Environmental Management System

**Brief**

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**BRIEF**

**Policy Summary**

Through its Environmental Management System (EMS), Berkeley Lab has established a broad-based environmental policy stating that it is committed to:

- Complying with applicable environmental, public health, and resource conservation laws and regulations
- Preventing pollution, minimizing waste, and conserving natural resources
- Correcting environmental hazards and cleaning up existing environmental problems and
- Continually improving the Laboratory’s environmental performance while maintaining operational capability and sustaining the overall mission of the Laboratory

**Who Should Read This Policy**

All Berkeley Lab employees, visitors, affiliates, and subcontractors

**To Read the Full Policy, Go To:**

The POLICY tab on this wiki page

**To Read the ES&H Program Details, Go To:**

Environmental Management System Plan (PUB-3180)

**Contact Information**

Environmental Services Group
EHS Division
PATHorson@lbl.gov

**Policy**

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**POLICY**

**A. Purpose**

Executive Order 13423, *Strengthening Federal Environmental, Energy, and Transportation Management*, established the policy that federal agencies conduct their environmental, transportation, and energy-related activities in a manner that is environmentally, economically, and fiscally sound; integrated; continually improving; efficient; and sustainable. Subsequently, Executive Order 13514, *Federal Leadership in Environmental, Energy, and Economic Performance*, expanded on this policy to require federal agencies to lead by example in creating a clean energy economy that will promote energy security, safeguard the environment, and increase the nation's prosperity. In response to these actions, the Department of Energy (DOE) approved DOE Order 436.1, *Departmental Sustainability*, to manage sustainability activities within the department. The purpose of this directive is to:

- Ensure that DOE carries out its missions in a sustainable manner that addresses national energy security and global environmental
challenges, and advances sustainable, efficient, and reliable energy for the future

- Institute wholesale cultural change to factor sustainability and greenhouse gas reductions into all DOE corporate management decisions, and
- Ensure that DOE achieves the sustainability goals established in the annual DOE Strategic Sustainability Performance Plan pursuant to applicable laws, regulations, and Executive Orders, related performance scorecards, and sustainability initiatives.

The directive’s objectives flow down from DOE Order 436.1 to Lawrence Berkeley National Laboratory (Berkeley Lab) through a Contract 31 requirement that Berkeley Lab have an Environmental Management System (EMS) in place that is either certified to or conforms with the International Organization of Standardization (ISO) 14001:2004(E) standard.

B. Persons Affected

This policy applies to all individuals at Berkeley Lab: Employees, visitors, affiliates, and subcontractors. The degree to which individuals are involved in carrying out the policy varies. This is described below in Section E, Roles and Responsibilities, and presented graphically in the Process tab of this policy.

C. Exceptions

None

D. Policy Statement

1. Berkeley Lab’s Environmental Management System is a structured process designed to maintain compliance of Berkeley Lab programs with environmental laws and regulations, and minimize overall environmental impacts. The framework for achieving these objectives is an environmental policy with the following requirements that apply to all staff, affiliates, subcontractors, and visitors:
   a. Comply with applicable environmental, public health, and resource conservation laws and regulations
   b. Prevent pollution, minimize waste, and conserve natural resources
   c. Correct environmental hazards and clean up existing environmental problems and
   d. Continually improve the Laboratory’s environmental performance while maintaining operational capability and sustaining the overall mission of the Laboratory

2. Administering this policy through the Berkeley Lab EMS requires the following measures:
   a. Initiating a core leadership team to perform a continual cycle of process improvement
   b. Identifying environmental impacts (air, water, waste, resource usage, land use, and transportation)
   c. Developing targets to reduce identified environmental impacts and implement plans for reduction, which are called Environmental Management Programs (EMPs) and
   d. Auditing and assessing the Laboratory’s environmental programs to determine that all activities are being performed

3. In applying these measures, the Laboratory follows a performance-based approach to achieve the elements of the ISO 14001 standard for environmental management systems. This approach provides real and tangible business value rather than applying all the requirements of an ISO 14001–based EMS. A performance-based approach allows the Laboratory to focus resources on activities that have a more valuable and stronger environmental benefit and to maintain the current strengths of the environmental compliance programs. Performance of the EMS is measured by multiple methods and involves various internal and external organizations, including a comprehensive annual review by senior management.

E. Roles and Responsibilities

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| Senior management     | • Represents divisions who have staff serving as members of the EMS Core Team as well as the EMS Program Manager  
                       | • Participates in the annual management review of the EMS. This review will include at least one member of EHS senior management.  
                       | • Makes recommendations for the continual improvement of the EMS           |
EMS Program Manager

- Develops the EMS Plan and its implementing procedures; manages improvements to each
- Attends training required to achieve competence at the EMS implementation level
- Facilitates training for senior management and Core Team members
- Develops training strategy and measures to increase staff awareness of their environmental impacts
- Convenes and facilitates Core Team meetings where the following topics will generally be discussed:
  - Development and maintenance of EMPs
  - Identifying environmental aspects, impacts, and significance of Berkeley Lab activities
- Manages the following activities:
  - Internal assessments and external audits of the EMS
  - External communication about the EMS and EMPs, including performance status
  - Interdivisional programs that are part of the EMS
  - Annual senior management review of the EMS; Ensures that all required elements are discussed during this review
- Liaises between the senior management and the Core Team
- Enters assessment and audit findings into Berkeley Lab's Corrective Action Tracking System
- Oversees the implementation of any corrective actions
- Manages document control of required EMS documents, including audit records and any resulting corrective actions

