Executive Order 13514 requires that 100 percent of purchases of designated items meet or exceed the EPA guideline standards unless written justification is provided of the following: (check all those that apply)

- [ ] the item made with recovered materials is not available competitively within a reasonable period of time
- [ ] the item made with recovered materials is not available at a reasonable price
- [ ] the item made with recovered materials is not available within the performance requirements

- [ ] None of the above (Justification does not conform with valid reasons per EO 13514. Corrective action should be taken to prevent re-occurrence.)

Although this report does not require that you provide detailed documentation of the justification for not purchasing 100 percent of the designated item with recommended levels of recovered materials, EO 13514 requires that written justification be provided. Thus, documentation should be maintained at your site for future reference.

In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Printer Ribbons

NOTE: GSA will provide data for DOE purchases of this product from its stock program. DO NOT include electronics obtained directly from GSA. Only provide amounts for your purchases from other sources (i.e. NONFEDERAL), including GSA schedule contracts.

Total dollar amount of printer ribbons purchased by your organization from NONFEDERAL sources:

$ 0.00

Dollar amount of reinked or reloaded printer ribbons purchased by your organization from NONFEDERAL sources:

$ 0.00

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

- ○ Yes
- ○ No
- ○ Not Applicable

Did you purchase printer ribbons containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

Executive Order 13514 requires that 100 percent of purchases of designated items meet or exceed the EPA guideline standards unless written justification is provided of the following: (check all those that apply)

- ☐ the item made with recovered materials is not available competitively within a reasonable period of time
- ☐ the item made with recovered materials is not available at a reasonable price
- ☐ the item made with recovered materials is not available within the performance requirements

- ☐ None of the above (Justification does not conform with valid reasons per EO 13514. Corrective action should be taken to prevent re-occurrence.)

Although this report does not require that you provide detailed documentation of the justification for not purchasing 100 percent of the designated item with recommended levels of recovered materials, EO 13514 requires that written justification be provided. Thus, documentation should be maintained at your site for future reference.

In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications

(technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Solid Plastic Binders

NOTE: GSA will provide data for DOE purchases of this product from its stock program. DO NOT include electronics obtained directly from GSA. Only provide amounts for your purchases from other sources (i.e. NONFEDERAL), including GSA schedule contracts.

Total dollar amount of solid plastic binders purchased by your organization from NONFEDERAL sources:

$ 0.00

Dollar amount of solid plastic binders containing recovered materials purchased by your organization from NONFEDERAL sources:

$ 0.00

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

- ○ Yes
- ○ No
- ○ Not Applicable

Did you purchase solid plastic binders containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

Executive Order 13514 requires that 100 percent of purchases of designated items meet or exceed the EPA guideline standards unless written justification is provided of the following: (check all those that apply)

- ☐ the item made with recovered materials is not available competitively within a reasonable period of time
- ☐ the item made with recovered materials is not available at a reasonable price
- ☐ the item made with recovered materials is not available within the performance requirements

☐ None of the above (Justification does not conform with valid reasons per EO 13514. Corrective action should be taken to prevent re-occurrence.)

Although this report does not require that you provide detailed documentation of the justification for not purchasing 100 percent of the designated item with recommended levels of recovered materials, EO 13514 requires that written justification be provided. Thus, documentation should be maintained at your site for future reference.

In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Toner Cartridges

NOTE: GSA and DLA will provide data for DOE purchases of toner cartridges and remanufactured toner cartridges through their stock programs. Please provide amounts for your purchases from other sources (i.e., NONFEDERAL), including GSA schedule contracts.

Total dollar amount of toner cartridges purchased by your organization from NONFEDERAL sources:

$ 13,453.29

Dollar amount of remanufactured toner cartridges purchased by your organization from NONFEDERAL sources:

$ 9,347.50

Dollar amount of toner cartridge remanufacturing services purchased by your organization from NONFEDERAL sources:

$ 0

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

○ Yes
○ No

◉ Not Applicable

Did you purchase toner cartridges containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

Executive Order 13514 requires that 100 percent of purchases of designated items meet or exceed the EPA guideline standards unless written justification is provided of the following: (check all those that apply)

☐ the item made with recovered materials is not available competitively within a reasonable period of time
☐ the item made with recovered materials is not available at a reasonable price
☑ the item made with recovered materials is not available within the performance requirements

☐ None of the above (Justification does not conform with valid reasons per EO 13514. Corrective action should be taken to prevent re-occurrence.)

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In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

Office Furniture

NOTE: GSA and DLA will provide data for DOE purchases of toner cartridges and remanufactured toner cartridges through their stock programs. Please provide amounts for your purchases from other sources (i.e., NONFEDERAL), including GSA schedule contracts.

Total dollar amount of Office Furniture purchased by your organization from NONFEDERAL sources:

$ 26,668.53

Dollar amount of remanufactured Office Furniture purchased by your organization from NONFEDERAL sources:

$ 15,722.82

If this product is purchased using a facility specification, does that specification require the use of recovered materials?

- (●) Yes
- ( ) No
- ( ) Not Applicable

Did you purchase Office Furniture containing only virgin materials? If yes, continue. If no, go to bottom of page and press the **Submit** button!

Executive Order 13514 requires that 100 percent of purchases of designated items meet or exceed the EPA guideline standards unless written justification is provided of the following: (check all those that apply)

- [ ] the item made with recovered materials is not available competitively within a reasonable period of time
- [ ] the item made with recovered materials is not available at a reasonable price
- [x] the item made with recovered materials is not available within the performance requirements

- [ ] None of the above (Justification does not conform with valid reasons per EO 13514. Corrective action should be taken to prevent re-occurrence.)

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In order to satisfy our reporting requirements to OMB, please provide a summary of the justifications (technical impediments) preventing your consistent purchase of the EPA designated item with recovered content:

Total dollar amount of purchases of this item which do not conform with the three EO 13514 justifications given above:

$ 0.00

Per EO 13514, procurement personnel MUST submit a plan for purchasing recovered-content EPA designated items if any or all of your purchases of virgin content products were unjustified.

Please describe your site plan.

To print more categories, use the BACK button.

Last updated October 1, 2009

Accomplishments and Awards

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Cradle to Cradle: examples of an integrated, system-based, approach to the acquisition and/or management of products and materials. This may include, but is not limited to, source reduction practices related to the generation of non-hazardous solid wastes, hazardous wastes, or pollution, approaches that take into account the lifecycle impacts of a product or processes, or reusing or repurposing materials or products that would otherwise be discarded.

PPTRS – Accomplishment/Award:

Recycling the Mound Site, Ohio Waste Water Treatment System Cradle to Cradle

Introduction

The clean closure and recycling of the U.S. Department of Energy (DOE) Office of Legacy Management (LM) Mound Site Sanitary Sewage Package Plant (SSPP) resulted in the reuse or repurposing of 100 percent of all materials that would have otherwise been discarded. No safety or regulatory violations occurred, and the project netted $150,000 in cost savings. The Mound Site is a remediated DOE site, which had several major missions including the radio-thermal generators (space batteries) used on satellites and probes, detonators/initiators for nuclear weapons, and ceramic development. Neither hazardous nor nuclear materials were released in performing the closure and removal of the SSPP.

This is the first time that a complete SSPP has been removed and reused for its original intended purpose by DOE and in the state of Ohio. By reusing the system for its original intended purpose, the loss of material and energy that is normally expended through conventional metal recycling was completely avoided. This project serves as an example of how excess DOE equipment and systems can be reused.

Description

The Mound Site began as a polonium-beryllium production site that supported the atomic weapons programs. The facility began operations in 1948 and continued through 2003 as an integrated research, development, and weapons reserve production facility. In 1989 the site was placed on the National Priorities List (NPL). Remediation at the Mound Site has been conducted in accordance with Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and/or Resource Conservation and Recovery Act (RCRA) regulations. The site transferred to LM in 2010 and will require ongoing operation and maintenance of remedial action systems, routine inspection and maintenance, records-related activities, and stakeholder support.

During operations at the Mound Site, a conventional in-ground Sanitary Sewage Treatment Plant (SSTP) was on-site. The in-ground SSTP contained standard tanks and a gaseous chlorination system similar to a publicly owned treatment works (POTW) designed to process large amounts of sanitary waste. Peak employment at the Mound Site during production was approximately 2,400 people with associated infrastructure. The conventional SSTP was capable of treating 150,000 to 200,000 gallons per day with certified operators.

