March 5, 2019
DIR-19-001

To: Matthew Moury, Associate Under Secretary for Environment, Health, Safety and Security

From: Jack Salazar, EHS Division Director

Re: Title 10, Code of Federal Regulations, 851 Variance Application

Lawrence Berkeley National Laboratory (LBNL) is submitting the attached revised application for a variance to Title 10, Code of Federal Regulations 851 (10 CFR 851) subpart B, subpart C and appendix A. The variance has been prepared according to the requirements in 10 CFR 851, subpart D, §31 Variance Process. The revisions to our initial variance package, dated November 9, 2018, are the result of collaboration and recommendations from the DOE Office of Environment, Health, Safety and Security, Office of Health and Safety (AU-10).

It is LBNL's assertion that this variance application provides a compelling justification for use of Cal/OSHA regulations (in lieu of OSHA regulations) as implemented through a new Injury and Illness Prevention Program (IIPP). The IIPP will incorporate Cal/OSHA regulations and portions of 10 CFR 851, subpart B, subpart C and appendix A not entirely addressed by Cal/OSHA requirements to maintain a workplace as safe and healthful as previously under full 851 compliance.

If this application is approved, LBNL will work closely with the DOE Bay Area Site Office to implement the provisions of the variance application and develop success metrics to monitor progress and demonstrate value.

Please let me know if you have any comments or need additional information. I can be reached at jjsalazar@lbl.gov or (510) 486-6571.

Sincerely,
Jack Salazar, EHS Division Director

cc: Pat Worthington, DOE Director, Office of Health and Safety
Joanna Livengood, DOE Office of Science, Acting Deputy Director, Field Operations
Juston Fontaine, DOE Office of Science, Associate Director, Field Operations
Ingrid Kolb, DOE Director, Office of Management
Paul Golan, DOE Site Office Manager, Berkeley Site Office
Mary Gross, DOE Division Director, Berkeley Site Office
Michael Witherell, Berkeley Lab Director
Nancy Ware, Senior Counsel, Berkeley Lab
Craig Leasure, Associate Vice President for National Laboratories
Ken Hoar, Executive Director for National Laboratory Operations
Kevin Dressman, DOE Acting Director, Office of Enforcement
Brian Sherin, SLAC Deputy Director of Operations
Carole Fried, SLAC Chief Safety Officer
Hanley Lee, Deputy Manager, DOE Bay Area Site Office
Tom Rizzi, DOE Bay Area Site Office, Acting Operations Director

Lawrence Berkeley National Laboratory Variance Application

1. **Name and address of the Contractor**:
   The Regents of the University of California
   1111 Franklin St
   Oakland, CA. 94607

2. **Name and address of DOE site or sites Involved**:
   Lawrence Berkeley National Laboratory
   1 Cyclotron Road
   Berkeley, CA. 94720

3. **A specification of the standard, or portion thereof, from which the contractor seeks a variance:** 10 CFR Part 851, *Worker Safety and Health Program*

Subpart B—Program Requirements

- § 851.10 General requirements
- § 851.11 Development and approval of the worker safety and health program
- § 851.12 Implementation
- § 851.13 Compliance

Subpart C—Specific Program Requirements

- § 851.20 Management responsibilities and worker rights and responsibilities
- § 851.21 Hazard identification and assessment
- § 851.22 Hazard prevention and abatement
- § 851.23 Safety and health standards
  - § 851.23(a)(2) 29 CFR Parts 1904.4 -11, 1904.29 - 33, and 1904.46, *Recording and Reporting Occupational Injuries and Illnesses;*
  - § 851.23(a)(3) 29 CFR Part 1910, *Occupational Safety and Health Standards,* excluding 29 CFR 1910.1096, *Ionizing Radiation,* and 29 CFR 1910.1000, *Beryllium;*
  - § 851.23(a)(4), 29 CFR Part 1915, *Shipyard Employment*;
  - § 851.23(a)(5), 29 CFR, Part 1917, *Marine Terminals*
  - § 851.23(a)(6), 29 CFR, Part 1918, *Safety and Health Regulations for Longshoring*
  - § 851.23(a)(7) 29 CFR 1926, *Safety and Health Regulations for Construction*
  - § 851.23(a)(8), 29 CFR, Part 1928, *Occupational Safety and Health Standards for Agriculture*
  - § 851.23(a)(9) *ACGIH® Threshold Limit Values and Biological Exposure Indices* (2016), when the ACGIH® Threshold Limit Values (TLVs) are lower (more protective) than permissible exposure limits in 29 CFR part 1910 for general industry and/or part 1926 for construction. When the ACGIH TLVs are used as exposure limits, contractors must nonetheless comply with the other provisions of any applicable expanded health standard found in 29 CFR part 1910 and/or part 1926.

§ 851.23(a)(10) American National Standards Institute (ANSI/ASSE) Z88.2, *American National Standard Practices for Respiratory Protection*, (2015);
§ 851.23(a)(11) ANSI Z136.1, *Safe Use of Lasers*, (2014);
§ 851.23(a)(12) ANSI Z49.1, *Safety in Welding, Cutting and Allied Processes*, sections 4.3 and E4.3 (2012);
§ 851.23(a)(13) National Fire Protection Association (NFPA) 70, *National Electrical Code*, (2017);
§ 851.23(a)(14) NFPA 70E, *Standard for Electrical Safety in the Workplace*, (2015) (incorporated by reference, see §851.27).

§ 851.24 Functional areas
§ 851.25 Training and information
§ 851.26 Recordkeeping and reporting

Appendix A—Worker Safety and Health Functional Areas

1. Construction Safety
2. Fire Protection
3. Explosive Safety
4. Pressure Safety
5. Firearms Safety
6. Industrial Hygiene
7. Biological Safety
8. Occupational Medicine
9. Motor Vehicle Safety
10. Electrical Safety
11. Nanotechnology Safety—Reserved
12. Workplace Violence—Reserved

4. A description of the steps that the contractor has taken to inform the affected workers of the application, which must include giving a copy thereof to their authorized representative, posting a statement, giving a summary of the application and specifying where a copy may be examined at the place or places where notices to workers are normally posted:

Lawrence Berkeley National Laboratory (LBNL) held multiple meetings with affected workers and key stakeholder groups in October and November of 2018. These meetings were scheduled through Google Calendar, and included meetings with representatives from University of California Office of National Laboratories (October 12), unions (October 17), Procurement (October 17), Project Management (October 17), Facilities (October 18), Legal (October 18), Assurance and Integrity (October 31), and Division Safety Coordinators (November 9). In addition, numerous meetings were held with the Berkeley Site Office (now referred to as the Bay Area Site Office) and key Environment, Health and Safety staff over the course of 2018. A final meeting was held with the newly reformed Safety Advisory Committee on February 1, 2019.

During these meetings, LBNL shared the objective and goals of the variance and allowed for questions and answers. The affected workers and stakeholder groups were informed of their rights to request a conference with the Associate Under Secretary for Environment, Health, Safety and Security on the variance application.

In addition, LBNL distributed site-wide notification through LBNL's primary internal news source, *Today at Berkeley Lab* on November 2, 2018. A link to TABL articles are sent to all workers with a LBNL email address, and the article, including a link to the variance application, continues to be accessible to everyone at https://today.lbl.gov/2018/11/02/lab-submits-variance-to-move-from-fed-osha-to-cal-osha/. Important notices are normally posted on TABL (which is now referred to as Elements), and this ensures all affected worker were given the opportunity to review the variance request.

5. A description of how affected workers have been informed of their right to petition the Associate Under Secretary for Environment, Health, Safety and Security or designee for a conference:

LBNL held a number of meetings with affected workers and key stakeholder groups (detailed above), and at those meeting they were informed of their rights to petition the Associate Under Secretary for Environment, Health, Safety and Security for a conference on the variance application.

6. Any requests for a conference: No

7. Type of variance: Permanent

a. **A description of the conditions, practices, means, methods, operations, or processes used or proposed to be used by the contractor**:

In performing its mission, LBNL is required to comply with the provisions in 10 CFR Part 851, *Worker Safety and Health Program*, which establishes the framework for a worker protection program that will reduce or prevent occupational injuries and illnesses, and accidental losses by requiring DOE contractors to provide their employees with safe and healthful workplaces.

LBNL is seeking a permanent variance to 10 CFR part 851 subparts B and C, and appendix A. LBNL proposes to establish, implement, and maintain an effective Injury and Illness Prevention Program (IIPP) as required by Title 8, California Code of Regulations, Section 3203 (8 CCR § 3203) instead of the provisions in subpart B, and to comply with applicable California Occupational Safety and Health Administration (Cal-OSHA) regulations in lieu of the requirements in 10 CFR 851 subpart C and appendix A.

Cal-OSHA regulations and the IIPP have the same intention as the Workers Safety and Health Program required by 10 CFR part 851, namely providing an environment that is safe for workers

to work. Because of this shared goal, there is substantial overlap between the two sets of regulations.

LBNL acknowledges that there are portions of subparts B and C, and appendix A that are not entirely covered by Cal-OSHA regulations. To address those areas, LBNL will establish an IIPP per 8 CCR § 3203 and incorporate those sections, or an as protective equivalent of 10 CFR 851 into the IIPP, as needed, to provide a substantially equivalent level of protection. As such, LBNL will use the combination of Cal-OSHA regulations and requirements within the IIPP as alternative means to comply with subparts B and C, and appendix A. Oversight and enforcement of the IIPP will remain with DOE.

Tables 1 - 3 (attachments 2-4) identify Cal-OSHA regulations that meet the approval criterial in 10 CFR 851.32(b). In addition, these tables identify areas that do not adequately meet the approval criteria and therefore, LBNL will supplement the IIPP with these requirements creating an as safe and healthful level of protection.

b. **A statement showing how the conditions, practices, means, methods, operations, or processes used or proposed to be used would provide workers a place of employment which is as safe and healthful as would result from compliance with the standard from which a variance is sought**:

LBNL proposes to use Cal/OSHA regulations as the foundation for its worker safety and health programs. The Occupational Safety and Health Act of 1970 requires state plans approved by the Secretary of Labor to be "at least as effective in providing safe and healthful employment and places of employment" as OSHA. The state of California has implemented and maintained an approved state plan since 1973. As such, pivoting to Cal/OSHA regulations continues to provide workers a place of employment, which is as safe and healthful as the OSHA regulations adopted in 10 CFR part 851.

Specific to 10 CFR 851 Subpart B: DOE recognized the importance of a comprehensive worker safety and health program (WSHP) to provide structure and guidance for contractor's worker protection programs and added this requirement to 10 CFR 851. Cal/OSHA however also recognized the importance of comprehensive worker safety and health programs, and subsequently established a requirement in 1991 for employers to develop such programs. Title 8, California Code of Regulations, § 3203 (8 CCR § 3203) requires employers to "establish, implement and maintain an effective Injury and Illness Prevention Program…" In this regard, the Cal/OSHA requirement to establish, implement, and maintain an effective IIPP is equivalent to the 10 CFR 851 Subpart B requirement to establish a Worker Safety and Health Program (WSHP). As such, the IIPP will continue to provide workers a place of employment, which is as safe and healthful as under 10 CFR 851, Subpart B.

