

U. S. DEPARTMENT OF ENERGY
OFFICE OF SCIENCE

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)
ENVIRONMENTAL EVALUATION NOTIFICATION FORM

To be completed by "financial assistance award" organization receiving Federal funding. For assistance (including a point of contact), see "Instructions for Preparing SC F-560, Environmental Evaluation Notification Form".

Solicitation/Award No. (if applicable):

Organization Lawrence Berkeley National Laboratory (LBNL)

Name:

Title of Proposed Old Town Decontamination, Demolition, and Environmental Restoration

Project/Research: Recovery Act Project

Total DOE Funding/Total Project ~\$44M

Funding:

I. Project Description (use additional pages as necessary):

A. Proposed Project/Action (delineate Federally funded/Non-Federally funded portions)

The proposed action would include the decontamination and demolition of some buildings at the original site of the Lawrence Berkeley National Laboratory (LBNL), commonly referred to as "Old Town". Subsurface investigation would be carried out to identify any past releases of contamination underneath and within the vicinity of the buildings. Appropriate remedial actions would be used to remediate any newly identified sites. Depending on the level of funding, up to fourteen buildings (approx. 55,000 gsf) would be decontaminated and demolished, including Buildings: 4, 5, 7, 7C, 14, 16, 25A, 40, 41, 44, 44A, 44B, 52, and 52A.

Any soil contamination identified at these sites would be remediated to the levels identified in the DOE/EA-1527, Environmental Assessment and Corrective Measures Study for Remediating Contamination at Lawrence Berkeley National Laboratory Regulated under Resource Conservation and Recovery Act (EA/CMS). If any new groundwater contamination is identified, remedial measures would be implemented in accordance with the goals identified in the EA/CMS.

The project work would take place over a 60 month period, beginning in 2010 and completing in 2014. Approximately 75-100 workers would be employed on-site during peak activity. The existing groundwater remediation, as approved by CAL/EPA Department of Toxic Substances Control (DTSC), will be continued during the project period in accordance with the EA/CMS.

This American Recovery and Reinvestment Act (Recovery Act) Project supports the mission of DOE and the Office of Environmental Management (EM) by 1) Completing decontamination and demolition (D&D) of facilities that provide no further value and reducing long-term liabilities, 2) Remediating radioactive and chemical sources of soil and groundwater, and 3) Reconfiguring/relocating/replacing systems impacted by D&D in a safe and cost effective manner that are required to support remaining site operations.

Yes ☐ No ☒

B. Would the project proceed without Federal funding?

If "yes", describe the impact to the scope:

II. Description of Affected Environment:

Historical operations within the subject "Old Town" buildings included radiochemistry, radioactive and hazardous waste management, metal plating, and metal cleaning with chlorinated solvents and acid solutions. As a result, there is subsurface contamination in the site, which includes: volatile organic compounds (VOC) in the groundwater; and PCBs, VOCs, and possibly radioactivity in the soil. Building contamination in the site includes asbestos, lead, and PCB's, and low levels of radioactive contamination inside buildings 4, and 5.

LBNL's Old Town is in the "Research and Academic" Zone of the Lab, within the "Charter Hill" research cluster, and in the geographic center of the main hill site. Old Town, which was originally known as "Charter Hill," was the first area developed by LBNL. Many of the Old Town buildings were built in the 1940s and 1950s. Due to the age of these buildings, they do not provide effective space for LBNL's modern research needs, and they are not constructed to current fire, seismic, and other safety standards. A historical assessment conducted in 2003 found that these buildings are not eligible to be listed on the National Register of Historical Places pursuant to the National Historic Preservation Act, neither individually nor as a historic district.

