Partnership Agreement Between UCB and LBNL Concerning Environment, Health and Safety Policy and Procedures

I. PRINCIPLES

II. ESH ACTIVITIES

III. ACCIDENT/INJURY RESPONSE

IV. PARTNERSHIP AGREEMENT MANAGEMENT

V. SIGNATURES

APPENDIX A: Environment, Safety and Health-Related Agreements between LBNL and UC

Berkeley

APPENDIX B: Construction, Renovation and Maintenance

APPENDIX C: Compensation Agreements

APPENDIX D: Process for Environment, Safety and Health Assurance of LBNL Funded

Work at UC Berkeley

This Partnership Agreement is entered into between the University of California, Berkeley (UCB) and the Lawrence Berkeley National Laboratory (LBNL). Its purpose is to set forth the agreement between UCB and LBNL for environment, safety and health policies and procedures applicable to the two facilities. This Agreement supersedes entirely the previous Memorandum of Understanding between the parties that was signed in June 1993.

I. PRINCIPLES

A. Abbreviations

- 1. "EH&S" refers to the specific Environment, Health and Safety organization (UCB or LBNL).
- "ESH" refers to the environment, safety and health programs, policies or procedures in general without reference to an individual organization providing those services.

B. Spaces

For purposes of this Agreement, spaces are defined as follows:

1. LBNL Spaces

The term "LBNL spaces" means those spaces within the boundaries of the LBNL fence line, various leased spaces occupied by LBNL activities, and the Donner and Melvin Calvin Laboratories.¹

2. UC Berkeley Spaces

The term "UC Berkeley spaces" means all spaces on the central UCB campus (excepting Donner and Melvin Calvin Laboratories) and associated field stations. UC Berkeley spaces include "Appendix I" space (see below).

3. Appendix I Space

The term "Appendix I space" is that space referred to in Appendix I to the current contract between DOE and the UC Regents², with the exception of Donner and Melvin Calvin Laboratories. Appendix I space is UC Berkeley space (see definition above) that is used at least partially for LBNL-funded activities.

C. Intent of the Partnership Agreement

 At both the University of California, Berkeley campus (UCB) and the Lawrence Berkeley National Laboratory (LBNL) the obligation to provide a safe and healthful working and learning environment rests, by law, with the University of California (UC, the University) for all UC employees. UC will assure that all applicable environment, safety and health (ESH) standards are met. The policies and procedures that UCB and LBNL use to meet this obligation may differ, since the two organizations are regulated by different government agencies and operate under different constraints. UCB and LBNL ESH programs provide equivalent protection.

On February 28, 1974, the United States Atomic Energy Commission (succeeded by the United States Department of Energy (DOE)) and the Regents of the University of California agreed that the Donner Laboratory and the Melvin Calvin Laboratory (then called the Laboratory for Chemical Biodynamics) were to be considered "government owned or controlled areas."

Modification No.: M353, Supplemental Agreement to DE-AC03-76SF00098

- The University extends this obligation for providing a safe and healthful working and learning environment to students, guests and visiting scholars, compensated or not. However, the procedures established to meet this obligation may differ between these groups.
- Line managers (including shop supervisors and laboratory Principal Investigators) have the primary responsibility for assuring that this obligation is met in areas under their control.
- 4. How "safe and healthful" working and learning environment is interpreted depends upon the work location:
 - a. For work in UC Berkeley spaces, including Appendix I space, the standards are established by UC Berkeley policies and procedures. The UCB Office of Environment, Health and Safety provides ESH services and oversight to all personnel working in, and to all equipment situated in, the UC Berkeley spaces.
 - UCB Emergency Preparedness protocols, as described in the University of California at Berkeley Emergency Operations Management Plan and as supplemented by specific department and building emergency plans, apply in the UC Berkeley spaces.
 - b. For work in the LBNL spaces, the standards are established by LBNL policies and procedures. LBNL Environment, Health, and Safety Division provides ESH services and oversight to all personnel working in, and to all equipment situated in, the LBNL spaces.
 - LBNL protocols are followed for emergencies that occur in LBNL spaces. These protocols are described in the specific LBNL Building Emergency Plans for these buildings.
 - Exception: At Donner and Melvin Calvin Laboratories, certain activities are regulated by environmental permits and requirements that apply to the UC Berkeley central campus property as a whole. These activities include but are not limited to wastewater discharge, air emissions, and oil storage. For those activities for which UC Berkeley EH&S oversees campus-wide compliance, UC Berkeley policies, procedures, and compliance inspections and assessment guidelines apply. LBNL and UC Berkeley EH&S organizations will coordinate to ensure that these campus environmental protection programs are effectively implemented.
 - c. Exceptions and/or modifications to the above or to any other provision of this agreement may occur by mutual agreement between LBNL and UCB. Such exceptions and/or modifications will be documented in separate agreements. Appendix A contains current ESH-related agreements.
 - d. Any line manager may impose, fund and implement policies and procedures upon work in areas under his/her control in addition to those outlined above. Such policies and procedures must be consistent with, and at least as protective as, the policies outlined above.
 - e. Although UCB and LBNL safety systems and procedures differ, and the DOE-mandated Integrated Safety Management (ISM) System specified in the contract between the UC Regents and the US Department of Energy does not apply at UC Berkeley, the systems and procedures at both institutions are consistent with ISM.
- Any questions or interpretations will be resolved according to mechanisms spelled out elsewhere in this Agreement.