When the Mound Site was closed, plans were developed to decommission and demolish the buildings on the site. At that time, approval could not be reached with Ohio regulators and various stakeholders to allow a connection of the Mound sanitary sewer system to the City of Miamisburg; therefore, the Mound Sanitary Sewage Package Plant (SSPP) was installed in 2005. This allowed for the conventional SSTP to be decommissioned and decontaminated and subsequently dismantled and closed in accordance with applicable regulations.

The SSPP was an above-ground tertiary treatment system capable of handling a daily throughput of 75,000 gallons of sanitary waste. The SSPP was mobile and much smaller in capability than a conventional in-ground plant. As designed, the SSPP relied on a final chlorination/dechlorination process to kill fecal coliform bacteria prior to discharge to the Great Miami River. This system of chlorination/dechlorination was found to be difficult to operate correctly at the volumes being treated. LM applied for a permit to install (PTI) and a permit to operate (PTO) an ultra violet (UV) continuous flow disinfection system. This reduced the use of toxic chemicals and the chance for the release of chlorine to the river, which resulted in a reduction of releases of chlorine and fecal coliform to the Great Miami River and represented a source reduction. The change to the UV system also resulted in the elimination of the use of toxic chemicals to control chlorine and fecal coliform.

In June 2009, an agreement was reached with regulators and stakeholders that allowed the Mound sanitary sewer system to be connected to the City of Miamisburg POTW sanitary sewage plan, and the SSPP was no longer needed.

The dismantling for reuse project presented several challenges and organizational issues. The Ohio Environmental Protection Agency (OEPA) had no experience or procedures in terminating licenses for sanitary treatment systems. DOE worked closely with OEPA to ensure that the cleaning and dismantling was completed while meeting all regulatory provisions.

A review of the potential to free release the SSPP was performed using criteria established in DOE Order 5400.5, Radiation Protection of the Public and Environment, and the DOE Secretarial Memorandum regarding Release of Surplus and Scrap Materials (July 13, 2000).

It was determined that the SSPP was never in a radiation area and never required posting as defined in 10 CFR 835 as a radiologically posted area. A radioactive (RAD) review of the effluent stream determined that it not only met all of the discharge guidelines in DOE Order 5400.5, but it also met the Ohio Department of Health (ODH) radioactive guidelines for release of radionuclides to sewers. The effluent stream was discharged to the Great Miami River. Based on the findings for the effluent stream a step-by-step procedure was developed by LM. After review, the DOE Office of Environmental Management (EM) approved the free release justification per DOE orders and the ODH concurred, which removed the requirement of disposal of scrap to a licensed low-level radioactive waste disposal facility.

The sludge had been handled at the Mound Site as low-level waste by choice, and a review of the sludge handling and constituents determined that it would meet land application guidelines. Accordingly, the sludge was shipped at no cost with other Accelerated Remediation Company (aRc) low-level waste.

An original DOE cost estimate to scrap the SSPP was $250,000. However, LM did not desire to scrap the plant to a landfill, which would contribute to the construction and demolition waste stream. Plans were developed to complete the removal of the SSPP for re-use, and an independent contractor, Poynter Wastewater Systems (PWS), was paid $100,000 to clean the plant per the OEPA agreement regarding discharges during cleaning and sludge dewatering. Once this was accomplished and the RAD review showed free release was possible, PWS paid for dismantlement and removal of the plant. This resulted in an estimated cost savings of $150,000. A copy of the LM Cost Savings Report is attached with this PPTRS application. Additionally, all portions of the SSPP were either taken for reuse or refurbished. No portion of the SSPP was added to the waste stream. Removal and scrapping of 100% of the SSPP involved pollution prevention and reuse activities as follows:

Pollution prevention:

- 137,000 pounds of metal was diverted from construction debris waste stream
- All foam insulation was taken for reuse (approximately 411.6 ft^3)
- All electrical switch gear was taken for reuse
- An emergency generator and excess diesel fuel were taken for reuse
- All pumps and ancillary equipment were taken for reuse
- Approximately 2,500 ft^2 of concrete pad and gravel will be reused at Mound for fill, rip rap, and road repair

Reuse:

- SSPP was refurbished and sold to a mobile/modular home park
- Tertiary filter system was donated to a Boy Scout camp

Prior to beginning dismantlement, the SSPP was placed on a continuous recycle regime to reduce the solids and kill fecal coliform. To reduce volume, solids were removed from the SSPP with a plate press, which resulted in clear water with a high carbonaceous biological oxygen demand (CBOD) that exceeded the discharge limit. To lower the high oxygen-depleting potential in the effluent to discharge limits, granulated sugar was added to the clear water, which effectively reduced the CBOD. Thus eliminating the need to containerize this liquid and allowing discharge to the river. All solids were verified to meet aRc's Waste Acceptance Criteria (WAC) at Energy Solutions. The SSPP was then pressure cleaned using water**.** A RAD survey of the plant was self performed, and results verified by EM, LM, and LM's prime contractor, Stoller. After completion of the final discharge and review by the OEPA, the Mound National Pollutant Discharge Elimination System (NPDES) permit was terminated.

The SSPP was dismantled by cutting the plant apart with metal saws and torches. All elements of the plant were removed for reuse or refurbishment. The contractor charged LM for the cleaning costs only. LM was not charged for disposal or transportation of the system. The contractor was able to realize income from selling the plant to a mobile home park. The mobile home park had a failing sewage treatment plant and was in bankruptcy proceedings. The owner of the bankrupt trailer park was able to obtain federal funding to purchase the refurbished plant, the park was able to install the system, and was thus saved from either closing or continuing NPDES violations. The owner of the reused SSPP is also able to use the UV technology initiated by LM,

which will continue to result in the elimination of the use of toxic chemicals to control chlorine and fecal coliform for as long as the system is in use.

Safety is a primary concern at the DOE, and daily meetings were held with all personnel involved in dismantling of the SSPP. A Job Safety Analysis (JSA) for the cleaning of the plant was prepared with input from PWS contractors. Plan of the day meetings were held every day, with all workers present, and any changes to plans were noted and reviewed. Each employee then was required to sign the JSA. Multiple random daily visits to the worksite were conducted and at any time critical work was being performed a safety representative was at the job site. After the cleaning was completed and the system disconnected from the sewer lines, a dismantlement JSA was prepared, again with input from PWS. Confined space entry was required in the clean SSPP until access holes were cut into the vertical sides of the plant's tanks. Dismantlement could continue without the confined space entry requirement. Lock-out tag out (LOTO) was required to remove the plant's electrical switch gear and emergency generators. After this was completed, one final LOTO procedure was left to remove the sanitary lift station from the influent manhole and associated equipment. Work was completed safely with no delays, no conflicts with traffic or deliveries to aRc, no NPDES violations, and no issues with final hook up of the site sanitary discharge to the city's POTW.

In addition to the attachments referenced above, a power point presentation is attached to this Application for Award that provides photos of the building and dismantling of the SSPP.

Value of this action

The package treatment plant (SSPP) was put out for reuse within the DOE complex. With no DOE site desiring the plant, the next option could have been disposal out of state, with or without trying to recycle the metal. Instead, the system including controllers, insulation and all was reused for its designed purpose. The remaining liquids and the sludge were intensely "recycled" within the plant concentrating the sludge and causing very clean residual liquid. The remaining treated liquid could be discharged to the river meeting the conditions of the original permit for the plant. This concentration of sludge and resulting clean liquids saved impacts on the environment by minimizing both, landfill and liquid wastes, as well as saving money.

While DOE, under any disposal scenario, would have paid clean up costs, in this manner, all disposal and transportation costs were taken care of at no cost to the government. In addition the clever method of dismantling and avoiding confined space not only increased the safety of the job but also the efficiency of the dismantlement. The Contractor in turn, could sell (at a discount) a treatment system to an out-of-compliance Trailer Park, and have enough left over to afford donating the tertiary facility to a Boy Scout Facility.

