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Environmental Management System (EMS) Objectives & Targets Annual Results Summary – FY2011

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Environmental Management System
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Abstract

Sandia National Laboratories/New Mexico's (SNL/NM) Environmental Management System is the integrated approach for members of the workforce to identify and manage environmental risks. Each Fiscal Year (FY) SNL/NM performs an analysis to identify environmental aspects, and the environmental programs associated with them are charged with the task of routinely monitoring and measuring the objectives and targets that are established to mitigate potential impacts of SNL/NM's operations on the environment. An annual summary of the results achieved towards meeting established objectives and targets provides a connection to, and rationale for, annually revised environmental aspects. The purpose of this document is to summarize the results achieved and documented in FY2011.

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Acronyms & Abbreviations

AOP	Administrative Operating Procedure
BTU	British Thermal Unit
C&D	Construction & Demolition
CINT	Center for Integrated Nanotechnology
DOE	U. S. Department of Energy
EISA	Energy Independence and Security Act
ELM	Environmental Life-cycle Management
EMS	Environmental Management System
EO	Executive Order
ES&H	Environment, Safety, & Health
FMOC	Facilities Management and Operations Center
FY	Fiscal Year
Gal	gallon
GHG	Greenhouse Gas
gsf	Gross Square Footage
HWMF	Hazardous Waste Management Facility
MOW	Member of the Workforce
NA	Not Applicable
NEPA	National Environmental Policy Act
P2	Pollution Prevention
PPOA	Pollution Prevention Opportunity Assessment
Sandia	Sandia Corporation
SF-6	Sulfur Hexafluoride
SNL	Sandia National Laboratories
SNL/NM	Sandia National Laboratories/New Mexico
SSP	Site Sustainability Plan
WIMS	Waste Information Management System
yr	year

1.0 INTRODUCTION

1.1 Description of the Activity

Sandia National Laboratories/New Mexico's (SNL/NM) Environmental Management System (EMS) is the integrated approach for members of the workforce (MOW) to identify and manage environmental risks. Each Fiscal Year (FY) environmental aspects are evaluated and prioritized, and the environmental programs associated with them are charged with the task of routinely monitoring and measuring the objectives and targets that are designed to mitigate the impact of SNL/NM's operations on the environment.

Monitoring and measurement information supports SNL/NM's EMS program compliance requirements and provides a status of overall progress in meeting site environmental objectives. Based on the annual evaluation and prioritization of environmental aspects, procedures for monitoring and measurement are revised to reflect objectives and targets performance metrics, associated operational controls, and documentation requirements. An annual summary of the results achieved towards meeting established objectives and targets provides a yearly overview of environmental performance and a connection to, and rationale for, the annual evaluation and prioritization of environmental aspects.

1.2 Purpose & Scope

The purpose of this document is to annually summarize results achieved and documented through monitoring and measurement of objectives and targets established to progress SNL/NM towards mitigating its significant environmental aspects. In addition, this annual summary will provide a roadmap for year to year changes in the significant aspects and objectives and targets tracked by the SNL/NM EMS Team. This provides consistency, continuity and connectivity between objectives and targets for the previous, current, and upcoming years.

In FY2011 an important scope change occurred when the U.S. Department of Energy (DOE) issued DOE Order 436.1, *Department Sustainability*, superseding DOE Orders 450.1 and 430.2A. This new DOE Order requires sites to use EMS as a platform for Site Sustainability Plan (SSP) implementation and for programs with objectives and measurable targets that contribute to the Department meeting its sustainability goals. Although this order is not within Sandia Corporation's (Sandia's) Management and Operating Contract, the intent of the DOE Order is implemented through Sandia's requirement for an International Organization for Standardization 14001 certified EMS. SNL/NM's EMS had previously included several SSP sustainability goals as objectives and targets, but were measured and monitored on the basis of SNL/NM activities only. The scope of measuring and monitoring SSP-specific sustainability goals was expanded for FY2011 to include all SNL sites (e.g., New Mexico, California, Nevada, and Hawaii).

Processes and procedures associated with measuring and monitoring of EMS objectives and targets are described in administrative operating procedure (AOP), *Monitoring & Measuring Procedures*, AOP 09-06.

2.0 OBJECTIVES AND TARGETS SUMMARY

2.1 Significant Aspect: Land Use

Objective: Minimize Impact to the Environment from Land Use

Target: Implement the *Complete the Environmental Life-Cycle Management Form* corporate procedure by January 15, 2011, and upon implementation, minimize environmental impacts through project evaluations.