Regarding 10 CFR 851 Subpart C: Cal-OSHA regulations cover many of the requirements within subparts. For example, 8 CCR § 3203 includes requirements for hazard identification and evaluation, hazard correction, injury and illness investigation, training, and recordkeeping. Regarding Appendix A: Cal-OSHA regulations provide workers a place of employment that is equivalent to complying with many of the requirements within the functional areas listed in appendix A.

Appendix A, section 1, Construction Safety. See Table 3 – Cal/OSHA Regulations in lieu of 10 CFR 851, Appendix A (attachment 4).

Appendix A, section 2, Fire Protection. The standards listed below would provide workers a place of employment which is equivalent to complying with 10 CFR 851.

> CCR 3221 Fire Prevention Plan; 8 CCR 3220 Emergency Action Plan; 8 CCR 3400 Medical Services and First Aid; 8 CCR 3219 Maintenance of Fire Protection Equipment, Materials and Assemblies; 8 CCR Group 27 Fire Protection.

Note: Incorporation of applicable building and NFPA codes and standards is also included in DOE O 420.1C Facility Safety, which is in the UC/DOE Contract No. DE-AC02-05CH11231.

See Table 3 – Cal/OSHA Regulations in lieu of 10 CFR 851, Appendix A (attachment 4).

Appendix A, section 3, Explosive Safety. No comparable requirement. LBNL will incorporate the following requirements from 10 CFR Part 851 into the IIPP:

(a) Contractors responsible for the use of explosive materials must establish and implement a comprehensive explosives safety program.
(b) Contractors must comply with the policy and requirements specified in the appropriate explosives safety technical standard.
(c) Contractors must determine the applicability of the explosives safety directive requirements to research and development laboratory type operations consistent with the DOE level of protection criteria described in the explosives safety directive.

See Table 3 – Cal/OSHA Regulations in lieu of 10 CFR 851, Appendix A (attachment 4).

Appendix A, section 4, Pressure Safety. See Table 3 – Cal/OSHA Regulations in lieu of 10 CFR 851, Appendix A (attachment 4).

Appendix A, section 5, Firearms Safety. Firearms are not permitted on site, therefore, a variance for this section is not needed.

Appendix A, section 6, Industrial Hygiene. See Table 3 – Cal/OSHA Regulations in lieu of 10 CFR 851, Appendix A (attachment 4).

Appendix A, section 7, Biological Safety. See Table 3 – Cal/OSHA Regulations in lieu of 10 CFR 851, Appendix A (attachment 4).

Appendix A, section 8, Occupational Medicine. LBNL will continue to implement these requirements and include them in the IIPP for LBNL employees but will exclude subcontractors and other workers employed by third party organizations who are covered by their employer's medical surveillance program under Cal-OSHA and other applicable California regulations. LBNL will continue to include independent contractors who are not required by California regulations to develop an IIPP and occupational medicine program. Based on specific work performed, LBNL may contractually require or extend specific medical surveillance to third party organizations.

LBNL will continue to implement those via the IIPP for LBNL employees. Subcontractors covered by their own employer under the State of California law will however, be excluded from the requirements in Appendix A, section 8, Occupational Medicine. They will instead follow their employer's IIPP per the California regulations governing occupational medicine services.

The State of California has robust worker health and safety requirements including requirements for medical surveillance and medical services for workers. For instance, multiple California regulations require various medical exams, screenings or surveillance (e.g., Title 8, CCR 5199.1, 5208, 1529, 5218, 5231, 5193, 5194, 5209, 5203, 5217, 5192, 5191, 5216, 5198, 1532.1, 5097, 5144, 5147, 5153; Title 17, CCR 30277; and Title 3, CCR 6728 and 6760). Additional California regulations require medical services in the event of a workplace injury (e.g., California Labor Code 6400, 4600, 3400 and 3700), and still other regulations address unique medical situations such as alcohol and drug rehabilitation (i.e., California Labor Code 1025 and 1026). LBNL will include, as appropriate, in its medical surveillance program, independent contractors (self-employed) who are not covered by Cal-OSHA regulations.

It is a responsibility of LBNL subcontractors working in California to provide appropriate medical services to its workers, and LBNL will continue working with subcontractors, as appropriate, to ensure subcontractors and their workers have the necessary information about LBNL hazards to maintain an effective occupational medical services program. However, LBNL and its Site Occupational Medicine Director (SOMD) have no practical ability to monitor all of the potential health factors among the cross-section of subcontractors for their work being performed at other sites or their non-work-related illnesses unless such information is voluntarily disclosed. If a subcontractor or their company's occupational health representative identifies a medical restriction of any kind to the SOMD, consultation services would be provided to determine what, if any, impact that may have on their work activities at LBNL, with the intent of maintaining that worker's safety and well-being.

LBNL will continue to partner with subcontractors and continue to make access to worksites and hazard-related information available to subcontractors and their medical service providers. First aid services will continue to be available to all individuals on-site regardless of their affiliation.

Through implementation of applicable California regulations and partnership with LBNL, subcontractor workers will continue to be provided with a place of employment, which is as safe and healthful as under 10 CFR 851.

LBNL acknowledges there are some areas Cal-OSHA or other California regulations do not meet the approval criteria of 10 CFR 851.32(b). In those instances, LBNL will incorporate the 10 CFR 851 requirement into the LBNL IIPP to provide for a workplace that is as safe and healthful by implementing the requirement through the LBNL IIPP (see Tables 1-3 for detailed information).

The requirement the LBNL IIPP be approved by the Head of DOE Field Element annually or in the event of any significant change will remain. Collectively through the application of Cal-OSHA regulations and the LBNL IIPP, through robust partnership between LBNL, and its subcontractors, and through concurrence by the DOE Bay Area Site Office, all workers will continue to be provided with a place of employment, which is as safe and healthful as under 10 CFR 851.

Attachment 2

Table 1 – Cal/OSHA Injury and Illness Prevention Program (IIPP) in lieu of 10 CFR 851, Subpart B

Subpart B – Program Requirements	Cal/OSHA (or California) regulation that is "As Safe and Healthful"	851 vs Cal/OSHA	Action*
851.10 General Requirements			
(a) With respect to a covered workplace for which a contractor is responsible, the contractor must: (1) Provide a place of employment that is free from recognized hazards that are causing or have the potential to cause death or serious physical harm to workers; and (2) Ensure that work is performed in accordance with: (i) All applicable requirements of this part; and (ii) With the worker safety and health program for that workplace. (b) The written worker safety and health program must describe how the contractor complies with the: (1) Requirements set forth in Subpart C of this part that are applicable to the hazards associated with the contractor's scope of work; and	8CCR3203(a) Effective July 1, 1991, every employer shall establish, implement and maintain an effective Injury and Illness Prevention Program (Program). (Note: 8CCR3202 is similar to the Fed OSHA General Duty Clause under OSHA Act 1970, Section 5(a)(1) in that Cal OSHA may cite an employer for violating the Injury and Illness Prevention Program standard when a hazard is not covered by a specific Cal OSHA safety order.) 8CCR3203(a)(2) Include a system for ensuring that employees comply with safe and healthy work practices.	No gap	Comply with Cal/OSHA regulation.
(2) Any compliance order issued by the Secretary pursuant to §851.4.	No comparable requirement.	Gap	Incorporate requirement into IIPP.
851.11 Development and approval of the worker safety and health program			
(a) Preparation and submission of worker safety and health program. By February 26, 2007, contractors must submit to the appropriate Head of DOE Field Element for approval a written worker safety and health program that provides the	8CCR3203(a) Effective July 1, 1991, every employer shall establish, implement and maintain an effective Injury and Illness Prevention Program (Program). 8CCR, Article 4.5 Multi-Employer Worksites.	No gap	Comply with Cal/OSHA regulation. Note: The LBNL WSHP will remain in effect until the IIPP is

methods for implementing the requirements of Subpart C of this part. (1) If a contractor is responsible for more than one covered workplace at a DOE site, the contractor must establish and maintain a single worker safety and health program for the covered workplaces for which the contractor is responsible. (2) If more than one contractor is responsible for covered workplaces, each contractor must: (i) Establish and maintain a worker safety and health program for the workplaces for which the contractor is responsible; and (ii) Coordinate with the other contractors responsible for work at the covered workplaces to ensure that there are clear roles, responsibilities and procedures to ensure the safety and health of workers at multi-contractor workplaces. (3) The worker safety and health program must describe how the contractor will: (i) Comply with the requirements set forth in Subpart C of this part that are applicable to the covered workplace, including the methods for implementing those requirements; and (ii) Integrate the requirements set forth in Subpart C of this part that are applicable to a covered workplace with other related site-specific worker protection activities and with the integrated safety management system.			approved by the DOE Head Field Element.
(b) DOE evaluation and approval. The Head of DOE Field Element must complete a review and provide written approval of the contractor's worker safety and health program, within 90 days of receiving the document. The worker safety and health program and any updates are deemed	No comparable requirement. Note: This requirement is subsumed by initial and annual IIPP approval requirement.	No gap	The IIPP will include review and approval by the DOE Head Field Element when initially developed and annually thereafter

approved 90 days after submission if they are not specifically approved or rejected by DOE earlier. (1) Beginning May 25, 2007, no work may be performed at a covered workplace unless an approved worker safety and health program is in place for the workplace. (2) Contractors must send a copy of the approved program to the Assistant Secretary for Environment, Safety and Health.			per section (c) Updates .
(3) Contractors must furnish a copy of the approved worker safety and health program, upon written request, to the affected workers or their designated representatives.	8CCR340 Every employer shall be required to post immediately upon receipt and to keep posted the CAL/OSHA Notice of Employee Protections and Obligations entitled "Safety and Health Protection on the Job," which is furnished pursuant to Labor Code Section 6328 by the Division of Occupational Safety and Health, Department of Industrial Relations, State of California, containing information on pertinent safety laws, regulations and certain rights of employees under the California Labor Code. 8CCR340.1(b) The affected employee, employees or their representatives shall be allowed access to the records and reports of the results of the testing monitoring or measuring when carried out under the requirements of a standard promulgated under Labor Code Section 142.3. 8CCR3204(e)(1)(A) Whenever an employee or designated representative requests access to a record, the employer shall assure that access is	No gap	Comply with Cal/OSHA regulation. The IIPP like the WSHP will remain accessible to all employees via the internet.

	provided in a reasonable time, place, and manner, but in no event later that fifteen (15) days after the request for access is made. Note: Additional Cal OSHA safety orders specifically require access to health and safety programs, such as: 8CCR5194(e)(3) The employer shall make the written hazard communication program available, upon request, to employees, their designated representatives, the Chief, and NIOSH, in accordance with the requirements of section 3204(e).		
(c) Updates. (1) Contractors must submit an update of the worker safety and health program to the appropriate Head of DOE Field Element, for review and approval whenever a significant change or addition to the program is made, or a change in contractors occurs. (2) Contractors must submit annually to DOE either an updated worker safety and health program for approval or a letter stating that no changes are necessary in the currently approved worker safety and health program. (3) Contactors must incorporate in the worker safety and health program any changes, conditions, or workplace safety and health standards directed by DOE consistent with the requirements of this part and DEAR 970.5204–2, Laws, Regulations and DOE Directives (December, 2000) and associated contract clauses.	No comparable requirement.	Gap	Incorporate requirement into IIPP.

