

Richmond Bay Campus Frequently Asked Questions

This is the first iteration of a “frequently asked questions” document for the Richmond Bay Campus; later versions may address new questions and incorporate new information as it develops. Topics here include: Site Development and Planning (see page 2); Jobs, Business Considerations, Financing (see page 4); Research and Operations (see page 6); Community (see page 8).

OVERVIEW

The proposed Richmond Bay Campus (RBC) is a partnership between Lawrence Berkeley National Laboratory (“Berkeley Lab”) and the University of California, Berkeley (“UCB”). The Richmond Bay Campus is all about collaborative science for healthy living and sustainable communities.

The proposed new Richmond Bay Campus would be sited on approximately 136 upland acres which include a minimum of 12 acres of coastal prairie grasslands. At this stage, it is our belief that we can preserve and enhance much of the rich habitat on the site, while still accommodating the potential amount of growth specified in the long range development plan. Marshlands and mud flats south of the campus site, totaling approximately 73 acres, would remain in their natural condition. UCB has about 300 employees already working at the Richmond site, currently known as the Richmond Field Station.

The initial Berkeley Lab development at the Richmond Bay Campus would integrate bioscience research programs currently housed in leased facilities.

Many variables could affect the timing of development at the RBC. Our current timetable follows:

November or December 2012: Issue CEQA Notice of Preparation and hold a scoping session for our environmental review work

2013: Proceed with Long Range Development Plan and environmental review

2014: Design underway and site preparation begins for first phase

2015-16: Construction occurs, first phase

2017-2018: Complete construction and move into first phase buildings

2019 and beyond: Future phases of development

1. How can members of the public fully participate in the planning process for the site?

As of October 4, 2012 three large community meetings have been held and we expect additional meetings this fall and in the new year. You are always invited. Also, please send an e-mail to rbc@lbl.gov to share your views or ask questions. You can use the same address to be put on a list to receive notices about public meetings and other information concerning planning for the site. Also, you can monitor developments and meetings concerning the site at the Richmond Bay Campus website on the Berkeley Lab site: <http://richmondbaycampus.lbl.gov/>

2. Over what period will the site reach full build-out of development?

The RBC would meet Berkeley Lab and UCB needs through mid-century and beyond. The full build-out timeline would depend on many variables. Development would occur as opportunities and funding permit and would be incremental over time.

3. What will be done to clean up the site?

The University has been working to remediate legacy contamination at the Richmond site that occurred prior to University purchase of the property. UCB and Berkeley Lab share the community's interest in ensuring that the site is properly remediated and provides a safe and healthy environment for all occupants and neighbors. To date, the University has invested approximately \$23 million in remediation costs. We believe we have a good understanding of remaining needs, and the remediation process is ongoing. The University has been working closely with the state Department of Toxic Substances Control for several years to monitor contamination and remediate the site.

4. How will you connect the site to public transit? How many parking spaces will it have?

Berkeley Lab and UCB are working with the City of Richmond to find ways that would improve connectivity between the Richmond Bay Campus and nearby BART stations. At a minimum, we would plan to connect the site to public transit and our Berkeley sites through shuttle services. We are continuing to explore options that would encourage use of public transit and minimize the number of single-occupancy vehicle trips. For planning purposes we estimate that a high percentage of the campus population would need parking initially, and a smaller percent would need parking as the campus, and transit serving the campus, developed. At build out we anticipate providing parking for approximately 60% of the population of the Richmond Bay Campus.

5. Will the Lab consider alternative sites in the environmental review phase of the Richmond Bay Campus process?

Yes. The process requires us to fully examine alternatives with respect to environmental impacts and the requirements of CEQA and NEPA will be fully met.

6. Why not move the whole Berkeley Lab to the new site?

Berkeley Lab currently resides on 202 acres with 106 buildings occupying about 1.8 million square feet. We have an 80-plus year history at the current location and substantial infrastructure that is well suited for much of Berkeley Lab's mission needs. We are looking to the new site initially to consolidate the 20% of facilities already in leased space off-site and to accommodate future growth. Moving much or all of the main site facilities is not practical, does not make the best use of the multi-billion dollar taxpayer investment in our current site and is not necessary.