II. ESH ACTIVITIES

A. Inspections and Assessments

1. Internal Compliance Inspections

Internal compliance inspections, when performed, will be performed or coordinated by the organization providing ESH services to the space to be inspected, and will be based upon the standards in effect for that space (see Section I, above). When necessary, the organization not providing ESH services may request inspection of a space not under its jurisdiction, may accompany the inspection, and may comment upon its results.

For non-routine or comprehensive inspections, the organization providing ESH services will inform the line manager responsible for that space of the inspection. For routine inspections (e.g., fire compliance inspections), the line manager may not necessarily be notified of the inspection. Reports resulting from inspections will be submitted to the individual responsible for that space, and to others as provided for in the policies and procedures governing that space.

2. External Regulatory Agency Inspections

External regulatory inspections will be coordinated by the organization providing ESH services to that space. When the regulatory inspection is of Appendix I space, UCB will inform LBNL of the inspection and, when feasible, provide LBNL the opportunity to accompany the inspection as an observer. The organization being inspected will inform the line manager responsible for that space of the inspection, if possible. Regulatory findings resulting from such inspections will be submitted to the line manager responsible for that space, and to others as provided for in the policies and procedures governing that space.

3. Self-assessment Activities

- a) Self-assessment activities in any space will be performed per the policies and procedures of the organization providing ESH services to that space. Line managers are responsible for providing verification that they have met the self-assessment requirements for spaces under their control.
- b) Verification of self-assessment activities will be conducted by, and using the procedures of, the organization providing ESH services to that space.
- c) Line managers of any spaces may request advisory assessment of their spaces from either EH&S organization. If the organization to which the request is addressed does not provide ESH services to that space, it will refer the request to the other organization. Both organizations may participate in the assessment. The organization providing ESH services will coordinate the combined assessment, verify that site standards are met, and issue reports where appropriate with input from the other organization.

B. Training

Line managers are responsible for analyzing work of persons under their direction and for assuring that the proper training for safe conduct of the work is identified and obtained. Until an individual has been properly trained, he/she will work under the direct supervision of someone who is already trained. Classroom or specific content training, where required, will be specified

by the organization providing ESH services or oversight to the space where the work will be performed.

C. Construction and Renovation

Management of construction and renovation-related activities is outlined in Appendix B.

III. ACCIDENT/INJURY RESPONSE

- A. Accident investigations will consider the policies and procedures of
 - the injured employee's employer,
 - · the organization providing ESH services to the space in which the accident occurred, and
 - the organization providing funding for the operation.

When these differ, then the organizations will consult with each other so that a co-investigation may be considered. The organization providing ESH services and oversight to that space (see II above) will lead the investigation, and will provide the other EH&S organization the opportunity to participate in the investigation and to comment upon reports and recommendations. Corrective actions will be based upon the policies and procedures in effect for those spaces, and are the responsibility of the line manager/principal investigator assigned that space.