(d) Labor Organizations. If a contractor employs or supervises workers who are represented for collective bargaining by a labor organization, the contractor must: (1) Give the labor organization timely notice of the development and implementation of the worker safety and health program and any updates thereto; and (2) Upon timely request, bargain concerning implementation of this part, consistent with the Federal labor laws.	No comparable requirement.	Gap	Incorporate requirement into IIPP.
851.12 Implementation			
(a) Contractors must implement the requirements of this part. (b) Nothing in this part precludes a contractor from taking any additional protective action that is determined to be necessary to protect the safety and health of workers.	8CCR3203(a) Effective July 1, 1991, every employer shall establish, implement and maintain an effective Injury and Illness Prevention Program (Program).	No gap	Comply with Cal/OSHA regulation.
851.13 Compliance			
(a) Contractors must achieve compliance with all the requirements of Subpart C of this part, and their approved worker safety and health program no later than May 25, 2007. Contractors may be required to comply contractually with the requirements of this rule before February 9, 2007. (b) In the event a contractor has established a written safety and health program, an Integrated Safety Management System (ISMS) description pursuant to the DEAR Clause, or an approved Work Smart Standards (WSS) process before the date of issuance of the final rule, the Contractor may use that program, description, or process as the worker safety and health program required by this part if the appropriate Head of the DOE Field Element	8CCR3203(a) Effective July 1, 1991, every employer shall establish, implement and maintain an effective Injury and Illness Prevention Program (Program).	No gap	Comply with Cal/OSHA regulation.

approves such use on the basis of written documentation provided by the contractor that identifies the specific portions of the program, description, or process, including any additional requirements or implementation methods to be added to the existing program, description, or process, that satisfy the requirements of this part and that provide a workplace as safe and healthful as would be provided by the requirements of this part.			
(c) Nothing in this part shall be construed to limit or otherwise affect contractual obligations of a contractor to comply with contractual requirements that are not inconsistent with the requirements of this part.	This is unnecessary as additional requirements can be met and are enforceable in the M&O contract.	No Gap	Comply with UC/DOE Contract No. DE-AC02-05CH11231

*Maintain in IIPP = No gap exists but for clarification (or emphasis) LBNL will include the requirement in a new IIPP.
Incorporate in IIPP = A gap or partial gap exists. LBNL will include the 851 requirement in a new IIPP.
Comply with Cal/OSHA Regulation = No gap exists. LBNL will include a statement to comply with Cal/OSHA regulations in a new IIPP.

Attachment 3

Table 2 – Cal/OSHA Regulations in lieu of 10 CFR 851, Subpart C

Subpart C – Program Requirements	Cal/OSHA (or California) regulation that is "As Safe and Healthful"	851 vs Cal/OSHA	Action*
851.20 Management responsibilities and worker rights and responsibilities			
(a) Management responsibilities. Contractors are responsible for the safety and health of their workforce and must ensure that contractor management at a covered workplace: (1) Establish written policy, goals, and objectives for the worker safety and health program;	8CCR340 Every employer shall be required to post immediately upon receipt and to keep posted the CAL/OSHA Notice of Employee Protections and Obligations entitled "Safety and Health Protection on the Job," which is furnished pursuant to Labor Code Section 6328 by the Division of Occupational Safety and Health, Department of Industrial Relations, State of California, containing information on pertinent safety laws, regulations and certain rights of employees under the California Labor Code. 8CCR340.1 (a) Whenever an employer is required to conduct tests or to engage in monitoring or measuring, to determine employee exposure to hazards by specific standards promulgated under Labor Code Section 142.3, the employer shall notify the affected employee or employees or their representative, prior to commencement of the date, time and place of the testing, monitoring or measuring of employee exposure. 8CCR340.2 Whenever any employee has been or is being exposed to toxic materials or harmful physical agents in concentrations or at levels exceeding those prescribed by applicable standard, order, or special order, the employer of	No gap	Comply with Cal/OSHA regulation.

	the affected employee must promptly notify any employee so affected in writing of the fact that the employee has been exposed, and of the corrective action being taken by the employer. 8CCR3203(a) Effective July 1, 1991, every employer shall establish, implement and maintain an effective Injury and Illness Prevention Program (Program). The Program shall be in writing and, shall, at a minimum. Note: In addition, management responsibilities are included UC/DOE Contract No. DE-AC02-05CH11231. Goals are established every year through the DOE Performance Evaluation and Measurement Plan (PEMP) process.		
(2) Use qualified worker safety and health staff (e.g., a certified industrial hygienist, or safety professional) to direct and manage the program;	No comparable requirement.	Gap	Incorporate requirement into IIPP.
(3) Assign worker safety and health program responsibilities, and hold personnel accountable for worker safety and health performance; (4) Provide mechanisms to involve workers and their elected representatives in the development of the worker safety and health program goals, objectives, and performance measures and in the identification and control of hazards in the workplace; (5) Provide workers with access to information relevant to the worker safety and health program;	8CCR340 Every employer shall be required to post immediately upon receipt and to keep posted the CAL/OSHA Notice of Employee Protections and Obligations entitled "Safety and Health Protection on the Job," which is furnished pursuant to Labor Code Section 6328 by the Division of Occupational Safety and Health, Department of Industrial Relations, State of California, containing information on pertinent safety laws, regulations and certain rights of employees under the California Labor Code. …The Notice shall inform the employees that the employer shall provide an opportunity for employees or their representatives to observe	No gap	Comply with Cal/OSHA regulation.

	monitoring or measuring of employee exposure to hazards conducted pursuant to standards promulgated under California Labor Code Section 142.3, and shall allow the employee or his representative access to accurate records of employee exposures to potentially toxic materials or harmful physical agents. 8CCR3203(a)(1) Identify the person or persons with authority and responsibility for implementing the Program. 8CCR3203(a)(2) Include a system for ensuring that employees comply with safe and healthy work practices. Substantial compliance with this provision includes recognition of employees who follow safe and healthful work practices, training and retraining programs, disciplinary actions, or any other such means that ensures employee compliance with safe and healthful work practices. 8CCR3203(a)(3) Include a system for communicating with employees in a form readily understandable by all affected employees on matters relating to occupational safety and health, including provisions designed to encourage employees to inform the employer of hazards at the worksite without fear of reprisal. Substantial compliance with this provision includes meetings, training programs, posting, written communications, a system of anonymous notification by employees about hazards, labor/management safety and health		

	committees, or any other means that ensures communication with employees. 8CCR3204(a) Purpose. The purpose of this section is to provide employees and their designated representatives and authorized representatives of the Chief of the Division of Occupational Safety and Health (DOSH) a right of access to relevant exposure and medical records.		
(6) Establish procedures for workers to report without reprisal job-related fatalities, injuries, illnesses, incidents, and hazards and make recommendations about appropriate ways to control those hazards; (7) Provide for prompt response to such reports and recommendations; (8) Provide for regular communication with workers about workplace safety and health matters; (9) Establish procedures to permit workers to stop work or decline to perform an assigned task because of a reasonable belief that the task poses an imminent risk of death, serious physical harm, or other serious hazard to workers, in circumstances where the workers believe there is insufficient time to utilize normal hazard reporting and abatement procedures; and	8CCR340 Every employer shall be required to post immediately upon receipt and to keep posted the CAL/OSHA Notice of Employee Protections and Obligations entitled "Safety and Health Protection on the Job," which is furnished pursuant to Labor Code Section 6328 by the Division of Occupational Safety and Health, Department of Industrial Relations, State of California, containing information on pertinent safety laws, regulations and certain rights of employees under the California Labor Code. 8CCR3203(a)(3) Include a system for communicating with employees in a form readily understandable by all affected employees on matters relating to occupational safety and health, including provisions designed to encourage employees to inform the employer of hazards at the worksite without fear of reprisal. 8CCR3203(a)(6) Include methods and/or procedures for correcting unsafe or unhealthy conditions, work practices and work procedures in a timely manner based on the severity of the hazard:...	Partial gap	Stop work authority at LBNL is documented in the UC-DOE Prime Contract No. DE-AC02-05CH11231 however, LBNL will also maintain the stop work authority in the IIPP. Otherwise, comply with Cal/OSHA regulation.

	(B) When an imminent hazard exists which cannot be immediately abated without endangering employee(s) and/or property, remove all exposed personnel from the area except those necessary to correct the existing condition. Employees necessary to correct the hazardous condition shall be provided the necessary safeguards. California Labor Code 6311 No employee shall be laid off or discharged for refusing to perform work in the performance of which this code, including Section 6400, any occupational safety or health standard or any safety order of the division or standards board will be violated, where the violation would create a real and apparent hazard to the employee or his or her fellow employees.		
(10) Inform workers of their rights and responsibility by appropriate means, including posting the DOE-designated Worker Protection Poster in the workplace where it is accessible to all workers.	8CCR340 Every employer shall be required to post immediately upon receipt and to keep posted the CAL/OSHA Notice of Employee Protections and Obligations entitled "Safety and Health Protection on the Job," which is furnished pursuant to Labor Code Section 6328 by the Division of Occupational Safety and Health, Department of Industrial Relations, State of California, containing information on pertinent safety laws, regulations and certain rights of employees under the California Labor Code. FAR Clause: 52.222-40: Notification of employee rights under the employee relations act.	No Gap	Maintain in IIPP. LBNL will continue to post the DOE-designated Worker Protection Poster in addition to mandated California and Federal postings. Posters will be customized to ensure workers are provided accurate information regarding DOE notification.
(b) Worker rights and responsibilities. Workers must comply with the requirements of this part,	CCR3203(a)(2) Include a system for ensuring that employees comply with safe and healthy work	No gap	Comply with Cal/OSHA regulation.

including the worker safety and health program, which are applicable to their own actions and conduct. Workers at a covered workplace have the right, without reprisal, to:	practices. Substantial compliance with this provision includes recognition of employees who follow safe and healthful work practices, training and retraining programs, disciplinary actions, or any other such means that ensures employee compliance with safe and healthful work practices.		
(1) Participate in activities described in this section on official time;	No comparable requirement.	Gap	Incorporate requirement into IIPP.
(2) Have access to:	No requirement	No gap	N/A
(i) DOE safety and health publications;	No comparable requirement	Gap	Incorporate requirement into IIPP.
(ii) The worker safety and health program for the covered workplace; (iii) The standards, controls, and procedures applicable to the covered workplace;	8CCR340 Every employer shall be required to post immediately upon receipt and to keep posted the CAL/OSHA Notice of Employee Protections and Obligations entitled "Safety and Health Protection on the Job," which is furnished pursuant to Labor Code Section 6328 by the Division of Occupational Safety and Health, Department of Industrial Relations, State of California, containing information on pertinent safety laws, regulations and certain rights of employees under the California Labor Code. 8CCR340.1(b) The affected employee, employees or their representatives shall be allowed access to the records and reports of the results of the testing monitoring or measuring when carried out under the requirements of a standard promulgated under Labor Code Section 142.3. 8CCR3204(e)(1)(A) Whenever an employee or designated representative requests access to a record, the employer shall assure that access is	Partial gap	California regulations address this requirement in part, but not in full. Incorporate requirement into IIPP. LBNL will continue to post the IIPP and EH&S Manual on the internet for accessibility

	provided in a reasonable time, place, and manner, but in no event later that fifteen (15) days after the request for access is made. Note: Additional Cal/OSHA safety orders specifically require access to health and safety programs, such as: 8CCR5194(e)(3) The employer shall make the written hazard communication program available, upon request, to employees, their designated representatives, the Chief, and NIOSH, in accordance with the requirements of section 3204(e).		
(iv) The safety and health poster that informs the worker of relevant rights and responsibilities;	8CCR340 Every employer shall be required to post immediately upon receipt and to keep posted the CAL/OSHA Notice of Employee Protections and Obligations entitled "Safety and Health Protection on the Job," which is furnished pursuant to Labor Code Section 6328 by the Division of Occupational Safety and Health, Department of Industrial Relations, State of California, containing information on pertinent safety laws, regulations and certain rights of employees under the California Labor Code.	No gap	Comply with Cal/OSHA regulations.
(v) Limited information on any recordkeeping log (OSHA Form 300). Access is subject to Freedom of Information Act requirements and restrictions; and	8CCR14300.32(a) Basic requirement. At the end of each calendar year, you must:... (4) Post the annual summary 8CCR3204(a) Purpose. The purpose of this section is to provide employees and their designated representatives and authorized representatives of the Chief of the Division of	No gap	Comply with Cal/OSHA regulations.