Scope: NM Site-Specific

This objective and target was established in FY2011 within the scope of the SNL/NM site only and is based on continual improvement to life-cycle management of land use. The Environmental Life-cycle Management (ELM) Program (formerly Long Term Environmental Stewardship Program) ensures long-term protection of human health and the environment and proactive management toward sustainable use and protection of natural and cultural resources affected by SNL's operation and operational legacies. To advance this mission, the ELM Program pursued development of corporate procedure ESH100.1.EP.3 *Complete an Environmental Life-cycle Management Evaluation*. The procedure is intended to ensure new projects evaluate potential environmental impacts by requiring project personnel to:

- 1) Evaluate environmental impacts at all stages of the project and identify approaches to minimize those impacts and ensure proper disposal/cleanup at the end of the project.
- 2) Account for environmental deposition costs for activities that use materials which:
 - Potentially impact the environment including activities such as destructive testing, explosions, or other activity that may result in dispersal/deposition of any of the following: hazardous substances, petroleum products, water, debris, or particulate matter.
 - Have a high disposal cost.
 - Are difficult to dispose of or have no disposal pathway.
- 3) Complete an Environmental Life-cycle Management Form.

The National Environmental Policy Act (NEPA) process will be used as the basis to determine if a new project has a potential environmental impact, and thus requiring implementation of procedure ESH100.1.EP.3 to minimize the impacts and account for environmental liability costs. The completed form is to be tracked in a manner similar to how the NEPA Checklist currently tracks permits and other requirements.

FY2011 Results:

This objective and target is considered to be complete. The corporate procedure ESH100.1.EP.3 -- Complete an Environmental Life-cycle Management Evaluation -- was approved and implemented on March 23, 2011. Project evaluations through the NEPA Tracking Environmental Action Management System process began in the 3rd Quarter FY2011. Through the end of FY2011, a total of 42 outdoor projects were evaluated for potential environmental liability and assigned an impact rating of Not Applicable (NA), Low, Medium, or High. Of the 42 projects evaluated; 28 had an impact classification of NA (outside the scope of the procedure), 10 had an impact classification of Low, and 4 had an impact classification of Medium. No FY2011 projects were classified as High.

Although life-cycle management of land use will be an ongoing effort at SNL, this objective and target is considered complete and will not be included in objective and target monitoring and measurement in FY2012.

2.2 Environmental Aspect: Air Emissions – Mobile Sources

Objective: Minimize the Number of Portable Sources

Target: By FY2012, reduce the number of portable sources by 5 percent relative to the FY2010 baseline.

Scope: NM Site-Specific

This objective and target was established in FY2011 within the scope of the SNL/NM site only and is based on continual improvement to reduce air emissions. The Air Quality Control Program (Environmental Programs) maintains an equipment inventory list of potential air emission sources throughout SNL/NM. This list helps to prove site-wide compliance with applicable regulations. As follow-on to the FY2010 objective and target established for the air emissions environmental aspect, an effort to reduce Sandia-owned portable emission source equipment was established in FY2011 to reduce overall air emissions.

In FY2010, Environmental Programs worked with Fleet Services, to update and verify the existing mobile emission source inventory spreadsheet. The mobile emission source inventory spreadsheet compiles all fossil fuel burning emission units that are capable of moving or being moved readily (i.e., portable generators). The spreadsheet contains unit information (i.e., size, fuel type) along with the potential air emission calculations based on Environmental Protection Agency AP-42 Emission Factors. Additionally, a hands-on inventory of portable emission sources was completed in FY2010 to verify the Fleet Services spreadsheet information as well as identify additional portable emission sources not managed by Fleet Services.

In FY2011 an assessment of the hands-on inventory was conducted to identify portable sources that are either not being used or have potential for causing environmental impacts (i.e., leaks). Owners of unused or potentially impacting portable sources were contacted to identify disposition or reuse options. As appropriate, assistance was provided to owners to disposition such equipment.

FY2011 Results:

The primary owners of portable emission source equipment at SNL/NM are Fleet Services and Facilities Management and Operations Center (FMOC). FMOC Grounds and Roads successfully dispositioned 3 inventoried equipment items, including a Crack Cleaner, Melter (M/A-1), Water Buffalo (LVE001), and a Debris Vacuum (DV-1). FMOC Mechanical Utilities successfully dispositioned 3 inventoried equipment items, including 2 trailer mounted water pumps (WP-1 and WP-2) and a sewer line cable machine (SC-1). Fleet Services successfully dispositioned 6 inventoried generators (GEN4, 10, 29, 32, 46, and 71) and one inventoried air compressor (AC3). As a result, 13 of the 144 items identified in the FY2010 portable emission source equipment inventory were successfully dispositioned. The resulting 9 percent reduction exceeds the 5 percent target for this objective.

Although reduction of air emissions will be an ongoing effort at SNL, this objective and target is considered complete and will not be included in the objective and target measurement and monitoring in FY2012.

2.3 Environmental Aspect: Air Emissions – Greenhouse Gas (GHG)

Objective: Reduce GHG Footprint

Target: By FY2020, reduce Scope 1 & 2 GHG emissions by 28 percent relative to a FY2008 baseline.

Scope: Corporate SSP Goal for all SNL Sites

This corporation-based goal is identified in the SSP and originates from Executive Order (EO) 13514, *Federal Leadership in Environmental, Energy, and Economic Performance*. EO 13514 requires DOE to reduce its GHG Scope 1 & 2 emissions by 28 percent by FY2020 from a FY2008 baseline. Scope 1 consists of direct emissions such as on-site combustion of fossil fuels or fugitive GHG emissions, whereas Scope 2 consists of indirect emissions associated with the consumption of electricity, heat, or steam. Sites are expected to aggressively strive towards the overall DOE goal of a 28 percent reduction, but will not necessarily be held to it, as actual targets will be defined at the DOE Under Secretary level.

