

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 Name: Lawrence Berkeley National Laboratory

Title of Proposed Project/Research: Replace Existing Firehouse (Building) at Lawrence Berkeley National Laboratory (LBNL), Berkeley, California.

Total DOE Funding/Total Project Funding: Approximately \$1 Million (Construction)

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

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

Project Description:

The U.S. Department of Energy (DOE) proposes to deconstruct and remove its existing LBNL fire station (Building 45), retain and reinforce its existing foundation, and replace it in-kind and in place with a building of roughly the same size, layout, and program elements. The purpose of this proposed action is to improve the seismic performance of this "essential services" facility from its current "seismically poor" rating to a rating of "Good," or "Seismic occupancy category IV."

The existing 3,300 gross square-foot (gsf) fire station features two levels and an adjoining garage for emergency vehicles, all on a slab grade. It is a "pre-manufactured" metal building and was constructed in 1979. The proposed replacement building would be a new metal frame building, also be approximately 3,300 gsf. It would be built on the same footprint using the existing slab foundation and would include a similar open garage structure to house emergency vehicles. The existing foundation would be reinforced with new subsurface grade beams. All subsurface work would be confined to within the existing footprint of the existing Building 45 site.

Building occupancy would continue to be fewer than 20 occupants. Building function would continue to serve the LBNL site and surrounding Berkeley and Oakland areas with Alameda County fire and emergency medical service.

Project construction is expected to take place as follows: Design and approvals process would be completed in Fall 2011. Existing equipment and operations would be moved and demolition activities performed in early 2012. Foundation would be improved and the building constructed during mid-2012. Building completion would occur and occupancy would begin in late 2012.

During construction, fire station activities would be relocated to adjacent Building 48 or put in temporary storage. Emergency vehicles would be parked in outside parking spaces nearby to Building 48. Construction crews would be expected not to exceed six workers on site at any one time. Approximately 15-to-20 concrete pumping trucks trips and 4-to-8 structural and finish steel truck trips would be required. One crane would be brought to and used on the site.

B. Would the project proceed without Federal funding?

Yes No

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

II. Description of Affected Environment:

The site is within a highly developed and disturbed area of the Lab adjacent to the "Old Town" area. It is bounded by Lawrence Road, Building 43, Building 48, and a grassy slope that climbs to "Old Town" buildings 40 and 41. To the south, across Lawrence Road, are undeveloped slopes populated with eucalyptus, scrub, and grassland areas.

Surrounding the Building 45 proposed project site are Building 43 (a utility structure housing an air compressor and the Fire Station's emergency generator) adjoining to the west; a steep, grassy slope to the north which plateaus into the LBNL "Old Town" area approximately 150 feet northward; Building 48 (LBNL's Emergency Operations Command center) immediately to the east; and Lawrence Road to the south. The site is within what is described as "Research and Academic Area" in the University of California's 2006 Long Range Development Plan for LBNL.

III. Preliminary Questions:

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

Yes No

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

B. Would the work to be performed include work that would take place outside an existing building?

And:

- | | | | |
|----|--|--------------------------|-------------------------------------|
| 1. | Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. | Require the siting, construction or major expansion of waste treatment, storage, or disposal facilities? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. | Disturb hazardous substances, pollutants, or contaminants preexisting in the environment? Lead based paint and asbestos would be encountered during demolition. Grade beam construction would be shallow so as not to encounter groundwater. There is no known or expected subsurface contamination at the project site. Nevertheless, all foundation work would be overseen by LBNL's EH&S personnel. | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. | Adversely affect environmentally-sensitive resources identified in Section IV.A.? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. | Be connected to another existing/proposed activity that could potentially create a cumulatively significant impact? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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)? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