	Occupational Safety and Health (DOSH) a right of access to relevant exposure and medical records.		
(vi) The DOE Form 5484.3 (the DOE equivalent to OSHA Form 301) that contains the employee's name as the injured or ill worker;	8CCR14300.35(a) Basic requirement. Your employees and their representatives must be involved in the recordkeeping system in several ways… (2) You must provide limited access to your injury and illness records for your employees and their representatives. 8CCR14300.35(b)(2) Do I have to give my employees and their representatives access to the injury and illness records required by this article? Yes. Your employees, former employees, their personal representatives, and their authorized employee representatives have the right to access the injury and illness records required by this article, with some limitations, as discussed below. 8CCR14300.29(a) Basic requirement. You must use Cal/OSHA 300, 300A, and 301 forms, or equivalent forms, for recordable injuries and illnesses. Note: In addition covered by DOE Order 231.1B-Environment, Safety and Health Reporting Order (CAIRS requirement) incorporated in UC-DOE Prime Contract No. DE-AC02-05CH11231 – Clause H.5.1- Environmental Safety and Health Reporting	No gap	Cal/OSHA does not require use of DOE Form 5484.3. However, the information required in DOE Form 5484.3 is collected and documented in Computerized Accident/Incident Reporting System (CAIRS) and Cal/OSHA reporting forms. LBNL will maintain requirement in the IIPP.
(3) Be notified when monitoring results indicate the worker was overexposed to hazardous materials;	8CCR340 Every employer shall be required to post immediately upon receipt and to keep posted the CAL/OSHA Notice of Employee	No gap	Comply with Cal/OSHA regulation.

(4) Observe monitoring or measuring of hazardous agents and have the results of their own exposure monitoring; (5) Have a representative authorized by employees accompany the Director or his authorized personnel during the physical inspection of the workplace for the purpose of aiding the inspection. When no authorized employee representative is available, the Director or his authorized representative must consult, as appropriate, with employees on matters of worker safety and health; (6) Request and receive results of inspections and accident investigations; (7) Express concerns related to worker safety and health; (8) Decline to perform an assigned task because of a reasonable belief that, under the circumstances, the task poses an imminent risk of death or serious physical harm to the worker coupled with a reasonable belief that there is insufficient time to seek effective redress through normal hazard reporting and abatement procedures; and	Protections and Obligations entitled "Safety and Health Protection on the Job," which is furnished pursuant to Labor Code Section 6328 by the Division of Occupational Safety and Health, Department of Industrial Relations, State of California, containing information on pertinent safety laws, regulations and certain rights of employees under the California Labor Code. … The Notice shall also inform the employees that no employee shall be laid off or discharged for refusing to perform work in the performance of which the provisions of the California Labor Code, any occupational safety or health standard or any safety order of the Division will be violated, where such violation would create a real and apparent hazard to the employee or his fellow employees. …The Notice shall inform the employees that the employer shall provide an opportunity for employees or their representatives to observe monitoring or measuring of employee exposure to hazards conducted pursuant to standards promulgated under California Labor Code Section 142.3, and shall allow the employee or his representative access to accurate records of employee exposures to potentially toxic materials or harmful physical agents. 8CCR340.1 (a) Whenever an employer is required to conduct tests or to engage in monitoring or measuring, to determine employee exposure to hazards by specific standards promulgated under		

	Labor Code Section 142.3, the employer shall notify the affected employee or employees or their representative, prior to commencement of the date, time and place of the testing, monitoring or measuring of employee exposure. The employer shall provide the affected employee or employees, or their representatives with the opportunity to observe the testing, sampling, monitoring or measuring undertaken pursuant to such standards. 8CCR340.2 Whenever any employee has been or is being exposed to toxic materials or harmful physical agents in concentrations or at levels exceeding those prescribed by applicable standard, order, or special order, the employer of the affected employee must promptly notify any employee so affected in writing of the fact that the employee has been exposed, and of the corrective action being taken by the employer. 8CCR3203(a)(3) Include a system for communicating with employees in a form readily understandable by all affected employees on matters relating to occupational safety and health, including provisions designed to encourage employees to inform the employer of hazards at the worksite without fear of reprisal. 8CCR3204(a) Purpose. The purpose of this section is to provide employees and their designated representatives and authorized representatives of the Chief of the Division of		

	Occupational Safety and Health (DOSH) a right of access to relevant exposure and medical records.		
(9) Stop work when the worker discovers employee exposures to imminently dangerous conditions or other serious hazards; provided that any stop work authority must be exercised in a justifiable and responsible manner in accordance with procedures established in the approved worker safety and health program.	No comparable requirement. Note: Stop work also addressed by UC/DOE Contract No. DE-AC02-05CH11231 which includes FAR 52.242-15 - Stop Work Order (Aug 1989)(Alternative I)(Apr 1984).	Gap	Stop work authority at LBNL is documented in the UC-DOE Prime Contract No. DE-AC02-05CH11231 however, LBNL will also maintain requirement in the IIPP.
851.21 Hazard identification and assessment			
(a) Contractors must establish procedures to identify existing and potential workplace hazards and assess the risk of associated workers injury and illness. Procedures must include methods to: (1) Assess worker exposure to chemical, physical, biological, or safety workplace hazards through appropriate workplace monitoring; (2) Document assessment for chemical, physical, biological, and safety workplace hazards using recognized exposure assessment and testing methodologies and using of accredited and certified laboratories; (3) Record observations, testing and monitoring results;	8CCR3203(a)(4) Include procedures for identifying and evaluating work place hazards including scheduled periodic inspections to identify unsafe conditions and work practices. 8CCR3204(d)(1)(B) Employee Exposure Records. Each employee exposure record shall be preserved and maintained for at least thirty (30) years. 8CCR5155(e)(1) Whenever it is reasonable to suspect that employees may be exposed to concentrations of airborne contaminants in excess of levels permitted in section 5155(c), the employer shall monitor (or cause to have monitored) the work environment so that exposures to employees can be measured or calculated.	Partial gap	DOE requires records to be maintained for longer than 30 years. Comply with Cal/OSHA regulation, but LBNL will specify and maintain DOE record retention durations in the IIPP.

	8CCR5155(e)(3) For the adequate protection of employees, the person supervising, directing or evaluating the monitoring and control methods shall be versed in this standard and shall be competent in industrial hygiene practice. 8CCR5155(e)(4) All monitoring results shall be recorded and such records shall be retained in accordance with section 3204. 8CCR5191(d)(1) Initial monitoring. The employer shall measure the employee's exposure to any substance regulated by a standard which requires monitoring if there is reason to believe that exposure levels for that substance exceed the action level (or in the absence of an action level, the exposure limit). The person supervising, directing or evaluating the monitoring shall be competent in industrial hygiene practice		
(4) Analyze designs of new facilities and modifications to existing facilities and equipment for potential workplace hazards;	8CCR3203(a) Effective July 1, 1991, every employer shall establish, implement and maintain an effective Injury and Illness Prevention Program (Program). 8CCR3203(a)(4) Include procedures for identifying and evaluating work place hazards including scheduled periodic inspections to identify unsafe conditions and work practices. Note: In addition, addressed though UC/DOE Contract No. DE-AC02-05CH11231 which includes DEAR 970.5223-1 which includes Integrated Safety Management, the guiding principles and five core functions.	No gap	Maintain requirement in IIPP.

(5) Evaluate operations, procedures, and facilities to identify workplace hazards;	8CCR3203(a)(4) Include procedures for identifying and evaluating work place hazards including scheduled periodic inspections to identify unsafe conditions and work practices.	No gap	Comply with Cal/OSHA regulation.
(6) Perform routine job activity-level hazard analyses;	8CCR3203(a)(4) Include procedures for identifying and evaluating work place hazards including scheduled periodic inspections to identify unsafe conditions and work practices.	Partial gap	Comply with Cal/OSHA regulation, but include details on job activity-level hazard analyses in the IIPP.
(7) Review site safety and health experience information; and	No comparable Cal/OSHA requirement. Note: This is addressed by DEAR 970.5223-1, which required feedback and continuous improvement on all safety-related activities. The DEAR is included in UC/DOE Contract No. DE-AC02-05CH11231.	Partial gap	Maintain requirement in IIPP.
(8) Consider interaction between workplace hazards and other hazards such as radiological hazards.	3203(a) Effective July 1, 1991, every employer shall establish, implement and maintain an effective Injury and Illness Prevention Program (Program).	No gap	Comply with Cal/OSHA regulation.
(b) Contractors must submit to the Head of DOE Field Element a list of closure facility hazards and the established controls within 90 days after identifying such hazards. The Head of DOE Field Element, with concurrence by the Cognizant Secretarial Officer, has 90 days to accept the closure facility hazard controls or direct additional actions to either: (1) Achieve technical compliance; or (2) Provide additional controls to protect the workers.	No comparable requirement.	Gap	Incorporate requirement into IIPP.
(c) Contractors must perform the activities identified in paragraph (a) of this section, initially to	8CCR3203(a)(4) Include procedures for identifying and evaluating work place hazards	No gap	Comply with Cal/OSHA regulation.

obtain baseline information and as often thereafter as necessary to ensure compliance with the requirements in this Subpart.	including scheduled periodic inspections to identify unsafe conditions and work practices. Inspections shall be made to identify and evaluate hazards: (A) When the Program is first established; (B) Whenever new substances, processes, procedures, or equipment are introduced to the workplace that represent a new occupational safety and health hazard; and (C) Whenever the employer is made aware of a new or previously unrecognized hazard.		
851.22 Hazard prevention and abatement			
(a) Contractors must establish and implement a hazard prevention and abatement process to ensure that all identified and potential hazards are prevented or abated in a timely manner.	3203(a)(6) Include methods and/or procedures for correcting unsafe or unhealthy conditions, work practices and work procedures in a timely manner based on the severity of the hazard:	No gap	Comply with Cal/OSHA regulation.
(1) For hazards identified either in the facility design or during the development of procedures, controls must be incorporated in the appropriate facility design or procedure.	8CCR3203(a) Effective July 1, 1991, every employer shall establish, implement and maintain an effective Injury and Illness Prevention Program (Program). 8CCR3203(a)(4) Include procedures for identifying and evaluating work place hazards including scheduled periodic inspections to identify unsafe conditions and work practices. Note: In addition, addressed though UC/DOE Contract No. DE-AC02-05CH11231, which includes DEAR 970.5223-1, which includes Integrated Safety Management, the guiding principles and five core functions.	No gap	Maintain requirement in IIPP.
(2) For existing hazards identified in the workplace, contractors must:	3203(a)(6) Include methods and/or procedures for correcting unsafe or unhealthy conditions,	No gap	Comply with Cal/OSHA regulation.

