

CHAPTER 1

INTRODUCTION

1.1 PURPOSE OF THIS EIR

This environmental impact report (EIR) evaluates the potential for environmental impacts from implementation of the proposed Richmond Bay Campus Long Range Development Plan (LRDP). The EIR is a public informational document for use by University of California (UC or the University) decision-makers and the public, as it informs the University of California, Board of Regents (The Regents), responsible agencies, trustee agencies, and the public of the proposed project's environmental effects. It is intended to identify, publicly disclose and evaluate potential environmental consequences of the proposed project, to identify mitigation measures that would lessen or avoid significant adverse impacts, and to examine feasible alternatives to the project. The information contained in the EIR is reviewed and considered by the lead agency prior to its action to approve, disapprove, or modify the proposed project.

The University is the lead agency for this EIR that examines the overall effects of implementation of the proposed 2014 LRDP (also referred to herein as the “project” for purposes of the California Environmental Quality Act [CEQA]). At University-owned properties in Richmond, California, the University proposes to establish a new major research campus and rename those properties as the “Richmond Bay Campus” (RBC). The LRDP is a joint proposal of the University of California, as the operating and management contractor of the Lawrence Berkeley National Laboratory (LBNL)¹ and the University of California, Berkeley (UC Berkeley). For the RBC, and throughout this EIR, the “University” is represented by LBNL and UC Berkeley and the staffs of those institutions.

This EIR was prepared pursuant to the applicable provisions of the CEQA and its implementing guidelines (CEQA Guidelines), and the UC Procedures for Implementation of the California Environmental Quality Act (UC CEQA Procedures).

An LRDP is a land use plan that guides overall development of a site. The adoption of an LRDP does not constitute a commitment to, or final decision to implement, any specific project, construction schedule, or funding priority. Rather, the proposed 2014 LRDP guides development of a campus of approximately 5,400,000 gross square feet (gsf) of research, development, and supportive uses.

CEQA requires that, before a decision can be made by a state or local government agency to approve a project that may have significant environmental effects, an EIR must be prepared that fully describes the environmental effects of the project. Pursuant to Public Resources Code Section 21080.09, the University is required to prepare an EIR when an LRDP is prepared or updated.

¹ “LBNL” refers in this document to the Lawrence Berkeley National Laboratory, a national federally funded research and development center, and to the University in its role as the management and operating contractor of the laboratory. LBNL facilities are owned by the Department of Energy (DOE) and are located at the main LBNL site in the Berkeley-Oakland hills and at a number of leased properties, such as the Potter Street facility in Berkeley. The main LBNL site is on land owned by the Regents of the University of California and includes land the federal government leases from the University and on which it constructs federally owned buildings, as well as UC-owned land not leased to the federal government.

CEQA stipulates that the lead agency shall neither approve nor implement a project as proposed unless the significant environmental effects of that project have been reduced to less-than-significant levels, essentially “eliminating, avoiding, or substantially lessening” the expected impacts. If the lead agency approves the project despite residual significant adverse impacts that cannot be mitigated to less-than-significant levels, the agency must state the reasons for its action in writing. This “Statement of Overriding Considerations” must be included in the record of project approval.

This LRDP EIR provides information that will inform California Department of Toxic Substances Control (DTSC) decision-making on a proposed Removal Action Workplan (RAW) addressing historic pollutants on portions of the RBC site proposed for development and currently subject to a site investigation and remediation order.

1.2 PROJECT BACKGROUND

The UC proposes to establish a new major research campus at properties it owns in Richmond, California. This campus would provide for development of additional facilities for use by LBNL and UC Berkeley, and foster opportunities and synergisms between LBNL, UC Berkeley, and institutional or industry counterparts to conduct energy, environment, and health related research and development. The University proposes to rename the properties as the Richmond Bay Campus.

