

## 4.6 Hazards and Hazardous Materials

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### 4.6.1 Introduction

This section discusses existing conditions with respect to hazards in the project vicinity and analyzes the potential for the Computational Research and Theory (CRT) project to increase the exposure of people or the environment to hazards or increase the risk associated with the use, generation, and disposal of hazardous materials. Information presented in the discussion and analysis presented below was drawn from the Lawrence Berkeley National Laboratory (LBNL) 2006 Long Range Development Plan (LRDP) Environmental Impact Report (EIR), previous California Environmental Quality Act (CEQA) documents prepared for projects at LBNL, and the Master Emergency Program Plan for the Ernest Orlando Lawrence Berkeley National Laboratory (2005).

In response to the Notice of Preparation for this EIR, several commenters expressed concern with respect to the project's location in an area susceptible to wildland fires and for the project's potential to affect area evacuation. All of these scoping comments are addressed in the impact assessment presented below.

### 4.6.2 Environmental Setting

#### Hazardous Materials

The term "hazardous material" is defined in Section 25501 of the California Health and Safety Code as any material that, because of quantity, concentration, or physical or chemical characteristics poses a significant present or potential hazard to human health and safety or to the environment. Hazardous materials are grouped into the following four categories, based on their properties: toxic (causes human health effects), ignitable (has the ability to burn), corrosive (causes severe burns or damage to materials), and reactive (causes explosions or generates toxic gases).

Numerous hazardous materials, including non-radioactive hazardous chemicals (solvents, organic compounds, reagents) and radioactive materials, are used in research activities at the Berkeley Lab. Other hazardous materials are used in facility operations and maintenance. Hazardous materials use at the Berkeley Lab generates hazardous and mixed wastes (i.e., radioactive wastes with hazardous waste components) that must be handled and disposed of as hazardous waste. LBNL complies with applicable federal, state, and local laws and regulations for the handling, storage and disposal of hazardous materials and wastes to minimize worker exposure and environmental impact. In addition to the above, several sources of non-ionizing radiation (such as lasers, magnets, and microwave generators) are also used at the Berkeley Lab to conduct research.

## Soil and Groundwater Contamination

There are some areas of soil and groundwater contamination that exist at LBNL as a result of historical releases of hazardous materials into the environment. The primary chemical constituents of concern are volatile organic compounds, mostly degreasing solvents used to clean equipment. Other detected constituents include Polychlorinated Biphenyls (PCBs), petroleum hydrocarbons, and very small amounts of polynuclear aromatic hydrocarbons, semivolatile organic compounds, and metals. The principal radioactive contaminant is tritium. All areas of soil contamination have been cleaned up to levels consistent with LBNL operations (designated as institutional land use) and acceptable to regulatory oversight agencies (LBNL 2007).

While there is remaining groundwater contamination, it is confined within the boundary of LBNL's main hill site. Remediation and monitoring of non-radioactive contamination in groundwater are being conducted under the Resource Conservation and Recovery Act of 1976 Corrective Action Program. Department of Toxic Substances Control (California) (DTSC) has the primary responsibility for regulatory oversight of non-radioactive contamination. In addition, the San Francisco Bay Regional Water Quality Control Board (RWQCB) and City of Berkeley have oversight roles with respect to these activities. Monitoring of a tritium plume in groundwater on the other hand is being conducted under the Atomic Energy Act, and the Department of Energy is responsible for the regulatory oversight of tritium in groundwater. These agencies have been involved in review and approval of various work plans and reports related to these investigation and cleanup activities. LBNL submits quarterly progress reports to these agencies and meets with them periodically to review the status of these activities. Currently, there are about 150 groundwater monitoring wells at LBNL, with an additional groundwater monitoring well located off site. Groundwater under the LBNL site is not used as a drinking water source by the Berkeley Lab or by local utilities, and groundwater contamination is therefore not a threat to the local drinking water supply.

## Fire Hazards

The northern and eastern boundary of LBNL is located along a portion of the interface between wildlands and developed lands in the East Bay hills. The Berkeley Lab is similar in character to other developed hillside areas in the region as it combines developed lands, groves of trees, and non-irrigated grassland areas. Dry summers desiccate plant materials and make them more prone to burning. The fire risk during brief periods of the fall months is even more pronounced when strong offshore winds, often called "Diablo winds," occur in the East Bay hills, which further dry up fuel material and can drive fire fronts and fire brands at extreme speeds.

