CALIFORNIA Water Boards

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San Francisco Bay Regional Water Quality Control Board

Site Cleanup and Health Risk Fact Sheet for Building Occupants at 1001-1031 Camelia Street, 1329-1395 Ninth Street, and 1330-1390 Tenth Street, Berkeley

September 2021

Introduction

We are providing this fact sheet to the occupants of the building at 1001-1031 Camelia Street, 1329-1395 Ninth Street, and 1330-1390 Tenth Street in Berkeley, California. This building is the location of the former Perc-Serve Site (Site). The Site includes both the building and the parking lot located on the west side of the building along Ninth Street. The Site is an environmental cleanup project being overseen by the Regional Water Board, an agency within the California Environmental Protection Agency. This fact sheet is intended to provide the occupants of the building an understanding of current environmental Site conditions and assessment work conducted at the Site, discuss the Site risk, define the next steps to address residual pollution present and ensure the safety of the occupants, and complete additional cleanup.

Site Background

The southern half of the Site building was occupied by Perc-Serv, Inc., a wholesale laundry and dry cleaning supply business, from 1978 to 1983. In 1985, the Site building was renovated for multi-tenant retail, office, and warehouse uses, which are its current uses. Past operations at the Perc-Serv facility resulted in spills of the solvent PCE (also known as tetrachloroethylene) at the Site, which have polluted soil, groundwater, and soil vapor (the air space between the individual soil grains) on the Site. Soil and groundwater cleanup was conducted from 2009 to 2015 by adding chemical and biological treatments; however, the cleanup was not fully effective.

Previous investigations at the Site since March 2000 have identified the highest levels of PCE in soil, groundwater, and soil vapor in the parking lot near the loading dock on Ninth Street (see figure). PCE in soil vapor can move into the indoor air of Site structure and has been measured in indoor air in all tenant suites at the Site. The Regional Water Board has required that indoor air quality be evaluated in all tenant suites on a monthly basis and as needed to test effectiveness of air purifiers. Air purifiers have been placed in many of the tenant suites and are being evaluated as a temporary action to improve indoor air quality. A fact sheet describing what PCE is, how one may be exposed to it and the potential health risks of exposure is attached.

Indoor Air Quality Results

Indoor air sampling was conducted in available building suites. The most recent sampling was conducted in late August in all occupied building suites. Results are shown on the attached figure. PCE was found within the indoor air in all of the building suites ranging from (1.6 micrograms of PCE per cubic meter of air (ug/m^3 to 340 ug/m^3) during July and August 2021. The results of these samples were compared to the Regional Water Board's Environmental Screening Levels (commonly referred to as ESLs).

The ESLs are a set of chemical specific tables used by our agency to evaluate potential risks to human health and the environment. The ESL for PCE long-term exposure in indoor air is 2 micrograms of PCE per cubic meter of air (ug/m^3) and applies to both children and adults. The ESL of 2 ug/m^3 PCE is a conservative value set at an excess lifetime cancer risk of one-in-a-million, if exposed for eight hours per day for a period of 20 years. PCE concentrations in most tenant suites were above the ESL with the highest concentration of 340 ug/m^3 PCE representing an excess lifetime cancer risk of one-in-ten-thousand. Since the levels of PCE measured in most building suites are above the ESL, the Regional Water is requiring cleanup action to be taken to reduce this long-term health risk.

See the attached fact sheet, for more information about the health risks associated with this chemical.

Next Steps for Cleanup

As an interim measure the Regional Water Board has required the property owner to operate air purifiers at the Site. Air purifiers have been placed in some tenant spaces, and it is important that these operate 24/7. If possible, any doors or windows to the outside air should remain open during business hours to increase ventilation. Additionally, Regional Water Board staff are working with the property owner to conduct additional cleanup at the Site. Cleanup activities will include soil excavation and groundwater remediation in the Ninth Street parking lot and in Ninth Street. This work is expected to occur late 2021.

Long-term a remediation system will be installed at the Site under the building's concrete floor slab. This remediation system will create a vacuum beneath the building and will both remove the PCE soil vapors and prevent them from entering the buildings. Once the system is running, the indoor air will again be sampled to make sure the system is working properly. This remediation system is expected to be installed late 2021.

The work described above will be conducted in a manner as to minimize disturbances to occupants. There will be some noise and it may be necessary to enter your unit from time to time for sampling or other activities. Should you have any questions, please feel free to contact our Regional Water Board staff listed below.

Project Updates/Additional Information

As the project moves forward, we will provide periodic updates. We will also provide notices of upcoming significant work, or if entry into your suite is necessary. All case documents are posted on our online database, GeoTracker. To find them, go to the GeoTracker case webpage, or

http://geotracker.waterboards.ca.gov and search on the address or the file number (01S0560).

For more information about health risks, contact:
Nicole Fry, PhD
San Francisco Bay Regional Water Quality Control Board
510-622-5047 Nicole.Fry@waterboards.ca.gov

For more information about cleanup and air testing schedule, contact:
David Tanouye
San Francisco Bay Regional Water Quality Control Board
510-622-2360 David.Tanouye@waterboards.ca.gov

Attached: Site Figure and PCE Fact Sheet

PCE Fact Sheet

What is PCE?

PCE is a chemical that is mainly used as a cleaning product. It was one of the most common solvents for dry cleaning clothes. PCE is also found in some common household products such as stain removers and metal cleaning products. PCE vapors can be released into the air, and the vapors have an ether-like smell. However, in most cases you will not smell the vapors. The scientific name for PCE is tetrachloroethylene.

How can I be exposed to PCE?