While individual DOE sites are not required specifically to meet the 28 percent target that the agency as a whole is committed to meeting, Sandia as a corporation has adopted an equivalent GHG reduction in the SSP and as an EMS Objective and Target. As a result, this objective and target have been revised from FY2010 with respect to scope. Adoption of the corporate SSP goals for GHG reduction changed the scope from SNL/NM-specific to include all SNL sites.

FY2011 Results:

Sulfur Hexafluoride (SF-6) is the primary contributor to SNL GHG emissions, accounting for approximately 45 percent in FY2011. Due to the extensive use of SF-6 in SNL accelerator facilities, the GHG emissions are expected to vary widely from year to year depending on the accelerator research and development activities conducted. Figure 1 shows SNLs FY2011 status towards meeting the GHG reduction objective and target. Since this objective and target has a FY2020 timeline, monitoring and measurement progress will be ongoing.

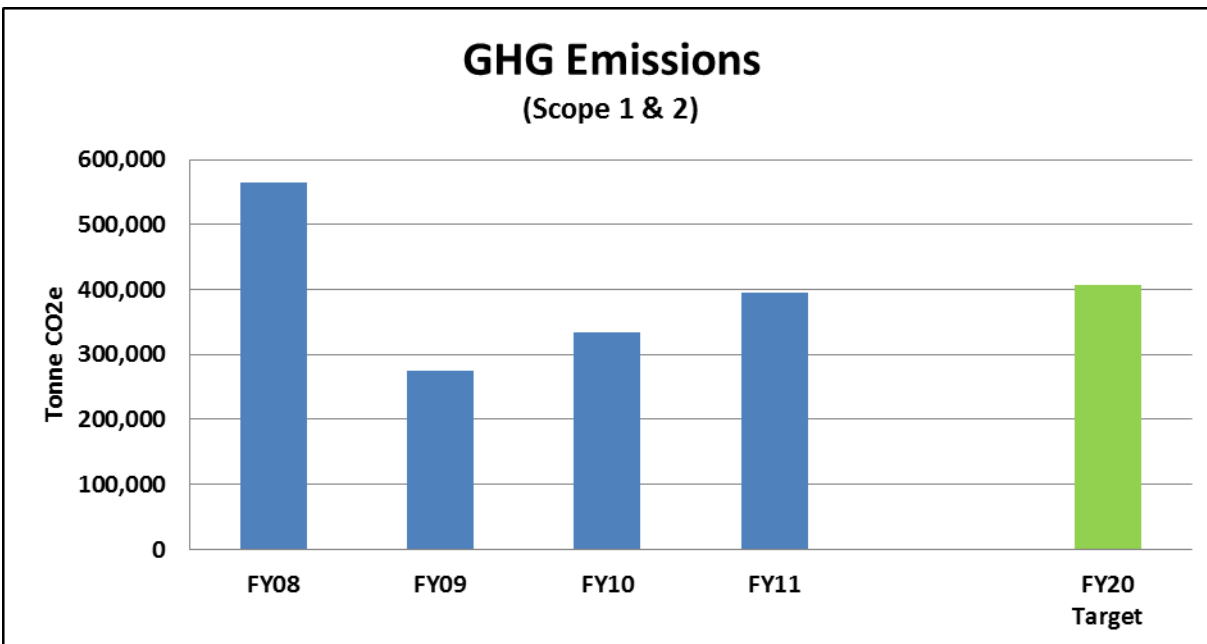


Figure 1. GHG Emission Reduction Status (in Tonnes of Carbon Dioxide Equivalents [CO₂e]).

2.4 Environmental Aspect: Personnel Transportation

Objective: Reduce Use of Fleet Petroleum

Target: By FY2020, reduce fleet petroleum consumption by 2 percent per year relative to a FY2005 baseline.

Scope: Corporate SSP Goal for all SNL Sites

Objective: Increase the Use of Fleet Alternative Fuel

Target: By FY2015, increase fleet alternative fuel consumption by 10 percent per year relative to a FY2005 baseline.

Scope: Corporate SSP Goal for all SNL Sites

These two corporation-based goals are identified in the SSP and originate from EO 13514 *Federal Leadership in Environmental, Energy, and Economic Performance* (2009); EO 13423 *Strengthening Federal Environmental, Energy, and Transportation Management* (2007); and the *Energy Independence and Security Act of 2007* (EISA 2007). EO 13423 requires Federal agencies to reduce “subject” fleet petroleum use by 2 percent per year through FY2015 (from a FY2005 baseline), for an overall reduction of 20 percent. EO 13514 incorporates this requirement and extends it to FY2020, for an overall reduction of 30 percent. In addition, EISA 2007 requires federal agencies to increase the use of “subject” non-petroleum fuels, or alternative fuels, by 10 percent annually through FY2015 (from a FY2005 baseline), for an overall increase of 159.4 percent. “Subject” fuel includes the fuel used in all light-duty, medium-duty, and heavy-duty vehicles, unless such vehicles are exempted from EO 13423 (e.g., law enforcement, emergency, and military tactical vehicles, and vehicles operated outside of the United States).