These winds contributed to the extensive damage that occurred in the devastating Oakland Berkeley Hills Fire of October 1991. On average, serious Diablo-wind-driven wildland fires that destroy structures occur in the regional vicinity of LBNL approximately every 20 years. The site where LBNL now is situated last burned in 1923 (LBNL 2007). These fire conditions are now well understood. Although these fires can spread over large areas, it has been shown that each structure is at risk of damage for approximately 10 minutes, since during this interval a Diablo-wind-driven fire will typically consume the adjacent fuel. LBNL has reviewed fire histories, worked with fire researchers, and applied computer models to determine how the fuels adjacent to its buildings can be reduced to levels that will not support fire intensities that pose serious risks to the structures. Under LBNL's vegetation management program, the site is now managed to minimize wildland fire damage to structures. This program provides for annual treatment of vegetation on the LBNL site such that ground fuels cannot produce flame heights in excess of 3 feet (and ground plantings within 10 feet of buildings and roadways produce even lower flame heights); trees are "limbed up" so that flammable branches are at least 8 to 10 feet above the ground, and bushes that would allow ground-based fires to rise into tree canopies are removed.

LBNL is provided firefighting services by the Alameda County Fire Department, which staffs a fire station on the LBNL grounds (Alameda County Station 19 is located at LBNL Building 48). At least four firefighters are on duty at all times. Equipment at the station includes one fire engine, one reserve fire engine, a hazardous materials vehicle, and a light-duty four-wheel drive "brush rig" that can be used for low-intensity wildland fires.

Through an Automatic Aid Agreement between LBNL and the City of Berkeley Fire Department, the Alameda County Fire Department, who has been contracted by LBNL, will provide emergency response to the Helios Building. As Station 19 is the closest fire station, it will provide first response, with Berkeley Fire Department augmenting response with other fire apparatus as needed. The Alameda County Fire Department has mutual aid agreements with other agencies, including Oakland and the East Bay Regional Park District, which can be activated in the event of a major emergency.

### **LBNL Emergency Response Plan**

LBNL has developed a Master Emergency Program Plan (MEPP) that establishes policies, procedures, and an organizational structure for responding to and recovering from a major disaster at the Berkeley Lab. The MEPP utilizes the Standardized Emergency Management System for managing response to multi-agency and multi-jurisdiction emergencies in California and the National Incident Management System, which is a nationwide standardized approach to incident management prescribed by Homeland Security Presidential Directive 5. The Plan includes a hazard analysis and assessment, which finds that the primary hazards for the hill site are a major earthquake along the Hayward Fault and a major urban-

wildland fire. In view of these primary hazards, the plan includes four phases of emergency management, including mitigation, preparedness, response, and recovery. Mitigation includes activities that eliminate or reduce the occurrence or effects of a disaster. For instance, to address earthquake hazard, the Berkeley Lab uses both structural and non-structural measures to make buildings and work areas seismically safe. To address wildland fires, as discussed above, the Berkeley Lab implements vegetation management. Preparedness includes planning as to how to respond when an emergency occurs; LBNL provides regular training to employees so that they are prepared to respond to an emergency. For response, LBNL relies on local fire and police services and also maintains response equipment on site for use by employees. Recovery includes short and long-term actions necessary to return all systems to normal or near-normal conditions. LBNL's plan includes a planned transition from response to recovery.

The MEPP also includes a Wildland Fire Evacuation/Relocation Plan. This plan presents the steps that the Berkeley Lab will implement in the event that any portion of the site is threatened by a major fire. In such an emergency, the Berkeley Lab will order an evacuation of the site either by vehicle or foot, order relocation of employees from one area to another, more protected area, or provide instructions to employees to remain in place and await further instructions. The plan outlines the steps involved in a vehicular evacuation which include traffic control and use of those gates and routes that are not threatened by fire. For evacuation by foot, the plan identifies all evacuation routes including the use of the Blackberry Canyon gate near the CRT project site, and an assembly area on the UC Berkeley campus from where the evacuated employees would be transported by bus to a BART station.