- B. All injuries involving LBNL personnel, regardless of where they occur, will be reported to LBNL Health Services. When an LBNL employee seeks medical treatment for an injury arising out of his/her employment, the employee should identify himself/herself as an LBNL employee to the attending physician so that Worker Compensation records are efficiently processed.
- C. All injuries involving UCB personnel will be reported to the individual's home department office.
- D. Liability for Workers Compensation depends upon employment and work activity at the time of the injury, not necessarily upon the work location in which that injury occurs. The organizational unit (LBNL or UCB) having this liability will be determined by an analysis of each incident.
- E. Whenever a serious injury occurs that may require agency notification, the two EH&S organizations will consult with each other as soon as possible to determine which, if either, organization will make the notification. If such consultation cannot or does not occur, the organization providing ESH services to the space where the injury occurred will make the notification, and consult with the other organization as soon as possible.

IV. PARTNERSHIP AGREEMENT MANAGEMENT

A. LBNL/UCB EH&S Coordinating Group

The Group consists of the LBNL and UCB Directors of Environment, Health and Safety and/or their designees, and has the following functions:

- Long-range planning of ESH coordination and activities
- Dialogue and coordination to facilitate research collaboration
- Discussion of major funding obstacles
- Identification and resolution of technical and administrative obstacles

- Determination of appropriate applicable standards, in the absence of legally applicable standards or policy addressing a particular ESH issue, and upon demonstration of a clear need for a standard
- Negotiation of appropriate compensation agreements
- · Consideration of proposed revisions to this Agreement

The Group will meet regularly, as necessary but not less than semiannually, to review activities. The Group will meet with the LBNL Deputy Director for Operations and the UCB Vice Chancellor for Research when necessary to advise them of any changes or significant events or issues that have occurred, and of the status of the LBNL/UCB relationship.

B. Compensation for Services

Compensation agreements are located in Appendix C.

C. Interpretations and Resolutions

Questions or disagreements regarding the interpretation or implementation of this Agreement will be resolved by the involved parties by exchanging information and reaching agreement. If necessary, the LBNL/UCB EH&S Coordinating Group will intervene. Unresolved issues will be referred to LBNL and UCB upper management.

D. Termination

This Agreement may be terminated by either party upon 90 days written notice to the other party, or by mutual agreement.

E. Amendment

This Agreement may be amended at any time by written agreement between the parties. Either party may at any time amend its own internal procedures. If the amended internal procedures affect anyone operating under this Agreement, the persons will be notified as soon as practical.

V. SIGNATURES

For UC Berkeley

Mark Freiberg, Director, Office of Environment, Hea

Beth Burnside, Vice Chancellor for Research

For Lawrence Berkeley National Laboratory

Robin Wendt, Acting Director of Environment, Healt

V. Sally Benson. Deputy Laboratory Director of Operati

Appendix A ENVIRONMENT, SAFETY AND HEALTH-RELATED AGREEMENTS BETWEEN LBNL AND UC BERKELEY

1. "Memorandum of Understanding - Human Subjects Research", 10 June 2003

Appendix B

CONSTRUCTION, RENOVATION, AND MAINTENANCE

A. Donner and Melvin Calvin Laboratories

- 1. When LBNL wishes UCB to modify facilities in spaces LBNL occupies:
 - a. Normally, UCB will prepare work plans and specifications to meet LBNL functional requirements. If it is agreed that LBNL will prepare work plans and specifications, then the plans and specifications will be prepared in accordance with LBNL policies and procedures, including LBNL EH&S review, to ensure that work conforms to LBNL/DOE standards, the California Building Code, and UC Berkeley design standards.
 - b. UCB Project Team³ will review the specifications and gain all necessary approvals.
 - c. UCB Project Team will perform the work using contractors or staff, except where LBNL will self-perform work as provided in section (A)(4) or when LBNL staff acts as Project Manager, in which event, LBNL contracting processes will be utilized as provided in (A)(5).
 - d. LBNL will normally provide funding to complete the modification.
 - e. UCB EH&S will provide construction-phase safety and environmental oversight as needed, except that in all cases LBNL will act as lead EH&S office for radiological issues. LBNL EH&S will coordinate with UCB EH&S for any issues arising out of the project that affect building occupants.
 - f. All modifications are subject to UCB Campus Fire Marshal (CFM) and Construction Inspection Services (CIS) inspections. A UCB CIS inspector will be the inspector-ofrecord (IOR).
- 2. When UCB wishes to modify facilities in spaces LBNL or UCB occupies:
 - uCB Facilities Services will plan the work to conform withconform to the California Building Code and UC Berkeley design standards.
 - UCB Project Team will review the plans and specifications and gain all necessary approvals.
 - UCB Project Team will distribute two sets of plans to the LBNL Building Manager for LBNL review.
 - d. Prior to initiation of work, UCB will notify the LBNL Building Manager of approximate work start time and date.
 - e. UCB Project Team will perform the work using contractors or campus staff.
 - f. UCB EH&S will provide construction-phase safety and environmental oversight as needed, except that in all cases LBNL will act as lead EH&S office for radiological issues. LBNL EH&S will coordinate with UCB EH&S for any issues arising out of the project that affect building occupants.
 - g. UCB will normally provide funding to complete the modification.