While individual DOE sites are not specifically required to meet the petroleum fuel use reduction and alternative fuel use increase that the agency as a whole is committed to meeting, Sandia as a corporation has adopted both these fuel use goals in the SSP and as EMS Objectives and Targets. As a result, these two objectives and targets have been revised from FY2010 with respect to scope. Adoption of the corporate SSP goals for petroleum fuel use reduction and alternative fuel use increase changed the scope from SNL/NM-specific to include all SNL sites.

FY2011 Results:

SNL achieved a 17 percent reduction fleet petroleum use relative to FY2010, far exceeding the annual 2 percent target reduction. This resulted in an overall cumulative reduction in fleet petroleum use of 36 percent from the baseline year FY2005, which is well above the overall FY2020 target of a 30 percent reduction. SNL achieved a 4 percent increase in fleet alternative fuel use relative to FY2010. Although this result is below the annual 10 percent target increase, the overall cumulative increase in fleet alternative fuel use is 98 percent compared to the baseline year FY2005. Thus, the overall cumulative alternative fuel use increase is exceeding the overall increase trend necessary to meet the FY2015 objective and target, 159 percent increase. Figures 2 and 3 depict the Fleet petroleum reduction and alternative fuel increase objective and target status, respectively, based on FY2011 results. Since these objectives and targets have FY2015 and FY2020 timelines, monitoring and measurement progress will be ongoing.