## Project Site

The project site is located in the southwestern portion of the Berkeley Lab site. There is no history of hazardous materials use, storage or disposal on the project site and there is no existing contamination at the project site. The tritium plume is located in the eastern portion of the Berkeley Lab site. The project footprint lies approximately 2,200 feet west of the tritium plume area. The project site is located in a stand of eucalyptus with a few immature redwood, bay, and oak trees, and a grassland understory. Areas adjacent to the site have similar vegetation communities.

### 4.6.3 Regulatory Considerations

LBNL is subject to environmental, health, and safety regulations applicable to the transportation, use, management, and disposal of hazardous materials and wastes. This section provides an overview of the regulatory setting and describes LBNL's current health and safety policies and procedures.

## State and Federal Regulatory Requirements

The primary federal agencies with responsibility for hazardous materials management include the U.S. Environmental Protection Agency (EPA), U.S. Department of Labor Occupational Safety and Health Administration (OSHA), U.S. Department of Transportation (DOT), and DOE. The applicable federal laws, regulations, and responsible agencies are discussed in detail in this section. In many cases, California state law mirrors or is more restrictive than federal law, and enforcement of these laws has been delegated to the state or a local agency. In January 1996, the California Environmental Protection Agency adopted regulations implementing a Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program). The program has six elements: hazardous waste generators and hazardous waste on-site treatment, underground storage tanks, aboveground storage tanks, hazardous materials release response plans and inventories, risk management and prevention programs, and Unified Fire Code hazardous materials management plans and inventories. The local agency responsible for implementation of the Unified Program is called the Certified Unified Program Agency (CUPA). Since the LBNL main site is located within the city limits of the City of Berkeley and the City of Oakland, both cities are the designated CUPAs. In order to streamline their oversight of CUPA regulations at LBNL, Berkeley and Oakland have entered into a Memorandum of Understanding that established the City of Berkeley as the lead agency for all CUPA activities (other than emergency release reporting) (LBNL 2007).

### Hazardous Materials Management

Federal and state laws require detailed planning to ensure that hazardous materials are properly handled, used, stored, and disposed of, and in the event that such materials are accidentally released, to prevent or to mitigate injury to health or the environment. These laws require hazardous materials users to prepare written plans detailing the types and quantities of hazardous materials used on site and addressing emergency response and training procedures. The City of Berkeley, through its CUPA program, requires any business that handles hazardous materials above certain thresholds to prepare a Hazardous Materials Business Plan. LBNL voluntarily complies with these state requirements as implemented by the City of Berkeley.

### Hazardous Waste Handling

Under the federal Resource Conservation and Recovery Act of 1976 (RCRA), the US (EPA) regulates the generation, treatment, and disposal of hazardous waste, and the investigation and remediation of hazardous waste sites. Individual states may apply to EPA to authorize them to implement their own hazardous waste programs in lieu of RCRA, as long as the state program is at least as stringent as federal

RCRA requirements. California has been authorized by EPA to implement its own hazardous waste program, with certain exceptions. In California, DTSC regulates the generation, transportation, treatment, storage, and disposal of hazardous waste, and the investigation and remediation of hazardous waste sites. The California DTSC program incorporates the provisions of both federal and state hazardous waste laws (LBNL 2007).

#### Hazardous Materials Transportation

The DOT regulates the transportation of hazardous materials between states and foreign countries. The State of California has adopted DOT regulations for the intrastate movement of hazardous materials. In addition, the State of California regulates the transportation of hazardous waste originating in the state and passing out of the state. The two state agencies that have primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol (CHP) and the California Department of Transportation (Caltrans). The CHP enforces hazardous material and hazardous waste labeling and packing regulations to prevent leakage and spills of material in transit and to provide detailed information to cleanup crews in the event of an accident. The CHP conducts regular inspections of licensed transporters to assure regulatory compliance. Caltrans has emergency chemical spill identification teams at as many as 72 locations throughout the state that can respond quickly in the event of a spill (LBNL 2007).

#### Occupational Safety

Occupational safety standards exist in federal and state laws to minimize worker safety risks from both physical and chemical hazards in the workplace. OSHA is generally responsible for assuring worker safety in the workplace.

The CRT project would be a UC building that would be occupied by DOE programs, and site operations would therefore be subject to LBNL policy and to DOE jurisdiction and safety regulations.