Waste Generation

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Pollution Prevention Tracking and Reporting System

Guidance

PSO: LM
FY Year: 2010

This record has been approved by DePinho, Darlene at 12/1/2010 and cannot be edited. If this data is incorrect, please contact P2 Support at 800-473-4375 or email to p2support@eh.doe.gov

Site Name: Office of Legacy Management
FY Year: 2010

Waste Type	Routine Waste		Cleanup/Stabilization Waste	
High Level Waste (Liquid)	0	m3	0	m3
(Solid)	0	m3	0	m3
Transuranic Waste (Liquid)	0	m3	0	m3
(Solid)	0	m3	0	m3
Mixed Transuranic Waste (Liquid)	0	m3	0	m3
(Solid)	0	m3	0	m3
Low Level Waste (Liquid)	0	m3	0	m3
(Solid)	0	m3	6089.76	m3
Mixed Low Level Waste (Liquid)	0	m3	0	m3
(Solid)	0	m3	0	m3
RCRA Regulated	0.2	mt	0	mt
State Regulated	0	mt	0	mt
TSCA Regulated	0	mt	0	mt
Mixed TSCA	0	mt	0	mt

Approved and Lock | Submit

Last updated October 1, 2010
Return to Home Page

Technical questions? E-mail us at: P2support@hq.doe.gov or call HSS InfoCenter at 800-473-4375

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Fugitive GHG Emissions

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2 Scope 1 Fugitive Emissions: Refrigerants and Fluorinated Gases

Must be filled in
Should be filled in

Data Type Entered | Fiscal Year

Fill in F-Gas Aquisitons if you only have purchasing records

Material Type:	CAS Number	Composition	Quantity in storage at beginning of inventory year	Unit of Measure	Quantity in storage at end of inventory year	Unit of Measure	Sum of all F-Gas acquisitions	Unit of Measure	Sum of all F-Gas disbursements	Unit of Measure	Total capacity of F-Gas in equipment at beginning of inventory year	Unit of Measure	Total Cacity of all F-Gas in equipment at end of Inventory year	Unit of Measure	F-Gas imported from Refrigerants tab	Unit of Measure	Total quantity emitted by Type	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure	GWP by Type	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure
Carbon dioxide	124-38-9	CO2	558.00	lbs	138.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs			420.0	lbs	0.2	MT	1	CO2e	0.2	MT CO2e
Methane	74-82-8	CH4	1.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs			1.0	lbs	0.0	MT	21	CO2e	0.0	MT CO2e
Nitrous oxide	10024-97-2	N2O	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs			0.0	lbs	0.0	MT	310	CO2e	0.0	MT CO2e
Hydrofluorocarbons (HFCs)																								
HFC-23	75-46-7	CHF3	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0	lbs	0.0	lbs	0.0	MT	11,700	CO2e	0.0	MT CO2e
HFC-32	75-10-5	CH2F2	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0	lbs	0.0	lbs	0.0	MT	650	CO2e	0.0	MT CO2e
HFC-41	593-53-3	CH3F	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0	lbs	0.0	lbs	0.0	MT	150	CO2e	0.0	MT CO2e
HFC-125	354-33-6	CHF2CF3	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0	lbs	0.0	lbs	0.0	MT	2,800	CO2e	0.0	MT CO2e
HFC-134	359-35-3	CHF2CHF2	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs			0.0	lbs	0.0	MT	1,000	CO2e	0.0	MT CO2e
HFC-134a	811-97-2	CH2FCF3	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0	lbs	0.0	lbs	0.0	MT	1,300	CO2e	0.0	MT CO2e
HFC-143	430-66-0	CHF2CH2F	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs			0.0	lbs	0.0	MT	300	CO2e	0.0	MT CO2e
HFC-143a	420-46-2	CF3CH3	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0	lbs	0.0	lbs	0.0	MT	3,800	CO2e	0.0	MT CO2e
HFC-152	624-72-6	CH2FCH2F	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs			0.0	lbs	0.0	MT	53	CO2e	0.0	MT CO2e
HFC-152a	75-37-6	CH3CHF2	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0	lbs	0.0	lbs	0.0	MT	140	CO2e	0.0	MT CO2e
HFC-161	353-36-6	CH3CH2F	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs			0.0	lbs	0.0	MT	12	CO2e	0.0	MT CO2e
HFC-227ca	2252-84-8	CF3CF2CHF2	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs			0.0	lbs	0.0	MT	2,900	CO2e	0.0	MT CO2e
HFC-227ea	431-89-0	CF3CHFCF3	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0	lbs	0.0	lbs	0.0	MT	2,900	CO2e	0.0	MT CO2e
HFC-236ca	27070-61-7	CHF2CF2CHF2	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs			0.0	lbs	0.0	MT	120	CO2e	0.0	MT CO2e
HFC-236cb	677-56-5	CH2FCF2CF3	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs			0.0	lbs	0.0	MT	1,340	CO2e	0.0	MT CO2e
HFC-236ea	431-63-0	CHF2CHFCF3	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs			0.0	lbs	0.0	MT	1,370	CO2e	0.0	MT CO2e
HFC-236fa	690-39-1	CF3CH2CF3	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0	lbs	0.0	lbs	0.0	MT	6,300	CO2e	0.0	MT CO2e
HFC-245ca	679-86-7	CH2FCF2CHF2	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs			0.0	lbs	0.0	MT	560	CO2e	0.0	MT CO2e
HFC-245fa	460-73-1	CHF2CH2CF3	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0	lbs	0.0	lbs	0.0	MT	1,030	CO2e	0.0	MT CO2e
HFC-365mfc	406-58-6	CF3CH2CF2CH3	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs			0.0	lbs	0.0	MT	794	CO2e	0.0	MT CO2e
HFC-c-447ef	15290-77-4	c-C5H3F7	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs			0.0	lbs	0.0	MT	250	CO2e	0.0	MT CO2e
HFC-43-10mee	138495-42-8	CF3CHFCHFCF2CF3	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs			0.0	lbs	0.0	MT	1,300	CO2e	0.0	MT CO2e
Perfluorocarbons (PFCs)																								
PFC-14	75-73-0	CF4	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0	lbs	0.0	lbs	0.0	MT	6,500	CO2e	0.0	MT CO2e
PFC-116	76-16-4	C2F6 (CF3CF3)	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0	lbs	0.0	lbs	0.0	MT	9,200	CO2e	0.0	MT CO2e
PFC-218	76-19-7	C3F8 (CF3CF2CF3)	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0	lbs	0.0	lbs	0.0	MT	7,000	CO2e	0.0	MT CO2e
PFC-318 or PFC-c318	115-25-3	c-C4F8 (-(CF2)4-)	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0	lbs	0.0	lbs	0.0	MT	8,700	CO2e	0.0	MT CO2e
PFC-3-1-10	355-25-9	C4F10	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs			0.0	lbs	0.0	MT	7,000	CO2e	0.0	MT CO2e
PFC-4-1-12	678-26-2	C5F12	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs			0.0	lbs	0.0	MT	7,500	CO2e	0.0	MT CO2e
PFC-5-1-14	355-42-0	C6F14	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs			0.0	lbs	0.0	MT	7,400	CO2e	0.0	MT CO2e
PFC-9-1-18	306-94-5	C10F18	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs			0.0	lbs	0.0	MT	7,500	CO2e	0.0	MT CO2e
Perfluorocyclopropane	931-91-9	c-C3F6	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs			0.0	lbs	0.0	MT	17,340	CO2e	0.0	MT CO2e
Sulfur hexafluoride	2551-62-4	SF6	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs			0.0	lbs	0.0	MT	23,900	CO2e	0.0	MT CO2e
Nitrogen Trifluoride	7783-54-2	NF3	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs			0.0	lbs	0.0	MT	17,200	CO2e	0.0	MT CO2e
Other fugitive gases																								
[Enter Fugitive Gas Name]		[Enter Molecular Comp	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs			0.0	lbs	0.0	MT	0.0	CO2e	0.0	MT CO2e
[Enter Fugitive Gas Name]		[Enter Molecular Comp	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs			0.0	lbs	0.0	MT	0.0	CO2e	0.0	MT CO2e
[Enter Fugitive Gas Name]		[Enter Molecular Comp	0.00	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs			0.0	lbs	0.0	MT	0.0	CO2e	0.0	MT CO2e