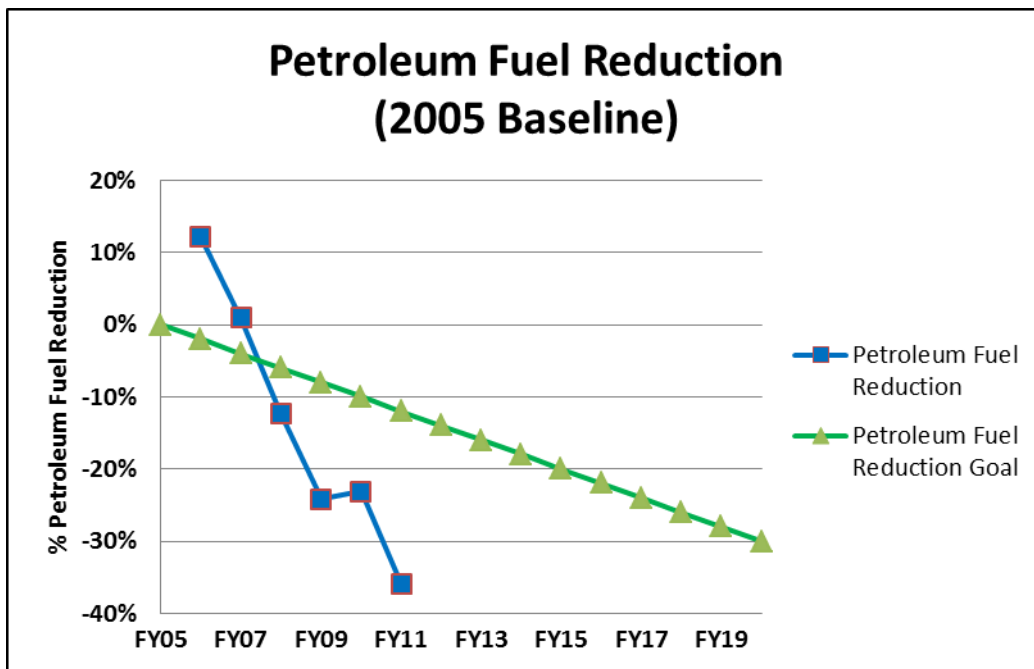


Figure 2. SNL Fleet Petroleum Use Reduction Trend

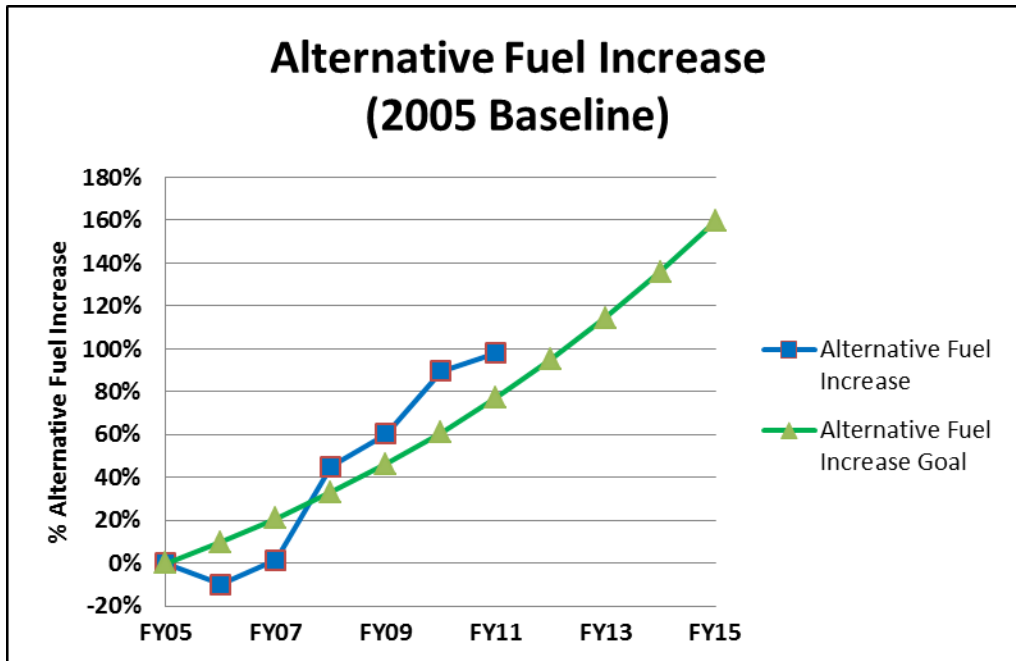


Figure 3. SNL Fleet Alternative Fuel Use Increase Trend

2.5 Significant Aspect: Hazardous Waste

Objective: Reduce Quantity of Hazardous Waste Generated

Target: Determine and prioritize hazardous waste opportunities by August 30, 2011.

Scope: NM Site-Specific

This objective and target was established in FY2011 within the scope of the SNL/NM site only and is based on continual improvement of hazardous waste reduction efforts.

All hazardous waste generated at SNL/NM is managed for disposal through the Hazardous Waste Management Facility (HWMF). The HWMF utilizes the Waste Information Management System (WIMS), which is a system for the management of hazardous waste generated by SNL. Hazardous waste generation data from WIMS is tracked and reported through the Pollution Prevention (P2) Program. Upon receiving quarterly raw data from WIMS, P2 enters the data into a “Trends” spreadsheet. The data maintained in the Trends spreadsheet can then be used to identify and prioritize hazardous waste reduction opportunities.

As the point of contact for this objective and target, P2 established the means for meeting this objective and target based on three primary elements:

1. Determine an FY2010 corporate baseline with breakdown by Divisions, with highest generators identified by waste type and corresponding buildings. Share with Division EMS Teams by November 30, 2010.
2. For highest waste generators, meet with Division EMS Teams to determine methods of, and timelines for, Waste Reduction assessment by March 15, 2011.

3. With completed assessment(s), report on potential reduction(s) and develop an implementation strategy for outward years.

FY2011 Results:

This objective and target was accomplished through a series of activities involving the P2 organization and EMS Division Teams. During the first quarter of FY2011, P2 analyzed FY2010 hazardous waste generation data to determine a corporate baseline with breakdown by Divisions. This baseline identified the highest quantity generators by waste type and buildings. For highest waste generators, P2 and EMS Division Teams met to determine potential methods of and timelines for Waste Reduction assessment.

During the second quarter of FY2011, P2 and EMS Division Team meetings were held with Division 2000 (multiple meetings, including Centers 2700, 2100, and 2900), Division 5000 (two meetings, specifically 5400), and Division 6000 (two meetings with EMS Champion and others). Based on a specific interest in waste reduction, a pollution prevention opportunity assessment (PPOA) was immediately initiated with Center 1700.

A number of waste reduction opportunities and implementation strategies were identified during the final two quarters of FY2011. Although the first 3 quarters of FY2011 revealed a 31 percent reduction in routine hazardous waste generation at SNL/NM compared to the same time period in FY2010, Division 1000 was the only division with an increase. As a result, the Division 1000 Environment, Safety, & Health (ES&H) team was presented with recent waste generation data, highlighting an excessive waste stream of high-occurrence, low-weight lab trash packages. The Center for Integrated Nanotechnology (CINT) building was then targeted for a walk-down of the waste process with the assigned Environmental Compliance Coordinator and generators. Based on recommendations resulting from the walk-down, the administrative process for laboratory trash packaging was changed, saving the generator over \$3,000 and eliminated the labor required to fill out and facilitate the pick-up of over 70 waste items annually. Opportunities to reduce chemicals older than 10 years at CINT were also reviewed.

The Center 1700 PPOA resulted in the identification of a recycling pathway for the largest quantity solid waste stream generated by the center (calcium fluoride). Division 6000 planned to facilitate wider use of the Chemical Exchange Program to reduce overall chemical inventory. Center 2700 planned to reduce their inventory of chemicals older than 10 years.

P2 worked with Fleet Services to implement the use of bulk brake cleaning product. Brake cleaner is a chemical commonly used by Fleet technicians for many purposes and previously was used with aerosol cans as the application method. A 55 gallon (gal) drum of the brake cleaning product was purchased along with equipment for filling rechargeable sprayers with the product and compressed air. In FY2012, Fleet will complete the transition from disposable aerosol cans to reusable/rechargeable sprayers eliminating the hazardous waste disposal of exhausted cans of brake cleaner.

