



Yana Garcia
Secretary for
Environmental Protection



Department of Toxic Substances Control

Meredith Williams, Ph.D., Director
700 Heinz Avenue
Berkeley, California 94710-2721



Gavin Newsom
Governor

MEMORANDUM

TO: Nicole Yuen, Project Manager
Senior Environmental Scientist
Cleanup Program, Berkeley Office
Site Mitigation and Restoration Program

FROM: Mark Sorensen, PG 7448
Engineering Geologist
Geological Services Branch – Berkeley
Site Mitigation and Restoration Program

DATE: November 21, 2022

SUBJECT: **REVIEW OF EASTERN TRANSITION AREA, PROPOSED SAMPLING
RICHMOND FIELD STATION UNIVERSITY OF CALIFORNIA,
BERKELEY**



SITE 201605-00 PCA: 11018 MPC: OTHplan WR 20089404

DOCUMENT REVIEWED

As requested, the Berkeley Geological Services Unit (GSU) has reviewed the *Eastern Transition Area, Proposed Sampling, Richmond Field Station, University of California, Berkeley* (Letter), dated September 24, 2022. The Letter was prepared by Tetra Tech, Inc. The Letter offers recommendations for sampling in this area as a follow-up to the results of PCB samples collected during a removal in the adjoining Mercury Fulminate Area. The Report was reviewed with respect to geologic and hydrogeologic interpretations and technical adequacy.

BACKGROUND

The established cleanup goal for total polychlorinated biphenyls (PCBs) in site soils is 1 milligram per kilogram (mg/kg). UC Berkeley recommended the sampling after finding PCBs in some samples during the Mercury Fulminate Area removal action completed in January 2020. During the removal action, PCBs were identified in confirmation samples

at the southwestern-most portion of the Mercury Fulminate Area excavation, on the border of the Eastern Transition Area (ETA). The source of PCBs in soil is unknown. Sample results indicated total PCBs greater than the cleanup goal of 1 mg/kg at six of the 18 sample locations; all samples above 1 mg/kg were collected at the 2.5 to 3.0 feet below ground surface (ft bgs) interval, while samples from 0 to 0.5 ft bgs were all non-detect for PCBs. As has been the practice at other areas of PCB soil contamination at the Richmond Field Station, Incremental Sampling Methodology (ISM) will be applied to collect and analyze soil samples from decision units (DUs) DU01 through DU04 of concern that have been defined within the ETA.

COMMENTS AND RECOMMENDATIONS

1. *Proposed Sampling, Page 3, and Laboratory Processing, Subsampling, and Analyses, Page 4*

In the fourth paragraph of the Proposed Sampling section, in the description of the field soil sampling increments, the text states

“The nested triplicate set at DU01 will consist of 90 borings.”

This statement appears inconsistent with this statement from the Laboratory Processing, Subsampling, and Analyses section on Page 4. It is unclear whether the second and third subsamples of the nested triplicate will be collected from borings distinct from those used to collect the first set of samples. Please clarify this issue by adding the **bold** text as follows:

“The second and third independent representative subsamples [at DU01] will be collected in the same way by taking separate increments from **30 different borings each, within** the same 30 grid cells **used to collect the first subsample.**”

If you have any questions or comments regarding this memorandum, please contact Mark Sorensen at (510) 540-3947 or Mark.Sorensen@dtsc.ca.gov, or Jon Buckalew (Buck) King at (510) 540-3955 or Buck.King@dtsc.ca.gov.

Reviewed by: Theodore (Ted) Mazzoli, PG
Engineering Geologist, Geological Services Unit
Geological Services Branch
Site Mitigation and Restoration Program