-

³ UCB Project Team refers to any of several campus units that manage construction work.

- All modifications are subject to UCB Campus Fire Marshal (CFM) and Construction Inspection Services (CIS) inspections. A UCB CIS inspector will be the inspector-ofrecord (IOR).
- 3. Where maintenance and small scale renovation work is initiated:
 - a. Prior to initiation of work, UCB will notify the LBNL Building Manager of work scope and approximate work start time and date.
 - b. The building manager will evaluate the potential for the work to have safety or environmental impacts upon the building occupants. Where it does, the building manager will consult with LBNL EH&S prior to initiation of the work.
 - c. UCB staff or contractors will perform the work.
 - d. UCB EH&S will provide construction-phase safety and environmental oversight as needed, except that in all cases LBNL will act as lead EH&S office for radiological issues. LBNL EH&S will coordinate with UCB EH&S for any issues arising out of the project that affect building occupants.
- 4. When LBNL wishes to self-perform work:
 - a. The value of the work may not exceed \$50,000 per delegation of authority by the Campus Building Official (Vice Chancellor Facilities Services).
 - LBNL will prepare work plans and specifications in accordance with LBNL policies and procedures, including LBNL EH&S review, to ensure that work conforms to LBNL/DOE standards, the California Building Code, and UC Berkeley design standards.
 - c. LBNL will gain all necessary UCB approvals.
 - d. LBNL employees will perform the work.
 - e. LBNL will provide funding to complete the work.
 - LBNL EH&S will provide construction-phase safety and environmental oversight as needed.
 - g. All modifications are subject to UCB Campus Fire Marshal (CFM) and Construction Inspection Services (CIS) inspections. A UCB CIS inspector will be the inspector-ofrecord (IOR).
- When LBNL wishes to modify facilities in spaces LBNL occupies and will also act as Project Manager:
 - a. LBNL will prepare work plans and specifications in accordance with LBNL policies and procedures, including LBNL EH&S review, to ensure that work conforms to LBNL/DOE standards, the California Building Code, and UC Berkeley design standards.
 - LBNL will gain all necessary UCB approvals. UCB Project Team will review the plans and specifications and gain all necessary approvals.
 - c. LBNL Project Team will perform the work using contractors or staff.
 - LBNL will normally provide funding to complete the modification.

- LBNL EH&S will provide construction-phase safety and environmental oversight as needed
- f. All modifications are subject to UCB Campus Fire Marshal (CFM) and Construction Inspection Services (CIS) inspections. A UCB CIS inspector will be the inspector-ofrecord (IOR).

B. Appendix I Space

- When UCB performs maintenance work in Appendix I space, or when either LBNL or UCB wishes to modify facilities in Appendix I space, UCB will provide all project services, including safety and environmental oversight as needed.
- LBNL EH&S may, through UCB EH&S, also provide oversight when work has the potential to affect LBNL employees.

Appendix C

COMPENSATION AGREEMENTS

Compensation between LBNL and UCB will be considered for the following services:

- 1. Hazardous waste collection and processing
- 2. Radiation Protection
- 3. General Environment, Health and Safety services under the following situations:
 - i. When UCB provides ESH services for LBNL activities located in Appendix I space; or
- ii. When LBNL provides ESH services for UCB activities located in LBNL space.