Although hazardous waste reduction will be an ongoing effort at SNL, this objective and target is considered complete and will not be included in the objective and target measurement and monitoring in FY2012.

2.6 Environmental Aspect: Solid Waste

Objective: Reduce Waste

Target: By FY2012, divert 65 percent of non-hazardous solid waste, (excluding construction and demolition debris).

Scope: NM Site-Specific

This objective and target was established in FY2011 within the scope of the SNL/NM site only and is considered a “stretch” goal for continually improving solid waste reduction. The objective and target is based on reducing (or diverting) solid waste sent to the landfill through measures incorporating the P2 hierarchy of reduce, reuse, and recycle. Construction and demolition (C&D) waste is specifically excluded from this objective and target, as this portion of the solid waste stream is highly variable at SNL/NM.

The P2 Program coordinates, tracks, and improves the recycling processes for SNL/NM and the nearby offsite Sandia Science & Technology Park, working with both line organizations and the Waste Management Service Center. Coordinating and improving the recycling processes are daily activities. Diversion of solid waste in FY2011 will be increased through a number of measures, including:

- Awareness and outreach to MOWs encouraging participation in available recycling opportunities,
- Expansion of existing recycling programs to improve access to MOWs,
- Implementation of new recycle programs, and
- Improvements to the existing recycling infrastructure.

FY2011 Results:

SNL/NM achieved a diversion rate of 61.2 percent in FY2011. Although the 65 percent target diversion rate was not attained, this Objective & Target has a 2-year timeframe with an end of year FY2012 completion date. Figure 4 below shows the quarterly year-to-date solid waste diversion rate results for FY2011. An increasing trend in the diversion occurred over the first three quarters of FY2011 and then plateaued in the fourth and final quarter of the FY. Since this objective and target has a FY2012 completion timeline, monitoring and measurement progress will be ongoing.

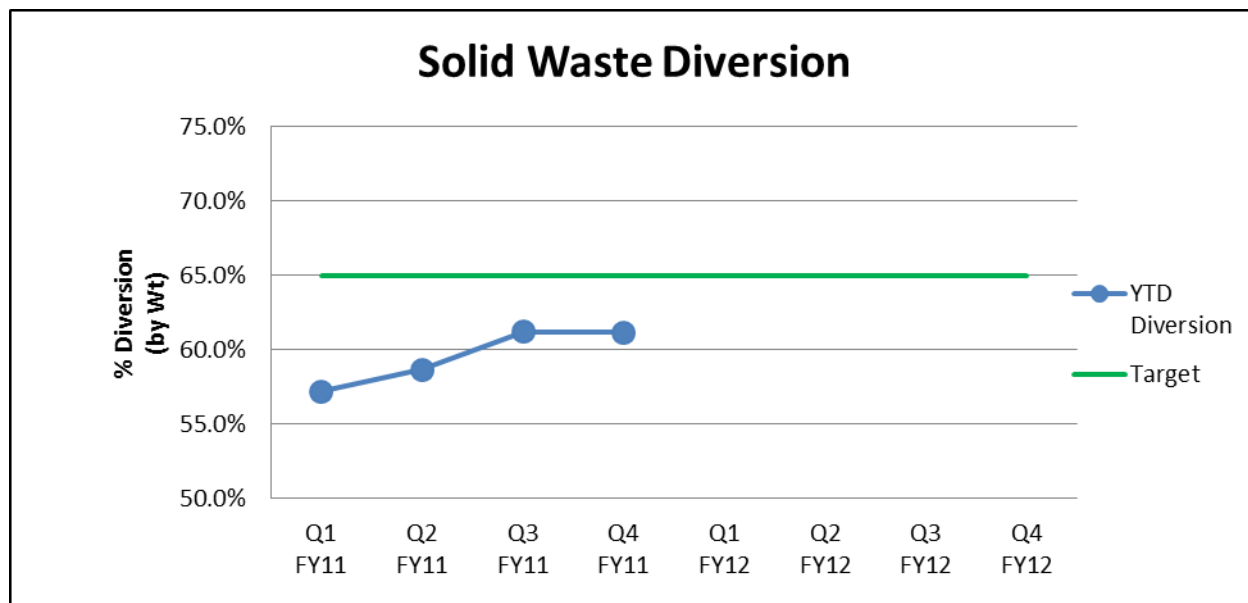


Figure 4. FY2011 Solid Waste Diversion Trend (excluding C&D waste).

2.7 Environmental Aspect: Resource Use -- Energy

Objective: Reduce Annual Energy Use

Target: By FY2015, reduce energy intensity by 30 percent relative to FY2003 (excluding buildings that meet the guidelines for Federal Energy Management Program excluded buildings).

