



Yana Garcia
Secretary for
Environmental Protection



Department of Toxic Substances Control

Meredith Williams, Ph.D., Director
9211 Oakdale Avenue
Chatsworth, California 91311



Gavin Newsom
Governor

December 13, 2023

SENT VIA ELECTRONIC MAIL

Mr. David Thaete
Phibro-Tech, Inc
8851 Dice Road
Santa Fe Springs, California 90670
David.Thaute@pahc.com

REVIEW OF RESPONSE TO REVIEW OF RESPONSE TO REVIEW OF WORK PLAN
FOR ADDITIONAL CHARACTERIZATION AND WORK PLAN FOR ADDITIONAL
CHARACTERIZATION, PHIBRO-TECH, INC., 8851 DICE ROAD, SANTA FE
SPRINGS (SITE CODE: 300142)

Dear Mr. Thaete:

The Department of Toxic Substances Control (DTSC) has reviewed the Response to Review of Response to Review of Work Plan for Additional Characterization (Terraphase Engineering, Inc., September 8, 2023) (RTC) and the Work Plan for Additional Characterization (Terraphase Engineering, Inc., September 8, 2023) (Work Plan) for the Phibro-Tech, Inc. facility located at 8851 Dice Road, Santa Fe Springs, California (Facility). The Work Plan for Additional Characterization was designed to address comments provided by DTSC Geological Services Unit (GSU), dated November 1, 2021, with the stated objective of characterizing the presence of hexavalent chromium along the southern property line.

The Facility is situated on approximately 4.8 acres in an industrialized section of the city. The Facility is essentially an inorganic chemical manufacturing plant using certain hazardous wastes as a primary raw material. The Facility is permitted to treat, store, and transfer both RCRA¹ and California hazardous wastes. Chemicals previously detected in onsite soil that are included as chemicals of potential concern (COPCs) are as follows: various volatile organic compounds (VOCs); Semi-Volatile Organic Compounds (SVOCs) (1,2,4-trichlorobenzene, 2-methylnaphthalene, pyrene), TPH (extractable fuel hydrocarbons [EFH] C23-C40), TPH-e, TPHd, TPH-g), Aroclor 1260,

¹ United States Environmental Protection Agency, Resource Conservation and Recovery Act

and metals including lead, cadmium, chromium, copper, and zinc. Chemicals previously detected in soil gas that are included as COPCs are as follows: chlorinated and aromatic VOCs, aliphatic and aromatic individual petroleum hydrocarbons, total petroleum hydrocarbons in the gasoline and diesel ranges, and limited polycyclic aromatic hydrocarbons (PAHs). Chemicals previously detected in groundwater include the following: various VOCs, arsenic, and specific metals (chromium, hexavalent chromium, copper, and cadmium).

Based on its review, DTSC conditionally approves the Work Plan provided enclosed. DTSC comments are addressed in the field prior to investigation and in future deliverable(s), as appropriate. If you have any questions regarding this letter, please contact me at (818) 717-6562 or by e-mail at Laura.Radke@dtsc.ca.gov.

Sincerely,



Laura Radke
Project Manager
Brownfields Restoration and School Evaluation Branch
Site Mitigation and Restoration Program

Enclosures

cc: (via e-mail)

Mr. Christopher S. Alger, PG, CEG, CHG
Principle Engineering Geologist
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**DTSC COMMENTS
RESPONSE TO REVIEW OF RESPONSE TO REVIEW OF
WORK PLAN FOR ADDITIONAL CHARACTERIZATION AND
WORK PLAN FOR ADDITIONAL CHARACTERIZATION
PHIBRO-TECH, INC.
8851 DICE ROAD
SANTA FE SPRINGS**

The following DTSC staff reviewed and provided comments herein to the Response to Review of Response to Review of Work Plan for Additional Characterization (Terraphase Engineering, Inc., September 8, 2023) and Work Plan for Additional Characterization (Terraphase Engineering, Inc., September 8, 2023). Original comments are available for review in DTSC project files. All questions regarding these comments should be directed to the Project Manager.