DTSC issued a Hazardous Waste Facility Permit to LBNL in May 1993. As a part of the permit, DTSC required LBNL to follow the Resource Conservation and Recovery Act (RCRA) process to investigate and clean up all historical releases of hazardous chemicals. LBNL completed the investigation, determined the extent of soil and groundwater contamination and proposed remedial measures to DTSC. On August 31, 2005, DTSC approved the LBNL Corrective Measure Study Report (CMS) and Remedy Selection establishing the clean up standards for soil and groundwater. The accessible parts of the Old Town area were included in the RCRA process and the groundwater plumes in this area are covered by the CMS

The Old Town site is completely developed and contains no surface water or sensitive biological habitat. It is generally surrounded by other Lab buildings and Lab perimeter zones with steep slopes and vegetation. The Lawrence Hall of Science, a children's museum, is located approximately 800 feet to the north, although it is further separated by a steep elevation difference (approximately 150- feet higher than Old Town). A small (approx. one-quarter acre) landscaped area with grass and approximately 11 mature trees is in the southeast corner of the Old Town area; this area would remain unaffected by the proposed action.

III. Preliminary Questions:

Yes ☐ No ☒

A. Is the DOE-funded work *entirely* a "paper study"?

If "Yes", ensure that the description in Section I reflects this and go directly to Section V.

B. Will the work to be performed take place *entirely* in existing buildings or facilities?

☐ ☒

And:

1. Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health?

☐ ☒

- | | | | |
|----|---|-------------------------------------|-------------------------------------|
| 2. | Require the siting, construction or major expansion of waste treatment, storage, or disposal facilities? If any new groundwater contamination is identified, remedial measures would be implemented in accordance with the goals identified in the EA/CMS. | ☐ | ☒ |
| 3. | Disturb hazardous substances, pollutants, or contaminants preexisting in the environment?
There is building and subsurface chemical contamination. In addition, the buildings also have radioactive contamination and the subsurface may have radioactive contamination. | ☒ | ☐ |
| 4. | Adversely affect environmentally-sensitive resources identified in Section IV.A.?
See below. | ☐ | ☒ |
| 5. | Be connected to another existing/proposed activity that could potentially create a cumulatively significant impact? | ☐ | ☒ |
| 6. | Have an inherent <i>possibility</i> for high consequence impacts to human health or the environment (e.g., Biosafety Level 3-4 laboratories, activities involving high levels of radiation)? | ☐ | ☒ |

If "No" to Question III.B. and ALL six subsequent questions, ensure the descriptions in Sections I and II reflect this and go directly to Section V.

IV. Potential Environmental Effects:

Attach/insert an explanation for each "Yes" response.

A. Sensitive Resources: Will the proposed action result in changes and/or disturbances to any of the following resources?

- | | Yes | No |
|--|-------------------------------------|-------------------------------------|
| 1. Threatened/Endangered Species and/or Critical Habitats | ☐ | ☒ |
| 2. Other Protected Species (e.g., Burros, Migratory Birds)
Surveys would be performed, as appropriate, for the presence of raptors and bat roosts in the area. | ☐ | ☒ |
| 3. Sensitive Environments (e.g., Tundra/Coral Reefs/Rain Forests) | ☐ | ☒ |
| 4. Archaeological/Historic Resources
A historical assessment conducted in 2003 and the California State Historic Preservation Officer concurred that these buildings are not eligible to be listed on the National Register of Historical Places pursuant to the National Historic Preservation Act, neither individually nor as a historic district. | ☐ | ☒ |
| 5. Important Farmland | ☐ | ☒ |
| 6. Non-Attainment Areas for Ambient Air Quality Standards.
Bay Area Air Basin is in non-attainment for ozone and particulate matter. Bay Area Air Quality Management District best management practices for dust suppression and air quality would be followed, along with LBNL 2006 LRDP EIR mitigation measures for construction and demolition. | ☒ | ☐ |
| 7. Class I Air Quality Control Region | ☐ | ☒ |
| 8. Special Sources of Groundwater (e.g. Sole Source Aquifer) | ☐ | ☒ |
| 9. Navigable Air Space | ☐ | ☒ |
| 10. Coastal Zones | ☐ | ☒ |
| 11. Areas with Special National Designation (e.g. National Forests, Parks, Trails) | ☐ | ☒ |
| 12. Floodplains and Wetlands | ☐ | ☒ |

B. Regulated Substances/Activities: Will the proposed action involve any of the following regulated

items or activities?