Scope: Corporate SSP Goal for all SNL Sites

This corporation-based goal is identified in the SSP and originates from EISA of 2007, which requires DOE to reduce its energy intensity by 30 percent by FY2015 from a FY2003 baseline. This objective and target has been revised from FY2010 with respect to scope. Adoption of the corporate SSP goal for energy intensity reduction changed the scope from SNL/NM-specific to include all SNL sites.

Energy intensity, as opposed to overall energy use, is a measure that normalizes energy use by allowing for increases or decreases in the size of SNL due to changes in mission and work scope. Energy intensity is measured in terms of energy use per square foot of building space, or British Thermal Units per gross square foot (BTU/gsf), and when measured on an annual basis, intensity becomes energy use per gross square foot of building space per year (or BTU/gsf/yr).

SNL has an Energy and Water Resource Management program that is assigned the responsibility of ensuring energy efficiency is integrated and institutionalized into SNL sites planning, design, construction, operations, and infrastructure including, ES&H policies, processes, and procedures. Significant opportunity for energy demand reduction exists at SNL, because 60 to 70 percent of the peak energy intensity occurs at night and on weekends. In other words, significant energy demand occurs even during non-working hours. As a result, SNL continually strives to reduce energy consumption through a variety of means, including improved facility control measures, implementation of new and more efficient equipment, razing of outdated, inefficient buildings, etc.

FY2011 Results:

SNL is on track to meet the objective and target for energy-intensity reduction. In FY2011, energy use intensity was decreased by 1.8 percent relative to FY2011, from 155,089 BTU/gsf/yr to 152,236 BTU/gsf/yr. This corresponds to an overall 16.4 percent reduction relative to the FY2003 baseline of 182,198 BTU/gsf/yr. Figure 5 displays SNL’s annual energy intensity trend from the FY2003 baseline.

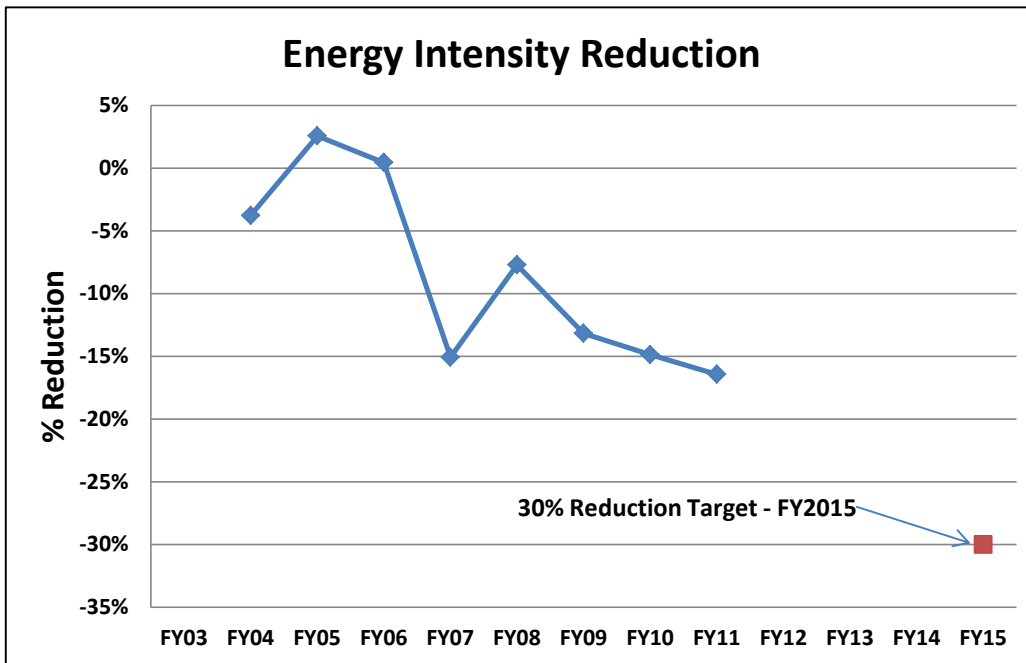


Figure 5. Annual Energy Use Intensity Reduction Trend.

The energy intensity reduction goal has a FY2020 timeline to completion. As a result, monitoring and measurement of this objective and target will be ongoing through FY2020.

2.8 Environmental Aspect: Resource Use -- Water

Objective: Reduce Water Use

Target: By FY2020, reduce potable water use intensity by 26 percent relative to FY2007.

Scope: Corporate SSP Goal for all SNL Sites

This corporation-based goal is identified in the SSP and originates from EO 13514; *Federal Leadership in Environmental, Energy, and Economic Performance*, which requires DOE to reduce potable water consumption intensity by 26 percent by FY2020 relative to a FY2007 baseline. Water use intensity, as opposed to overall water use, is a measure that normalizes water use by allowing for increases or decreases in the size of SNL due to changes in mission and work scope. Water use intensity is measured in terms of water use per square foot of building space, or gallons per gross square foot (gal/gsf), and

when measured on an annual basis becomes water use per gross square foot of building space per year (or gal/gsf/yr).