The University has prepared an LRDP in support of the research and academic goals for this proposed new research campus. An LRDP is defined by statute (Public Resources Code [PRC] 21080.09) as a “physical development and land use plan to meet the academic and institutional objectives for a particular campus or medical center of public higher education.” The proposed 2014 LRDP addresses sustainability, land use, access and circulation, utilities and infrastructure, and open space and landscaping, and provides for development of up to 5.4 million square feet of new research, development, and support space at the site and an employee population of 10,000 at full implementation of the LRDP in the year 2050. Design principles in the proposed LRDP feature preservation of the site’s important natural open spaces including the San Francisco Bay, marsh, and coastal grasslands. The proposed 2014 LRDP will guide the growth and development of the campus through 2050. The project includes addressing historic contamination at developable portions of the proposed RBC site currently subject to a site cleanup and investigation order; this work would be done pursuant to a proposed RAW if approved by DTSC.

The RBC site would continue to be owned by the University, but some of the facilities developed on the RBC site would be used by LBNL to accomplish the missions and activities assigned and funded by US Department of Energy (DOE). Because the RBC would be a joint use campus, some of the existing buildings as well as new buildings on the RBC site would be occupied by UC Berkeley teaching and research programs. As a result, the laws, regulations, and policies that would apply to design and construction of an individual facility would depend on its funding source, and the laws, regulations, and policies that would apply to the operation of an individual facility would depend on the organization occupying the facility.

The Notice of Preparation (NOP) for this Draft EIR, published in January 2013, included an initial development project at the RBC encompassing approximately 16 acres and a development target of 600,000 gsf. Although that project is no longer proposed, the information and analysis developed for that project informs some of the analysis in this EIR, where noted in the document.

1.3 PROJECT OBJECTIVES

To accomplish the purpose and need, the University has the following project objectives. The project should:

- Be within an approximately 20- to 25-minute commute from the existing LBNL main entrance at Blackberry Gate on Hearst Avenue; or an approximately 20 minute commute from UC Berkeley's main entrance at Oxford and University Avenue.
- Have development capacity for approximately 5.4 million gsf of laboratory, office, and support facilities and related utility and transportation infrastructure to support the University's research, teaching, and public service mission.
- Be in a safe and welcoming community with a positive civic expression of interest in development of the site.
- Be readily accessible to a variety of modes of public transportation, inclusive of local buses, mass transit (Bay Area Rapid Transit [BART], Amtrak, and Alameda-Contra Costa [AC] Transit), and shuttle services, and allow safe bicyclist access from designated bicycle routes.
- Allow for electrical, natural gas, and water utilities for the lowest possible cost.
- Allow for establishment of a design framework for development of a state-of-the-art research campus that will be the location of choice for internationally recognized researchers.
- Foster synergy and collaboration between UC Berkeley and LBNL in and across disciplines and institutions in both the public and private sectors.
- Provide sustainable land use and circulation patterns which maximize density to reduce overall building footprints and conserve open space, and maximize bicycle, pedestrian and shuttle services and allow for placement and massing of buildings to maximize shared views.
- Facilitate efficient constructability of facilities (buildings, parking structures, bridges, etc.), infrastructure development (roads, underground utilities, pedestrian walkways, etc.), and open space.
- Foster connectivity with the surrounding community.
- Leverage capital investment for environmental stewardship.

1.4 ENVIRONMENTAL REVIEW PROCESS

On January 4, 2013, the University sent a copy of the NOP for this Draft EIR to governmental agencies, organizations, and interested persons for a 30-day review. The NOP was circulated through the Office of Planning and Research, State Clearinghouse. The University held a public scoping meeting on January 23, 2013, at the Richmond City Hall from 7:00 to 9:00 PM. The public scoping period ended on February 4, 2013. The NOP, comments received on the NOP, and the transcript from the public scoping meeting are attached in Appendix A.

Comments received in the public scoping process were considered during preparation of this Draft EIR. This Draft EIR was made available for a 60-day public review period (November 15, 2013, to January 21, 2014). All comments on the Draft EIR were sent to:

Jeff Philliber
Environmental Planning Group
Lawrence Berkeley National Laboratory
One Cyclotron Road, MS 76-225
Berkeley, CA 94720

Comments were also sent by e-mail to: lrdp-eir@lbl.gov (attention: Jeff Philliber).