PCE spilled in the environment can be found in water, air, or soil. Concerns for exposure to PCE in each area of the environment are listed below:

- **Water** – No exposure to PCE in tap water is expected at this property. The tap water in this building is provided by public water supplies. These water supplies are tested for PCE and other chemicals to ensure safety.
- **Air** – PCE was found in the indoor air of this building at levels above long-term health safety levels in our ESLs. PCE in the ground releases vapors. Those vapors have traveled through the floor into this building. All buildings have air circulation, usually to prevent mold and odors. This allows indoor air to be replaced with outdoor air. This process will remove some of the PCE from the building. The design of the building will affect how much PCE vapor gets into the building and how fast it is removed from the building. In this building, vapors have built up to levels that are above the ESLs.
- **Soil** – No exposure to PCE in soil is expected. The PCE-impacted area is almost completely paved, PCE in shallow soil will be excavated and removed from the site in the near future.

What are the health effects of PCE?

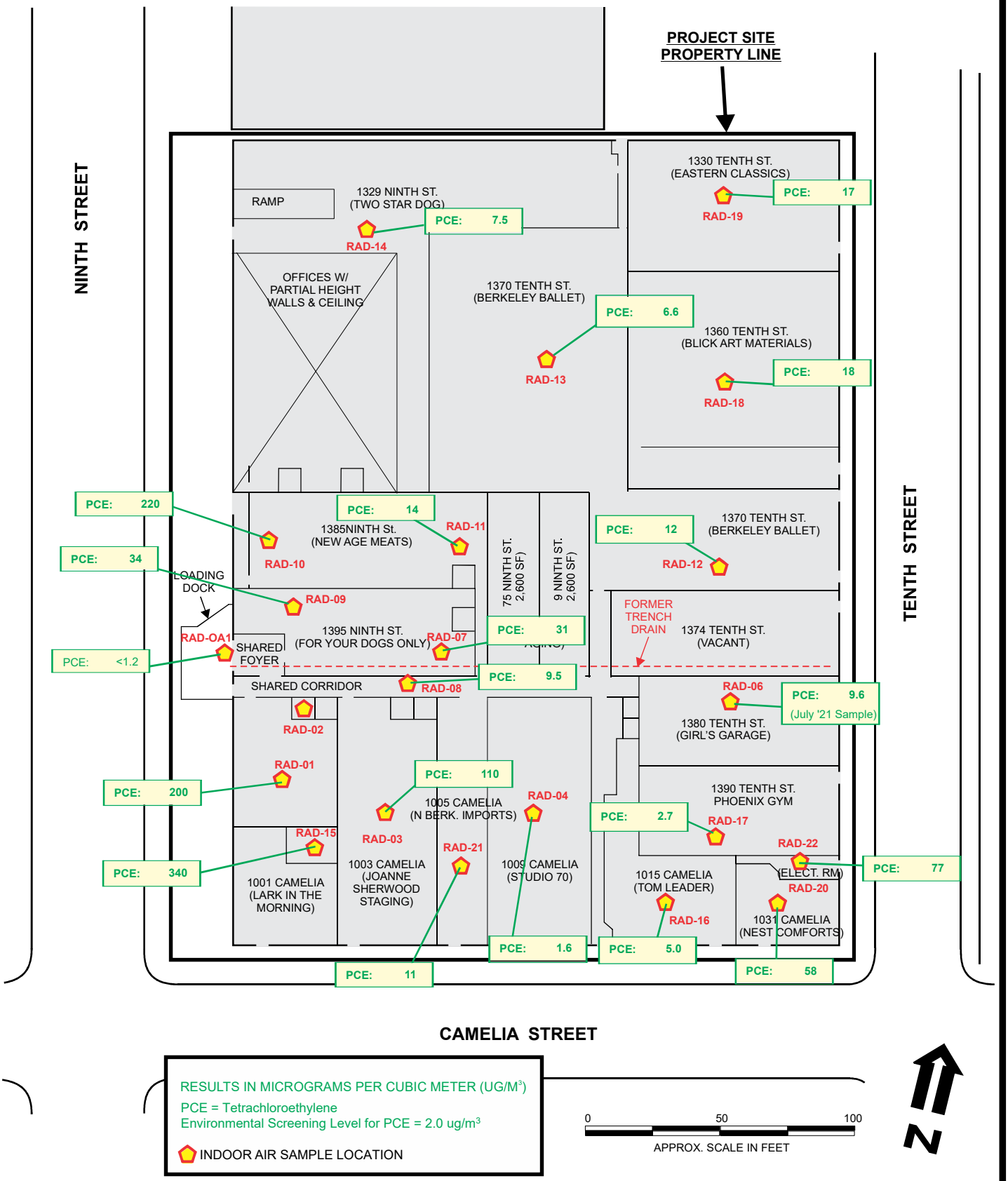
Levels of PCE found at this property are low enough that short exposures will not result in immediate health effects. However, many years of exposure to low levels of PCE can increase a person's risk of developing health effects in the future. There are two main types of health effects that may occur from long-term exposure to low levels of PCE:

1. A person's risk of getting cancer could slightly increase. Studies in humans suggest that long-term PCE exposure might lead to a higher risk of bladder cancer, non-Hodgkin lymphoma and multiple myeloma.

2. Parts of the body could be damaged:

    a. Nervous System - This could cause changes in a person's mood, memory, attention, reaction time, or vision.
    b. Kidneys
    c. Liver

If you are concerned that PCE exposure has caused you to experience any of these health effects, discuss these concerns with your medical doctor.



DESIGNED BY:	CHECKED BY:	**INDOOR AIR VOC RESULTS, 8/24-8/25/2021**	DATE: 08/31/2021	FIGURE: **2**
DRAWN BY: JG	SCALE:			
PROJECT NO:		1001 CAMELIA STREET BERKELEY, CALIFORNIA		