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December 3, 2019

Lynn Nakashima
Project Manager
Department of Toxic Substances Control
700 Heinz Avenue
Berkeley, CA 94710

Subject: **Northern Regional Library Facility (NRLF) Phase 4 – Bio Retention Pond Soil Management Plan, Sampling Approach Richmond Field Station, University of California, Berkeley**

Dear Ms. Nakashima:

The University of California (UC) Berkeley proposes to collect soil samples at the Richmond Field Station associated with the construction of the NRLF Phase 4 bio-retention pond. The objective of the sampling effort is to characterize soil remaining in place under the retention pond stormwater mitigation feature per the Soil Management Plan, Revision 1, dated April 12, 2017. The project footprint is approximately 6,220 square feet; and will be approximately 2 feet below the existing grade. The surface area of soil is greater than 500 square feet and therefore sampling is required according to the Soil Management Plan.

This letter addresses comments received from DTSC dated November 25, 2019, and replaces UC's previous letter dated November 21, 2019. The sampling approach has been modified to clarify that soil samples will have all foreign materials removed in the field. Soil sample jar volumes have remained unchanged per consultation with the analytical laboratory.

This letter provides the proposed sampling location and a summary of field sampling protocols. The attached figure presents the project features and proposed sampling locations.

Sample Locations and Depths

The project is located within SMP Areas 13, and 17, which are defined as low sampling density with arsenic, lead, mercury, polycyclic aromatic hydrocarbons (PAH), and polychlorinated biphenyls (PCB) as chemicals of concern. SMP areas, chemicals of concern, and sample frequency are presented in Section 4.1and Table C-3 of the Soil Management Plan. Low sampling density areas dictate a minimum of one sample location per 15,625 square feet, mandating a minimum of one location for this project. UC Berkeley proposes to collect samples from one location within the excavation footprint; the location is presented on the figure following this letter.

Soil samples will be collected from depths of 0-0.5 and 2-2.5 feet below the depth of planned soil disturbance, for a total of two samples. This will allow documentation of potential residual soil contamination beneath the excavation.

Field Sampling Protocols

Soils will be collected using a hand auger to help ensure sample mass recovery. Once the sample depth interval is reached, either a disposable plastic scoop, a stainless steel metal scoop, or a hand auger will be used to collect the soil sample. The sampling protocol will follow these steps:

1. The field sampler will use a disposable scoop, stainless steel metal scoop, or hand auger to collect the soil sample.
2. All foreign materials (plants, debris, pebbles or rocks) will be removed prior to placing the soil in the sample jar.
3. One 16-ounce jar of soil will be collected for each sample.
4. Any sampling equipment used will either be disposable or decontaminated between samples using Alconox and de-ionized water.
5. The sample jars will be labeled and packed into an insulated cooler. The sample will be transported under chain-of custody procedures directly to Enthalpy Laboratory in Berkeley, California.

All sample collection protocols will be consistent with the Final Sampling and Analysis Plan included as Exhibit C2 of the Soil Management Plan. Any deviations from Exhibit C2 will be identified in the summary report.

Analyses Summary and Screening Criteria

Soil samples will be analyzed for arsenic, lead, mercury, PAH, and PCB using the methods listed below.

- Arsenic, lead, and mercury analysis by EPA 6020A/7471A
- PCB analysis by EPA 8082A
- PAH analysis by EPA 8270 SIM

The laboratory will be instructed to homogenize the soil mass provided before analyses.