Corrected Memorandum to Temporarily Amend Appendix C LBNL/UCB Partnership Agreement, March 15, 2004 Extension

Change in Calculation of Radiation Safety Costs Recovery

Identification and verification of campus Radiation Use Authorizations (RUAs) issued wholly or in part for Lawrence Berkeley National Laboratory (LBNL) funded research is an ongoing challenge for LBNL Environment, Health & Safety Division (LBNL-EH&S) and the UC Berkeley Office of Environment, Health & Safety (UCB-EH&S). Accurate data on LBNL-funded RUA holders has been problematic so that appropriate and timely billing for Fiscal Years 04-05, 05-06, and potentially 06-07 is an issue.

A further complication is the current timing of recovering environmental and safety program costs between LBNL and UCB. Since portions of the UCB bill are calculated using campus fiscal year end data and campus FDX calendar year data, past practice (since the inception of the MOU) has been to transmit the invoice in the calendar year following the fiscal year being recharged. Inability to confirm LBNL funding used for RUA activities has further exacerbated the situation as campus recharge policies require billing recharge clients within 60 days of the service provided.

To bring the past cost recovery up to date, the UCB-EH&S and LBNL-EH&S offices have agreed to set the radiation safety services costs based on an average of the annual payments made by LBNL for RUA activities from FY00-01 through FY03-04. While the average payment amount calculated by LBNL-EH&S and UCB-EH&S differs slightly, \$71.000.00 per year is the set amount that will be used for each year of this temporary amendment to the rate calculation methodology for the radiation safety services portion.

Appendix C provides for compensation for services provided. The prior practice of compensation was continued from the prior MOU, Appendix VII, Section II, A.2 which stated "Radiation safety costs will be shared based on ratio of assignable LBL (LBNL) Radiation Use Authorizations (RUA) to total campus RUA's." By signature below, both parties agree that the radiation safety services costs provided to LBNL-funded researchers, for FY 04-05, 05-06, 06-07, and 07-08 will be set at \$71,000.00 per billing year. This number will be used on the intercampus/laboratory invoice which also includes recovery for hazardous waste disposal costs and general environment, health and safety costs. The annual billing amount will need to be revisited for 08-09 to accommodate rising costs associated with radiation safety services provided to LBNL-funded RUA holders.

Agreed:

Original Document Signed by both parties March 22 and 27, 2007 respectively.

Appendix reference has been corrected, all other commitment and financial agreements still apply.

Mark Freiberg

UCB/EH&S Director

Howard Hatayama

LBNL EH&S Director

Created March 2007 Revised May 2008

Appendix D

PROCESS FOR ESH ASSURANCE OF LBNL FUNDED WORK AT UCB

The purpose of this document is to describe a process for assuring that LBNL staff working in UCB space is afforded safety protection equivalent to that for comparable activities at LBNL.

Pursuant to the Partnership Agreement Between UCB and LBNL Concerning Environment, Health and Safety Policy and Procedures, March 15, 2004:

"I. PRINCIPLES

- C. Intent of the Partnership Agreement
 - 1. At both the University of California, Berkeley campus (UCB) and the Lawrence Berkeley National Laboratory (LBNL) the obligation to provide a safe and healthful working and learning environment rests, by law, with the University of California (UC, the University) for all UC employees. UC will assure that all applicable environment, safety and health (ESH) standards are met. The policies and procedures that UCB and LBNL use to meet this obligation may differ, since the two organizations are regulated by different government agencies and operate under different constraints. UCB and LBNL ESH programs provide equivalent protection.
 - 4. How "safe and healthful" working and learning environment is interpreted depends upon the work location:
 - a. For work in UC Berkeley spaces, including Appendix I space, the standards are established by UC Berkeley policies and procedures. The UCB Office of Environment, Health and Safety provides ESH services and oversight to all personnel working in, and to all equipment situated in, the UC Berkeley spaces.
 - d. Any line manager may impose, fund and implement policies and procedures upon work in areas under his/her control in addition to those outlined above. Such policies and procedures must be consistent with, and at least as protective as, the policies outlined above.
 - e. Although UCB and LBNL safety systems and procedures differ, and the DOEmandated Integrated Safety Management (ISM) System specified in the contract between the UC Regents and the US Department of Energy does not apply at UC Berkeley, the systems and procedures at both institutions are consistent with ISM.