(i) Prioritize and implement abatement actions according to the risk to workers; (ii) Implement interim protective measures pending final abatement; and (iii) Protect workers from dangerous safety and health conditions;	work practices and work procedures in a timely manner based on the severity of the hazard: (A) When observed or discovered (B) When an imminent hazard exists which cannot be immediately abated without endangering employee(s) and/or property, remove all exposed personnel from the area except those necessary to correct the existing condition. Employees necessary to correct the hazardous condition shall be provided the necessary safeguards.		
(b) Contractors must select hazard controls based on the following hierarchy:	No requirement	No gap	N/A
(1) Elimination or substitution of the hazards where feasible and appropriate; (2) Engineering controls where feasible and appropriate; (3) Work practices and administrative controls that limit worker exposures; and (4) Personal protective equipment. (c) Contractors must address hazards when selecting or purchasing equipment, products, and services.	8CCR3203(a) Effective July 1, 1991, every employer shall establish, implement and maintain an effective Injury and Illness Prevention Program (Program).	Partial gap	Incorporate requirement into IIPP.
851.23 Safety and health standards			
(a) Contractors must comply with the following safety and health standards that are applicable to the hazards at their covered workplace:	No requirement	No gap	N/A
(1) Title 10 Code of Federal Regulations (CFR) 850, ‘‘Chronic Beryllium Disease Prevention Program.’	10 CFR 850 “Chronic Beryllium Prevention Program”	No gap	10 CFR 850 is not subject to this variance request. It applies independent of 10 CFR 851. LBNL will continue to

			comply with 10 CFR 850.
(2) Title 29 CFR, Parts 1904.4 through 1904.11, 1904.29 through 1904.33; 1904.44, and 1904.46, ‘‘Recording and Reporting Occupational Injuries and Illnesses.’’	Title 8 CCR, Division 1, “Department of Industrial Relations,” 14300.4 through 14300.11, 14300.29 through 14300.33, “California’s Employer Records of Occupational Injury and Illness”	No gap	Comply with Cal/OSHA regulation.
(3) Title 29 CFR, Part 1910, ‘‘Occupational Safety and Health Standards,’’ excluding 29 CFR 1910.1096, ‘‘Ionizing Radiation.’’	Title 8 CCR, Chapter 4. Division of Industrial Safety, Subchapter 7, General Industrial Safety Orders, excluding 8 CCR Group 14 Radiation and Radioactivity	No gap	Comply with Cal/OSHA regulation.
(4) Title 29 CFR, Part 1915, ‘‘Shipyard Employment."	Activity not currently applicable to LBNL operations	No gap	Comply with Cal/OSHA regulation if/when applicable.
(5) Title 29 CFR, Part 1917, ‘‘Marine Terminals.’’	Activity not currently applicable to LBNL operations	No gap	Comply with Cal/OSHA regulation if/when applicable.
(6) Title 29 CFR, Part 1918, ‘‘Safety and Health Regulations for Longshoring.’’	Activity not currently applicable to LBNL operations	No gap	Comply with Cal/OSHA regulation if/when applicable.
(7) Title 29 CFR, Part 1926, ‘‘Safety and Health Regulations for Construction.’’	Title 8 CCR, Chapter 4. Division of Industrial Safety, Subchapter 4, Construction Safety Orders	No gap	Comply with Cal/OSHA regulation.
(8) Title 29 CFR, Part 1928, ‘‘Occupational Safety and Health Standards for Agriculture.’’	Activity not currently applicable to operations	No gap	Comply with Cal/OSHA regulation if/when applicable.
(9) American Conference of Governmental Industrial Hygienists (ACGIH®), ‘‘Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices,’’ (**2016**) (incorporated by reference, see § 851.27) when the ACGIH® Threshold Limit Values (TLVs) are lower (more protective) than permissible exposure limits in 29 CFR part 1910 for general industry and/or part 1926 for construction. When the ACGIH TLVs are used as exposure limits, contractors must	No comparable requirement.	Gap	Incorporate the technical amendment requirement into IIPP. LBNL will review subsequent versions of the listed standards and with concurrence of the DOE Head of Field Element will

nonetheless comply with the other provisions of any applicable expanded health standard found in 29 CFR part 1910 and/or part 1926.			adopt updated standards as appropriate.
(10) American National Standards Institute (ANSI/ASSE) Z88.2, ''American National Standard Practices for Respiratory Protection,'' (**2015**) (incorporated by reference, see § 851.27).	Title 8 CCR, Chapter 4. Division of Industrial Safety, Subchapter 7, General Industrial Safety Orders, Section 5144 Respiratory Protection	Partial gap	Incorporate the technical amendment requirement into IIPP. LBNL will review subsequent versions of the listed standards and with concurrence of the DOE Head of Field Element will adopt updated standards as appropriate.
(11) ANSI Z136.1, ''Safe Use of Lasers,'' (**2014**) (incorporated by reference, see §851.27)	No comparable requirement.	Gap	Incorporate the technical amendment requirement into IIPP. LBNL will review subsequent versions of the listed standards and with concurrence of the DOE Head of Field Element will adopt updated standards as appropriate.
(12) ANSI Z49.1, ''Safety in Welding, Cutting and Allied Processes,'' sections 4.3 and E4.3 (**2012**) (incorporated by reference, see §851.27).	No comparable requirement.	Gap	Incorporate the technical amendment requirement into IIPP.

			LBNL will review subsequent versions of the listed standards and with concurrence of the DOE Head of Field Element will adopt updated standards as appropriate.
(13) National Fire Protection Association (NFPA) 70, ‘‘National Electrical Code,’’ (**2017**) (incorporated by reference, see §851.27).	No comparable requirement.	Gap	Incorporate the technical amendment requirement into IIPP. LBNL will review subsequent versions of the listed standards and with concurrence of the DOE Head of Field Element will adopt updated standards as appropriate.
(14) NFPA 70E, ‘‘Standard for Electrical Safety in the Workplace,’’ (**2015**) (incorporated by reference, see §851.27).	No comparable requirement.	Gap	Incorporate the technical amendment requirement into IIPP. LBNL will review subsequent versions of the listed standards and with concurrence of the DOE Head of Field Element will adopt updated

			standards as appropriate.
(b) Nothing in this part must be construed as relieving a contractor from complying with any additional specific safety and health requirement that it determines to be necessary to protect the safety and health of workers.	No comparable requirement	Gap	Incorporate requirement into IIPP.
851.24 Functional Areas			
(a) Contractors must have a structured approach to their worker safety and health program which at a minimum, include provisions for the following applicable functional areas in their worker safety and health program: construction safety; fire protection; firearms safety; explosives safety; pressure safety; electrical safety; industrial hygiene; occupational medicine; biological safety; and motor vehicle safety. (b) In implementing the structured approach required by paragraph (a) of this section, contractors must comply with the applicable standards and provisions in Appendix A of this part, entitled ‘‘Worker Safety and Health Functional Areas.’	8CCR3203(a) Effective July 1, 1991, every employer shall establish, implement and maintain an effective Injury and Illness Prevention Program (Program).	See Table 3 below.	See Table 3 below.
851.25 Training and information.			
(a) Contractors must develop and implement a worker safety and health training and information program to ensure that all workers exposed or potentially exposed to hazards are provided with the training and information on that hazard in order to perform their duties in a safe and healthful manner. (b) The contractor must provide:	8CCR3203(a)(2) Include a system for ensuring that employees comply with safe and healthy work practices. Substantial compliance with this provision includes recognition of employees who follow safe and healthful work practices, training and retraining programs 8CCR3203(a)(3) Include a system for communicating with employees in a form readily understandable by all affected employees on	No gap	Comply with Cal/OSHA regulation.

(1) Training and information for new workers, before or at the time of initial assignment to a job involving exposure to a hazard; (2) Periodic training as often as necessary to ensure that workers are adequately trained and informed; and (3) Additional training when safety and health information or a change in workplace conditions indicates that a new or increased hazard exists. (c) Contractors must provide training and information to workers who have worker safety and health program responsibilities that is necessary for them to carry out those responsibilities.	matters relating to occupational safety and health, including provisions designed to encourage employees to inform the employer of hazards at the worksite without fear of reprisal. Substantial compliance with this provision includes meetings, training programs 8CCR3203(a)(7) Provide training and instruction ... (B) To all new employees; (C) To all employees given new job assignments for which training has not previously been received; (D) Whenever new substances, processes, procedures or equipment are introduced to the workplace and represent a new hazard; (F) For supervisors to familiarize themselves with the safety and health hazards to which employees under their immediate direction and control may be exposed.		
851.26 Recordkeeping and reporting			
(a) Recordkeeping. Contractors must:	No requirement	No gap	N/A
(1) Establish and maintain complete and accurate records of all hazard inventory information, hazard assessments, exposure measurements, and exposure controls.	8CCR3203(b) Records of the steps taken to implement and maintain the Program shall include: (1) Records of scheduled and periodic inspections required by subsection (a)(4) to identify unsafe conditions and work practices, including person(s) conducting the inspection, the unsafe conditions and work practices that have been identified and action taken to correct the identified unsafe conditions and work practices. These records shall be maintained for at least one (1) year; and	Partial gap	Incorporate requirement into IIPP including specifying DOE record retention durations in the IIPP.

	(2) Documentation of safety and health training required by subsection (a)(7) for each employee, including employee name or other identifier, training dates, type(s) of training, and training providers. This documentation shall be maintained for at least one (1) year.		
(2) Ensure that the work-related injuries and illnesses of its workers and subcontractor workers are recorded and reported accurately and consistent with DOE reporting directives.	No comparable Cal/OSHA requirement. Note: This is addressed through UC/DOE Contract No. DE-AC02-05CH11231, which includes Environment, Safety and Health Reporting (DOE Order 231.1B, Admin Chg. 1 (CRD Only) (11/28/2012)).	No gap	Maintain requirement in IIPP.
(3) Comply with the applicable occupational injury and illness recordkeeping and reporting workplace safety and health standards in §851.23 at their site, unless otherwise directed by DOE.	8CCR14300 The purpose of this rule (Article 2) is to require employers to record work-related fatalities, injuries and illnesses.	No gap	Comply with Cal/OSHA regulation.
(4) Not conceal nor destroy any information concerning non-compliance or potential noncompliance with the requirements of this part.	No comparable requirement.	Gap	Incorporate requirement into IIPP.
(b) Reporting and investigation. Contractors must: (1) Report and investigate accidents, injuries and illness;	8CCR3203(a)(5) Include a procedure to investigate occupational injury or occupational illness.	No gap	Comply with Cal/OSHA regulation.
(2) Analyze related data for trends and lessons learned	No comparable Cal/OSHA requirement. Note: This requirement is captured DEAR 970.5223-1, which is included in UC/DOE Contract No. DE-AC02-05CH11231.	No gap	Maintain requirement in IIPP.
851.27 Referenced Sources			
(a) General. We incorporate by reference the following standards into part 851. The material has been approved for incorporation by the Director of the Federal Register under 5 U.S.C. 552(a) and 1	No comparable requirement.	N/A	N/A. Section only required for Federal Register.