Total Direct Chemical Usage Fugitive Emissions | **0.2** | **MT CO2e** | **0.2** | **MT CO2e**

Source: *U.S. EPA Climate Leaders Program, Technical Guidance, Direct HFC and PFC Emissions from Use of Refrigeration and Air Conditioning Equipment, May 2008, see at: http://www.epa.gov/stateply/documents/resources/mfgrfg.pdf*

Comments:

1. Scope 1 Fugitive Emissions: Refrigerants and Fluorinated Gases Calculator ***(Inputs to Tab 2. Fugitive F-gases)***

Must be filled in
Should be filled in

Data Type Entered	Fiscal Year

Fill in F-Gas Aquisitons if you only have purchasing records

Refrigerant Type:	Composition	Quantity in storage at beginning of inventory year	Unit of Measure	Quantity in storage at end of inventory year	Unit of Measure	Sum of all refrigerant acquisitions	Unit of Measure	Sum of all refrigerant disbursements	Unit of Measure	Total capacity of refrigerant in equipment at beginning of inventory year	Unit of Measure	Total capacity of refrigerant in equipment at end of inventory year	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure	Corresponding Component F-gases *(as required for reporting)*													
																HFC-23	HFC-32	HFC-41	HFC-125	HFC-134a	HFC-143a	HFC-152a	HFC-227ea	HFC-236fa	HFC-245fa	PFC-14	PFC-116	PFC-218	PFC-(c)318
R-23	R-23	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0													
R-32	R-32	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs		0.0												
R-41	R-41	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs			0.0											
R-125	R-125	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs				0.0										
R-134a	R-134a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs					0.0									
R-143a	R-143a	0.0	lbs	0.0	lbs	0.0	lbs	0.5	lbs	1.3	lbs	0.8	lbs	0.0	lbs						0.0								
R-152a	R-152a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs							0.0							
R-227ea	R-227ea	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs								0.0						
R-236fa	R-236fa	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs									0.0					
R-245fa	R-245fa	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs										0.0				
R-14	R-14	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs											0.0			
R-116	R-116	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs												0.0		
R-218	R-218	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs													0.0	
R-C318	R-C318	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs														0.0
R-401A	R-22/152a/124	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs							0.0							
R-401B	R-22/152a/124	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs							0.0							
R-401C	R-22/152a/124	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs							0.0							
R-402A	R-125/290/22	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs				0.0										
R-402B	R-125/290/22	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs				0.0										
R-403A	R-290/22/218	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs													0.0	
R-403B	R-290/22/218	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs													0.0	
R-404A	R-125/143a/134a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs				0.0	0.0	0.0								
R-405A	R-22/152a/142b/C318	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs							0.0							0.0
R-406A	R-22/600a/142b	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs														
R-407A	R-32/125/134a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs		0.0		0.0	0.0									
R-407B	R-32/125/134a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs		0.0		0.0	0.0									
R-407C	R-32/125/134a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs		0.0		0.0	0.0									
R-407D	R-32/125/134a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs		0.0		0.0	0.0									
R-407E	R-32/125/134a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs		0.0		0.0	0.0									
R-408A	R-125/143a/22	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs				0.0		0.0								
R-409A	R-22/124/142b	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs														
R-409B	R-22/124/142b	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs														
R-410A	R-32/125	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs		0.0		0.0										
R-410B	R-32/125	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs		0.0		0.0										
R-411A	R-1270/22/152a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs							0.0							
R-411B	R-1270/22/152a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs							0.0							
R-412A	R-22/218/143a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs						0.0							0.0	
R-413A	R-218/134a/600a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs					0.0								0.0	
R-414A	R-22/124/600a/142b	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs														
R-414B	R-22/124/600a/142b	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs														
R-415A	R-22/152a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs							0.0							
R-415B	R-22/152a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs							0.0							
R-416A	R-134a/124/600	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs					0.0									
R-417A	R-125/134a/600	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs				0.0	0.0									
R-418A	R-290/22/152a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs							0.0							
R-419A	R-125/134a/E170	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs				0.0	0.0									
R-420A	R-134a/142b	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs					0.0									
R-421A	R-125/134a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs				0.0	0.0									
R-421B	R-125/134a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs				0.0	0.0									
R-422A	R-125/134a/600a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs				0.0	0.0									
R-422B	R-125/134a/600a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs				0.0	0.0									
R-422C	R-125/134a/600a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs				0.0	0.0									
R-422D	R-125/134a/600a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs				0.0	0.0									
R-423A	R-134a/227ea	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs					0.0			0.0						
R-424A	R-125/134a/600a/600/601a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs				0.0	0.0									
R-425A	R-32/134a/227ea	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs		0.0			0.0			0.0						
R-426A	R-125/134a/600/601a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs				0.0	0.0									
R-427A	R-32/125/143a/134a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs		0.0		0.0	0.0	0.0								
R-428A	R-125/143a/290/600a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs				0.0		0.0								
R-429A	R-E170/152a/600a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs							0.0							
R-430A	R-152a/600a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs							0.0							
R-431A	R-290/152a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs							0.0							
R-434A	R-125/143a/134a/600a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs				0.0	0.0	0.0								
R-435A	R-E170/152a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs							0.0							
R-437A	R-125/134a/600/601	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs				0.0	0.0									
R-438A	R-32/125/134a/600/601a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs		0.0		0.0	0.0									
R-500	R-12/152a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs							0.0							
R-501	R-22/12	0.0	lbs	0.0	lbs	0.0	lbs	54.2	lbs	54.2	lbs	0.0	lbs	0.0	lbs														
R-502	R-22/115	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs														
R-503	R-23/13	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0													
R-504	R-32/115	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs		0.0												
R-505	R-12/31	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs														
R-506	R-31/114	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs														
R-507	R-125/143a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs				0.0		0.0								
R-507A	R-125/143a	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs				0.0		0.0								
R-508A	R-23/116	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0													
R-508B	R-23/116	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0													
R-509	R-22/218	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs													0.0	
R-509A	R-22/218	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs	0.0	lbs													0.0	

F-Gas Type	HFC-23	HFC-32	HFC-41	HFC-125	HFC-134a	HFC-143a	HFC-152a	HFC-227ea	HFC-236fa	HFC-245fa	PFC-14	PFC-116	PFC-218	PFC-318
Total F-Gas Emitted by Type	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Units of Measure	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs

Source: *American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE), Designation and Safety Classification of Refrigerants, ANSI/ASHRAE 34-2007, see at: http://www.ashrae.org/aboutus/*

Comments:

7 Scope 1 Fugitive Emissions: On-site Wastewater Treatment

Must be filled in
May be filled in

Waste Water Treatment Process Type	Agency has:	Population Served	Units
On-Site Centralized WWTP with Anaerobic Digestion	No		Population Served
On-Site Centralized WWTP with Nitrification / Denitrification	No		Population Served
On-Site Centralized WWTP without Nitrification / Denitrification	No		Population Served
On-Site Effluent Discharge to Rivers and Estuaries with Nitrification / Denitrification	No		Population Served
On-Site Effluent Discharge to Rivers and Estuaries without Nitrification / Denitrification	No		Population Served
On-Site Wastewater Treatment Lagoons	No		Population Served
On-Site Septic Systems	Yes	2.0	Population Served

Stationary combustion - flare

Process Type	GHG Type	Composition	Population Served by the WWTP	Workdays per Year	Fraction Allocated to Facility	Per Capita Digester Gas Produced per Day	Unit of Measure	Fraction CH4 in Biogas	Density of CH4 (Standard Conditions)	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure	Destruction Efficiency	HHV	Unit of Measure	Energy Content of Methane Combusted	Unit of Measure	Combustion Emission Factor	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure	GWP by Type	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure
On-Site Centralized WWTP with Anaerobic Digestion	Carbon dioxide (biogenic)	CO2												0.0438	MMBtu/Kg CH4	0.0	MMBtu	0.052070	MT CO2/MMBtu	0.0	MT CO2			0.0	MT CO2 (biogenic)
	Methane	CH4	0.0	230.00	0.5	1.0	CUFT / Person / Day	65.0%	0.0112	kg / CUFT	0	kg CH4	99.0%	0.0438	MMBtu/Kg CH4	0.0	MMBtu	0.000003	MT CH4/MMBtu	0.0	MT CH4	21	CO2e	0.0	MT CO2e
	Nitrous oxide	N2O												0.0438	MMBtu/Kg CH4	0.0	MMBtu	0.000001	MT N2O/MMBtu	0.0	MT N2O	310	CO2e	0.0	MT CO2e