7. Will the Richmond Bay Campus be open to the public, and how will you manage security?

The Richmond properties are currently open to the public with no restricted access during normal business hours. We would like this to continue. The law enforcement response would depend on the existing jurisdiction and its response protocol; currently, University of California police serve the site and provide security.

8. Will the RBC be compatible with City of Richmond plans for the area?

The City is developing a specific plan for the south shoreline area. Berkeley Lab and UCB are working closely with the City to ensure that all parties understand each other's needs and priorities to ensure that the Richmond Bay Campus and City plans would be compatible.

9. Will the project be constructed using principles of sustainability, and will it use solar or other non-fossil fuel sources for energy?

In the same way that Berkeley Lab and UC Berkeley are leaders in research, we would like to build a campus that demonstrates leadership in sustainability. In fact, much of the research conducted at Berkeley Lab has a direct impact in advancing sustainability. We will continue to explore opportunities to reduce use of fossil fuels associated with the new campus.

10. Have you looked at sea level rise as a concern for the site?

Yes. Sea level rise is very much a consideration in site planning and would influence the scope of site preparation for buildings at the southern end of the site.

11. Is the marsh threatened by this development?

Site planning is focused on upland areas of the site. No changes are anticipated that would threaten the marsh or shoreline area. We also intend to minimize

impacts on coastal prairie grasslands. We expect the new plan to address this directly.

12. How long will the construction take?

We hope to begin operations on the site by 2017-2018. Precise construction timelines won't be known until we finalize plans for the site and complete the planning and environmental review process.

JOBS, BUSINESS CONSIDERATIONS, FINANCING

1. Will this project create jobs for the Richmond community?

The Richmond Bay Campus would attract new economic activity and opportunities for Richmond and its neighboring communities. Job opportunities in construction would be associated with development of the campus, and additional benefits for the local economy would occur with co-location of existing staff from Berkeley Lab and UC Berkeley at the Richmond Bay Campus.

Berkeley Lab and UCB expect that the RBC would be a catalyst for new innovation and clean industries in the area that would generate additional jobs. We are committed to partnering with you to improve the outlook for jobs in this area. One example is the recent \$15 million grant to local community colleges for regional job training, to be facilitated in part by UC Berkeley and its College of Engineering faculty. See link: <http://georgemiller.house.gov/press-release/bay-area-community-colleges-win-huge-federal-grant-%E2%80%9Cdesign-it-build-it-ship-it%E2%80%9D>. A research campus draws staff from a region, the state, and internationally, and is not itself a business or industry sufficient to employ a local community; but it can be a catalyst for change and toward prosperity.

We will continually seek your ideas and your suggestions for how we would maximize the economic benefits of the proposed RBC for Richmond.

There are some opportunities available at both Berkeley Lab and UCB today. UC Berkeley encourages supplier diversity by promoting opportunities for small, local and diverse businesses. To learn more, go to the UC Berkeley Business Services website: <http://businessservices.berkeley.edu/procurement/diversity>. Contractors can currently review construction bids for University construction and learn how to submit a bid by visiting the Capital Projects website: <http://www.cp.berkeley.edu/>. Job openings at UCB are listed at <http://jobs.berkeley.edu>.

Vendors interested in doing business with Berkeley Lab now, or in the future, can visit the "Doing Business with LBNL" website at

<http://www.lbl.gov/Workplace/CFO/pro/business.html>, review applicable policies and speak with a procurement representative. Berkeley Lab has typically had more than 200 job openings at any given time, and we invite those interested in employment at Berkeley Lab not to wait for the opening of the Richmond Bay Campus but to review current listings at: <http://jobs.lbl.gov/>

2. Will you contract with local businesses for services?

Berkeley Lab is committed to obtaining high-quality supplies and services in a cost-effective and timely manner. We have an annual target for purchasing from small business, which typically is set at about 50% of our annual buying. If you are a Small, Hubzone, Veteran-Owned, Small Disadvantaged, or Woman-owned Small Business please see our Small Business-focused policies and site:

<http://www.lbl.gov/Workplace/CFO/pro/small-bus/index.html>.