CFR part 51. Any subsequent amendment to a standard by the standard-setting organization will not affect the DOE regulations unless and until amended by DOE. Material is incorporated as it exists on the date of the approval. To use a subsequent amendment to a standard, DOE must publish a document in the Federal Register and the material must be available to the public. All approved material is available for inspection at the U.S. Department of Energy, Office of Environment, Health, Safety and Security, Office of Worker Safety and Health Policy, 1000 Independence Ave. SW, Washington, DC 20585. 301–903– 6061. The material is available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030 or go to: www.archives.gov/federalregister/cfr/ibr-locations.html. Standards can be obtained from the sources listed below… … For brevity, the list of referenced sources is not listed here.			

*Maintain in IIPP = No gap exists but for clarification (or emphasis) LBNL will include the requirement in a new IIPP.
Incorporate in IIPP = A gap or partial gap exists. LBNL will include the 851 requirement in a new IIPP.
Comply with Cal/OSHA Regulation = No gap exists. LBNL will include a statement to comply with Cal/OSHA regulations in a new IIPP.

Attachment 4

Table 3 – Cal/OSHA Regulations in lieu of 10 CFR 851, Appendix A

Appendix A to Part 851 – Worker Safety and Health Functional Areas	Cal/OSHA (or California) regulation that is "As Safe and Healthful"	851 vs Cal/OSHA	Action*
This appendix establishes the mandatory requirements for implementing the applicable functional areas required by §851.24.	No requirement	No gap	N/A
1. Construction Safety			
(a) For each separately definable construction activity (e.g., excavations, foundations, structural steel, roofing) the construction contractor must:	No requirement	No gap	N/A
(1) Prepare and have approved by the construction manager an activity hazard analysis prior to commencement of affected work. Such analyses must:	1509(a) Every employer shall establish, implement and maintain an effective Injury and Illness Prevention Program in accordance with section 3203 of the General Industry Safety Orders. 3203(a)(4) Include procedures for identifying and evaluating work place hazards including scheduled periodic inspections to identify unsafe conditions and work practices.	Partial gap	California regulations do not require the Construction Manager to approve hazard analysis. Incorporate requirement into IIPP.
(i) Identify foreseeable hazards and planned protective measures;	8CCR1509(a) Every employer shall establish, implement and maintain an effective Injury and Illness Prevention Program in accordance with section 3203 of the General Industry Safety Orders. 8CCR1509(b) Every employer shall adopt a written Code of Safe Practices which relates to the employer's operations. The Code shall contain language equivalent to the relevant parts of Plate A-3 of the Appendix.	No gap	Comply with Cal/OSHA regulations.

	8CCRSubchapter 4, Appendix A, PLATE A-3 CODE OF SAFE PRACTICES. 8CCR3203(a)(4) Include procedures for identifying and evaluating work place hazards including scheduled periodic inspections to identify unsafe conditions and work practices.		
(ii) Address further hazards revealed by supplemental site information (e.g., site characterization data, as-built drawings) provided by the construction manager;	8CCR1509(a) Every employer shall establish, implement and maintain an effective Injury and Illness Prevention Program in accordance with section 3203 of the General Industry Safety Orders. 8CCR1509(b) Every employer shall adopt a written Code of Safe Practices which relates to the employer's operations. The Code shall contain language equivalent to the relevant parts of Plate A-3 of the Appendix. 8CCRSubchapter 4, Appendix A, PLATE A-3 CODE OF SAFE PRACTICES 8CCR3203(a)(4) Include procedures for identifying and evaluating work place hazards including scheduled periodic inspections to identify unsafe conditions and work practices.	Partial gap	California regulations do not require the Construction Manager to do this. Incorporate requirement into IIPP.
(iii) Provide drawings and/or other documentation of protective measures for which applicable Occupational Safety and Health Administration (OSHA) standards require preparation by a Professional Engineer or other qualified professional, and	This clause is referencing OSHA requirements.	No gap	Comply with Cal/OSHA regulations.

(iv) Identify competent persons required for workplace inspections of the construction activity, where required by OSHA standards.	This clause is referencing OSHA requirements.	No gap	Comply with Cal/OSHA regulations.
(2) Ensure workers are aware of foreseeable hazards and the protective measures described within the activity analysis prior to beginning work on the affected activity.	8CCR3203(a)(3) Include a system for communicating with employees in a form readily understandable by all affected employees on matters relating to occupational safety and health, including provisions designed to encourage employees to inform the employer of hazards at the worksite without fear of reprisal. Substantial compliance with this provision includes meetings, training programs, posting, written communications, a system of anonymous notification by employees about hazards, labor/management safety and health committees, or any other means that ensures communication with employees. 8CCR3203(a)(7) Provide training and instruction: ... (C) To all employees given new job assignments for which training has not previously been received; 8CCR1509(e) Supervisory employees shall conduct "toolbox" or "tailgate" safety meetings, or equivalent, with their crews at least every 10 working days to emphasize safety.	No gap	Comply with Cal/OSHA regulations.
(3) Require that workers acknowledge being informed of the hazards and protective measures associated with assigned work activities. Those workers failing to utilize appropriate protective measures must be subject to the construction contractor's disciplinary process.	8CCR3203(a)(2) Include a system for ensuring that employees comply with safe and healthy work practices. Substantial compliance with this provision includes recognition of employees who follow safe and healthful work practices, training and retraining programs, disciplinary actions, or	No gap	Comply with Cal/OSHA regulations.

	any other such means that ensures employee compliance with safe and healthful work practices. 8CCR3203(b)(2) Documentation of safety and health training required by subsection (a)(7) for each employee, including employee name or other identifier, training dates, type(s) of training, and training providers.		
(b) During periods of active construction (i.e., excluding weekends, weather delays, or other periods of work inactivity), the construction contractor must have a designated representative on the construction worksite who is knowledgeable of the project's hazards and has full authority to act on behalf of the construction contractor. The contractor's designated representative must make frequent and regular inspections of the construction worksite to identify and correct any instances of noncompliance with project safety and health requirements.	8CCR3203(a)(4) Include procedures for identifying and evaluating work place hazards including scheduled periodic inspections to identify unsafe conditions and work practices.	Partial gap	California regulations do not specifically require this. Incorporate requirement in IIPP.
(c) Workers must be instructed to report to the construction contractor's designated representative, hazards not previously identified or evaluated. If immediate corrective action is not possible or the hazard falls outside of project scope, the construction contractor must immediately notify affected workers, post appropriate warning signs, implement needed interim control measures, and notify the construction manager of the action taken. The contractor or the designated representative must	8CCR3203(a)(3) Include a system for communicating with employees in a form readily understandable by all affected employees on matters relating to occupational safety and health, including provisions designed to encourage employees to inform the employer of hazards at the worksite without fear of reprisal. 8CCR3203(a)(6) Include methods and/or procedures for correcting unsafe or unhealthy conditions, work practices and work procedures in a timely manner based on the severity of the	No gap	Comply with Cal/OSHA regulations.

stop work in the affected area until appropriate protective measures are established.	hazard:...(A) When observed or discovered; and,...(B) When an imminent hazard exists which cannot be immediately abated without endangering employee(s) and/or property, remove all exposed personnel from the area except those necessary to correct the existing condition. Employees necessary to correct the hazardous condition shall be provided the necessary safeguards.		
(d) The construction contractor must prepare a written construction project safety and health plan to implement the requirements of this section and obtain approval of the plan by the construction manager prior to commencement of any work covered by the plan. In the plan, the contractor must designate the individual(s) responsible for on-site implementation of the plan, specify qualifications for those individuals, and provide a list of those project activities for which subsequent hazard analyses are to be performed. The level of detail within the construction project safety and health plan should be commensurate with the size, complexity and risk level of the construction project. The content of this plan need not duplicate those provisions that were previously submitted and approved as required by §851.11.	8CCR1509(a) Every employer shall establish, implement and maintain an effective Injury and Illness Prevention Program in accordance with section 3203 of the General Industry Safety Orders. 8CCR3203(a) Effective July 1, 1991, every employer shall establish, implement and maintain an effective Injury and Illness Prevention Program (Program). The Program shall be in writing and, shall, at a minimum:... (1) Identify the person or persons with authority and responsibility for implementing the Program.	Gap	California regulations do not address this section in its entirety. Incorporate requirement in IIPP.
2. Fire Protection			
(a) Contractors must implement a comprehensive fire safety and emergency response program to protect workers commensurate with the nature of the work that is performed. This includes appropriate facility and site-wide fire protection, fire alarm notification and egress features, and	8CCR3221 Fire Prevention Plan 8CCR3220 Emergency Action Plan 8CCR3400 Medical Services and First Aid	No gap	Comply with Cal/OSHA regulations.

access to a fully staffed, trained, and equipped emergency response organization that is capable of responding in a timely and effective manner to site emergencies.			
(b) An acceptable fire protection program must include those fire protection criteria and procedures, analyses, hardware and systems, apparatus and equipment, and personnel that would comprehensively ensure that the objective in paragraph 2(a) of this section is met. This includes meeting applicable building codes and National Fire Protection Association codes and standards.	8CCR3221 Fire Prevention Plan 8CCR3219 Maintenance of Fire Protection Equipment, Materials and Assemblies 8CCRGroup 27 Fire Protection Note: Incorporation of applicable building and NFPA codes and standards is also included in DOE O 420.1C Facility Safety, which is in the UC/DOE Contract No. DE-AC02-05CH11231.	No gap	Comply with Cal/OSHA regulations. Maintain requirement in IIPP in accordance with M&O contract.
3. Explosives Safety			
(a) Contractors responsible for the use of explosive materials must establish and implement a comprehensive explosives safety program. (b) Contractors must comply with the policy and requirements specified in the appropriate explosives safety technical standard. (c) Contractors must determine the applicability of the explosives safety directive requirements to research and development laboratory type operations consistent with the DOE level of protection criteria described in the explosives safety directive.	No comparable requirement.	Gap	Incorporate requirement into IIPP.
4. Pressure Safety			

