Message

**From**: ZIFF, SARA [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=1CE282EB90B04EDD932CCDCEACDE7F9A-SZIFF]
**Sent**: 2/1/2016 10:55:01 PM
**To**: Tasnif-abbasi, Maryam@DTSC [Maryam.Tasnif-abbasi@dtsc.ca.gov]
**Subject**: FW: Former Riverside Agricultural Park Path Forward

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**From:** Armann, Steve
**Sent:** Monday, February 01, 2016 2:54 PM
**To:** Lofstrom, Dot@DTSC <Dot.Lofstrom@dtsc.ca.gov>
**Cc:** ZIFF, SARA <ZIFF.SARA@EPA.GOV>; Baylor, Katherine <Baylor.Katherine@epa.gov>; Wilson, Patrick <Wilson.Patrick@epa.gov>; Cope, Grant@EPA <Grant.Cope@calepa.ca.gov>
**Subject:** FW: Former Riverside Agricultural Park Path Forward

Dot, per below, I have management approval of our agreed upon path forward at the former Riverside Agricultural Park site. Please let me know if you have any questions.

Steven S. Armann, Manager
Corrective Action Office (LND-4-1)
USEPA Region 9
75 Hawthorne Street
San Francisco, CA 94105

Phone: 415-972-3352
Fax: 415-947-3533
Email: armann.steve@epa.gov

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**From:** Huetteman, Tom
**Sent:** Monday, February 01, 2016 2:52 PM
**To:** Armann, Steve <Armann.Steve@epa.gov>
**Subject:** RE: Former Riverside Agricultural Park Path Forward

Thanks, Steve. I concur on this path forward. Tom

Tom Huetteman, Assistant Director
Land Division, USEPA Region 9
415-972-3751

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**From:** Armann, Steve
**Sent:** Monday, February 01, 2016 2:39 PM
**To:** Huetteman, Tom <Huetteman.Tom@epa.gov>
**Subject:** Former Riverside Agricultural Park Path Forward

Memorandum

To: Tom Huetteman, Assistant Director
RCRA Program, Land Division

From: Steve Armann, Manager
Corrective Action Office, Land Division

Subject: Recommended Path Forward to Address Polychlorinated Biphenyl (PCB) Contamination at Former Riverside Agricultural Park

The purpose of this memorandum is to summarize the actions taken to date by EPA, in coordination with DTSC, to address PCB contamination at the former Riverside Agricultural Park (Site) since August 2015 and to obtain your concurrence on the proposed path forward. Please respond to this email with your decision.

In August 2015, DTSC requested our support to evaluate the effectiveness of the previous cleanup activities and, if necessary, coordinate with them on appropriate actions to ensure that the Site is ready for residential development. I believe that the path forward proposed in this memo will allow us to make a positive determination that this Site is ready for residential development.

Background

Prior to EPA involvement in this Site, DTSC oversaw the investigation and cleanup at the property. They determined that adequate investigation and cleanup was complete and the Site met applicable health-based guidelines for residential development. Subsequently, the Center for Community Action and Environmental Justice (CCAEJ) requested that EPA verify the adequacy of the cleanup. EPA agreed to work with DTSC on the next steps to verify the adequacy of the cleanup.

In September 2015, DTSC and EPA agreed upon a sampling approach based on a 250-foot grid, to verify that the site was adequately characterized and met health-based guidelines. The developer conducted the sampling with EPA and DTSC oversight. Both DTSC and EPA conducted limited independent sampling. The results of this sampling revealed that the property has widespread low-level PCB contamination with a few areas with elevated concentrations.

Regulations implementing the Toxic Substances Control Act (TSCA) PCB cleanup program authorize the use of two sample extraction methods. DTSC and the developer used the ultrasonic extraction method while EPA used the "Soxhlet" extraction method. We discovered that the Soxhlet method consistently showed higher results than the ultrasonic method at this site. Therefore, all subsequent data analysis and data used in decision making at this site used the Soxhlet method.

Due to the inconsistency in the extraction method and the discovery of a few elevated samples of concern, DTSC and EPA determined that additional sampling would be necessary. In November 2015, another round of sampling was conducted. This event tightened up the grid to obtain one sample every 125 feet across the property. The November 2015 soil samples were all analyzed using the Soxhlet extraction method. EPA also analyzed six samples for the full suite of PCB congeners, including the more toxic "dioxin-like" congeners, to determine if the cleanup goal of 0.22 ppm was adequate. After analysis of the congeners, specifically congener 126, EPA determined that the cleanup goal of 0.22 ppm is appropriate. The results of this sampling event were similar to the previous event in that the site continued to show low-level contamination with a few elevated areas. DTSC and EPA also continue to be concerned that there may be possible elevated PCBs in between sampled locations.

Path Forward

EPA and DTSC met on a number of occasions to discuss various options to satisfactorily address the wide-spread low-level PCB contamination at the site. **We had already agreed that certain elevated areas above 1 ppm needed to be removed.** We agreed on three options to present to the developer. First, the developer could remove all soils with concentrations greater than 1 ppm and run a statistical evaluation of the data using ProUCL to determine the Site's exposure point concentration. Second, the developer could consolidate soils with PCB concentrations greater than 0.22 ppm on-site, enter into a land use covenant restricting the area where

soils were consolidated, and run ProUCL. Third, the developer could remove all soil above 0.22 ppm and run ProUCL. All three options also included increasing the sampling density in areas not slated for immediate development, as well as sampling of each proposed house lot. DTSC presented these options to the developer and the developer chose the third option, which is the most conservative.

The selected approach includes removal of all soil with PCB concentrations greater than 0.22 parts per million (ppm), confirmation sampling after removal, additional soil removal if still above 0.22 ppm after confirmation, and a robust sampling of individual lots, including at depth, and removal of PCBs above 0.22 ppm. Each lot will have between six and eight discrete sample locations depending upon the lot size. If PCBs are found above 0.22 ppm, the contaminated soils will be removed.

The path forward agreed to by DTSC, EPA, and the developer addresses our two concerns: sample density and risks. Given that the site will have a robust PCB data set to include sampling of each residential lot with up to eight sample locations and PCB concentrations will likely be below 0.22 ppm, I fully expect that the ProUCL concentration will validate that the Site is ready for residential development. The cleanup goal of 0.22 ppm, however, is not a "bright line". Some soil above the goal may remain at the site and still be protective.

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