OSHA regulations at 29 Code of Federal Regulations (CFR) 1910 and 1926 contain requirements concerning the use of hazardous materials in the workplace and during construction that mandate employee safety training, safety equipment, accident and illness prevention programs, hazardous substance exposure warnings, emergency action and fire prevention plan preparation, and a hazard communication program. The hazard communication program regulations contain training and information requirements, and require preparation of emergency action plans (escape and evacuation procedures, rescue and medical duties, alarm systems, and training in emergency evacuation). In addition, LBNL adheres to Cal OSHA Construction Safety Orders when a Cal OSHA standard is more stringent than federal standards.

## Emergency Response

California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local government and private agencies. The plan is administered by the State Office of Emergency Services, which coordinates the responses of other agencies, including the California Environmental Protection Agency, the CHP, the Department of Fish and Game, the San Francisco Bay RWQCB, and Alameda County Fire Department. LBNL's on-site fire department provides first response capabilities, if needed, for hazardous materials and other emergencies.

## Local Plans and Policies

The proposed project would be located at LBNL, which is operated by the University of California and conducts work within the University's mission on land that is owned or controlled by The Regents of the University of California. As a state entity, the University is exempted by the state constitution from compliance with local land use regulations, including general plans and zoning. However, the University seeks to cooperate with local jurisdictions to reduce any physical consequences of potential land use conflicts to the extent feasible. The following section summarizes objectives and policies from the City of Berkeley and City of Oakland General Plans and local ordinances that relate to hazards and hazardous materials.

## LBNL Hazardous Materials Storage, Handling and Disposal

LBNL stores chemicals and other hazardous materials in aboveground tanks and storage drums. Hazardous, radioactive, and mixed wastes are stored in designated areas in research and support areas throughout the Berkeley Lab. From these locations, they are taken to the permitted Hazardous Waste Handling Facility for temporary storage. From this site, the wastes are hauled off for treatment and disposal. None of these types of materials has been stored on the CRT site.

## 2006 LRDP Principles and Strategies<sup>1</sup>

The 2006 LRDP proposes four fundamental principles that form the basis for the Plan's development strategies provided for each element of the Plan. The two principles most applicable to concerns regarding hazards and hazardous materials related to new development are to "Preserve and enhance the environmental qualities of the site as a model of resource conservation and environmental

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<sup>1</sup> While this Environmental Impact Report is a "stand alone" analysis that does not rely upon tiering from any programmatic CEQA document, Berkeley Lab does actively follow the 2006 Long Range Development Plan (LRDP) as a planning guide for Lab development. Accordingly, relevant 2006 LRDP principles, strategies, and design guidelines are identified in this section.

stewardship” and to “Build a safe, efficient, and cost-effective scientific infrastructure capable of long-term support of evolving scientific missions.”

Development strategies set forth in the 2006 LRDP applicable to hazards and hazardous materials include the following:

- Improve efficiency and security of Laboratory access through improvements to existing gates and the creation of new gates.
- Develop all new landscape improvements in accordance with the Laboratory’s vegetation management program to minimize the threat of wildland fire damage to facilities and personnel.

#### LBL Design Guidelines

The LBNL Design Guidelines were developed in parallel with the 2006 LRDP. The design guidelines would be applied to the proposed project; however, there are no design guidelines that are specifically relevant to hazards and hazardous materials.

#### City of Berkeley General Plan

The City of Berkeley General Plan was adopted on April 23, 2002. The following policies are contained in the General Plan pertaining to hazards and hazardous materials:

Policy EM-13 Hazardous Materials Disclosure: Continue to require the disclosure of hazardous materials usage and encourage businesses using such materials to prepare and implement a plan to reduce the use of hazardous materials and the generation of hazardous wastes.

Policy EM-14 Hazardous Materials Regulation: Control and regulate the use, storage, and transportation of toxic, explosive, and other hazardous and extremely hazardous material to prevent unauthorized and accidental discharge.

Policy EM-15 Environmental Investigation: When reviewing applications for new development in areas historically used for industrial uses, require environmental investigation as necessary to ensure that soils, groundwater, and buildings affected by hazardous material releases from prior land uses would not have the potential to affect the environment or the health and safety of future property owners, users, or construction workers.

Policy EM-16 Risk Reduction: Work with owners of vulnerable structures with significant quantities of hazardous materials to mitigate potential risks.



Policy EM-17 Warning Systems: Establish a way to warn residents of a release of toxic material or other health hazard, such as sirens and/or radio broadcasts.