EMS Core Team members

- Assist in the continual improvement of the EMS
- Attend training required to maintain comprehensive EMS awareness
- Coordinate internal communications about EMS or EMP activities
- Support management reviews of the EMS by preparing the information and data necessary for the review
- Participate in appraisals, audits, and reviews of the EMS
- Coordinate any training of staff critical to implementing applicable EMPs
- Identify environmental aspects and impacts
- Participate in the selection of significant aspects
- Develop objectives and targets for significant aspects applicable to individual's role on Core Team
- Recommend and assist in the development of any operational control that will be needed to achieve environmental objectives and targets
- Determine and manage necessary actions and associated target deadlines for applicable EMPs associated with a determined significant aspect
- Develop, collect, and maintain performance metrics for applicable EMPs
- Review performance results and prepare recommendations on improvements to applicable EMPs

Office of Contractor Assurance

- Provides oversight to Berkeley Lab's management and assurance systems

General Laboratory employees, affiliates, visitors, and subcontractors

- Must be aware of the Laboratory's environmental policy statements

F. Definitions/Acronyms

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Assessment</td>
<td>A formal review that is normally conducted by an organization with an appropriate degree of independence</td>
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<tr>
<td>Audit</td>
<td>A systematic and documented verification process of objectively obtaining and evaluating evidence to determine the adequacy of a program or system within an organization</td>
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<tr>
<td>Continual improvement</td>
<td>A recurring process of enhancing the environmental management system to achieve improvements in overall environmental performance consistent with an organization's environmental policy</td>
</tr>
<tr>
<td>Core Team</td>
<td>A group of Berkeley Lab employees charged with implementing the essential elements of the Environmental Management System</td>
</tr>
<tr>
<td>DOE</td>
<td>Department of Energy</td>
</tr>
<tr>
<td>Environment</td>
<td>The surroundings, including air, water, land, natural resources, flora, fauna, humans, and their interrelations, in which an organization operates</td>
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<tr>
<td>Environmental aspect</td>
<td>An activity, product, or service that can interact with the environment</td>
</tr>
<tr>
<td>Environmental impact</td>
<td>A change to the environment, whether adverse or beneficial, wholly or partially resulting from an organization’s activities, products, or services</td>
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<tr>
<td>Environmental Management Program (EMP)</td>
<td>A formal mechanism that summarizes how the objectives and targets will be achieved, including timescales and personnel responsible for implementing the appropriate actions.</td>
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<tr>
<td>Environmental Management System (EMS)</td>
<td>A systematic approach to ensuring that environmental activities are well managed. It includes organization structure, planning activities, responsibilities, practices, procedures, processes and resources.</td>
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<tr>
<td>Environmental objective</td>
<td>Overall environmental goal that an organization attempts to attain</td>
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Lawrence Berkeley National Laboratory. The official or current version is located in the online LBNL Requirements and Policies Manual. Printed or exported versions are not official. Users are responsible for working with the latest approved revision.
Environmental target
Detailed performance goal that results from the establishment of an environmental objective. Where practicable, the target will be quantified and include a completion date.

Executive Order
A presidential policy directive that implements or interprets a federal statute, a constitutional provision, or a treaty.

Management review
A review by senior management on the performance of the EMS in relationship to the expectations specified in the ISO 14001 standard.

Operational control
The identification, planning, and management of the organization's operations and activities in line with the policy, objectives and targets, and significant aspects.

Senior management
The highest levels of organizational management having the day-to-day responsibilities for managing the organization and the authority to make decisions affecting the site or facility. Also may be referred to as senior leadership or top management.

Significant environmental aspect
An activity, product, or service that has or can have a significant environmental impact. A significant environmental impact will generally result in the establishment of an environmental management program.

G. Recordkeeping Requirements
Recordkeeping requirements are identified in the procedures listed in Implementing Documents section.

H. Implementing Documents

<table>
<thead>
<tr>
<th>Document number</th>
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<tr>
<td>N/A</td>
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<td>ESG Procedure 271</td>
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I. Contact Information
Environmental Services Group
EHS Division
PATHorson@lbl.gov

J. Revision History

<table>
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<tr>
<th>Date</th>
<th>Revision</th>
<th>By whom</th>
<th>Revision Description</th>
<th>Section(s) affected</th>
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<td>1/2/2013</td>
<td>0</td>
<td>P. Thorson</td>
<td>Rewrite for wiki (brief)</td>
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<td>Minor</td>
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PROCESS

Roles in Implementing the Berkeley Lab Environmental Management System
(Applicable to all Berkeley Lab Employees, Affiliates, Subcontractors, and Visitors)
Title: Environmental Management System

Document number 07.09.002.000

Revision number 1

Publication date: 9/24/2013

Effective date: 4/3/2009

Next review date: 9/24/2016

Policy Area: Environmental Protection Program

RPM Section (home) ESH

RPM Section (cross-reference) None

Functional Division EHS

Prior reference information (optional) PUB-3000 Section 11.3.3

Source Requirements Documents

- DOE O 436.1, Departmental Sustainability
- Executive Order 13423, Strengthening Federal Environmental, Energy and Transportation Management
- Executive Order 13514, Federal Leadership in Environmental, Energy, and Economic Performance
- Contract 31, Clause I.139, DEAR 970.5223-6, Executive Order 13423, Strengthening Federal Environmental, Energy and Transportation Management
- Contract 31, Clause I.145, FAR 52.223-19, Compliance with Environmental Management Systems

Other Driving Requirements


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