(a) Contractors must establish safety policies and procedures to ensure that pressure systems are designed, fabricated, tested, inspected, maintained, repaired, and operated by trained and qualified personnel in accordance with applicable and sound engineering principles. (b) Contractors must ensure that all pressure vessels, boilers, air receivers, and supporting piping systems conform to: (1) - (2) ... list of ASME codes (3) The strictest applicable state and local codes.	No comparable requirements.	Gap	Incorporate requirement into IIPP.
(c) When national consensus codes are not applicable (because of pressure range, vessel geometry, use of special materials, etc.), contractors must implement measures to provide equivalent protection and ensure a level of safety greater than or equal to the level of protection afforded by the ASME or applicable state or local code. Measures must include the following: (1) Design drawings, sketches, and calculations must be reviewed and approved by a qualified independent design professional (i.e., professional engineer). Documented organizational peer review is acceptable. (2) Qualified personnel must be used to perform examinations and inspections of materials, in-process fabrications, non-destructive tests, and acceptance test. (3) Documentation, traceability, and accountability must be maintained for each pressure vessel or system, including descriptions of design, pressure conditions, testing, inspection, operation, repair, and maintenance.	No comparable requirement.	Gap	When conformance to the requirements of these national consensus codes is neither practical nor feasible, LBNL will implement measures to provide equivalent protection at a level of safety comparable to that achieved by complying with the requirements of these national consensus codes. An Alternate Pressure Systems Qualification Program, documented in the LBNL Environment, Safety and Health Manual, will provide a

			method of qualifying pressure systems that includes engineering evaluation, peer review, and management concurrence tailored to the complexity of the system, risks, and consequence of a failure.
5. Firearms Safety			
A contractor engaged in DOE activities involving the use of firearms must establish firearms safety policies and procedures for security operations, and training to ensure proper accident prevention controls are in place…….	Firearms are not permitted on site. This section does not apply to LBNL operations.	Not applicable	This section does not apply to LBNL operations. Firearms are not permitted on site.
6. Industrial Hygiene			
Contractors must implement a comprehensive industrial hygiene program that includes at least the following elements:	8CCR5144(c) Respiratory protection program. This subsection requires the employer to develop and implement a written respiratory protection program with required worksite-	No gap	Comply with Cal/OSHA regulations.

	specific procedures and elements for required respirator use.		
(a) Initial or baseline surveys and periodic resurveys and/or exposure monitoring as appropriate of all work areas or operations to identify and evaluate potential worker health risks;	8CCR3203(a)(4) Include procedures for identifying and evaluating work place hazards including scheduled periodic inspections to identify unsafe conditions and work practices. Inspections shall be made to identify and evaluate hazards: 8CCR5144(d) Selection of respirators. This subsection requires the employer to evaluate respiratory hazard(s) in the workplace, identify relevant workplace and user factors, and base respirator selection on these factors. 8CCR5155(e)(1) Whenever it is reasonable to suspect that employees may be exposed to concentrations of airborne contaminants in excess of levels permitted in section 5155(c), the employer shall monitor (or cause to have monitored) the work environment so that exposures to employees can be measured or calculated. 8CCR5191(d)(1) Initial monitoring. The employer shall measure the employee's exposure to any substance regulated by a standard which requires monitoring if there is reason to believe that exposure levels for that substance exceed the action level (or in the absence of an action level, the exposure limit).	No gap	Comply with Cal/OSHA regulations.
(b) Coordination with planning and design personnel to anticipate and control health	No comparable requirement.	Gap	Incorporate requirement into IIPP.

hazards that proposed facilities and operations would introduce;			
(c) Coordination with cognizant occupational medical, environmental, health physics, and work planning professionals;	No comparable requirement.	Gap	Incorporate requirement into IIPP.
(d) Policies and procedures to mitigate the risk from identified and potential occupational carcinogens;	8CCR5209 Carcinogens 8CCR5194(e)(1) Employers shall develop, implement, and maintain at the workplace a written hazard communication program for their employees which at least describes how the criteria specified in sections 5194(f), (g), and (h) for labels and other forms of warning, safety data sheets, and employee information and training will be met, 8CCR5194(e)(2)(B) The methods the employer will use to inform the other employer(s) of any precautionary measures that need to be taken to protect employees during the workplace's normal operating conditions and in foreseeable emergencies;	No gap	Comply with Cal/OSHA regulations.
(e) Professionally and technically qualified industrial hygienists to manage and implement the industrial hygiene program; and	8CCR5144(c) The program must be administered by a suitably trained program administrator. 8CCR5144(c)(3) The employer shall designate a program administrator who is qualified by appropriate training or experience that is commensurate with the complexity of the program to administer or oversee the respiratory protection program and conduct the required evaluations of program effectiveness.	No gap	Comply with Cal/OSHA regulations.

	8CCR5155(e)(3) For the adequate protection of employees, the person supervising, directing or evaluating the monitoring and control methods shall be versed in this standard and shall be competent in industrial hygiene practice. 8CCR5191(d)(1) Initial monitoring. … The person supervising, directing or evaluating the monitoring shall be competent in industrial hygiene practice.		
(f) Use of respiratory protection equipment tested under the DOE Respirator Acceptance Program for Supplied-Air Suits when the National Institute for Occupational Safety and Health-approved respiratory protection does not exist for DOE tasks that require such equipment. For security operations military type masks for respiratory protection by security personnel is acceptable.	All tasks performed at LBNL are covered by the National Institute for Occupational Safety and Health-approved respiratory protection parameters.	N/A. Gap with Cal/OSHA but not applicable to LBNL's mission and operation	N/A. Do not include requirement in IIPP. Not applicable based on LBNL's mission and operations.
7. Biological Safety			

(a) Contractors must establish and implement a biological safety program that: (1) Establishes an Institutional Biosafety Committee (IBC) or equivalent. The IBC must: (i) Review any work with biological etiologic agents for compliance with applicable Centers for Disease Control and Prevention (CDC), National Institutes of Health (NIH), World Health Organization (WHO), and other international, Federal, State, and local guidelines and assess the containment level, facilities, procedures, practices, and training and expertise of personnel; and (ii) Review the site's security, safeguards, and emergency management plans and procedures to ensure they adequately consider work involving biological etiologic agents. (2) Maintains an inventory and status of biological etiologic agents, and provide to the responsible field and area office, through the laboratory IBC (or its equivalent), an annual status report describing the status and inventory of biological etiologic agents and the biological safety program. (3) Provides for submission to the appropriate Head of DOE Field Element, for review and concurrence before transmittal to the Centers for Disease Control and Prevention (CDC), each Laboratory Registration/Select Agent Program registration application package requesting registration of a laboratory facility for the purpose of transferring, receiving, or handling biological select agents.	No comparable requirement.	Gap	Incorporate requirement into IIPP.

(4) Provides for submission to the appropriate Head of DOE Field Element, a copy of each CDC Form EA–101, Transfer of Select Agents, upon initial submission of the Form EA–101 to a vendor or other supplier requesting or ordering a biological select agent for transfer, receipt, and handling in the registered facility. Submit to the appropriate Head of DOE Field Element the completed copy of the Form EA–101, documenting final disposition and/or destruction of the select agent, within 10 days of completion of the Form EA–101. (5) Confirms that the site safeguards and security plans and emergency management programs address biological etiologic agents, with particular emphasis on biological select agents. (6) Establishes an immunization policy for personnel working with biological etiologic agents based on the evaluation of risk and benefit of immunization.			
(b) [Reserved]	No requirement.	Not applicable. Remove.	N/A
8. Occupational Medicine			
(a) Contractors must establish and provide comprehensive occupational medicine services to workers employed at a covered work place who: (1) Work on a DOE site for more than 30 days in a 12-month period; or (2) Are enrolled for any length of time in a medical or exposure monitoring program required by this rule and/or any other applicable Federal, State or local regulation, or other obligation.	Partially covered by California regulations. California employers are subject to medical surveillance regulations including Title 8, CCR 5199.1, 5208, 1529, 5218, 5231, 5193, 5194, 5209, 5203, 5217, 5192, 5191, 5216, 5198, 1532.1, 5097, 5144, 5147, 5153; Title 17, CCR 30277; and Title 3, CCR 6728 and 6760. Additional California regulations require medical services in the event of a workplace injury (e.g.,	Partial gap	LBNL will implement these requirements for LBNL employees working for any duration of time for LBNL, or enrolled in a medical or exposure monitoring program

(b) The occupational medicine services must be under the direction of a graduate of a school of medicine or osteopathy who is licensed for the practice of medicine in the state in which the site is located. (c) Occupational medical physicians, occupational health nurses, physician's assistants, nurse practitioners, psychologists, employee assistance counselors, and other occupational health personnel providing occupational medicine services must be licensed, registered, or certified as required by Federal or State law where employed. (d) Contractors must provide the occupational medicine providers access to hazard information by promoting its communication, coordination, and sharing among operating and environment, safety, and health protection organizations. (1) Contractors must provide the occupational medicine providers with access to information on the following: (i) Current information about actual or potential work-related site hazards (chemical, radiological, physical, biological, or ergonomic); (ii) Employee job-task and hazard analysis information, including essential job functions; (iii) Actual or potential work-site exposures of each employee; and (iv) Personnel actions resulting in a change of job functions, hazards or exposures. (2) Contractors must notify the occupational medicine providers when an employee has been absent because of an injury or illness for more	California Labor Code 6400, 4600, 3400 and 3700); alcohol and drug rehabilitation (i.e., California Labor Code 1025 and 1026); the use of licensed medical providers, etc.		required by an applicable regulation. Subcontractors to LBNL will make comprehensive occupational medicine services available to their workers as required by California regulations and by any contractual obligations with LBNL. This section will be documented in the IIPP with clarification that it applies to LBNL employees – not subcontractors.

than 5 consecutive workdays (or an equivalent time period for those individuals on an alternative work schedule); (3) Contractors must provide the occupational medicine provider information on, and the opportunity to participate in, worker safety and health team meetings and committees; (4) Contractors must provide occupational medicine providers access to the workplace for evaluation of job conditions and issues relating to workers' health. (e) A designated occupational medicine provider must: (1) Plan and implement the occupational medicine services; and (2) Participate in worker protection teams to build and maintain necessary partnerships among workers, their representatives, managers, and safety and health protection specialists in establishing and maintaining a safe and healthful workplace. (f) A record, containing any medical, health history, exposure history, and demographic data collected for the occupational medicine purposes, must be developed and maintained for each employee for whom medical services are provided. All occupational medical records must be maintained in accordance with Executive Order 13335, Incentives for the Use of Health Information Technology. (1) Employee medical, psychological, and employee assistance program (EAP) records must be kept confidential, protected from unauthorized access, and stored under conditions that ensure			

their long-term preservation. Psychological records must be maintained separately from medical records and in the custody the designated psychologist in accordance with 10 CFR 712.38(b)(2). (2) Access to these records must be provided in accordance with DOE regulations implementing the Privacy Act and the Energy Employees Occupational Illness Compensation Program Act. (g) The occupational medicine services provider must determine the content of the worker health evaluations, which must be conducted under the direction of a licensed physician, in accordance with current sound and acceptable medical practices and all pertinent statutory and regulatory requirements, such as the Americans with Disabilities Act. (1) Workers must be informed of the purpose and nature of the medical evaluations and tests offered by the occupational medicine provider. (i) The purpose, nature and results of evaluations and tests must be clearly communicated verbally and in writing to each worker provided testing; (ii) The communication must be documented in the worker's medical record; and (2) The following health evaluations must be conducted when determined necessary by the occupational medicine provider for the purpose of providing initial and continuing assessment of employee fitness for duty. (i) At the time of employment entrance or transfer to a job with new functions and hazards,			

a medical placement evaluation of the individual's general health and physical and psychological capacity to perform work will establish a baseline record of physical condition and assure fitness for duty. (ii) Periodic, hazard-based medical monitoring or qualification-based fitness for duty evaluations required by regulations and standards, or as recommended by the occupational medicine services provider, will be provided on the frequency required. (iii) Diagnostic examinations will evaluate employee's injuries and illnesses to determine work-relatedness, the applicability of medical restrictions, and referral for definitive care, as appropriate. (iv) After a work-related injury or illness or an absence due to any injury or illness lasting 5 or more consecutive workdays (or an equivalent time period for those individuals on an alternative work schedule), a return to work evaluation will determine the individual's physical and psychological capacity to perform work and return to duty. (v) At the time of separation from employment, individuals shall be offered a general health evaluation to establish a record of physical condition. (h) The occupational medicine provider must monitor ill and injured workers to facilitate their rehabilitation and safe return to work and to minimize lost time and its associated costs. (1) The occupational medicine provider must place an individual under medical restrictions			

when health evaluations indicate that the worker should not perform certain job tasks. The occupational medicine provider must notify the worker and contractor management when employee work restrictions are imposed or removed. (i) Occupational medicine provider physician and medical staff must, on a timely basis, communicate results of health evaluations to management and safety and health protection specialists to facilitate the mitigation of worksite hazards. (j) The occupational medicine provider must include measures to identify and manage the principal preventable causes of premature morbidity and mortality affecting worker health and productivity. (1) The contractor must include programs to prevent and manage these causes of morbidity when evaluations demonstrate their cost effectiveness. (2) Contractors must make available to the occupational medicine provider appropriate access to information from health, disability, and other insurance plans (de-identified as necessary) in order to facilitate this process. (k) The occupational medicine services provider must review and approve the medical and behavioral aspects of employee counseling and health promotional programs, including the following types: (1) Contractor-sponsored or contractor supported EAPs;			

