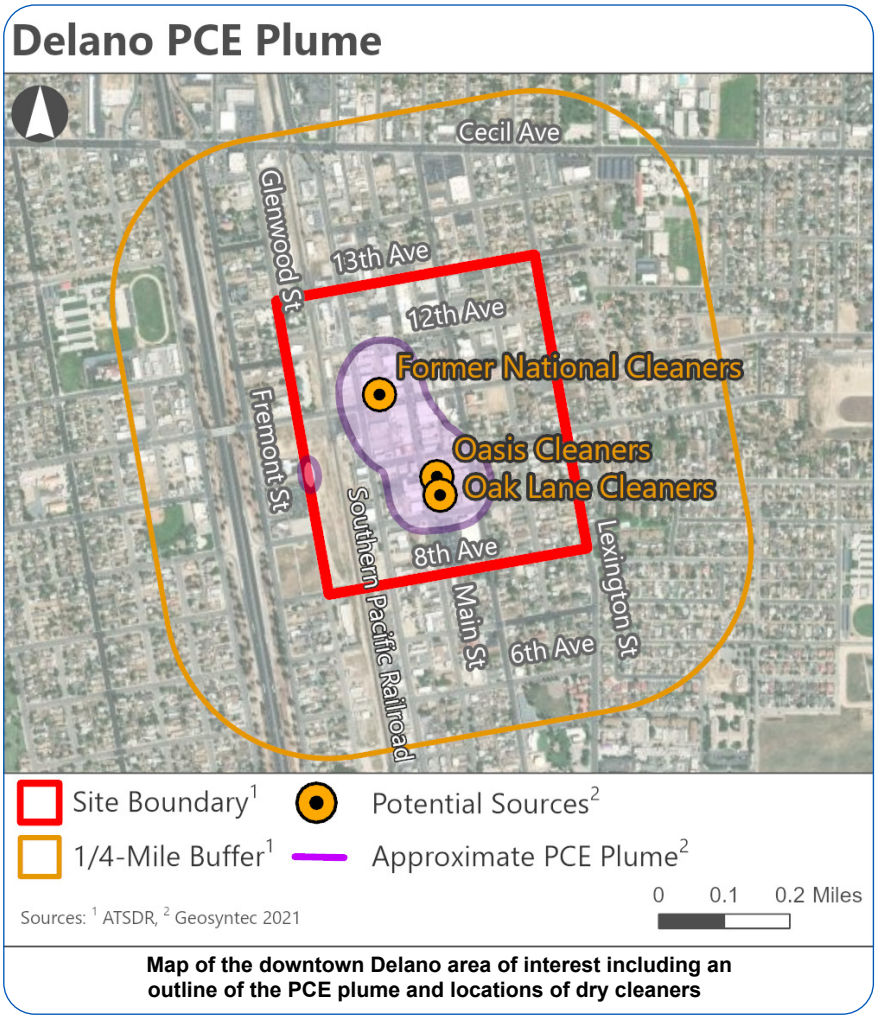
Indoor Air Exposures in Buildings Near the Delano PCE Plume Site - Delano, Kern County, CA | January 2026

Summary of ATSDR's Health Consultation Report

Chemicals have spread in groundwater and soil in a plume under many buildings in a 12-block area of downtown Delano. The California Department of Toxic Substances Control (DTSC) is cleaning up the contamination and reducing exposures. DTSC and Delano community organizations asked the Agency for Toxic Substances and Disease Registry (ATSDR) to assess health risks. ATSDR reviewed soil gas, outdoor air, and indoor air data DTSC collected between 2012 and 2024.

ATSDR assessed whether chemicals in indoor air in downtown Delano buildings could harm the health of workers or residents. This fact sheet describes ATSDR's findings about possible harm from the indoor air exposures. Overall, ATSDR needs more data to understand all the health risks and sources for exposure.

The full report is available at: https://wwwn.cdc.gov/TSP/PHA/PHAListing.aspx?StateIndicator=CA.



Map of the downtown Delano area of interest including an outline of the PCE plume and locations of dry cleaners

The Bottom Line

- **In the Quality Appliances building** (Building 36), breathing the air for many years may increase lifetime cancer risks for workers.
- **In one home** (Building 17), breathing the air for many years may increase lifetime cancer risks for residents.
- **At Oak Lane Cleaners** (Building 22), breathing indoor air is not expected to harm workers at this time. There may be a health risk in the future.
- **In four homes and 27 commercial buildings,** breathing indoor air is not expected to harm people's health.
- **ATSDR needs more data** to determine whether breathing air in 317 downtown buildings could harm people's health.

Read on below for additional details.

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What did ATSDR find?

