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MEMORANDUM

TO: Nicole Yuen, Project Manager
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FROM: Mark Sorensen, PG 7448
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Site Mitigation and Restoration Program

DATE: November 9, 2022

**SUBJECT: REVIEW OF DRAFT B112 TRANSFORMER AREA
PCB CLEANUP AND REMOVAL ACTION IMPLEMENTATION
SUMMARY REPORT, RICHMOND FIELD STATION SITE,
UNIVERSITY OF CALIFORNIA, BERKELEY**



SITE 201605-00 PCA: 11018 MPC: TECHMEMO WR 20088492

DOCUMENT REVIEWED

As requested, the Berkeley Geological Services Unit (GSU) has reviewed the *Draft B112 Transformer Area PCB Cleanup and Removal Action Implementation Summary Report, Richmond Field Station Site [Site], University of California, Berkeley* (Report), dated August 22, 2022. The Report was prepared by Tetra Tech, Inc., for the Office of Environment, Health and Safety, University of California, Berkeley. The Report addresses the investigation and cleanup actions taken to remedy the presence of PCBs in soils at the B112 Transformer Area, located west of Building 112 at the Richmond Field Station. The Report was reviewed with respect to geologic and hydrogeologic interpretations and technical adequacy. Evaluation of human health and ecological risk issues is deferred to DTSC's Human and Ecological Risk Office (HERO).

BACKGROUND

Records indicate that all PCB-containing electrical distribution system transformers at the Site were either removed for off-site disposal or backfilled onsite with non-PCB oils in the late 1980s and early 1990s. There are no records of spills of PCB oils having occurred at the Site; instead, the B112 Transformer Area contamination, limited to shallow soils (upper 1 to 2.5 feet), likely resulted from either transformer seepage or unreported spills during maintenance. The established cleanup goal for total polychlorinated biphenyls (PCBs) in site soils is 1 milligram per kilogram (mg/kg), based on both human and ecological thresholds, with the latter based on potential effects on marine biota. The Report documents the site remedy of excavation and confirmation sampling followed by backfilling of clean fill, wood chips, and mulch.

COMMENTS AND RECOMMENDATIONS

1. *Section 3.6.1, Sampling Methodology, Page 8*

Please cite the guidance for incremental sampling methodology (ISM) provided in the references.

2. *Section 5.3 Field Results, Page 13*

The Air Monitoring Summary table shows PDR (Personal Data Rams) data for particulate levels using units of micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). The lower detection limit is listed in Section 3.9 as $1 \mu\text{g}/\text{m}^3$. However, all the values listed in the Air Monitoring Summary table are significantly less than this detection limit, as low as $0.002 \mu\text{g}/\text{m}^3$, which is 500 times lower than the detection limit. It appears that the units in this table should instead be indicated as milligrams per cubic meter (mg/m^3). This assessment is consistent with the units of mg/m^3 indicated in the field forms provided in Appendix B (see the first page of Appendix B).

The description and supporting information for the remedial action presented in the Report are clear and appropriate, and the methods used are consistent with the sampling approach previously approved by DTSC. GSU has no additional comments beyond those provided above, and I support approval of the Report once the above minor comments are addressed.

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.

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