**Laura Radke
Project Manager**

Brownfields Restoration and School Evaluation Branch

COMMENTS:

1. The stated objective of the Work Plan is to characterize the presence of hexavalent chromium along the southern property line with the potential for offsite migration. However, none of the specific objectives propose collection of offsite soil samples to confirm or deny historic offsite migration of chemicals of concern. Offsite delineation of chemicals of concern in soil and potential threat to groundwater remains a data gap.

**Ms. Christine Bucklin, P.G.
Senior Engineering Geologist**
Geological Services Unit

(See comments in the attached DTSC Memorandum, dated December 7, 2023.)



Yana Garcia
Secretary for
Environmental Protection



Department of Toxic Substances Control

Meredith Williams, Ph.D., Director
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Chatsworth, California 91311



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MEMORANDUM

TO: Laura Radke
Senior Environmental Scientist
Site Mitigation and Restoration Program

FROM: Christine Bucklin P.G.
Senior Engineering Geologist
Chatsworth Geological Services Unit

DATE: December 7, 2023

SUBJECT: Phibro-Tech, Inc.
8851 Dice Road, Santa Fe Springs, California



PCA: 22120 Site Code: 300142 Phase: 48 MPC: RFIWP Log No: 20100082

As requested, the Department of Toxic Substances Control's (DTSC) Chatsworth Geological Services Unit (GSU) staff reviewed the following documents, both dated September 8, 2023:

- *Response to Review of Response to Review of Work Plan for Additional Characterization, Phibro-Tech, Inc., 8851 Dice Road, Santa Fe Springs*
- *Work Plan for Additional Characterization, Phibro-Tech, Inc., 8851 Dice Road, Santa Fe Springs*

The response to comments (RTCs) were submitted by Terraphase Engineering, in response to the GSU's technical memorandum dated July 12, 2023, prepared in response to the response to Review of Work Plan for Additional Characterization prepared by Terraphase and submitted to DTSC on June 2, 2023 regarding an original document titled, *Work Plan for Additional Characterization* (Work Plan), dated February 6, 2023. In addition, DTSC participated in a technical meeting and site walk at the PTI facility on November 7, 2023.

Following our review of the RTCs, GSU concurs that the updated conceptual site model discussed in the updated Work Plan is one of many reasonable explanations for the presence and distribution of hexavalent chromium [Cr^{+6}] in subsurface soils and groundwater at the site. The original source may have been released from aboveground and underground storage tanks and/or additional operations at former facilities that historically operated on the same parcel of land, the current PTI property. As an interim measure, PTI has implemented multiple rounds of remedial injections of calcium polysulfide (CPS) solution to treat Cr^{+6} in vadose zone soils across the southwestern and central portion of the site.

Confirmation soil sampling was conducted between the various rounds of CPS injections. An additional round of soil sampling is proposed to verify the success of the latest round of remedial activities conducted in 2022. To evaluate the residual concentrations of Cr^{+6} in site soils south and southwest of the F-area, soil sampling will be conducted along the southwestern property boundary adjacent to SWCONF20, SW29, and MW-29.

GSU concurs with the sampling rationale and depths provided for SWCONF-21, 22, 23, and 25; but requests that the depth for SWCONF-24 be extended to 65 feet below ground surface to target and confirm previous Cr^{+6} detects in MW-29.

Further, although GSU concurs with the approach to evaluation of site soils after the latest round of CPS injections (2022), the proposed work does not necessarily address the requirement for additional offsite characterization. Even if remedial efforts successfully affected soils toward the southern property boundary, the full extent of the original Cr^{+6} soil contamination is unknown. While onsite confirmation soil data may address the concern for the potential of offsite migration, it does not address what is already present offsite from historic migration of Cr^{+6} releases at the site. In addition, it is not known whether Cr^{+6} , if present in offsite subsurface soils, is a threat to groundwater.

The resulting report should utilize the results from the newly collected soil matrix data and build upon the discussion presented in the RTCs regarding the concept of significant mass of Cr^{+6} transport to soils at depth beyond the property boundary, and the threat to groundwater downgradient of the site.

Questions regarding this Memo can be directed to Christine.Bucklin@dtsc.ca.gov

Reviewed by: Todd Wallbom, P.G.
CC: John Naginis, C.E.G.