	Yes	No
13. Natural Resource Damage Assessments	☐	☒
14. Exotic Organisms	☐	☒
15. Noxious Weeds	☐	☒
16. Clearing or Excavation (Less than one acre. See Section II, above) Buildings would be cleared and potentially contaminated soil removed and/or remediated to institutional reuse levels. Entire project site is approximately three acres.	☒	☐
17. Dredge or Fill (under Clean Water Act, Section 404, indicate if greater than ten acres)	☐	☒
18. Noise (in excess of regulations)	☐	☒
19. Asbestos Removal Asbestos is known and/or expected in older Old Town buildings. Project demolition activities would be undertaken in close coordination with Lab EH&S to ensure that all requirements in 40 CFR 763 (Subpart G) and 40 CFR 61 (Subpart M) will be met, including asbestos removal certification.	☒	☐
20. PCB's PCBs are known and/or expected in older Old Town buildings. Prior to project demolition activities, Lab EH&S would determine the location, quantity, and concentration of PCB oil and prepare a disposal plan pursuant to 40 CFR Part 761, the TSCA, and applicable state regulations.	☒	☐
21. Import, Manufacture, or Processing of Toxic Substances	☐	☒
22. Chemical Storage/Use	☐	☒
23. Pesticide Use	☐	☒
24. Hazardous, Toxic, or Criteria Pollutant Air Emissions Particulate matter / dust and diesel exhaust from demolition and construction are expected. The Bay Area Air Quality Management District determines that LBNL will not cause significant criteria pollutant impacts if it follows applicable Air District mitigation measures and best management practices, which are identified in the 2006 LRDP EIR.	☒	☐
25. Liquid Effluents Contaminated groundwater may be encountered. Dewatering is possible. Any groundwater would be treated to applicable permit standards prior to discharge.	☒	☐
26. Underground Injection As approved by the regulatory agencies, Any groundwater injected underground for remediation purpose would be treated to nondetectable levels of contamination.	☒	☐
27. Hazardous Waste Some building material contamination may exceed hazardous waste thresholds.	☒	☐
28. Underground Storage Tanks	☐	☒
29. Radioactive Mixed Waste It is possible that sediment from removed drain lines may contain low level radioactive mixed waste. Such waste materials would be removed, treated, and disposed of in appropriately licensed and permitted facilities. Department of Energy Orders for the management of radioactive waste would be followed for any radioactively-contaminated building materials and soil.	☒	☐
30. Radioactive Waste Low level radioactive contamination is expected in some buildings.	☒	☐

Department of Energy Orders for the management of radioactive waste would be followed for any radioactively-contaminated building materials and soil.

- | | | | |
|-----|---|-------------------------------------|-------------------------------------|
| 31. | Radiation Exposure | ☐ | ☒ |
| | Radiation work would be performed and controlled in accordance with 10 CFR 835 to prevent radiation exposure | | |
| 32. | Surface Water Protection | ☒ | ☐ |
| | Coverage under California's construction storm water permit would be obtained from the State Water Resources Control Board and permit conditions for storm water protection would be followed | | |
| 33. | Pollution Prevention Act | ☐ | ☒ |
| 34. | Ozone Depleting Substances | ☐ | ☒ |
| 35. | Off-Road Vehicles | ☐ | ☒ |
| 36. | Biosafety Level 3-4 Laboratory | ☐ | ☒ |