The 2014 LRDP and this Draft EIR were publicly available at www.lbl.gov/lrdp (for the duration of this CEQA process) and at the following locations:

Berkeley Lab Main Library
One Cyclotron Road
Building 50, Room 4034
Berkeley, CA 94720

Richmond City Library
325 Civic Center Plaza
Richmond, CA 94804

A public hearing on the adequacy of the Draft EIR was held December 11, 2013, at:

Richmond City Hall
450 Civic Center Plaza
Richmond, CA 94804

Following the 60-day public review period, comments on the adequacy of the Draft EIR, submitted within the review period, have been addressed in the Final EIR. The Final EIR will be made available online at <http://richmondbaycampus.lbl.gov/> and will include the responses to Draft EIR comments, a mitigation monitoring and reporting program, any changes made to the EIR, and any additional information concerning the project. The Regents will then consider the Final EIR prior to taking any action to approve, modify, or reject the project. Before taking action on the proposed project, The Regents must certify the Final EIR, adopt CEQA Findings, and approve the Mitigation Monitoring and Reporting Program.

1.5 INTENDED USES OF THIS EIR

The Board of Regents is the University's decision-making body and is responsible for approving University LRDPs and any physical facilities to be constructed on University-owned land. The Regents will review and consider for approval both this EIR and the 2014 RBC LRDP. It is anticipated that such an approval decision would be made at an early 2014 Regents meeting after the University has completed and submitted a Final EIR.

This EIR is intended to be used for the following actions and to serve the following purposes:

- 1) The EIR will provide The Regents with environmental analysis to inform their evaluation of the proposed RBC 2014 LRDP, including information about environmental impacts and any mitigation measures that could avoid those impacts. It will be used as the required CEQA document for The Regents' consideration of the 2014 LRDP, for adoption of CEQA findings, and for any other related Regents' actions in connection with their consideration and possible adoption of the 2014 LRDP.
- 2) The EIR will be a basis for project tiering and for UC Berkeley, LBNL, or Regent consideration of specific projects pursuant to the 2014 LRDP. Pursuant to CEQA Guidelines Section 15168 and described in Chapter 1 (Introduction), some projects may

be approved as within the scope of this EIR, and other projects may be approved after a second-tier CEQA document is prepared.

- 3) This EIR will provide information to responsible agencies with permitting or approval authority over projects that may be implemented under the 2014 LRDP pursuant to CEQA Guidelines Section 16168, including the potential approvals listed under “permitting and approvals” below.
- 4) This EIR is intended to be used by the University, consistent with the provisions of CEQA, in connection with other specific regulatory and procedural actions that may be necessary or desirable to approve and implement the 2014 LRDP.
- 5) This EIR will be used by DTSC to inform its CEQA determination on the proposed RAW for the developable areas of the Richmond Field Station (RFS) portions of the proposed RBC site.

Regarding item (2) above, LBNL and UC Berkeley projects proposed for implementation under the 2014 LRDP would be evaluated to determine whether the LRDP EIR has fully analyzed the project impacts, or whether additional CEQA review is necessary.

As a program CEQA document, the LRDP EIR sets standards of significance for environmental impacts and evaluates whether construction and operation of the RBC through 2050 would exceed these standards. Under CEQA guidelines for using program EIRs with later activities, if newly proposed activities introduce no new effects that were not previously examined in the program EIR, and no new or substantially more severe significant effects would occur and no new mitigation measures would be required, a program EIR has adequately analyzed the later activities for CEQA purposes, i.e., the later activities are considered within the scope of the program EIR, and no further CEQA review is required.

Use of program EIRs to cover later activities is addressed in CEQA Guidelines Section 15168(c):

(c) Use with Later Activities. Subsequent activities in the program must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared.

(1) If a later activity would have effects that were not examined in the program EIR, a new Initial Study would need to be prepared leading to either an EIR or a Negative Declaration.

(2) If the agency finds that pursuant to Section 15162, no new effects could occur or no new mitigation measures would be required, the agency can approve the activity as being within the scope of the project covered by the program EIR, and no new environmental document would be required.

(3) An agency shall incorporate feasible mitigation measures and alternatives developed in the program EIR into subsequent actions in the program.

(4) Where the subsequent activities involve site specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were covered in the program EIR.

(5) A program EIR will be most helpful in dealing with subsequent activities if it deals with the effects of the program as specifically and comprehensively as possible. With a good and detailed analysis of the program, many subsequent activities could be found to be within the scope of the project described in the program EIR, and no further environmental documents would be required.

