Fact Sheet on Activities at Former Four Seasons Cleaners

13778 Doolittle Drive, San Leandro, CA
Alameda County ACDEH File No. RO0003155,
Geotracker Global Id No. T10000006425

ALAMEDA COUNTY
HEALTH CARE SERVICES AGENCY
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This fact sheet is being provided to describe site background, past work to investigate site contamination, next steps, the oversight process for the site, and how you can obtain more information.

Summary

The Alameda County Department of Environmental Health (ACDEH) has requested this fact sheet be issued to inform you of recently completed investigations and activities that are currently underway at the Four Seasons Cleaners property (site), located at 13778 Doolittle Drive in San Leandro, California (Figure 1).

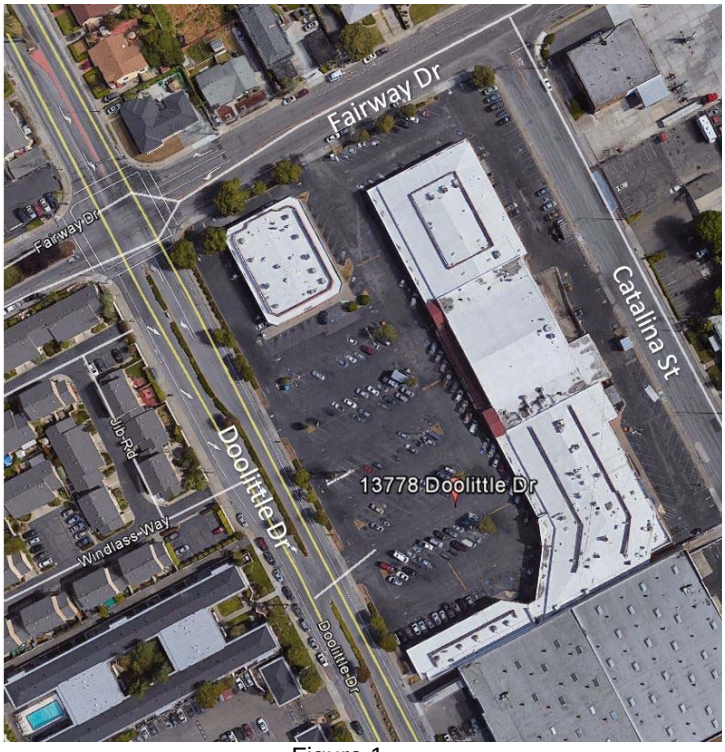

Figure 1

The purpose of the prior investigation work was to gather information on the nature and extent of releases of dry cleaning compounds to indoor air, soil, and groundwater to the extent needed to define potential residual soil source areas and the potential health risks posed to indoor air quality and groundwater by the released compounds. Activities are underway to mitigate risks to indoor air quality and to take steps to help to limit migration from soil to groundwater in some source areas to the extent practicable. This fact sheet summarizes investigation results and the activities proposed and taken to mitigate health risks to indoor air quality and help to limit migration from soil to groundwater. It also includes information contacts and a glossary of certain terms.

Background

The Marina Faire Shopping Center is located in a commercial area of San Leandro, California at the southeast corner of Fairway and Doolittle Drives and contains the former Four Seasons Cleaners and a number of other operating businesses. The current shopping center owner, now called Marina Faire, LP, acquired the shopping center in July 1978. Based on available records, it appears that the northern portion of the shopping center was constructed in 1966 and the former Four Seasons Cleaners began operations that same year. The former Four Seasons Cleaners was a small retail dry cleaner for 30 years or more that ceased operations and vacated the premises in late 2015. At that time the site housed a 55-gallon chemical capacity closed-loop dry cleaning machine, which was bolted to the floor. Prior to 2001, the dry cleaning operation utilized tetrachloroethene (PCE) as the chlorinated solvent cleaning agent, a volatile organic compound (VOC).

PCE is the most commonly used dry cleaning compound in California and throughout the US. PCE also may have been disposed of down the sanitary sewer. When PCE is released into the environment, it can break down into other VOCs. PCE and its breakdown products, including trichloroethene (TCE) are all VOCs.

Environmental Investigation Activities

The current shopping center owner, which did not cause the problem, began investigating the situation in 2014. These investigations have included soil, soil vapor, indoor air, and groundwater sampling to assess the type and extent of contamination at the site.

These investigations identified that VOCs, primarily PCE, were likely spilled or leaked during past dry cleaning operations, perhaps from the time the dry cleaner first began operating. PCE has been detected in the subsurface in the vicinity of the former dry cleaning machinery and a nearby floor drain.

VOCs, primarily PCE and its breakdown products, have been detected in shallow soil, soil vapor, and groundwater directly underlying the former PCE use and storage areas. The data indicate that the highest concentrations of PCE and TCE in soil vapor are located beneath the former dry cleaning operation suite in the vicinity of a former floor drain. PCE has also been detected in groundwater in the parking lot in front of the facility to the west and southwest.

