



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

SEP - 6 2018

Mr. Greg Haet
Associate Director of Environmental Protection
Office of Environment, Health & Safety
University of California, Berkeley
University Hall 3rd Floor #1150
Berkeley, California 94720

Re: USEPA Conditional Approval of PCB Cleanup Plan for University of California, Berkeley (UC Berkeley) Richmond Field Station (RFS) EPA North Meadow at 1301 South 46th Street in Richmond, California

Dear Mr. Haet:

Thank you for working with the U.S. Environmental Protection Agency, Region 9 ("USEPA") to address the disposal of polychlorinated biphenyls ("PCBs") found at the UC Berkeley Richmond Field Station ("RFS") EPA North Meadow located at 1301 South 46th Street in Richmond, California (the "Site"). USEPA has received and reviewed UC Berkeley's *Risk-based Disposal Approval Application* (the "Application") dated August 15, 2018, which outlines UC Berkeley's plan for excavation and disposal of soils containing PCBs at the Site as well as post-remediation verification.

The Application describes excavation and subsequent disposal of soils consistent with the Toxic Substances Control Act ("TSCA") standards. The RFS currently has non-residential land use consisting of an academic teaching and research facility, library facility, and several non-university commercial tenants. The 2014 Berkeley Global Campus Long Range Development Plan anticipates continued similar land use. Due to PCBs from the Site impacting the nearby Stege Marsh via stormwater flow, UC Berkeley will remediate the Site to meet a site-specific risk-based cleanup level of 1 ppm total PCBs that USEPA developed to be protective of ecological receptors in the marsh. This cleanup level is also appropriate for human receptors at the Site, given the current and anticipated future non-residential land use.

The EPA North Meadow is defined as the meadow bounded by Lark Drive to the north, Avocet Way to the east, and the northern parking lot of Building 201 to the south. The meadow is approximately 1.86 acres. The likely source of PCBs in soils at the meadow is disposal of PCB oils through the historical Western Storm Drain. Two soil piles from the excavation of the storm drain were placed on top of native meadow at the EPA North Meadow in the early 1990s. Each soil pile covers approximately 0.56 acre, and has been graded to approximately 1.5 feet above the historical prairie.

It is estimated that 1,032 cubic yards of soil will need to be removed for off-site disposal to meet the cleanup level of 1 ppm. All PCB concentrations are currently below 50 ppm. Confirmation sampling from excavation bottoms and sidewalls will ensure the cleanup level has been reached.

In addition to the soil removal, any sediment within existing storm drains affected by the Site will be removed, the storm drains will be flushed, and sediment filters will be installed at the storm drain inlets. During the rainy season, straw wattles will be staked around the inlets to reduce inflow of sediment from the

Site. Sediment filters will be monitored, and once a sufficient amount of sediment has accumulated for PCB analysis, a sample will be collected to determine if the Site is a continuing source of PCBs to the inlets.

USEPA is approving UC Berkeley's Application with conditions pursuant to 40 C.F.R. § 761.61(c) (i.e., risk-based disposal standards of TSCA). UC Berkeley shall implement the Application as modified by the conditions listed below.

USEPA Conditions of Approval and Additional Comments:

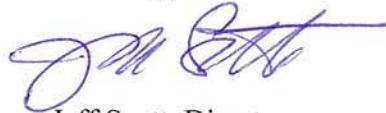
1. **Disposal of PCBs:** UC Berkeley shall dispose of all PCB waste that it generates during the PCB cleanup in accordance with the TSCA PCB regulations and other applicable federal, state, and local regulations. In determining the disposal method for the waste, UC Berkeley must comply with the anti-dilution requirements in 40 C.F.R. § 761.1(b). All bulk PCB remediation waste (i.e., soil) must be disposed of in accordance with the requirements in 40 C.F.R. § 761.61(a)(5). UC Berkeley must select appropriate disposal facilities based on the in-situ PCB concentrations of the waste.
2. **PCB Cleanup Waste Disposal:** Cleanup waste (e.g., personal protective equipment, rags, gloves, booties) shall be disposed of in accordance with 40 C.F.R. § 761.61(a)(5)(v). Disposal of all waste shall be in accordance with all federal, state, and local regulations.
3. **Equipment Decontamination:** UC Berkeley shall decontaminate non-disposable sampling tools and equipment, as well as movable equipment used during cleanup and/or additional sampling in accordance with 40 C.F.R. § 761.79(c)(2). Decontamination residues must be disposed of at their original concentrations in accordance with the requirements in 40 C.F.R. § 761.79(g). Recordkeeping of the decontamination events must be maintained in accordance with the requirements in 40 C.F.R. § 761.79(f)(2). These procedures must be implemented in a manner that is protective of human health and the environment consistent with the requirements in 40 C.F.R. § 761.79(e).
4. **PCB Cleanup Report:** UC Berkeley shall submit a PCB cleanup report to USEPA, to include all relevant data and justification demonstrating that the work completed is consistent with this approval. UC Berkeley must address at a minimum all the reporting requirements set forth at 40 C.F.R. § 761.61(a)(9) and 40 C.F.R. § 761.125(c)(5). UC Berkeley shall also include figures, surveys, or GPS coordinates depicting the location and results for all site characterization samples, verification samples, and any PCBs left under a cap.
5. **Future Proposed Modifications to Cleanup Plan:** UC Berkeley shall request any changes to the approved cleanup plan via email to USEPA, and USEPA will provide any response to the request via email.

This approval does not relieve UC Berkeley from complying with all other applicable federal, state, and local regulations and permits. Departure from the conditions of the approval without prior written permission from USEPA may result in the commencement of proceedings to revoke this approval and/or an enforcement action. Nothing in this approval bars USEPA from imposing penalties for violations of this approval or for violations of other applicable TSCA PCB requirements or for activities not covered under this approval.

This approval only applies to the Site. USEPA reserves the right to require additional characterization and/or cleanup of PCBs at the Site if new information during additional site characterization, cleanup verification, and/or during future post-cleanup activities (e.g. redevelopment or post-redevelopment) at the property shows that PCBs remain at the Site above the approved PCB cleanup level. In addition, USEPA may require cleanup of areas immediately adjacent to the Site if those areas are found to be impacted by PCBs from the Site.

USEPA appreciates the opportunity to assist UC Berkeley with this PCB cleanup. If you have any questions regarding this approval, please contact Sara Ziff at (415) 972-3536 or ziff.sara@epa.gov. Thank you for your cooperation.

Sincerely,



Jeff Scott, Director
Land Division

cc (electronic): Alicia Bihler, UC Berkeley Office of Environment, Health & Safety
Lynn Nakashima, DTSC