Strategic Plan for Safety Culture Improvement at LBNL FY 2015-2017

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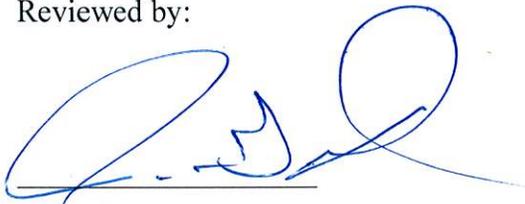
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FY 2015-2017

1. Introduction

The Lawrence Berkeley National Laboratory (Berkeley Lab) core value of "uncompromising safety" has resulted in safety-performance improvements over the years. However, to maintain and continually improve Laboratory safety, we must move beyond enforcement of regulatory compliance to focus on improving our safety culture. To that end, Berkeley Lab is committed to implementing this Plan's strategies for incorporating a positive safety culture into existing programs and activities.

In preparing this Plan, safety culture programs and documents were reviewed from organizations both within[1-9] and outside[10-15] the Department of Energy (DOE) complex. Additional resources on safety culture[16-23] added further knowledge and insights.

2. Purpose of the Strategic Plan

The purpose of this plan is to define and document:

- The vision for safety culture at Berkeley Lab
- Goals for implementing and sustaining safety culture improvements approved by Berkeley Lab senior management
- A standing work group to promote and drive the strategies in this Plan
- A framework to integrate safety culture improvement concepts at institutional and division levels

3. Definition of Safety Culture

A review of documents from DOE laboratories and non-DOE organizations found no universally recognized definition of safety culture. However, the following three definitions are frequently cited key elements of safety culture:

- "An organization's values and behaviors modeled by its leaders and internalized by its members, which serve to make safe performance of work the overriding priority to protect the public, workers, and the environment."[7]

- "Safety cultures consist of shared beliefs, practices, and attitudes that exist at an establishment. Culture is the atmosphere created by those beliefs, attitudes, etc., which shape our behavior."[16]
- "The enduring value and priority placed on worker and public safety by everyone in every group at every level of an organization."[17]

Safety culture encompasses existing safety systems such as Integrated Safety Management, Human Performance Improvement, and Behavior-Based Safety. To improve our safety culture, we must build on these existing safety systems and tailor our adjustments to our organization's values, beliefs, attitudes, and behaviors concerning safety.

4. Benefits of a Strong Safety Culture

While creating a stronger safety culture improves safety, it also benefits productivity, staff retention, and the overall organizational culture. Any process that brings all levels of an organization together to work on a common, highly valued goal strengthens the organizational culture.[16]

Examples how a strong safety culture benefits an organization:

- It has been observed by the Occupational Safety and Health Administration (OSHA) and confirmed by independent research that developing a strong safety culture has the single greatest impact on accident reduction of any process.[16]
- A company with a strong safety culture typically experiences few at-risk behaviors; consequently, it also experiences low accident rates, low turnover, low absenteeism, and high productivity.[16]

5. Vision for Safety Culture at Berkeley Lab

The Berkeley Lab safety culture vision will be aligned with organizational goals, approved by senior management, and clearly communicated to staff. Employees and managers will share a defined and documented vision to which to align their work. A safety-conscious work environment promotes trust, a questioning attitude, and a willingness by staff to raise issues.[23] The following are elements of the vision for safety culture at Berkeley Lab. They were partly derived from the results from the Safety Culture Survey conducted at the beginning of FY 2011.

- **Worker involvement.** Employees feel they have involvement and input on safety issues. They are involved in developing and implementing safety initiatives and feel free to raise concerns without fear of retribution.
- **Management recognition for positive safety.** Line managers and employees are positively recognized when they achieve or exceed safety performance standards.

- **Management commitment to safety.** All levels of management visibly participate in safety programs and initiatives: development, planning, implementation, and assessment.
- **Accountability.** Everyone from the Laboratory Director to the newest hire is accountable for safety. Their respective roles in the organization determine their level of accountability to others.
- **Co-worker support.** We rely on one another. Team discussions cover how to give and receive constructive feedback — both up and down the management line, or laterally — before, during, and after a task, activity, job, or project.
- **Off-the-job safety.** Our safety program imparts safety fundamentals, information, and guidance that is as valuable and beneficial for activities off the job as for on-site work.

6. Reviewing and Updating This Plan

To ensure this Plan stays current and aligned with Berkeley Lab goals, it will be reviewed and updated every two years by the Safety Culture Improvement (SCI) Work Group and approved by senior management.