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: Would 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	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2.	Other Protected Species (e.g., Burros, Migratory Birds)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.	Sensitive Environments (e.g., Tundra/Coral Reefs/Rain Forests)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.	Archaeological/Historic Resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5.	Important Farmland	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6.	Non-Attainment Areas for Ambient Air Quality Standards	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	LBNL is in Bay Area Air Quality Basin, which is in federal non-attainment for Ozone and state non-attainment for ozone, PM10, and PM2.5. There would be very minimal, very temporary construction-related air emissions and essentially no operational air emissions. Any construction impacts would be sufficiently mitigated by adherence to Bay Area Air Quality Management District construction practices.		
7.	Class I Air Quality Control Region	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8.	Special Sources of Groundwater (e.g. Sole Source Aquifer)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9.	Navigable Air Space	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10.	Coastal Zones	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11.	Areas with Special National Designation (e.g. National Forests, Parks, Trails)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12.	Floodplains and Wetlands	<input type="checkbox"/>	<input checked="" type="checkbox"/>

B. Regulated Substances/Activities: Would the proposed action involve any of the following regulated items or activities?

		Yes	No
13.	Natural Resource Damage Assessments	<input type="checkbox"/>	<input checked="" type="checkbox"/>
14.	Exotic Organisms	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15.	Noxious Weeds	<input type="checkbox"/>	<input checked="" type="checkbox"/>
16.	Clearing or Excavation (indicate if greater than one acre)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
17.	Dredge or Fill (under Clean Water Act, Section 404, indicate if greater than ten acres)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18.	Noise (in excess of regulations)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
19.	Asbestos Removal	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20.	PCBs	<input type="checkbox"/>	<input checked="" type="checkbox"/>
21.	Import, Manufacture, or Processing of Toxic Substances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
22.	Chemical Storage/Use	<input type="checkbox"/>	<input checked="" type="checkbox"/>
23.	Pesticide Use	<input type="checkbox"/>	<input checked="" type="checkbox"/>
24.	Hazardous, Toxic, or Criteria Pollutant Air Emissions	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Construction and grading activities would result in standard construction-related emissions of criteria pollutants (Particulate matter associated with earth movement, oxides of Nitrogen and reactive organic gasses associated with equipment engines; and diesel exhaust [toxic air contaminant] associated with equipment engines). By following BAAQMD best management practices, these levels are expected to be less than significant.		
25.	Liquid Effluents: Quantity and characteristics of effluent would not noticeably change as a result of this action.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
26.	Underground Injection	<input type="checkbox"/>	<input checked="" type="checkbox"/>
27.	Hazardous Waste	<input type="checkbox"/>	<input checked="" type="checkbox"/>
28.	Underground Storage Tanks	<input type="checkbox"/>	<input checked="" type="checkbox"/>
29.	Radioactive Mixed Waste	<input type="checkbox"/>	<input checked="" type="checkbox"/>
30.	Radioactive Waste	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- 31. Radiation Exposure
- 32. Surface Water Protection
- 33. Pollution Prevention Act
- 34. Ozone Depleting Substances
- 35. Off-Road Vehicles
- 36. Biosafety Level 3-4 Laboratory

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

- | | | Yes | No |
|-----|---|-------------------------------------|-------------------------------------|
| 37. | Potential Violation of Environment, Safety, or Health Regulations/Permits Siting/Construction/Major Modification of Waste Recovery, or Waste Treatment, Storage, or Disposal Facilities | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 38. | Disturbance of Pre-existing Contamination: No lead, PCB, or asbestos issues are expected, but surveying is being undertaken to determine that. In any event, controls and monitoring would be in place to avoid any releases to workers or the environment. All activities associated with the relocation would be carefully planned, executed, and monitored by qualified experts from LBNL's Environment, Health, & Safety Division and disposed of in accordance with all applicable laws and regulations. | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 39. | New or Modified Federal/State Permits | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 40. | Public Controversy | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 41. | Environmental Justice | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 42. | Action/Involvement of Another Federal Agency (e.g. license, funding, approval) | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 43. | Action of a State Agency in a State with NEPA-type law: A California Environmental Quality Act (CEQA) review would be conducted. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 44. | Public Utilities/Services | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 45. | Depletion of a Non-Renewable Resource | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 46. | Extraordinary Circumstances | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 47. | Connected Actions | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 48. | Exclusively Bench-top Research | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