Sub-Total CO2 (biogenic)	0.0	MT
Sub-Total CO2e	0.0	MT

Process Type	GHG Type	Composition	Population Served by WWTP with N/D	Workdays per Year	Fraction Allocated to Facility	N2O Emission Factor for a WWTP	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure	Unit Conversion	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure							Total Quantity Emitted by Type	Unit of Measure	GWP by Type	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure
On-Site Centralized WWTP with Nitrification / Denitrification	Nitrous oxide	N2O	0.0	230.00	0.5	0.02	g / Person / Day	0.0	g	0.000001	MT / g	0	MT N2O							0.00000	MT N2O	310	CO2e	0.0	MT CO2e

Sub-Total CO2 (biogenic)		MT
Sub-Total CO2e	0.0	MT

Process Type	GHG Type	Composition	Population Served by WWTP without N/D	Workdays per Year	Fraction Allocated to Facility	N2O Emission Factor for a WWTP	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure	Unit Conversion	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure							Total Quantity Emitted by Type	Unit of Measure	GWP by Type	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure
On-Site Centralized WWTP without Nitrification / Denitrification	Nitrous oxide	N2O	0.0	230.00	0.5	0.008	g / Person / Day	0.0	g	0.000001	MT / g	0	MT N2O							0.00000	MT N2O	310	CO2e	0.0	MT CO2e

Sub-Total CO2 (biogenic)		MT
Sub-Total CO2e	0.0	MT

Process Type			Population Served by WWTP with N/D	Workdays per Year	Fraction Nitrogen & BOD Allocated to Facility	Per capita Nitrogen Load	Unit of Measure	Nitrogen uptake for cell growth (assumes aerobic systems*)	Unit of Measure	Per capita BOD_5 produced per day	Unit of Measure	Total N produced	Unit of Measure	Effluent Emission Factor	Unit of Measure	N2O to N2 Ratio	Plant Nitrification / Denitrification Factor	Unit Conversion	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure	GWP by Type	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure
Effluent Discharge to Rivers and Estuaries for WWTP with Nitrification / Denitrification	Nitrous Oxide	N2O	0.0	230.00	0.5	0.26	kg N / person / day	0.05	kg N / kg BOD5	0.09	kg BOD5 / person / day	0.0	kg N	0.005	kg N2O-N / kg sewage-N Produced	1.6	0.7	0.001	MT / kg	0.0	MT N2O	310	CO2e	0.0	MT CO2e

*Anaerobic system uses a value of 0.005.

Sub-Total CO2 (biogenic)		MT
Sub-Total CO2e	0.0	MT

Process Type			Population Served by WWTP with N/D	Workdays per Year	Fraction Nitrogen & BOD Allocated to Facility	Per capita Nitrogen Load	Unit of Measure	Nitrogen uptake for cell growth	Unit of Measure	Per capita BOD_5 produced per day	Unit of Measure	Total N produced	Unit of Measure	Effluent Emission Factor	Unit of Measure	N2O to N2 Ratio	Plant Nitrification / Denitrification Factor	Unit Conversion	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure	GWP by Type	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure
Effluent Discharge to Rivers and Estuaries for WWTP without Nitrification / Denitrification	Nitrous Oxide	N2O	0.0	230.00	0.5	0.26	kg N / person / day	0.05	kg N / kg BOD5	0.09	kg BOD5 / person / day	0.0	kg N	0.005	kg N2O-N / kg sewage-N Produced	1.6	0.0	0.001	MT / kg	0.0	MT N2O	310	CO2e	0.0	MT CO2e

Sub-Total CO2 (biogenic)		MT
Sub-Total CO2e	0.0	MT

Process Type	GHG Type	Composition	Population Served by the Lagoons	Workdays per Year	Fraction BOD Allocated to Facility	Per capita BOD_5 produced per day	Unit of Measure	Fraction of BOD_5 Removed by Primary Treatment	Maximum CH_4 Production Capacity	Unit of Measure	CH_4 Correction Factor for Anaerobic Systems	Fraction of Lagoon BOD_5 Removal	Total Quantity Emitted by Type	Unit of Measure	Unit Conversion	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure		Total Quantity Emitted by Type	Unit of Measure	GWP by Type	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure
On-site Wastewater Treatment Lagoons	Methane	CH4	0.0	230.00	0.5	0.09	kg BOD5 / person / day	0.3	0.6	kg CH4 / kg BOD5	0.8	1.0	0	kg CH4	0.001	MT / kg	0	MT		0	MT CH4	21	CO2e	0.0	MT CO2e

Sub-Total CO2 (biogenic)		MT
Sub-Total CO2e	0.0	MT

Process Type			Population Served by the Septic System	Workdays per Year	Fraction BOD Allocated to Facility	Per capita BOD_5 produced per day	Unit of Measure		Maximum CH_4 Production Capacity	Unit of Measure	CH_4 Correction Factor for Septic Systems		Total Quantity Emitted by Type	Unit of Measure	Unit Conversion	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure		Total Quantity Emitted by Type	Unit of Measure	GWP by Type	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure
On-site Septic Systems	Methane	CH4	2.0	365.25	0.5	0.09	kg BOD5 / person / day		0.6	kg CH4 / kg BOD5	0.5		9.9	kg CH4	0.001	MT / kg	0.0	MT		0.0	MT CH4	21	CO2e	0.2	MT CO2e

Sub-Total CO2 (biogenic)		MT
Sub-Total CO2e	0.2	MT

Total CO2 (biogenic)	0.0	MT Biogenic CO2
Total CO2e	0.2	MT CO2e

Comments:

Total CO2 (biogenic)	0.0	MT
Total CO2e	0.2	MT

Source 1: *U.S. EPA, Inventory of U.S. Greenhouse Gas Emissions and Sinks, see at: http://www.epa.gov/climatechange/emissions/usinventoryreport.htm*
Source 2: *Local Government Operations Protocol (LGO Protocol), Chapter 10, see at: http://www.theclimateregistry.org/resources/protocols/local-government-operations-protocol/*

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Scope 3 GHG Emissions

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4 Scope 3: M&O Contractor Business Air Travel

Must be filled in

	Total distance flown (miles)	C02 (kg CO2 per Passenger mile)	CH4 (kg CH4 per Passenger mile)	N20 (kg N20 per Passenger mile)	Total Quantity Emitted CO2	Total Quantity Emitted CH4	Total Quantity Emitted N2O	Unit of Measure	GWP Factor for CO2	GWP Factor for CH4	GWP Factor for N2O	Unit of Measure	Total Quantity Emitted (CO2e)	Unit of Measure	Total Quantity Emitted (CO2e)	Unit of Measure
Short	0	0.277	0.0000104	0.0000085	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
Medium	0	0.229	0.0000104	0.0000085	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
Long	0	0.185	0.0000104	0.0000085	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
Unknown	0	0.271	0.0000104	0.0000085	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
Total GHGs (mtCO2e)															0.0	MT CO2e

Short	<300 miles
Medium	300 - <700 miles
Long	>700 miles

OR:

		Taxes	Resulting fare	$ per mile	Miles	C02 (kg CO2 per Passenger mile)	CH4 (kg CH4 per Passenger mile)	N20 (kg N20 per Passenger mile)	Total Quantity Emitted CO2	Total Quantity Emitted CH4	Total Quantity Emitted N2O	Unit of Measure	GWP Factor for CO2	GWP Factor for CH4	GWP Factor for N2O	Unit of Measure	Total Quantity Emitted (CO2e)	Unit of Measure	Total Quantity Emitted (CO2e)	Unit of Measure
Contractor spend on domestic business air travel:	$ 361,165.00	15.50%	305184.425	0.1475	2,069,047	0.271	0.0000104	0.0000085	560,711.7	21.5	17.6	kg	1	21	310	CO2e	566,615.5	kg CO2e	566.6	MT CO2e
Contractor spend on international air travel	$ -	15.50%	0	0.128	-	0.271	0.0000104	0.0000085	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
Total GHGs (mtCO2e)																			566.6	MT CO2e

OR:

If you are unable to calculate GHG emissions from contractor air travel using either Option 1 or 2 you may use an alternative method of your choosing. Please detail the methd used, any assumptions made and the calculated GHGs in this text box. Please also provide references to any external tools used.