II. ESH ACTIVITIES

- A. Inspections and Assessments
 - 1. Internal Compliance Inspections
 Internal compliance inspections, when performed, will be performed or coordinated by the organization providing ESH services to the space to be inspected, and will be based upon the standards in effect for that space (see Section I, above). When necessary, the

organization not providing ESH services may request inspection of a space not under its jurisdiction, may accompany the inspection, and may comment upon its results. For non-routine or comprehensive inspections, the organization providing ESH services will inform the line manager responsible for that space of the inspection. For routine inspections (e.g., fire compliance inspections), the line manager may not necessarily be notified of the inspection. Reports resulting from inspections will be submitted to the individual responsible for that space, and to others as provided for in the policies and procedures governing that space.

3. Self-assessment Activities

- a) Self-assessment activities in any space will be performed per the policies and procedures of the organization providing ESH services to that space. Line managers are responsible for providing verification that they have met the self-assessment requirements for spaces under their control.
- b) Verification of self-assessment activities will be conducted by, and using the procedures of, the organization providing ESH services to that space.
- c) Line managers of any spaces may request advisory assessment of their spaces from either EH&S organization. If the organization to which the request is addressed does not provide ESH services to that space, it will refer the request to the other organization. Both organizations may participate in the assessment. The organization providing ESH services will coordinate the combined assessment, verify that site standards are met, and issue reports where appropriate with input from the other organization.

B. Training

Line managers are responsible for analyzing work of persons under their direction and for assuring that the proper training for safe conduct of the work is identified and obtained. Until an individual has been properly trained, he/she will work under the direct supervision of someone who is already trained. Classroom or specific content training, where required, will be specified by the organization providing ESH services or oversight to the space where the work will be performed."

Consistent with Section I.C.4.e of this agreement, UCB has developed its Integrated Safety and Environmental Management plan (University of California Policy on Management of Health, Safety and the Environment, UC Berkeley Implementation Summary June 18, 2008) pursuant to the UC Policy and Guidance on Management of Health, Safety and Environment, October 24, 2005. This document is based on a set of guiding principles and core functions similar to that of the DOE ISM model. Assurance of equivalent protection is based on implementation of ISEM (Integrated Safety and Environmental Management) in areas where LBNL staff are working in UCB space and the following:

 Results of UCB EH&S inspections for areas where LBNL staff are working will be shared with LBNL EH&S.

APPENDIX D: PROCESS FOR ESH ASSURANCE OF LBNL FUNDED WORK AT UCB

- Results of self-assessments performed by campus departments/research groups will be shared with respective LBNL Divisions.
- LBNL research divisions may from time to time inspect areas on campus where their staff are working. These inspections will be coordinated with UCB and inspection results will be shared with UCB.
- 4. A UCB approach to corrective action management will be developed and implemented.
- 5. Applicable lessons learned will be shared between UCB and LBNL.
- 6. To facilitate this sharing of information and documentation, LBNL will annually provide a current list of LBNL-funded researchers working on the UC Berkeley campus. This list will be provided on or around July 1 of each year, and will serve as the basis for services provided through June 30 of the following year.
- Campus EH&S will track staff time necessary to meet these new DOE-driven obligations so that compensation to support this effort, supplementing the compensation system in place since the original 1993 MOU, can be considered by LBNL.

For UC Berkeley	For Lawrence Berkeley National Laboratory
Mark Freiberg, Director Office of Environment, Health & Safety	Howard Hatayama, Division Director Division of Environment, Health & Safety
Date:	Date: 8/25/08

Partnership Agreement Between University of California Berkeley and Lawrence Berkeley National Laboratory Concerning Environment, Health and Safety Policy and Procedures Revision Schedule

Document	Date
Partnership Agreement Between UCB and LBNL Concerning Environment, Health and Safety Policy and Procedures	March 15, 2004
Appendix C: Memorandum to Temporarily Amend Appendix VII LBNL/UCB Partnership Agreement	March 27, 2007
Appendix C: Corrected Memorandum to Temporarily Amend Appendix VII LBNL/UCB Partnership Agreement	July 2, 2008
Appendix D: Process for ES&H Assurance of LBNL Funded Work at UCB	August 26, 2008