UCB has a procurement process that encourages supplier diversity. This program promotes business relationships and contract opportunities for small, local, and diverse businesses wishing to provide goods and services to the University community. To learn more about how to access this service now, go to the UC Berkeley Business Services website

<http://businessservices.berkeley.edu/procurement/diversity>.

3. What is the plan for financing the development of the site?

A financing plan is being developed by the University, in conjunction with the Department of Energy (DOE).

4. What is the budget for the project?

We do not at this time have an approved budget for the development of the first phase of facilities because we are still in an early stage of the process. The balance of our development would occur over a 40-year period as the need arises and funding becomes available.

5. Will Berkeley Lab be able to afford the Richmond Campus in the future, and are you concerned about anticipated federal spending reductions?

A substantial portion of the Richmond Bay Campus expense would be paid by transferring dollars currently spent on off-site leases. The remainder would represent a fraction of Berkeley Lab's total budget and would be affordable.

Looking to the future, Berkeley Lab has weathered 80 years of federal appropriations, and over the past 30 years has grown consistently. Of course we can't predict the future, but we believe the type of research conducted by Berkeley Lab will continue to be viewed as essential to the Department of Energy mission. At the same time, we continue to control costs and improve our efficiency.

6. What approvals are needed?

Berkeley Lab is working closely with DOE and University of California leaders to address issues related to the proposal to site a second campus at the RBC. Berkeley Lab cannot proceed from identifying and proposing the RBC as a site for the second campus to construction at the RBC without completion of the CEQA and NEPA processes and receipt of approval by the Regents of the University of California and the Department of Energy.

7. How many construction jobs will be created by the project?

We won't know until we have construction plans.

RESEARCH AND OPERATIONS

1. What kind of third-party research and development (R&D) might be housed on the site? Will you have private companies located at the RBC? Will they be able to buy research?

The RBC would be an anchor of economic stimulation in the region. In addition to supporting space for innovation to transition into new business incubation and start-ups, we might also explore how partnerships with third-party R&D might support economic growth in the area. Some examples of how UCB and Berkeley Lab have partnered in these efforts include the Berkeley Skydeck, a startup incubator/accelerator established in downtown Berkeley (see skydeck.berkeley.edu); and QB3, a laboratory incubator operating in Berkeley and San Francisco (see <http://www.qb3.org>).

Ideally, the RBC site would foster an environment where Berkeley Lab and UCB inventions would be licensed and spawn new companies that could be co-located on or around the second site. Private companies can and do license Berkeley Lab and UCB research now. One example is the work of Amyris Biotechnologies to develop and optimize technology to produce artemisinin, an anti-malaria drug; see http://keaslinglab.lbl.gov/application_areas/index.html. We welcome the interest of private companies and work with them to help bring our technologies to the marketplace where they can be of use. For information on Berkeley Lab's technology transfer program please see: <http://www.lbl.gov/Tech-Transfer/industry/ResearchOpps/index.html>. For information about technology transfer programs at UC Berkeley see the office of intellectual property and industry research alliances website at: <http://ipira.berkeley.edu>.

2. What research do you anticipate being conducted at the RBC site? What research groups might move off of the main site? What do you gain by putting everyone together?

The initial Berkeley Lab research focus for Richmond Bay Campus would be biosciences research. In keeping with Berkeley Lab's tradition of team science, our biosciences research is often carried out in collaborations with research in other fields, such as materials and chemical sciences, earth and climate sciences, and computational sciences. Key programs within these fields may be considered for future location at the Richmond Bay Campus. Our growth and development as a national lab depends to a large degree on national needs and congressional funding in specific scientific fields. We will need to be flexible at both the main campus and Richmond Bay Campus in order to continue to serve our national mission.

UC Berkeley is exploring research themes for the Richmond Bay Campus including energy, sustainable transportation, design and advanced manufacturing, life science and public health research and practice, and ways to reduce the human environmental footprint. UC Berkeley expects the RBC to be an integrative science and engineering research and teaching campus that expresses the optimism about science and life inherent in our research.

Together, UC Berkeley and Berkeley Lab hope to build upon our thriving partnership in world class basic and use-inspired science and engineering, through joint programming of the Richmond site.

3. Do you conduct research on animals?

We do use mice in our life sciences research. We adhere to high standards in our care of the animals and have accreditation from the independent American Association for Assessment and Accreditation of Laboratory Animal Care, Int.