This objective and target has been revised from FY2010 with respect to description and scope. Adoption of the corporate SSP goal for water use intensity reduction changed the scope from SNL/NM-specific to include all SNL sites. In addition, the previous goal and driver for water reduction, DOE Order 430.2B, has been cancelled and replaced with the more aggressive EO 13514 goal. DOE Order 430.2B, *Departmental Energy, Renewable Energy and Transportation Management*, had required DOE to reduce water intensity by no less than 16 percent by FY2015, relative to a FY2007 baseline.

Sandia continually strives to reduce overall water consumption through a variety of means, including implementation of low-flow plumbing fixtures, improved cooling tower operating practices, efficient landscape irrigation technology, etc. SNL has determined that ultra-pure water process systems are one of the largest sources of water use, while cooling is the next-largest water-using process. Although irrigation does not account for a significant amount of the water consumed, an area that is difficult to quantify is construction and the recent reduction in construction activities helped reduce water consumption. Increased cooling tower cycles, condition assessments, and leak repairs on the water-distribution system have contributed to water savings.

FY2011 Results:

In FY2011, water use intensity was decreased by 5 percent relative to FY2010, from 52.7 gal/gsf/yr to 50.1 gal/gsf/yr. This corresponds to an overall reduction of 33.6 percent reduction relative to the FY2007 baseline of 75.4 gal/gsf/yr. Figure 6 displays SNL’s annual water consumption trend since FY2007.

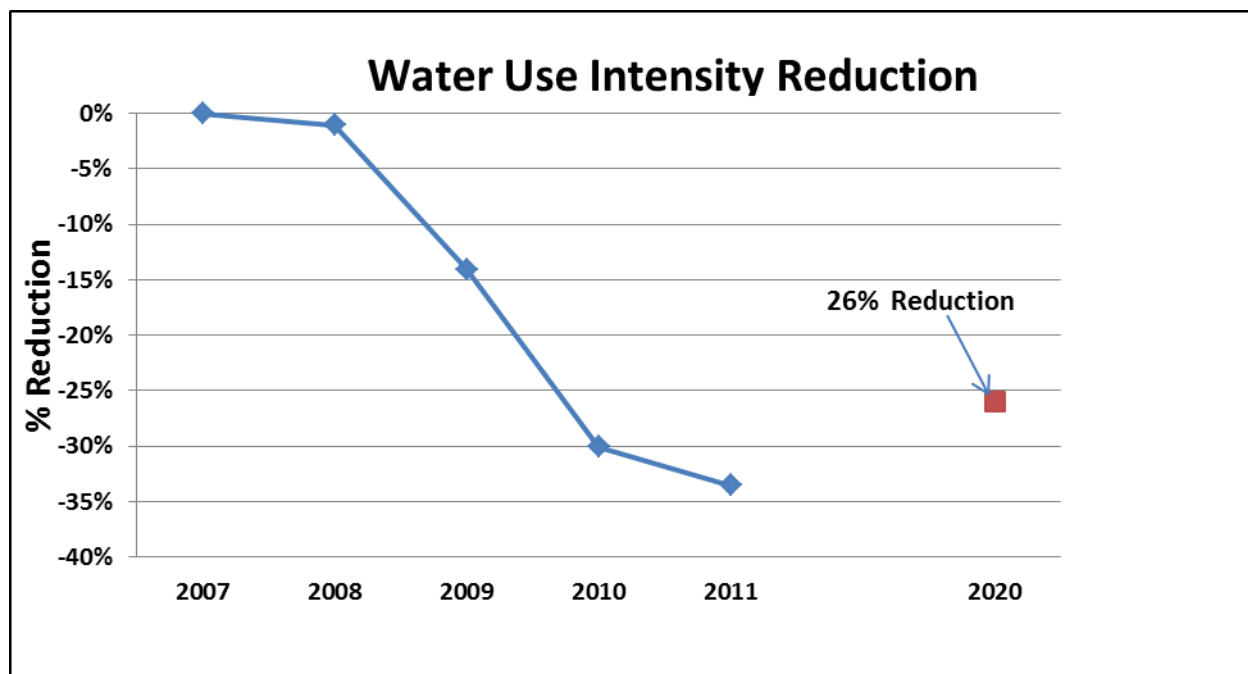


Figure 6. Annual Water Use Intensity Reduction Trend.

The water use intensity reduction goal has a FY2020 timeline to completion. As a result, monitoring and measurement of this objective and target will be ongoing through FY2020.

3.0 DOCUMENTATION AND RECORDKEEPING

The data (status of Objectives and Targets) that is collected in accordance with the Monitoring and Measurement Procedure (AOP 09-06, EMS Monitoring & Measurement Procedures) is maintained and tracked on the EMS Implementation SharePoint Site. The data is provided for management review.

4.0 REFERENCES

4.1 Reference Document

Sandia National Laboratories/New Mexico, Environmental Management System Manual (PG470222)

5.0 ATTACHMENTS

Not Applicable

6.0 DEFINITIONS

EMS -- The Environmental Management System is a part of an organizations management system used to develop and implement its environmental policy and manage its environmental aspects.

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