Method used:

Assumptions made:

Calculated GHGs:

References:

Comments:

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5 Scope 3: Employee (Federal and M&O Contractor) Business Ground Travel

Must be filled in
May be filled in

Default Methodology (A)

Process Type	Vehicle Type	Fuel Type	Annual number of vehicle rentals	Average Rental Mileage per Trip			Total Mileage by Vehicle Type	Unit of Measure	Emission Factor CO2	Unit of Measure	Emission Factor CH4	Unit of Measure	Emission Factor N2O	Unit of Measure	Total Quantity Emitted CO2	Total Quantity Emitted CH4	Total Quantity Emitted N2O	Unit of Measure	GWP Factor for CO2	GWP Factor for CH4	GWP Factor for N2O	Unit of Measure	Total Quantity Emitted (CO2e)	Unit of Measure	Total Quantity Emitted (CO2e)	Unit of Measure
Ground Business Travel Emissions - Rentals Emissions	Passenger Car	Gasoline	751.0	88.3			66,313.3	Miles	0.364	kg CO2/Mile	0.000031	kg CH4/Mile	0.000032	kg N2O/Mile	24,138.0	2.1	2.1	kg	1	21	310	CO2e	24,839.0	kg CO2e	24.8	MT CO2e
	SUV or Truck	Gasoline	0.0	419.0			0.0	Miles	0.519	kg CO2/Mile	0.000036	kg CH4/Mile	0.000047	kg N2O/Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
Personal Vehicle Use	Passenger Car	Gasoline					86,057.0	Miles	0.364	kg CO2/Mile	0.000031	kg CH4/Mile	0.000032	kg N2O/Mile	31,324.8	2.7	2.8	kg	1	21	310	CO2e	32,234.5	kg CO2e	32.2	MT CO2e
	SUV or Truck	Gasoline					62,548.8	Miles	0.519	kg CO2/Mile	0.000036	kg CH4/Mile	0.000047	kg N2O/Mile	32,462.8	2.3	2.9	kg	1	21	310	CO2e	33,421.5	kg CO2e	33.4	MT CO2e

Sub-Total Rental Emissions	90.5	MT CO2e

Or:

Advanced Methodology (B)

Process Type	Vehicle Type	Fuel Type	Total Quantity Fuel Purchased	Unit of Measure	Average MPG	Unit of Measure	Total Mileage by Vehicle Type	Unit of Measure	Emission Factor CO2	Unit of Measure	Emission Factor CH4	Unit of Measure	Emission Factor N2O	Unit of Measure	Total Quantity Emitted CO2	Total Quantity Emitted CH4	Total Quantity Emitted N2O	Unit of Measure	GWP Factor for CO2	GWP Factor for CH4	GWP Factor for N2O	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure
Ground Business Travel Emissions - Direct Fuel Purchase Emissions (rental Vehicle used for business purposes)	Passenger Car	Gasoline		Gallons	22.3	Miles / Gallon	0.0	Miles	0.364	kg CO2/Mile	0.000031	kg CH4/Mile	0.000032	kg N2O/Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
	SUV or Truck	Gasoline		Gallons	16.2	Miles / Gallon	0.0	Miles	0.519	kg CO2/Mile	0.000036	kg CH4/Mile	0.000047	kg N2O/Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
	SUV or Truck	Diesel		Gallons	18.1	Miles / Gallon	0.0	Miles	0.561	kg CO2/Mile	0.000001	kg CH4/Mile	0.0000015	kg N2O/Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
Personal Vehicle Use	Passenger Car	Gasoline						Miles	0.364	kg CO2/Mile	0.000031	kg CH4/Mile	0.000032	kg N2O/Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
	SUV or Truck	Gasoline						Miles	0.519	kg CO2/Mile	0.000036	kg CH4/Mile	0.000047	kg N2O/Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e

Optional but Encouraged:

Sub-Total Rental Direct Fuel Purchase Emissions	0.0	MT CO2e

Advanced Methodology (C)

Process Type	Vehicle Type	Fuel Type	Number of Agency Business Trip	Average Passenger Miles per Trip	Average MPG	Unit of Measure	Total Mileage by Vehicle Type	Unit of Measure	Emission Factor CO2	Unit of Measure	Emission Factor CH4	Unit of Measure	Emission Factor N2O	Unit of Measure	Total Quantity Emitted CO2	Total Quantity Emitted CH4	Total Quantity Emitted N2O	Unit of Measure	GWP Factor for CO2	GWP Factor for CH4	GWP Factor for N2O	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure
Ground Business Travel - Mass Transit	Bus	Diesel	0.0	0.0			0.0	Miles	0.107	kg CO2/Passenger Mi	0.0000006	kg CH4/Passenger Mile	0.0000005	kg N2O/Passe	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
	Metro / Transit R	Electric	0.0	0.0			0.0	Miles	0.163	kg CO2/Passenger Mi	0.000004	kg CH4/Passenger Mile	0.000002	kg N2O/Passe	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
	Commuter Rail	Diesel	0.0	0.0			0.0	Miles	0.172	kg CO2/Passenger Mi	0.000002	kg CH4/Passenger Mile	0.000001	kg N2O/Passe	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
	Intercity Rail	Diesel	0.0	0.0			0.0	Miles	0.185	kg CO2/Passenger Mi	0.000002	kg CH4/Passenger Mile	0.000001	kg N2O/Passe	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e

Sub-Total Rental Direct Fuel Purchase Emissions	0.0	MT CO2e

Total Ground Business Travel Emissions	90.5	MT CO2e

Total Ground Business Travel Emissions	90.5	MT CO2e

Source: *U.S. EPA Climate Leaders Program, Technical Guidance, Optional Emissions from Commuting, Business Travel, and Product Transport, see: http://www.epa.gov/stateply/documents/resources/commute_travel_product.pdf*

Comments:

6 Scope 3: Employee (Federal and M&O Contractor) Commuting

Must be filled in
May be filled in

Process Type	Vehicle Type	Fuel Type	Total Daily Commute Distance Traveled (miles)	Number of Commute Days per Year	Total Mileage by Vehicle Type	Unit of Measure	Emission Factor CO2	Unit of Measure	Emission Factor CH4	Unit of Measure	Emission Factor N2O	Unit of Measure	Total Quantity Emitted CO2	Total Quantity Emitted CH4	Total Quantity Emitted N2O	Unit of Measure	GWP Factor for CO2	GWP Factor for CH4	GWP Factor for N2O	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure
Commuter Travel - Personal Owned Vehicles	POV Passenger Car	Gasoline	6,795.0	230.0	1,562,850.0	Miles	0.364	kg CO2/Mile	0.000031	kg CH4/Mile	0.000032	kg N2O/Mile	568,877.4	48.4	50.0	kg	1	21	310	CO2e	585,398.3	kg CO2e	585.4	MT CO2e
	POV Passenger Car	Hybrid	140.0	230.0	32,200.0	Miles	0.192	kg CO2/Mile	0.000008	kg CH4/Mile	0.000005	kg N2O/Mile	6,182.4	0.2	0.2	kg	1	21	310	CO2e	6,237.1	kg CO2e	6.2	MT CO2e
	POV SUV or Truck	Gasoline	3,835.0	230.0	882,050.0	Miles	0.519	kg CO2/Mile	0.000036	kg CH4/Mile	0.000047	kg N2O/Mile	457,784.0	31.8	41.5	kg	1	21	310	CO2e	471,302.2	kg CO2e	471.3	MT CO2e
	POV SUV or Truck	Diesel	124.0	230.0	28,520.0	Miles	0.561	kg CO2/Mile	0.000001	kg CH4/Mile	0.0000015	kg N2O/Mile	15,993.3	0.0	0.0	kg	1	21	310	CO2e	16,007.1	kg CO2e	16.0	MT CO2e
	POV SUV or Truck	Hybrid	0.0	230.0	0.0	Miles	0.35	kg CO2/Mile	0.00001	kg CH4/Mile	0.000005	kg N2O/Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
	POV Motorcycle	Gasoline	83.0	230.0	19,090.0	Miles	0.167	kg CO2/Mile	0.00007	kg CH4/Mile	0.000007	kg N2O/Mile	3,188.0	1.3	0.1	kg	1	21	310	CO2e	3,257.5	kg CO2e	3.3	MT CO2e
Commuter Travel - Car / Van Pools	Car Pool	Gasoline	1,189.0	230.0	273,470.0	Miles	0.182	kg CO2/Passenger Mile	0.0000155	kg CH4/Passen	0.000016	kg N2O/Passenger Mile	49,771.5	4.2	4.4	kg	1	21	310	CO2e	51,217.0	kg CO2e	51.2	MT CO2e
	Van Pool	Gasoline	0.0	230.0	0.0	Miles	0.130	kg CO2/Passenger Mile	0.000009	kg CH4/Passen	0.00001175	kg N2O/Passenger Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
Commuter Travel - Mass Transit	Bus	Diesel	0.0	230.0	0.0	Miles	0.107	kg CO2/Passenger Mile	0.0000006	kg CH4/Passen	0.0000005	kg N2O/Passenger Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
	Metro / Transit Rail	Electric	0.0	230.0	0.0	Miles	0.163	kg CO2/Passenger Mile	0.000004	kg CH4/Passen	0.000002	kg N2O/Passenger Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
	Commuter Rail	Diesel	0.0	230.0	0.0	Miles	0.172	kg CO2/Passenger Mile	0.000002	kg CH4/Passen	0.000001	kg N2O/Passenger Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
	Intercity Rail	Diesel	0.0	230.0	0.0	Miles	0.185	kg CO2/Passenger Mile	0.000002	kg CH4/Passen	0.000001	kg N2O/Passenger Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
Commuter Travel - Human Powered	Walking and/or Bicycling		24.0	230.0	5,520.0	Miles	0	kg CO2/Mile	0	kg CH4/Mile	0	kg N2O/Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e

Total Commuter Travel Emissions	**1,133.4**	**MT CO2e**

Total Commuter Travel Emissions	1,133.4	MT CO2e

Source: *U.S. EPA Climate Leaders Program, Technical Guidance, Optional Emissions from Commuting, Business Travel, and Product Transport, see: http://www.epa.gov/stateply/documents/resources/commute_travel_product.pdf*
Source: *U.K. Defra Company Reporting Guidelines emissions factors for Hybrid vehicles http://www.defra.gov.uk/environment/business/reporting/conversion-factors.htm*

Comments:

Attachment G

Revised 2008 GHG Emissions

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4 Scope 3: M&O Contractor Business Air Travel

Must be filled in

	Total distance flown (miles)	C02 (kg CO2 per Passenger mile)	CH4 (kg CH4 per Passenger mile)	N20 (kg N20 per Passenger mile)	Total Quantity Emitted CO2	Total Quantity Emitted CH4	Total Quantity Emitted N2O	Unit of Measure	GWP Factor for CO2	GWP Factor for CH4	GWP Factor for N2O	Unit of Measure	Total Quantity Emitted (CO2e)	Unit of Measure	Total Quantity Emitted (CO2e)	Unit of Measure
Short	0	0.277	0.0000104	0.0000085	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
Medium	0	0.229	0.0000104	0.0000085	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
Long	0	0.185	0.0000104	0.0000085	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
Unknown	0	0.271	0.0000104	0.0000085	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
Total GHGs (mtCO2e)															0.0	MT CO2e

Short	<300 miles
Medium	300 - <700 miles
Long	>700 miles

OR:

		Taxes	Resulting fare	$ per mile	Miles	C02 (kg CO2 per Passenger mile)	CH4 (kg CH4 per Passenger mile)	N20 (kg N20 per Passenger mile)	Total Quantity Emitted CO2	Total Quantity Emitted CH4	Total Quantity Emitted N2O	Unit of Measure	GWP Factor for CO2	GWP Factor for CH4	GWP Factor for N2O	Unit of Measure	Total Quantity Emitted (CO2e)	Unit of Measure	Total Quantity Emitted (CO2e)	Unit of Measure
Contractor spend on domestic business air travel:	$ 365,941.27	15.50%	309220.3764	0.1485	2,082,292	0.271	0.0000104	0.0000085	564,301.2	21.7	17.7	kg	1	21	310	CO2e	570,242.8	kg CO2e	570.2	MT CO2e
Contractor spend on international air travel	$ -	15.50%	0	0.128	-	0.271	0.0000104	0.0000085	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
Total GHGs (mtCO2e)																			570.2	MT CO2e

Assumptions:
Price for aviation fuel/gallon was higher in 2008 than 2010, adjusted "$ per mile" accordingly
Only partial data for 2008 was available (from mid March 2008 forward), due to contract change.
(Assume travel was equally distributed across first 5.5 mos the same as last 7.5 mos.)

OR:

If you are unable to calculate GHG emissions from contractor air travel using either Option 1 or 2 you may use an alternative method of your choosing. Please detail the methd used, any assumptions made and the calculated GHGs in this text box. Please also provide references to any external tools used.

Method used:

Assumptions made:

Calculated GHGs:

References:

Comments:

LM 2008

5 Scope 3: Employee (Federal and M&O Contractor) Business Ground Travel

Must be filled in
May be filled in

Default Methodology (A)

Process Type	Vehicle Type	Fuel Type	Annual number of vehicle rentals	Average Rental Mileage per Trip			Total Mileage by Vehicle Type	Unit of Measure	Emission Factor CO2	Unit of Measure	Emission Factor CH4	Unit of Measure	Emission Factor N2O	Unit of Measure	Total Quantity Emitted CO2	Total Quantity Emitted CH4	Total Quantity Emitted N2O	Unit of Measure	GWP Factor for CO2	GWP Factor for CH4	GWP Factor for N2O	Unit of Measure	Total Quantity Emitted (CO2e)	Unit of Measure	Total Quantity Emitted (CO2e)	Unit of Measure
Ground Business Travel Emissions - Rentals Emissions	Passenger Car	Gasoline	0.0	419.0			0.0	Miles	0.364	kg CO2/Mile	0.000031	kg CH4/Mile	0.000032	kg N2O/Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
	SUV or Truck	Gasoline	0.0	419.0			0.0	Miles	0.519	kg CO2/Mile	0.000036	kg CH4/Mile	0.000047	kg N2O/Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
Personal Vehicle Use	Passenger Car	Gasoline					0.0	Miles	0.364	kg CO2/Mile	0.000031	kg CH4/Mile	0.000032	kg N2O/Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
	SUV or Truck	Gasoline					0.0	Miles	0.519	kg CO2/Mile	0.000036	kg CH4/Mile	0.000047	kg N2O/Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e

Sub-Total Rental Emissions	0.0	MT CO2e

Or:

Advanced Methodology (B)

Process Type	Vehicle Type	Fuel Type	Total Quantity Fuel Purchased	Unit of Measure	Average MPG	Unit of Measure	Total Mileage by Vehicle Type	Unit of Measure	Emission Factor CO2	Unit of Measure	Emission Factor CH4	Unit of Measure	Emission Factor N2O	Unit of Measure	Total Quantity Emitted CO2	Total Quantity Emitted CH4	Total Quantity Emitted N2O	Unit of Measure	GWP Factor for CO2	GWP Factor for CH4	GWP Factor for N2O	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure
Ground Business Travel Emissions - Direct Fuel Purchase Emissions (rental Vehicle used for business purposes)	Passenger Car	Gasoline	8,728.9	Gallons	22.5	Miles / Gallon	196,401.1	Miles	0.364	kg CO2/Mile	0.000031	kg CH4/Mile	0.000032	kg N2O/Mile	71,490.0	6.1	6.3	kg	1	21	310	CO2e	73,566.1	kg CO2e	73.6	MT CO2e
	SUV or Truck	Gasoline	0.0	Gallons	16.2	Miles / Gallon	0.0	Miles	0.519	kg CO2/Mile	0.000036	kg CH4/Mile	0.000047	kg N2O/Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
	SUV or Truck	Diesel	0.0	Gallons	18.1	Miles / Gallon	0.0	Miles	0.561	kg CO2/Mile	0.000001	kg CH4/Mile	0.0000015	kg N2O/Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
Personal Vehicle Use	Passenger Car	Gasoline					95,340.8	Miles	0.364	kg CO2/Mile	0.000031	kg CH4/Mile	0.000032	kg N2O/Mile	34,704.1	3.0	3.1	kg	1	21	310	CO2e	35,711.9	kg CO2e	35.7	MT CO2e
	SUV or Truck	Gasoline					55,993.8	Miles	0.519	kg CO2/Mile	0.000036	kg CH4/Mile	0.000047	kg N2O/Mile	29,060.8	2.0	2.6	kg	1	21	310	CO2e	29,919.0	kg CO2e	29.9	MT CO2e

