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MEMORANDUM

TO: Nicole Yuen, Project Manager
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FROM: Mark Sorensen, PG 7448
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DATE: April 12, 2023

**SUBJECT: REVIEW OF DRAFT SOIL MANAGEMENT PLAN, REVISION 3
REMOVAL ACTION WORKPLAN ATTACHMENT C – RESEARCH,
EDUCATION, AND SUPPORT AREA WITHIN THE RICHMOND FIELD
STATION**



SITE 201605-00 PCA: 11018 MPC: soilMP WR 20093891

DOCUMENT REVIEWED

As requested, the Berkeley Geological Services Unit (GSU) has reviewed the *Draft Soil Management Plan, Revision 3 – Removal Action Workplan Attachment C Research, Education, and Support Area within the Richmond Field Station* [Plan], dated March 3, 2023. The Plan was prepared by Tetra Tech, Inc., for University of California, Berkeley. The Plan 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

The Richmond Field Station (RFS) Site Investigation and Remediation Order provides for the investigation and cleanup of 96 acres of upland and 13 acres of tidal marsh and transition habitat within RFS. In July 2014, UC Berkeley prepared a RAW and an

accompanying SMP in compliance with the RFS Site Investigation and Remediation Order. The SMP provides a framework to prohibit uncontrolled soil excavation or disturbance activities which may expose workers or visitors to unsafe exposures to environmental contaminants. The objective of the SMP is to ensure that soil disturbance activities do not adversely impact human health or the environment and that the soils are handled, stored and disposed of, or reused onsite in accordance with applicable laws, regulations, and University of California policies. The current revision of the SMP (Revision 3) replaces the prior versions prepared in 2014 and 2019.

COMMENTS AND RECOMMENDATIONS

1. *Section 1.0 Introduction and Purpose (Page C-2):*
In the third bullet under the Soil Remedy heading, correct the remedial goal for benzo(a)pyrene equivalent-impacted soil (the text reads 1.6.4E-05 mg/kg).
2. *Section 1.2 Approach (Pages C-7 and C-8):*
 - a. Under heading 2. Sampling Design, Data Evaluation, and Soil Management Actions, the second paragraph states “EH&S will request DTSC and EPA, if appropriate, concurrence for any proposed deviations from the prescriptive soil management protocols.” This is the first reference to “EPA, if appropriate,” and the text should clarify when EPA will be consulted. Based on subsequent text, EPA will be consulted when total PCBs in soil exceed 1 milligram per kilogram.
 - b. In the last sentence of the above-noted paragraph, GSU suggests editing the text by adding a phrase as follows:

“Soil will remain within the SMP project area unless UC requests project-specific approval from DTSC or EPA, **if appropriate**, to use the soil in another location at RFS.”

If the context of EPA consultation is explained as suggested above in Comment 2a, systematic use of this phrase, which frequently appears in subsequent text, will be clear to the reader. Please add this phrase wherever appropriate in similar contexts throughout the subsequent text.
 - c. Under heading 4. *Completion Reporting*, it appears that the number should be changed to 3.
3. *Section 2.0 Background (Page C-12):*
In the first paragraph after the bullets, GSU recommends inserting the date of submittal of the Five-Year Review for clarity (and presumably it refers to the 2017 Five-Year Review).
4. *Section 2.1.1 Current land Use (Page C-13):*
In the second paragraph, please define the acronym LRDP.

5. *Section 2.3 Chemicals of Concern (Page C-17):*

In the last sentence under the heading PCBs, the text states “The documentation for the B150 Transformer Area will be included with the final Corporation Yard documentation since those activities were conducted simultaneously.” Use of the term “simultaneously” appears inaccurate, as GSU observes that the Corporation Yard work is ongoing, while the B150 work is complete. Please edit appropriately.

6. *Section 4.2.3 Determination of Soil Management Action (Page C-32):*

In the next-to-last paragraph, the text states:

“Soils exceeding Category II criteria will be transported off site to an appropriate disposal facility.”

This is a categorical statement; please add the word “generally” to be consistent with the idea that Category II soils may be managed on-site with DTSC approval.

7. *Section 6.0 Completion Reporting (Page C-50):*

The text states that soils exceeding Category I criteria will require an on-site management or excavation plan and will also require documentation of all activities following completion of the soil disturbance project, and specifies use of SMP Form C, Completion Report (Exhibit C1). There is no mention of plans or reporting for soils exceeding Category II criteria despite the fact that such soils are discussed in the Plan as potentially being present onsite, and may potentially be left onsite with the approval of DTSC. Please add text stating the plans and reporting that would be required in the event that Category II-exceeding soils may remain onsite.

8. *Section 7.0 References (Page C-52):*

For reference DTSC (2019b), please provide the current update of Human Health Risk Assessment (HHRA) Note 3, which was published in May 2022.

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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