Evaluation of Local Plans and Zoning

The State of California and its constitutionally created agencies are generally exempt from a city's planning and zoning regulations. Specifically, the UC was established by Article IX, Section 9 of the California Constitution. Section 9 grants the UC Regents broad authority with respect to the management and disposition of its property: "The Regents of [UC] shall have the power to take and hold . . . without restriction, all real and personal property for the benefit of the university or incidentally to its conduct." CAL. CONST. Art. IX, Section 9(f).

Because the RBC will be operated by the UC on UC land for UC purposes, it is exempt from local zoning regulations pursuant to Section 9. However, LBNL and UC Berkeley seek to cooperate with local jurisdictions to reduce any physical consequences of potential land use conflicts to the extent feasible.

The CEQA Guidelines (Section 15125(d)) specify that an EIR shall discuss "any inconsistencies between the proposed project and applicable general plans and regional plans." The general plan of the City of Richmond is not an "applicable" plan, because UC is legally exempt from such plans and those plans do not apply to the conduct of university activities on UC property. The conduct of federal activity is also not subject to such local plans. For public disclosure and CEQA, this EIR, at appropriate points, does summarize the provisions of local land use plans. Section 3.14 of the UC CEQA Guidelines states that UC will seek to cooperate to minimize conflict with local plans where feasible to do so.

Related Approvals and Permits

Approval of the 2014 LRDP and certification of the 2014 LRDP EIR by The Regents is required. Action by other agencies is not required prior to 2014 LRDP adoption or 2014 LRDP EIR certification. Under some circumstances, as individual development projects move forward, outside agency permits and approvals may be required or voluntarily sought by LBNL and UC Berkeley. These may include:

- **San Francisco Bay Conservation and Development Commission (BCDC) Major Permit.** The McAteer-Petris Act was enacted to preserve the San Francisco Bay from indiscriminate filling. The law established the BCDC as the agency to prepare the San Francisco Bay Plan as a guidance and policy document for long-term use of the bay. The BCDC commented on the NOP and made the preliminary determination that a portion of the RBC site is in its jurisdiction. For any activities within the BCDC jurisdictional area, a BCDC permit will be required. Based on the size of the proposed development within the jurisdictional area, it is anticipated that an Administrative Permit from the BCDC will be required.
- **Section 404 Permit.** Implementing the 2014 LRDP could result in the filling of wetlands and other waters of the United States. The US Army Corps of Engineers (USACE) regulates the nation's waterways and wetlands, and it is responsible for implementing and enforcing Section 404 of the federal Clean Water Act. USACE regulations require that any activity that discharges fill material or requires excavation in "waters of the United States," including wetlands, must obtain a Section 404 permit.
- **Section 401 Water Quality Certification.** The State Water Resources Control Board and the Regional Water Quality Control Boards (RWQCB) promulgate and enforce narrative and numeric water quality standards to protect water quality; they also adopt and approve Water Quality Control Plans. The State Board and the RWQCBs regulate discharges of harmful substances to surface waters, including wetlands, under the federal Clean Water Act and the California Porter-Cologne Water Quality Control Act. If

issuance of a Section 404 permit is required, it will be subject to water quality certification under Clean Water Act Section 401.