Policy EM-31 Landscaping: Encourage drought-resistant, rodent-resistant, and fire-resistant plants to reduce water use, prevent erosion of soils, improve habitat, lessen fire danger, and minimize degradation of resources.

Policy S-23 Property Maintenance: Reduce fire hazard risks in existing developed areas by ensuring that private property is maintained to minimize vulnerability to fire hazards.

#### City of Berkeley Manufactured Nanoparticle Disclosure Ordinance

In 2006, the City of Berkeley approved a change to the Hazardous Materials and Wastes Management portion of its Municipal Code. The amendment adds to facilities subject to reporting requirements, those facilities “that manufacture or use manufactured nanoparticles,” and requires such facilities to disclose “current toxicology of the materials reported, to the extent known, and how the facility will safely handle, monitor, contain, dispose, track inventory, prevent releases, and mitigate such materials.”

#### City of Oakland General Plan

The following policies from the City of Oakland General Plan Open Space, Conservation and Recreation Element would relate to hazards and hazardous materials.

Policy CO-1.2 Soil Contamination Hazards: Minimize hazards associated with soil contamination through the appropriate storage and disposal of toxic substances, monitoring of dredging activities, and cleanup of contaminated sites. In this regard, require soil testing for development of any site (or dedication of any parkland or community garden) where contamination is suspected due to prior activities on the site.

Policy CO-5.2 Improvements to Groundwater Quality: Support efforts to improve groundwater quality, including the use of nontoxic herbicides and fertilizers, the enforcement of anti-litter laws, the cleanup of sites contaminated by toxics, and ongoing monitoring by the Alameda County Flood Control and Water Conservation District.

#### 4.6.4 Impacts and Mitigation Measures

##### Significance Criteria

The impacts of the proposed project related to hazards and hazardous materials would be considered significant if they would exceed the following Standards of Significance, in accordance with Appendix G of the CEQA Guidelines and the UC CEQA Handbook:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school;
- Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment;
- Result in a safety hazard for people residing or working in the project area for a project that is located within an airport land use plan or, where such plan has not been adopted, within 2 miles of a public airport or public use airport;
- Result in a safety hazard for people residing or working in the project area for a project within the vicinity of a private airstrip;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

##### Issues Not Discussed Further

It is expected that the CRT project would include storage of aqueous ammonia solution that would be used to remove nitrogen compounds from exhaust from the electrical cogeneration equipment that may be included in the project. This process produces gaseous ammonia, and both aqueous and gaseous ammonia are considered potentially hazardous substances. If the proposed project includes an emergency generator (required if the cogeneration option is not implemented), an aboveground diesel fuel storage tank with a capacity of 2,200 gallons would also be installed. The tank would be required to have secondary containment and monitoring to comply with applicable federal and state regulations.

The Initial Study prepared for the CRT project found that compliance with federal, state, and local rules and regulations and LRDP Mitigation Measures HAZ-3a through HAZ-3f would reduce potential impacts to the public and the environment associated with routine transport, use, disposal, or accidental release of hazardous materials. These same rules, regulations, and mitigation measures would also reduce potential impacts to nearby schools associated with the handling of hazardous materials and wastes to a less than significant level. As discussed in the Initial Study, the project site is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and would not create a significant hazard to the public or the environment as a result.

The Initial Study also found that the project site is more than 11 miles northeast of the Oakland Metropolitan Airport, and is also not located within the vicinity of a private airstrip. Implementation of the project would not expose people on the project site to hazards from aircraft overflights or result in any safety hazards related to private airstrips.

These issues are not discussed further in this section.

### Mitigation Measures included in the Proposed Project

The following mitigation measures, adopted as part of the 2006 LRDP, are required by the LRDP for the proposed project and are thus included as part of the proposed project. The analysis presented below evaluates environmental impacts that would result from project implementation following the application of these mitigation measures. These mitigation measures that are included in the project would be monitored pursuant to the Mitigation Monitoring and Reporting Plan that will be adopted for the proposed project.

LRDP MM HAZ-3a: LBNL shall continue to prepare an annual self-assessment summary report and a Site Environmental Report that summarize environment, health, and safety program performance and identify any areas where LBNL is not in compliance with environmental laws and regulations governing hazardous materials and worker safety, emergency response, and environmental protection.