7. Strategic Objectives to Improve and Sustain Safety Culture

The objectives for this Plan are to achieve and sustain the following:

- A vision for a strong safety culture, approved by senior management and communicated to all staff
- A senior management that actively engages, supports, models, and leads safety culture improvements
- Safety culture initiatives that are implemented at the institutional and division levels
- Integration of the principles of safety culture into ES&H assessments and EHS Division programs

8. Safety Culture Improvement Work Group

The SCI Work Group was formed to promote, coordinate, and assist with achieving the strategies of this Plan. The Group's sponsors are the EHS Division Director and the Berkeley Lab Deputy Laboratory Director, who chooses the group's chair. Group members are volunteers, representing both operations and science divisions. The group meets monthly or more frequently when necessary.

9. Strategic Initiatives for FY 2015-2017

In FY 2015-2017, the SCI Work Group will coordinate four strategic initiatives, with input and assistance from other Berkeley Lab staff. The four strategies will create and support the changes necessary to achieve this Plan's objectives, as noted in Section 7.

Strategy 1. Continue to Engage Senior Management

Engagement by senior management is critical to establishing and sustaining a strong Berkeley Lab safety culture. The SCI Work Group will support and find opportunities for senior management to:

- **Model positive safety leadership and behavior**
  Working with senior management, the SCI Work Group will find opportunities for Lab leadership to model positive safety leadership and behavior. Such behavior sends a clear signal to employees that a strong safety culture is valued and necessary. Modeling can include activities such as performing safety walkarounds, recognizing positive safety behavior, and direct involvement and visible support for safety initiatives.

- **Approve and be involved with SC initiatives**
  Senor management will review, endorse, and be involved in improvement initiatives conducted by the SCI Work Group. This communication link ensures that the SCI Work Group stays aligned with management. The SCI Work Group will supply:

  o **Status reports**
    Updates on the SC initiatives will be provided by SCI Work Group members at the following senior management meetings:

    - Division Directors Meetings
    - Laboratory Support Advisory Council
    - Division Business Management Forum

Strategy 2. Incorporate Principles of Safety Culture into Assessments, Programs, and Documents

The SCI Work Group will support institutional and divisional efforts to integrate the principles of safety culture into hazard-control programs and into how safety management practices are assessed.

- The principles of safety culture will be integrated into ES&H Assessments such as Division Self-Assessments and Peer Reviews. Assessment plans and lines of inquiry will use safety culture concepts and metrics for collecting and interpreting data.

- The EHS Division will apply safety culture concepts in the design, implementation, and assessment of its technical programs.

- Existing ES&H documents (e.g., manuals, plans, and safety committee charters) will be revised to encourage safety culture improvements when appropriate. As these documents undergo regular periodic review and updating, safety culture improvement information will be added or referenced.

Strategy 3. Safety Culture Initiatives

Initiatives and programs to improve and sustain the vision for safety culture are performed by the SCI Work Group, which also supports initiatives managed by the Laboratory Directorate, the EHS Division, and other divisions. Here are some examples of those initiatives and programs:

- Safety Hero Card Program (SCI Work Group)
- Safety Is Elemental Pin Program (SCI Work Group)
- Safety Spot Award Program (SCI Work Group)
- Berkeley Lab Employee Recognition Program (Laboratory Directorate)
- Other employee recognition programs (Divisions)

Strategy 4. Communications and Outreach

Effective, engaging communication and outreach is fundamental to successful safety culture improvement. Safety culture messages from senior management should be aligned with the goals of this Strategic Plan.

The primary communication resource for the Work Group is the Safety Culture website, which includes:

- Refreshed safety culture news
- Summary of institutional initiatives
- Highlighted division initiatives
- Safety culture blog and forum
- Safety culture information resources
- Links to other safety culture sites (e.g., Safety Hero Card website)
- The current Strategic Plan for safety culture improvement

To familiarize managers and workers with the goals of this Strategic Plan — and to help them be conversant on the subject — safety culture topics are presented to senior management and working committees; and by 1 Minute 4 Safety slides, the Safety Culture website, and the online forum.

In addition, the Work Group conducts the following programs to communicate safety culture messages

- Posters that highlight positive safety behaviors

- Perspective series of articles that feature interviews with BerkeleyLab senior managers on the topic of safety culture
- TABL and website articles that promote the safety culture vision

11. Assessment of Progress Achieved

To evaluate the success achieved by the strategic initiatives for improving safety culture, an assessment will be performed in FY 2015. The assessment results will be compared with the vision characteristics described in Section 5 and to the initial survey that was performed in FY 2011. Using that information, the Plan will be modified to improve its effectiveness.

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