PCE has been detected in soil, soil vapor, indoor air, and groundwater at a few locations at concentrations that exceed applicable regulatory agency screening levels. The presence of these chemicals at concentrations exceeding regulatory screening levels does not indicate that adverse impacts to human health or the environment are necessarily occurring, but rather indicate that a potential for adverse risk may exist and that additional evaluations and/or the implementation of conservative preventative measures are warranted.

Four Seasons Cleaners vacated the premises in late 2015. Indoor air samples have been collected from inside the

former Four Seasons Cleaners and adjacent restaurants (Suites 13799 and 13780 and the adjacent dentist office). The only samples containing detectable levels of PCE in indoor air were collected within the former dry cleaning facility and the adjoining dentist office. Because these PCE concentrations exceeded applicable regulatory agency screening levels, the current shopping center owner retained a licensed contractor to increase air exchange rates in the dental office and is currently arranging to take additional steps to investigate and take additional mitigation measures, as appropriate.

Next Steps / Interim Remedial Measures

The current shopping center owner has already taken or is arranging to take the following interim remedial measures which will be conducted with County or City approval: (1) Decontaminate the dry cleaning unit and legally close the permitted hazardous material storage areas pursuant to federal, state, and local requirements including removal of certain areas of the slab and certain sewer lines previously used for storing/handling of unused, or discharge of spent PCE and PCE laden wastes. (2) Excavate, dispose, and replace soil in documented source areas to the extent practicable between the depths of 2 to 7 feet below grade surface. (3) Install a horizontal vapor extraction well network to test the feasibility of soil vapor extraction to reduce VOC concentrations in soil beneath the slab. (4) Install a sub- slab piping network in the excavation area to test and potentially install a sub-slab depressurization system to mitigate indoor air concerns (testing will include determining the area of influence of the sub-slab depressurization system). (5) Sample VOCs in groundwater beneath and adjacent to the former dry cleaner. (6) Sample indoor air and sub-slab vapor in suites adjacent to and near the former cleaner and, based on the results of the indoor air samples, implement interim mitigation measures as necessary for protection of human health. (7) Identify and map the location of subsurface utilities, including the sanitary sewer system, within the shopping center. (8) Conduct vapor sampling along the sewer alignment and other utilities as appropriate. During the work, safeguards will be taken to ensure compliance with OSHA rules that serve to ensure the protection of workers and building tenants.

How to Get More Information

There are several ways that interested parties will be informed of future work. First, information repositories are being established where reports, data, work plans, and other materials can be viewed. One is the Alameda County Department of Environmental Health website at http://www.acgov.org/aceh/index.htm, where the electronic files for the case are available on-line. A second location electronic files are available is on the State website known as Geotracker at http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000006425

A third way interested parties can obtain information is to contact the site representatives / spokespersons listed below.

Finally, additional fact sheets will be sent at appropriate intervals.

A more detailed map of the area and a Glossary of Terms appear on page 3.

For More Information

Mark Detterman, Senior Hazardous Materials Specialist, Alameda County Department of Environmental Health 510-567-6876, mark.detterman@acgov.org
Vera Nelson, PE, or John DeWitt, PE, EKI Environment & Water, Inc. 650-292-9100, vhnelson@ekiconsult.com or jdewitt@ekiconsult.com

Glossary of Terms

Tetrachloroethene (PCE) is a colorless organic liquid with a mild, chloroform-like odor. The greatest use of PCE is in the textile industry, and as a component of aerosol dry-cleaning products. It is a known human carcinogen.

Trichloroethene (TCE) –According to the US EPA, TCE is a VOC that is used as a solvent for metals degreasing, as an intermediate for refrigerant manufacture and as a spotting agent in dry cleaning facilities. It is a clear, colorless liquid that has a sweet odor and evaporates quickly. Exposure to TCE raises a number of health effects concerns, including for effects in the developing fetus from both acute and chronic exposure. TCE is carcinogenic to humans by all routes of exposure. Single (acute) or short-term exposure can potentially affect the developing fetus. In certain circumstances in the environment, PCE can naturally break down into TCE.

Soil-vapor—Soil-vapor refers to the air that is present in the open spaces between soil particles between the ground surface and the water table. It includes air (primarily oxygen and nitrogen, like above ground), water vapor, and occasionally pollutants.

Volatile organic compounds (VOCs)—VOCs are organic liquids, including many common solvents that readily evaporate at temperatures normally found at ground surface and at shallow depths. Many VOCs are known human carcinogens. Examples of VOC usage include dry cleaning solvent, carburetor cleaner, brake cleaner, and paint solvents. If VOCs are chlorinated as is the case for PCE, they are called halogenated VOCs or HVOCs.

Interim remedial measures (IRMs) – these are active steps to mitigate significant detections of VOCs that are devised and implemented prior to preparing a formal remedial action plan. They typically involve excavation and/or soil vapor extraction and serve the purpose of cleaning up detections of VOCs in the near surface that may pose a vapor intrusion risk or removing free phase compounds floating on the water table.

Soil vapor extraction (SVE) – a remediation process under which VOCs in soil vapor are pulled from the ground using a vacuum pump that is connected to horizontal or vertical vapor extraction wells typically 4 inches in diameter that have screened intervals where the VOCs have been detected in the subsurface.