4. What precautions or safety provisions are in place for synthetic biology and other research at the site?

Safety is a top priority for UC Berkeley and Berkeley Lab and is integrated into all of our operations. We are also very mindful of our physical environment and the need to protect it. The general research activities planned for Richmond Bay Campus are already currently underway at Berkeley Lab facilities in Emeryville, Berkeley, and Walnut Creek and are subject to extensive safety controls.

Berkeley Lab's biotechnology and other research meet or exceed local, state, and federal standards for biosafety, worker safety, and health and environmental protection. Berkeley Lab ensures biological materials used or created with recombinant or synthetic biology techniques are not released into the environment unless they have been deactivated and are released in a prescribed safe disposal manner. Of the four potential biosafety levels of containment, Berkeley Lab

operates at only the most common and lowest risk biosafety levels (i.e., BL1 and BL2), and synthetic biology typically operates at the lowest risk level (BL1).

Each year Berkeley Lab publishes a *Site Environmental Report* which covers activities conducted in the prior calendar year. These reports are probably the single best place to look to understand the set of regulations under which we operate and our actions and compliance. You can read recent reports and much more information on the Environment/Health/Safety/Security section of our website: <http://www.lbl.gov/ehs/>

Berkeley Lab has a **Biosafety Manual** which covers requirements from all applicable biosafety standards and how we follow those procedures.

Link to online version: <http://www.lbl.gov/ehs/biosafety/manual/index.shtml>.

Berkeley Lab also has a Health and Safety

Manual: <http://www.lbl.gov/ehs/pub3000/pub3000c.html> which has a chapter devoted to biosafety.

The Berkeley Lab **Integrated Environment, Safety, and Health Management Plan** provides overarching institutional policies and systems for managing environmental health and safety at the Lab. Link to PDF format printable version: <http://www.lbl.gov/ehs/ism/assets/docs/LBNL-ISM.pdf>.

Finally, the **Medical and Biohazardous Waste Generator's Guide** contains procedures and requirements for the safe and compliant management and disposal of medical and biohazardous waste. Link to online version that can be printed section by section: http://www.lbl.gov/ehs/waste/wm_pub_3095.shtml

COMMUNITY

1. How do you plan to relate to and consult with citizens of the community where the site is located?

We are happy to meet with community leaders and organizations and are conducting workshops where all members of the community are invited to participate. We will also conduct a public environmental planning process. The University intends to strengthen and expand its partnerships with the Richmond community. Comments are carefully recorded and shared with Berkeley Lab and campus leadership for action. Comments are invited at public meetings and in written form through mail or at rbc@lbl.gov.

2. Will the Richmond Bay Campus have local partnerships with schools—elementary, high school and community colleges?

Berkeley Lab has a robust science education program. See: <http://csee.lbl.gov/>. We hope to partner with UC Berkeley and its affiliates to build and expand relationships in the Richmond community and look forward to developing science education partnerships and programs in Richmond. The Joint Bioenergy Institute, a candidate for moving to the RBC, has a small internship program named iCLEM, designed for high school students from disadvantaged backgrounds. We hope to expand this program. And Berkeley Lab's Center for Science Education and Engineering programs match high school and community college students from disadvantaged neighborhoods with paid Berkeley Lab summer internships.

UCB,—through its CalCorps Public Service Center, Center for Educational Partnerships, Center for Cities and Schools, Center for Weight and Health, Lawrence Hall of Science, Recreation Department, and various colleges and departments— engages with schools, districts and community colleges in program and curriculum development, summer programs, college and career readiness, and project specific initiatives.

3. How might the Richmond Bay Campus support Richmond's diverse neighborhoods?

The new Richmond Bay Campus would mean we would have an expanded stake in the well-being of all of Richmond. Our staff would be working in Richmond, and increasing numbers would be living there. The new campus would provide an opportunity for UCB and Berkeley Lab to engage more deeply with the Richmond community in a variety of program areas. For example, today UCB students and faculty engage with local communities through the Center for Education Partnerships, CalCorps Public Service Center, the School of Public Health, and the Department of City and Regional Planning; we are interested in expanding such programs and exploring other opportunities as well.