

**REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

**EXECUTIVE OFFICER SUMMARY REPORT
JUNE 9, 2021**

ITEM NO. 10

SUBJECT

Informational Item: The Aztec Path to Conquering PCE – An SDSU-Water Board Partnership to Identify Historical Dry Cleaner Sites. *(Tom Alo)*

STAFF RECOMMENDATION

This is an informational item and the Board will not take an action.

KEY ISSUE

Many historical dry cleaner facilities have intentionally dumped or accidentally spilled tetrachloroethylene (PCE), a solvent used to clean and remove stains from clothes, into the environment. PCE is a chemical that is persistent in the environment, highly mobile, and highly volatile. Accordingly, historical dry cleaner facilities that have had release(s) of PCE pose a risk not only to groundwater resources, but to human health through the vapor intrusion (VI) pathway. These releases may occur within disadvantaged communities (DACs), where environmental justice is a concern, and also in the vicinity of buildings occupied by people that are sensitive to chemical exposure (e.g., residential areas and schools). Vapors present in soil can migrate into a building, such as an overlying office building or a nearby home, through the plumbing system, as well as through gaps and cracks in the foundation. Occupants within the building then have the potential to be exposed to PCE by inhaling the affected air. Further, PCE can break down to trichloroethene (TCE), which is a chemical that, when present in indoor air, requires an immediate action to avoid/minimize health risks to building occupants from inhalation (e.g., increasing outdoor air circulation). The U.S. Environmental Protection Agency classifies PCE and TCE as chemicals that can cause serious health issues, including cancer.

Identifying the locations of these historical dry cleaner facilities is a key goal to protect groundwater resources and human health. To carry out this goal, the Board's Site Cleanup Program (SCP) staff teamed up with San Diego State University's (SDSU) Sage Project. SDSU's Sage Project is a member of the Educational Partnerships for Innovation in Communities (EPIC), which is a growing network of educational institutions, partnering existing course work and university students with the needs of local governments and communities, to improve quality of life.

PRACTICAL VISION

Chapter 4 of the San Diego Water Board Practical Vision, *Proactive Public Outreach and Communication*, focuses on implementing the core values of leadership, communication, and transparency. This item provides an opportunity for the Board members and the public to learn about the partnership between the Board's SCP staff and SDSU to identify historical dry cleaner sites in DACs and near sensitive receptors, such as schools, daycares, and elderly care facilities.

DISCUSSION

The purpose of this item is to inform the Board and the public of the successful efforts to identify historical dry cleaner facilities in San Diego County through the partnership developed between the Board's SCP staff and SDSU's Sage Project. Because this agency has identified DACs as a priority through environmental justice efforts, historical dry cleaner sites within DACs have specifically been targeted through this effort. Further, nearby sensitive receptors, such as schools, daycares, elderly care facilities, and single-family and multi-family residential have also been identified in SDSU's work because these receptors have high risks of experiencing serious health issues due to chemical exposure.

To identify these historical dry cleaner facilities, students from SDSU's Environmental Engineering 558 class conducted internet searches and pored through various paper documents such as San Diego Water Board files and historical city directories. These students also attempted to identify parties that owned the historical dry cleaner facilities and provided recommendations on different remediation technologies to address PCE-impacted soil and groundwater due to unauthorized discharges. Students from SDSU's Geography 584 class compiled the historical dry cleaner locations into a Geographic Information System (GIS) layer, which was overlaid onto a map of DACs and sensitive receptor areas.

The work completed by SDSU's students will allow Site Cleanup Program staff to (1) identify and prioritize high-risk dry cleaner sites within DACs and nearby sensitive receptor areas; (2) issue Investigative Orders to responsible parties directing them to conduct soil, soil gas, and groundwater investigations; and (3) issue Cleanup and Abatement Orders to responsible parties directing them to clean up wastes in a manner that protects groundwater resources and human health. Because of the success of this project, other Regional Boards and State agencies can use this project as a model to develop partnerships with local colleges to identify historical dry cleaner facilities and move forward with identifying and remediating previously unknown releases of waste that disproportionately affect vulnerable communities.

LEGAL CONCERNS

None.

PUBLIC NOTICE

The agenda notice for today's meeting was posted on the San Diego Water Board's website and sent to subscribers to the email list for Board meetings. This satisfies the Bagley-Keene Open Meeting Act requirements to publish the meeting notice and agenda.

SUPPORTING DOCUMENTS

None.