(2) Contractor-sponsored or contractor supported alcohol and other substance abuse rehabilitation programs; and (3) Contractor-sponsored or contractor supported wellness programs. (4) The occupational medicine services provider must review the medical aspects of immunization programs, blood-borne pathogens programs, and bio-hazardous waste programs to evaluate their conformance to applicable guidelines. (5) The occupational medicine services provider must develop and periodically review medical emergency response procedures included in site emergency and disaster preparedness plans. The medical emergency responses must be integrated with nearby community emergency and disaster plans.			
9. Motor Vehicle Safety			
(a) Contractors must implement a motor vehicle safety program to protect the safety and health of all drivers and passengers in Government-owned or -leased motor vehicles and powered industrial equipment (i.e., fork trucks, tractors, platform lift trucks, and other similar specialized equipment powered by an electric motor or an internal combustion engine). (b) The contractor must tailor the motor vehicle safety program to the individual DOE site or facility, based on an analysis of the needs of that particular site or facility. (c) The motor vehicle safety program must address, as applicable to the contractor's operations:	Various Cal/OSHA requirements address elements of motor vehicle and powered industrial equipment safety such as 8CCR 3649 - 3669. Industrial Trucks, Tractors, Haulage Vehicles, and Earthmoving Equipment as do California Department of Motor Vehicle rules. However, there is not a comparable requirement to have a motor vehicle safety program however.	Partial gap	Incorporate requirement into IIPP.

(1) Minimum licensing requirements (including appropriate testing and medical qualification) for personnel operating motor vehicles and powered industrial equipment; (2) Requirements for the use of seat belts and provision of other safety devices; (3) Training for specialty vehicle operators; (4) Requirements for motor vehicle maintenance and inspection; (5) Uniform traffic and pedestrian control devices and road signs; (6) On-site speed limits and other traffic rules; (7) Awareness campaigns and incentive programs to encourage safe driving; and (8) Enforcement provisions.			
10. Electrical Safety			
Contractors must implement a comprehensive electrical safety program appropriate for the activities at their site. This program must meet the applicable electrical safety codes and standards referenced in § 851.23.	No comparable requirement.	Gap	Incorporate requirement into IIPP.
11. Nanotechnology Safety – Reserved			
The Department has chosen to reserve this section since policy and procedures for nanotechnology safety are currently being developed. Once these policies and procedures have been approved, the rule will be amended to include them through a rulemaking consistent with the Administrative Procedure Act.	Not applicable as there is not a specific DOE requirement at this time.	No requirement.	No action required. Note: LBNL implements The Safe Handling of Unbound Engineered Nanoparticles (DOE Order 456.1, Admin Chg. 1 (CRD Only) (2/14/2013) through

			UC/DOE Contract No. DE-AC02-05CH11231.
12. Workplace Violence Prevention – Reserved			
The Department has chosen to reserve this section since the policy and procedures for workplace violence prevention are currently being developed. Once these policies and procedures have been approved, the rule will be amended to include them through a rulemaking consistent with the Administrative Procedure Act.	Not applicable as there is not a specific DOE requirement at this time.	No requirement.	No action required. Note: LBNL maintains a workplace violation prevention program.

*Maintain in IIPP = No gap exists but for clarification (or emphasis) LBNL will include the requirement in a new IIPP.
Incorporate in IIPP = A gap or partial gap exists. LBNL will include the 851 requirement in a new IIPP.
Comply with Cal/OSHA Regulation = No gap exists. LBNL will include a statement to comply with Cal/OSHA regulations in a new IIPP.

Attachment 5

November 2, 2018 LBNL TABL Article Posting

Lab Submits Variance to Move From Fed/OSHA to Cal/OSHA

NOVEMBER 2, 2018

Historically, work done at Berkeley Lab has been required to adhere to federal safety standards. That sometimes makes it difficult for the workers the Lab contracts with and their companies, who are familiar with and accustomed to complying with California safety standards.

This month the Lab will submit an application to the Department of Energy (DOE) to begin following the California Occupational Safety and Health Administration (Cal/OSHA) safety standards rather than Federal Occupational Safety and Health Administration (Fed/OSHA) standards.

The Lab's current safety program also follows the Code of Federal Regulations (CFR) 851, which is unique to the Department of Energy labs. Parts of CFR 851 would continue to remain in effect since it offers a higher level of protection in areas such as laser and electrical. These standards would be moved into a new Injury and Illness Prevention Plan.

"The changes make it easier for construction contractors who do work at the Lab to train their workers since they use Cal/OSHA rules at other sites and have to modify their safety training to work at the Lab," said EH&S manager Andrew Peterson. "It also aligns the Lab's safety rules with UC Berkeley, which also uses Cal/OSHA safety standards."

Cal/OSHA incorporates all of Fed/OSHA (https://drive.google.com/a/lbl.gov/file/d/1JgZtoyOmV4puh5cw89znACxeVHODsfoF/view?usp=sharing), plus it has ergonomic standards, a program for heat illness prevention, and stricter

CONNECT

COMING UP

- Jan. 22 Brown Bag on Early Career Research Program (https://today.lbl.gov/2019/01/14/applications-open-for-does-office-of-science-early-career-research-program-2/)
- Farewell Reception For Wim Leemans on Jan. 22 (https://today.lbl.gov/2019/01/14/farewell-reception-honoring-wim-leemans-to-be-held-jan-22/)
- Blood Drive on Jan. 24 (https://today.lbl.gov/2019/01/10/lab-to-host-additional-blood-drives-in-2019-first-is-on-jan-24/)
- Jan. 28 Info Session for Postdocs' Mental Health & Well-Being Benefits (https://today.lbl.gov/2019/01/15/jan-28-information-session-for-postdocs-mental-health-and-well-being-benefits/)
- Parking Permits Stickers Required by Jan. 31 (https://today.lbl.gov/2018/12/11/annual-stickers-to-be-added-to-parking-hangtag-permits/)

levels of permissible exposure levels to air contaminants.

The internal safety reporting structure will remain the same with DOE being the enforcement agency for any violations.The CFR 851 “variance process” allows for employee comments on this change. The draft application is available for review (https://drive.google.com/a/lbl.gov/file/d/1qzTABmVJ1jCNIFRJubWBH98WuCN3hxrb/view?usp=sharing). If you want to submit comments, contact Andrew Peterson (mailto:afpeterson@lbl.gov), manager, Environment, Health & Safety.

More> (https://today.lbl.gov/2018/11/02/lab-submits-variance-to-move-from-fed-osha-to-cal-osha/)

Tagged: Environment/Health/Safety (https://today.lbl.gov/tag/environmenthealthsafetysecurity/), Safety (https://today.lbl.gov/tag/safety/)
You can leave a comment. View the Comment Policy. (/comment-policy/)

← Previous (https://today.lbl.gov/2018/11/01/photosynthesis-like-a-moss/)

Next → (https://today.lbl.gov/2018/11/02/it-offers-free-google-cloud-platform-class-nov-8-9/)

- Take Bay View Cafe Survey by Jan. 31 (https://today.lbl.gov/2019/01/15/complete-bay-view-cafe-survey-for-a-chance-to-win-gift-certificates/)

USEFUL LINKS

Submit (https://docs.google.com/forms/d/e/1FAIpQLSed41NYn74eCxMlHYpNUk5Gnyb_OE3cny1IhBysjIKl3TdvOg/viewform)

Contact (https://today.lbl.gov/contact/)

Lab Director Messages (https://today.lbl.gov/directors-messages/)

Deputy for Operations Messages (https://today.lbl.gov/deputy-for-operations-messages/)

Cafeteria Menu (http://www.bayviewcafelbl.com/weekly-menu/)

Holiday Schedule (http://www2.lbl.gov/Workplace/holiday-schedule.html)

Lab Map (http://map.lbl.gov/#UMAP_2012091840117)

Shuttle Buses (http://www2.lbl.gov/Workplace/Facilities/Support/Busses/all_routes.html)

Construction Projects Map (https://commons.lbl.gov/display/fac/Current+and+Planned+Facilities+Projects)

SEARCH TABL

View all headlines (https://today.lbl.gov/?search)

Attachment 6

Example Meeting Invite

Moving from Fed OSHA to Cal OSHA

Created by: afpeterson@lbl.gov · Your response: ✔Yes, I'm going

Time
3pm - 4pm (Pacific Time - Los Angeles)

Date
Wed Oct 17, 2018

Where
33-306-CR(20)

Description
Hi all,

We are moving along with our variance to 10 CFR 851 requesting to move from Fed OSHA safety rules to Cal OSHA safety rules. This meeting is to share the goals of the effort and the impact that may have. The most significant impact will be with subcontractors. I can set up a zoom meeting if that works as well.

My Notes

Rooms, etc.
- ✔ 33-306-CR(20)

Guests
- ✔ Andrew Peterson
- ✔ Harry Lorsbach
- ✔ John Corlett
- ✔ Kem Robinson
- ✔ Michelle Flynn
- ✔ Phillip McCants
- ⊘ Edna Annis
  Procurement will be represented by Harry and Philip

Confirmed - Unions Meeting - LBNL Variance Request (EHS)

Created by: legiron@lbl.gov · Your response: ✔Yes, I'm going

Time
1:30pm - 2:30pm (Pacific Time - Los Angeles)

Date
Wed Oct 17, 2018

Where
90-1099-CR(25)

Description
This is the link for Zoom:

https://lbnl.zoom.us/j/569789194

MEETING ID 569789194

Please confirm your attendance so I can request gate access and parking. If anyone is riding together please let me know so I can make the note that some will be drivers and some passengers.
I'm also including a video conference options, in case some can not come onsite.

Let me know if you have questions.

Thank you.

Nina

Hi there,

Rooms, etc.
- ✔ 90-1099-CR(25)

Guests
- ✔ Andrew Peterson
- ✔ Bettina Brixner
- ✔ Patricius Bloemhard
- ✔ carly@uaw5810.org
- ✔ Christopher Watchmaker
- ✔ Dianne Wentworth
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