Sub-Total Rental Direct Fuel Purchase Emissions	139.2	MT CO2e

Optional but Encouraged:

Advanced Methodology (C)

Process Type	Vehicle Type	Fuel Type	Number of Agency Business Trip	Average Passenger Miles per Trip	Average MPG	Unit of Measure	Total Mileage by Vehicle Type	Unit of Measure	Emission Factor CO2	Unit of Measure	Emission Factor CH4	Unit of Measure	Emission Factor N2O	Unit of Measure	Total Quantity Emitted CO2	Total Quantity Emitted CH4	Total Quantity Emitted N2O	Unit of Measure	GWP Factor for CO2	GWP Factor for CH4	GWP Factor for N2O	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure
Ground Business Travel - Mass Transit	Bus	Diesel	0.0	0.0			0.0	Miles	0.107	kg CO2/Passenger Mi	0.0000006	kg CH4/Passenger Mile	0.0000005	kg N2O/Passe	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
	Metro / Transit R	Electric	0.0	0.0			0.0	Miles	0.163	kg CO2/Passenger Mi	0.000004	kg CH4/Passenger Mile	0.000002	kg N2O/Passe	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
	Commuter Rail	Diesel	0.0	0.0			0.0	Miles	0.172	kg CO2/Passenger Mi	0.000002	kg CH4/Passenger Mile	0.000001	kg N2O/Passe	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
	Intercity Rail	Diesel	0.0	0.0			0.0	Miles	0.185	kg CO2/Passenger Mi	0.000002	kg CH4/Passenger Mile	0.000001	kg N2O/Passe	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e

Sub-Total Rental Direct Fuel Purchase Emissions	0.0	MT CO2e

Total Ground Business Travel Emissions	**139.2**	**MT CO2e**

Total Ground Business Travel Emissions	139.2	MT CO2e

Source: *U.S. EPA Climate Leaders Program, Technical Guidance, Optional Emissions from Commuting, Business Travel, and Product Transport, see: http://www.epa.gov/stateply/documents/resources/commute_travel_product.pdf*

Comments/Assumptions:
Only partial data for 2008 was available (from mid March 2008 forward), due to contract change. (Assume travel was equally distributed across first 5.5 mos the same as last 7.5 mos.)
For rentals: assumed all rentals were cars and that the avg. cost for gas per gallon was $3.39

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6 Scope 3: Employee (Federal and M&O Contractor) Commuting

Must be filled in
May be filled in

Process Type	Vehicle Type	Fuel Type	Total Daily Commute Distance Traveled (miles)	Number of Commute Days per Year	Total Mileage by Vehicle Type	Unit of Measure	Emission Factor CO2	Unit of Measure	Emission Factor CH4	Unit of Measure	Emission Factor N2O	Unit of Measure	Total Quantity Emitted CO2	Total Quantity Emitted CH4	Total Quantity Emitted N2O	Unit of Measure	GWP Factor for CO2	GWP Factor for CH4	GWP Factor for N2O	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure	Total Quantity Emitted by Type	Unit of Measure
Commuter Travel - Personal Owned Vehicles	POV Passenger Car	Gasoline	4,663.2	230.0	1,072,536.0	Miles	0.364	kg CO2/Mile	0.000031	kg CH4/Mile	0.000032	kg N2O/Mile	390,403.1	33.2	34.3	kg	1	21	310	CO2e	401,740.9	kg CO2e	401.7	MT CO2e
	POV Passenger Car	Hybrid	174.0	230.0	40,020.0	Miles	0.192	kg CO2/Mile	0.000008	kg CH4/Mile	0.000005	kg N2O/Mile	7,683.8	0.3	0.2	kg	1	21	310	CO2e	7,751.9	kg CO2e	7.8	MT CO2e
	POV SUV or Truck	Gasoline	3,166.8	230.0	728,364.0	Miles	0.519	kg CO2/Mile	0.000036	kg CH4/Mile	0.000047	kg N2O/Mile	378,020.9	26.2	34.2	kg	1	21	310	CO2e	389,183.8	kg CO2e	389.2	MT CO2e
	POV SUV or Truck	Diesel	104.4	230.0	24,012.0	Miles	0.561	kg CO2/Mile	0.000001	kg CH4/Mile	0.0000015	kg N2O/Mile	13,465.3	0.0	0.0	kg	1	21	310	CO2e	13,477.0	kg CO2e	13.5	MT CO2e
	POV SUV or Truck	Hybrid	0.0	230.0	0.0	Miles	0.35	kg CO2/Mile	0.00001	kg CH4/Mile	0.000005	kg N2O/Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
	POV Motorcycle	Gasoline	174.0	230.0	40,020.0	Miles	0.167	kg CO2/Mile	0.00007	kg CH4/Mile	0.000007	kg N2O/Mile	6,683.3	2.8	0.3	kg	1	21	310	CO2e	6,829.0	kg CO2e	6.8	MT CO2e
Commuter Travel - Car / Van Pools	Car Pool	Gasoline	452.4	230.0	104,052.0	Miles	0.182	kg CO2/Passenger Mile	0.0000155	kg CH4/Passer	0.000016	kg N2O/Passenger Mile	18,937.5	1.6	1.7	kg	1	21	310	CO2e	19,487.4	kg CO2e	19.5	MT CO2e
	Van Pool	Gasoline	0.0	230.0	0.0	Miles	0.130	kg CO2/Passenger Mile	0.000009	kg CH4/Passer	0.00001175	kg N2O/Passenger Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
Commuter Travel - Mass Transit	Bus	Diesel	0.0	230.0	0.0	Miles	0.107	kg CO2/Passenger Mile	0.0000006	kg CH4/Passer	0.0000005	kg N2O/Passenger Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
	Metro / Transit Rail	Electric	0.0	230.0	0.0	Miles	0.163	kg CO2/Passenger Mile	0.000004	kg CH4/Passer	0.000002	kg N2O/Passenger Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
	Commuter Rail	Diesel	0.0	230.0	0.0	Miles	0.172	kg CO2/Passenger Mile	0.000002	kg CH4/Passer	0.000001	kg N2O/Passenger Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
	Intercity Rail	Diesel	0.0	230.0	0.0	Miles	0.185	kg CO2/Passenger Mile	0.000002	kg CH4/Passer	0.000001	kg N2O/Passenger Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e
Commuter Travel - Human Powered	Walking and/or Bicycling		69.6	230.0	16,008.0	Miles	0	kg CO2/Mile	0	kg CH4/Mile	0	kg N2O/Mile	0.0	0.0	0.0	kg	1	21	310	CO2e	0.0	kg CO2e	0.0	MT CO2e

Total Commuter Travel Emissions	**838.5**	**MT CO2e**

Total Commuter Travel Emissions	**838.5**	MT CO2e

Source: *U.S. EPA Climate Leaders Program, Technical Guidance, Optional Emissions from Commuting, Business Travel, and Product Transport, see: http://www.epa.gov/stateply/documents/resources/commute_travel_product.pdf*
Source: *U.K. Defra Company Reporting Guidelines emissions factors for Hybrid vehicles http://www.defra.gov.uk/environment/business/reporting/conversion-factors.htm*

Comments/Assumptions:
Same % of people in each vehicle type was the same for 2008 as 2010.
Used an avg. mileage based on a survey of a sampled poplulation.
Total # of employees = 252 and did not include employees working at Forrestal

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