LRDP MM HAZ-3b: Prior to shipping hazardous materials to a hazardous waste treatment, storage, or disposal facility, LBNL shall confirm that the facility is licensed to receive the type of waste LBNL is proposing to ship.

LRDP MM HAZ-3c: LBNL shall require hazardous waste haulers to provide evidence that they are appropriately licensed to transport the type of wastes being shipped from LBNL.

LRDP MM HAZ-3d: LBNL shall continue its waste minimization programs and strive to identify new and innovative methods to minimize hazardous waste generated by LBNL activities.

LRDP MM HAZ-3e: In addition to implementing the numerous employee communication and training requirements included in regulatory programs, LBNL shall undertake the following additional measures as ongoing reminders to workers of health and safety requirements:

- Continue to post phone numbers of LBNL EH&S subject matter experts on the EH&S website.<sup>2</sup>
- Continue to post Emergency Response and Evacuation Plans in all LBNL buildings.
- Continue to post sinks, in areas where hazardous materials are handled, with signs reminding users that hazardous materials and wastes cannot be poured down the drain.
- Continue to post dumpsters and central trash collection areas where hazardous materials are handled with signs reminding users that hazardous wastes cannot be disposed of as trash.

LRDP MM HAZ-3f: LBNL shall update its emergency preparedness and response program on an annual basis and shall provide copies of this program to local emergency response agencies and to members of the public upon request.

## Project Impacts and Mitigation Measures

CRT Impact HAZ-1: The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The proposed project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. (Less than Significant)

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<sup>2</sup> This mitigation measure has been slightly altered from the previous wording of "Post, in areas where hazardous materials are handled, phone numbers of LBNL offices that can assist in proper handling and emergency response information."

## Emergency Response and Evacuation

The proposed emergency evacuation plan prepared pursuant to LRDP Mitigation Measure GEO-1, for the proposed project includes the following routes:

1. The majority of the occupants of the CRT building would exit via the stairwells and bridge to the parking area outside Buildings 70 and 50 complex.
2. Occupants from the fourth floor, at the east end of the building, would assemble in the parking lot of the Building 50 complex.
3. Occupants using the stairwell on the west face of the building would exit to the Seaborg stairs and would assemble in the parking lot of Building 88.

Once occupants reach the assembly areas, the LBNL evacuation plan would be used. In the event that a fault rupture causes the failure or blockage of Cyclotron Road, evacuees would be directed (and, if necessary, assisted) to evacuate on foot by way of the Seaborg stairs to the UC Berkeley campus.

The proposed project would not alter the evacuation routes of nearby neighborhoods, which would not use Cyclotron Road or the other internal Berkeley Lab roadways in the immediate vicinity of the CRT project site. More importantly, in the event of evacuation by vehicle, traffic control would be provided on Centennial Drive and Cyclotron Road, which are potential evacuation routes, by the Berkeley Lab and UC Berkeley to ensure orderly evacuation of all persons in the area. There would be no impact related to an emergency response plan or an evacuation plan.

## Wildland Fires

Although both the proposed building and the new population associated with the new building could be exposed to the risk from wildland fires, a significant impact related to risk of loss, injury or death involving wildland fire is not expected because the building would be designed and constructed in conformance with the requirements for Group B for office and building support spaces as defined by the California Building Code, Type I Fire Resistive Construction, and with fire code safety requirements. The building would be fitted with automatic sprinklers. Furthermore, in compliance with LBNL's vegetation management program, fire-resistant ground cover would be installed as needed for erosion control in the areas surrounding the building and the access driveway. Vegetation management to reduce fuel loads will continue to be conducted on all areas near the project site, as well in the Perimeter Open Space land use zone as depicted in the 2006 LRDP Land Use Plan. All new employees on the Berkeley Lab site will be provided training and information regarding measures to be taken in the event of a fire. The fire

station on the Berkeley Lab site is within 1,500 feet of the project site and is adequately staffed to serve this project along with other existing and proposed facilities on the Berkeley Lab site. The impact related to exposure to wildland fire risk would be less than significant.

Mitigation Measure: No project-level mitigation measure required.

#### 4.6.5 References

Lawrence Berkeley National Laboratory. 2007. 2006 Long Range Development Plan Final Environmental Impact Report, SCH No. 200102046. July.

LBNL. 2005. Master Emergency Program Plan for the Ernest Orlando Lawrence Berkeley National Laboratory.