- **Section 7 Consultation.** The Federal Endangered Species Act (ESA) requires a federal agency (potentially the Army Corps of Engineers if issuance of a Section 404 permit is required, or the Department of Energy) to seek formal consultation with the U.S. Fish and Wildlife Service (USFWS) for any action that may result in the “take” of any species listed or proposed for listing as threatened or endangered. Based on this consultation, the USFWS may issue a biological opinion determining whether the project is likely to adversely affect or jeopardize the continued existence of a federally listed species, or to result in the destruction or adverse modification of critical habitat proposed to be designated for such species. Section 7 consultation may be required for any project that receives federal funding. In some cases, the USFWS finds that an action may adversely affect a species, but not jeopardize its continued existence. When this happens, the USFWS prepares an incidental take statement for the proposed federal action. Under most circumstances, the ESA prohibits take. “Incidental take,” which is take that results from a federal action but is not the purpose of the action, may be allowed when the USFWS approves it through an incidental take statement. The statement includes the amount or extent of anticipated take due to the federal action, reasonable and prudent measures to minimize the take, and terms and conditions that must be observed when implementing those measures.
- **Section 10 of the Endangered Species Act.** Section 10 of the ESA provides a nonfederal applicant a mechanism to obtain incidental take authorization, as described above under Section 7 Consultation, for federally listed threatened or endangered species. Under Section 10, a habitat conservation plan is required to support the incidental take statement.
- **Section 106 Compliance.** For projects involving federal funding or requiring a federal permit, such as a Section 404 permit, the National Historic Preservation Act of 1966 (NHPA), as amended by 16 United States Code section 470 et seq., Section 106, 36 Code of Federal Regulations (CFR) 800, includes provisions for protection of significant archaeological and historical resources. Procedures for dealing with previously unsuspected cultural resources discovered during construction are identified in 36 CFR 800 (for implementing Section 106 processes). The administering agency is the State Historic Preservation Officer (SHPO) and the federal lead agency.
- **Section 1601 Permit.** The California Department of Fish and Wildlife (CDFW) requires notification for any project or activity that will take place in or near a river, stream, lake, or its tributaries. Section 1601 (1603 for private entities) of the Fish and Game Code requires that state or local governmental agencies notify the CDFW before they begin any construction project that will (1) divert, obstruct, or change the natural flow or the bed, channel, or bank of any river, stream, or lake; (2) use materials from a streambed; or (3) result in the disposal or disposition of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into any river, stream, or lake.
- **Section 2081 Compliance.** Section 2081 of the California Endangered Species Act permits the “take” (hunting, pursuit, catching, or killing) of endangered or threatened species, provided that the take is incidental to an otherwise lawful activity, the impacts of the authorized take are minimized and fully mitigated, the take permit is consistent with the CDFW recovery programs, the applicant ensures adequate funding to implement the mitigation and monitoring program, and the action will not jeopardize the continued

existence of the species. Substantial information regarding state listed species is in Section 4.3, Biological Resources.

- **NPDES Permits.** The Clean Water Act requires a National Pollutant Discharge Elimination System (NPDES) permit for any discharge of pollutants from a point source to waters of the United States. This law and its regulations apply to stormwater in certain circumstances. In 1987, Congress amended the Clean Water Act to require implementation, in two phases, of a comprehensive national program for addressing stormwater discharges. Phase 1 of the stormwater program requires NPDES permits for stormwater discharge from a large number of priority sources, including small municipal and non-traditional municipal separate storm sewer systems, and several categories of industrial activity, including construction activity that disturbs an acre or more of land. Phase 1 of the stormwater program requires permits for stormwater discharges from certain small municipal separate storm sewer systems and construction activity generally disturbing between one and five acres. The RBC is subject to Phase 1 regulations.
- **Encroachment Permits and Right of Way Acquisition.** The existing 2.7-acre Regatta Boulevard right-of-way through the RBC site would need to be acquired from the City of Richmond and the right-of-way relocated to develop the RBC. The University is working with the city to acquire this right-of-way parcel and provide road right-of-way for Regatta Boulevard on the western boundary of the proposed campus. Encroachment permits would be required for work within any city right-of-way.
- **Wastewater Discharge Permit.** The existing wastewater discharge permit from Richmond Municipal Sewer District would need to be amended for new construction related to the 2014 LRDP.
- **Internal Combustion Engine Permit.** The Bay Area Air Quality Management District (BAAQMD) requires an air emission permit for operation of stationary internal combustion engines. This would apply to the standby diesel generator proposed for the RBC. Application materials include submittal of the internal combustion engine permit, as well as a health risk screening analysis.

1.6 LEVELS OF SIGNIFICANCE

Determining whether or not a project may result in a significant adverse environmental impact is critical to comprehensive CEQA analysis. Neither CEQA nor the CEQA Guidelines describe specific thresholds of significance or how they may be used. The environmental checklist prompts project reviewers to examine a spectrum of potential environmental effects, but it leaves the determination of significance to the lead agency. Instead of dictating a one-size-fits-all approach, CEQA authorizes local governments to adopt by "ordinance, resolution, rule, or regulation" their own "objectives, criteria, and procedures for the evaluation of projects" (CEQA Section 21082). This enables local governments to adopt thresholds to assist in determining the environmental significance of a project.