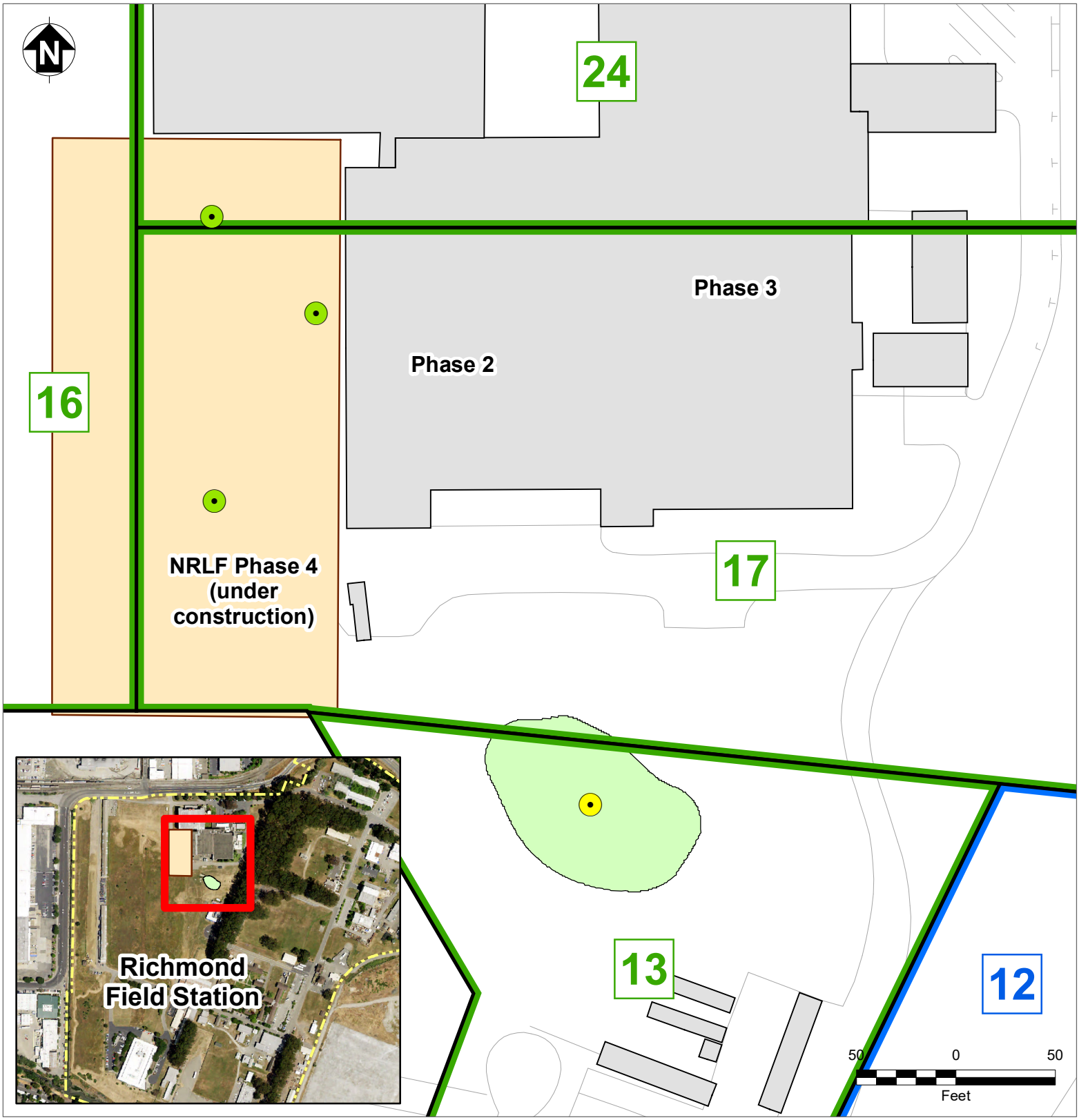
Following the receipt of analytical results, sample results will be presented in a sampling letter report along with screening levels identified in the Soil Management Plan.

If you have any questions or comments regarding this submittal, please call me at (510) 642-4848.

Sincerely,

Greg Haet
EH&S Associate Director
Environmental Proteciton

Enclosure: Figure



- Proposed Sample Location
- Sampled on Aug 10, 2018
- RFS Property Boundary
- Bio-retention Area
- NRLF Phase 4
- Buildings

SMP Area Boundaries and Identifiers with Density Protocol

- High Density Sampling Area
- Low Density Sampling Area

Berkeley EH&S

University of California, Berkeley
Richmond Field Station

NRLF Bio-Retention Pond Proposed Sampling Location

Richmond, CA Southeast Shoreline

Note:
NRLF Northern Regional Library Facility