V. Financial Assistance Award Organization Concurrence:

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

Signature: _____ /s/ _____ Date: 9-19-11

e-mail: JGPhilliber@lbl.gov

B. Optional Concurrence (Name and Title): _____

Signature: _____ Date: _____

e-mail: _____ Phone: _____

Remainder to be completed by SC

VI. SC Concurrence/Recommendation/Determination:

A. SC Office of Acquisition and Assistance or Office of Safety, Technical & Infrastructure Services:

Name and Title:

Rick Chapman General Engineer

Signature:

/s/

Date:

9/19/11

e-mail: Rick.chapman@bso.science.doe.gov

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 class(es) of action from Appendices A-D to Subpart D (10 CFR 1021):

B1.15 (Siting, Construction (or Modification) and operation of support buildings), and **B1.23** (Demolition and subsequent disposal of buildings and support structures).

Name and Title: Kim Abbott, NEPA Program Manager

Signature:

/s/

Date:

9/19/2011

e-mail: kim.abbott@bso.science.doe.gov

C. SC ISC Counsel (if necessary):

Name and Title: _____

Signature: _____

Date: _____

e-mail: _____

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

James L. Elmore

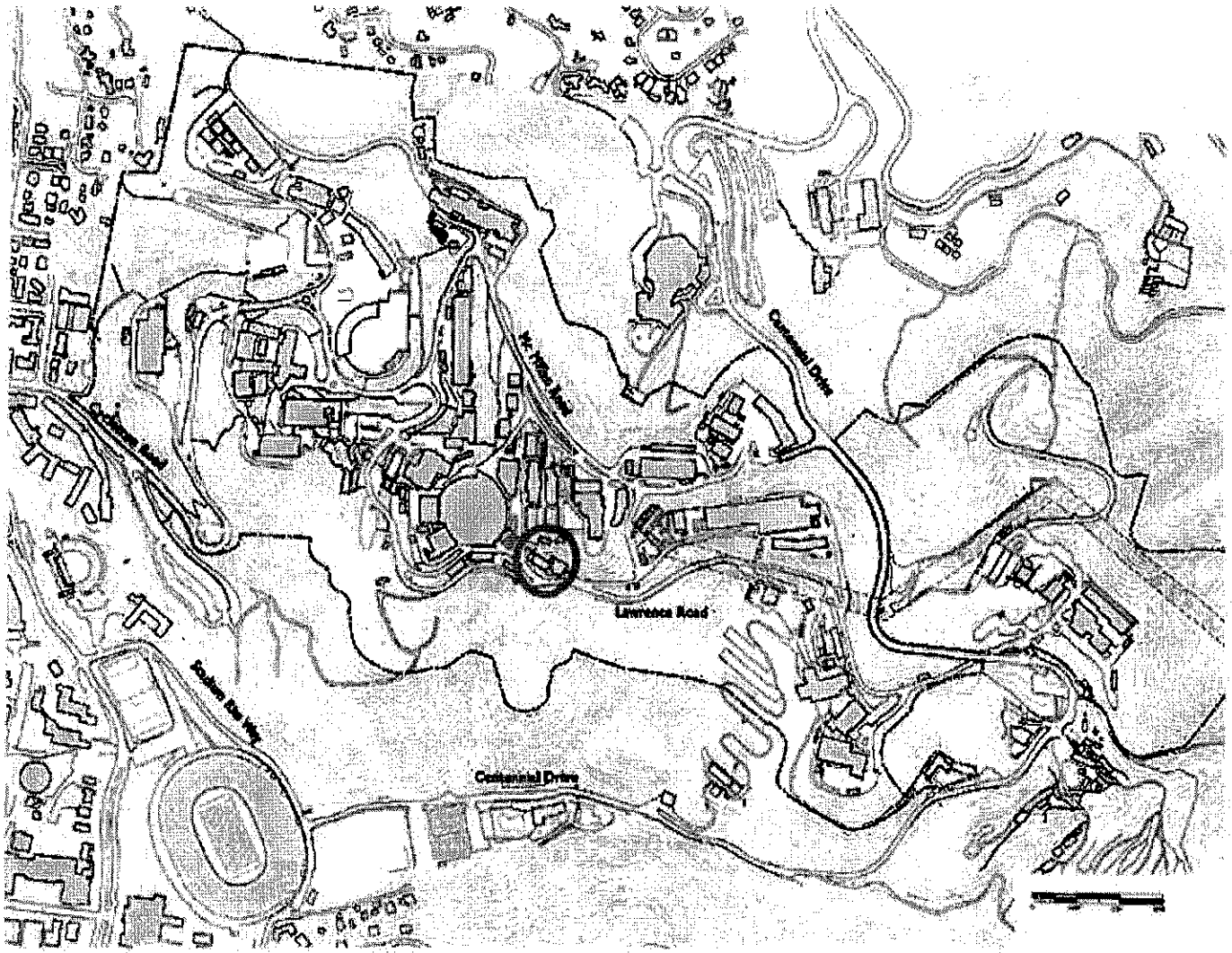
Signature:

/s/

Date:

9/20/2011

ORO NEPA Compliance Officer



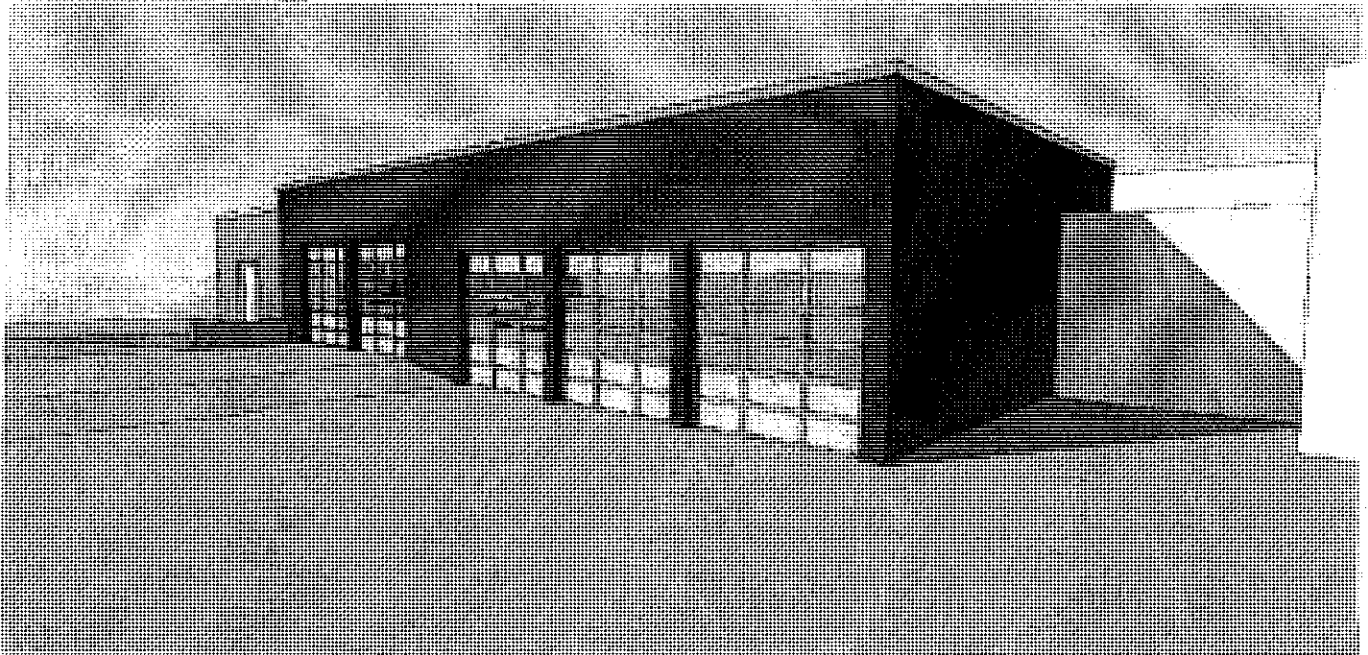
Proposed Project Site



Existing Building 45



Existing Building 45



Proposed New Building