The "threshold of significance" for an environmental effect is simply that level at which the lead agency finds the effects of the project to be significant. "Threshold of significance" can be defined as:

“A quantitative or qualitative standard or set of criteria, pursuant to which the significance of a given environmental effect may be determined.”

Ideally, a threshold of significance provides a clear differentiation of whether or not the project may result in a significant environmental effect. More practically, a threshold will assist the lead agency in making this determination. In either case, thresholds do not substitute for the agency's

use of careful judgment in determining significance (CEQA Guidelines Section 15064). A threshold may be based on:

- A health-based standard such as air pollutant emission standards, water pollutant discharge standards, or noise levels.
- Service capacity standards such as traffic level of service or water supply capacity.
- Ecological tolerance standards such as physical carrying capacity, impacts on declared threatened or endangered species, loss of prime farmland, or wetland encroachment.
- Cultural resource standards such as impacts on historic structures or archaeological resources.
- Other standards relating to environmental quality issues, such as those listed in the Initial Study Checklist.

Each of these resource areas are addressed with the appropriate level of detail for each resource determined in coordination with UC Berkeley and LBNL staff. These determinations considered the affected environment and the resources that could be impacted by implementation of the 2014 LRDP. For each resource area to be analyzed, the geographic area of the affected environment has been individually determined. In all decisions concerning the boundary of the resource-specific affected environment, available input from local, state and federal agencies has been considered, including CDFW, USFWS, and SHPO.

Determining the affected environment is important for potentially impacted resources and for jurisdictional purposes. The project site is on state land, but there are state and local agencies that exercise land use jurisdiction over resources, such as water or tides, that could affect the project site. For example, the BCDC has state jurisdiction over projects occurring on the San Francisco Bay within 100 feet of the high-tide line. Therefore, BCDC statutes and planning documents, including the San Francisco Bay Plan, have been consulted to ensure that the accurate identification of their jurisdictional boundary is incorporated into the EIR.

1.7 REPORT ORGANIZATION

This Draft EIR is organized to allow the reader to quickly review a summary of the analysis and recommended mitigation measures and to identify the residual environmental impacts after mitigation, if any (Chapter 2, Summary). Those readers who wish to read the Draft EIR in greater detail are directed to Chapter 4, Environmental Setting, Impacts, and Mitigation Measures. The Draft EIR begins with this **Introduction (Chapter 1)**. The chapters following the Introduction are:

- **Chapter 2, Summary**, describes the proposed project, issues of controversy associated with the project, environmental effects of the project, and alternatives to the project (including the No Project Alternative). The Summary includes the Summary of Environmental Impacts and Mitigation Measures table that lists each identified environmental impact, corresponding mitigation measures, and residual level of significance after of mitigation.
- **Chapter 3, Project Description**, provides a detailed description of the project site and location, project objectives, proposed project characteristics, and an outline of the approval process.
- **Chapter 4, Environmental Setting, Impacts, and Mitigation Measures**, contains an analysis of environmental topics. The discussion of each topic is divided into an introductory paragraph describing the scope of the issue under consideration, a Setting

section that describes baseline environmental information, an Impacts and Mitigation Measures section that has general standards of significance for potential impacts and describes the project-specific impacts and mitigation measures, and a Cumulative Impacts section that describes the cumulative impacts, if any, of the proposed project, in conjunction with other applicable projects.

- **Chapter 5, Analysis of RFS Contamination**, provides an analysis of the activities proposed to address contamination at the RFS.
- **Chapter 6, Alternatives**, provides an analysis of a reasonable range of alternatives to the proposed project. As required by the CEQA Guidelines, a discussion of the reasons for selecting the alternatives analyzed in this chapter is provided, along with a comparative analysis of each alternative and identification of the “environmentally superior” alternative.
- **Chapter 7, Other CEQA Considerations**, reviews the significant, irreversible effects (if any) and cumulative impacts identified in Chapter 4.
- **Chapter 8, List of Preparers/Organizations Consulted**, lists the firms and staff members that prepared the Draft EIR and persons and agencies contacted during preparation of the Draft EIR.