C. Other Relevant Information: Will the proposed action involve the following?

- | | | Yes | No |
|-----|---|-------------------------------------|-------------------------------------|
| 37. | Potential Violation of Environment, Safety, or Health Regulations/Permits | ☐ | ☒ |
| 38. | Siting/Construction/Major Modification of Waste Recovery, or Waste Treatment, Storage, or Disposal Facilities. | ☐ | ☒ |
| | If any new groundwater contamination is identified, remedial measures would be implemented in accordance with the goals identified in the EA/CMS. | | |
| 39. | Disturbance of Pre-existing Contamination | ☒ | ☐ |
| | See above. | | |
| 40. | New or Modified Federal/State Permits | ☒ | ☐ |
| | A Notice of Intent will be submitted to the California Water Resources Control Board to obtain coverage under California's construction storm water permit and storm water protection measures. Soil boring permits/well construction will be obtained from the City of Berkeley. | | |
| 41. | Public Controversy | ☒ | ☐ |
| | Truck trips to remove demolished material would follow LBNL protocols for managing wastes and debris, including using approved routes and covering all loads that contain radioactive or hazardous material where required. Truck trips would be managed site wide to ensure aggregate trucks entering and leaving the Lab would remain well below established significance thresholds. | | |
| 42. | Environmental Justice | ☐ | ☒ |
| 43. | Action/Involvement of Another Federal Agency (e.g. license, funding, approval) | ☐ | ☒ |
| 44. | Action of a State Agency in a State with NEPA-type law. | ☒ | ☐ |
| | California Environmental Quality Act review would be conducted by the University of California. | | |
| 45. | Public Utilities/Services | ☐ | ☒ |
| 46. | Depletion of a Non-Renewable Resource | ☐ | ☒ |
| 47. | Extraordinary Circumstances | ☐ | ☒ |
| 48. | Connected Actions | ☐ | ☒ |
| 49. | Exclusively Bench-top Research | ☐ | ☒ |
| 50. | Only a Laboratory Setting | ☐ | ☒ |

V. Financial Assistance Award Organization Concurrence:

A. Organization Official (Name and Title): Jeff Philliber, LBNL Environmental Planner

Signature: _____ /s/ _____ Date: 9-28-09

e-mail: JGPhilliber@lbl.gov Phone: _____

Remainder to be completed by SC

VI. SC Concurrence/Recommendation/Determination:

A. SC BSO Federal Project Director:

Project Director or
Contract Specialist
(Name and Title): Hemant Patel, Federal Project Director

Signature: _____ /s/ _____ Date: 9/28/09

B. SC NEPA Team Review:

Is the project/activity appropriate for a determination or a recommendation to the Head of the Field Organization by the NEPA Compliance Officer (NCO) under Subpart D of the DOE NEPA Regulations?

Yes ☒

No ☐

Specific classes of action from Appendices A-D to Subpart D (10 CFR 1021): B1.23, B1.16, B1.17, B1.27, B1.28, B1.31, B3.1, B3.6, B6.1, B6.9.

Additionally the soil and groundwater remediation activities are covered by the Environmental Assessment and Corrective Measures Study for Remediating Contamination at Lawrence Berkeley National Laboratory Regulated under the Resource Conservation and Recovery Act. DOE/EA-1527.

Name and Title: Kim Abbott, BSO NEPA Program Manager

Signature: _____ /s/ _____ Date: 9/28/09

C. SC ISC Counsel (if necessary):

Name and Title: _____

Signature: _____ Date: _____

D. SC ISC Field Office NEPA Compliance Officer:

The preceding pages are a record of documentation required under DOE Final NEPA Regulation, 10 CFR 1021.400.

☒ Action may be categorically excluded from further NEPA review. I have determined that the proposed action meets the requirements for Categorical Exclusion referenced above.

☐ Action requires approval by Head of the Field Organization. Recommend preparation of an Environmental Assessment.

☐ Action requires approval by Head of the Field Organization or a Secretarial Officer. Recommend preparation of an Environmental Impact Statement.

Comments/Limitations if necessary:

Print Name _____

Signature: _____/s/ _____ Date: _____

ORO  NEPA Compliance