1. **In Building 36 (Quality Appliances), breathing chloroform for 20 years or more may increase lifetime cancer risks among full-time workers.**
   - **Chemicals assessed:** Indoor air samples from Building 36 showed chloroform exceeded screening levels. This prompted ATSDR to estimate cancer risks for workers.
   - **Uncertainties:** Only two indoor air samples were collected, one in 2015 and one in 2016. Chloroform levels were much higher in 2016 compared to 2015 and could have continued to change. ATSDR does not know where the chloroform is coming from.
2. **In one home (Building 17), breathing chloroform and 1,2 dichloroethane in indoor air may increase lifetime cancer risk. However, the risk increased only slightly.**
   - **Chemicals assessed:** Indoor air samples from Building 17 showed chloroform and 1,2-dichloroethane exceeded screening levels. This prompted ATSDR to estimate cancer risks for children and adults. Chloroform likely comes from an indoor source in Building 17.
   - **Uncertainties:** Only two indoor air samples were collected, one in 2015 and one in 2016. Exposure levels could have changed since 2016. ATSDR does not know the source of 1,2-dichloroethane.
3. **In Building 22 (Oak Lane Cleaners), breathing various chemicals in indoor air is not expected to harm the health of workers. However, the levels of trichloroethylene (TCE) could become a concern in the future.**
   - **Chemicals assessed:** The levels of harmful chemicals in the air at Oak Lane Cleaners are currently below levels that could cause health problems. Indoor air was sampled seven times. The most recent measurement of TCE in the air (November 2023) was much higher than in 2018. If TCE levels keep rising, it could become a health concern in the future.
   - **Uncertainties:** It is unclear where the chemicals in the air are coming from.

ATSDR assigned a building identification number to each building evaluated in the report. ATSDR did not identify residential building addresses to protect privacy.

Commercial building numbers are matched with addresses and business names in Appendix B Table 11-19 of the report.

Community members can contact ATSDR's Region 9 office to learn more about indoor air quality in specific buildings.

4. **Breathing various chemicals in indoor air in 31 buildings is not expected to harm people's health: buildings 2, 3-6, 10, 11, 15, 23-25, 27-30, 32, 33, 41, 44, 46, 50, 52, 56-60, 64, 354-356.**
   - **Chemicals assessed:** The levels of harmful chemicals in 4 homes and 27 commercial buildings are below levels of health concern. Recent testing (2023–2024) showed levels of perchloroethylene (PCE) in indoor air are much lower than in previous years. These results indicate the cleanup efforts are working.
5. **ATSDR doesn't have enough information to determine if breathing chemicals in indoor air in 317 downtown Delano buildings could harm people's health.**
   - ATSDR could not assess health risks for 317 buildings in the area of interest because there is not enough indoor air data available.
   - For 284 of the buildings, there are no indoor air sampling data. Lack of data makes it impossible to evaluate the potential health risks from vapor intrusion.
   - For the remaining 33 buildings, some indoor air data exists, but it does not include seasonal variations. This data is important for understanding indoor air quality changes throughout the year.

Box 1: Improving Indoor Air Quality

The ATSDR suggests owners, workers, and residents in downtown Delano take steps to make the air inside their homes and businesses cleaner and healthier.

- **Reduce your use of harmful chemicals:** Remove or use fewer products that release harmful chemicals into the air. For example, limit your use of commercial grade cleansers and degreasers. Follow label instructions carefully. Other common sources of indoor air pollution include gas appliances, tobacco smoke, furniture, and hobby supplies.
- **Increase fresh air:** When the outdoor air quality is good, improve ventilation by letting more outdoor air into your building. You can open windows, use fans, or run air conditioning with the vent control open.
- **Use air cleaners:** Consider using an air cleaner that helps filter out dust, smoke, and other pollutants. For tips on choosing the right air cleaner, check out this guide from the EPA: https://www.epa.gov/indoor-air-quality-iaq/guide-air-cleaners-home#tips.

Next steps

ATSDR will provide additional technical assistance to DTSC, if asked. ATSDR will communicate with the owners of buildings 36, 17, and 22 about indoor air contaminants in those buildings and strategies to improve indoor air quality. ATSDR will present the findings of this report to community members.

Summary of recommendations for building owners, businesses, developers, workers, and residents

- **Building owners and businesses** like Quality Appliances (building 36) and Oak Lane Cleaners (building 22) should take steps to lower harmful chemical levels, such as chloroform and TCE, to improve air quality (see Box 1). Quality Appliances should inform workers about potential cancer risks from indoor air. All building owners in downtown Delano are encouraged to improve indoor air quality for public health (see Box 1) and allow DTSC access to conduct sampling.
- **Residents** of building 17 should lower chloroform and 1,2-dichloroethane levels and improve indoor air quality (see Box 1).
- **Building owners and developers** should design new buildings or modifications in affected areas to prevent vapor intrusion, ensuring safer indoor environments.
- **Workers and residents** who are worried about cancer risks from indoor air exposures at building 36, building 17, or elsewhere should discuss the issue with their doctor. Consider sharing this factsheet with your doctor.

Summary of recommendations for state and local government

- **Continue cleanup efforts:** The Department of Toxic Substances Control (DTSC) should keep cleaning up the PCE plume using soil vapor extraction systems to reduce harmful chemicals in the area.
- **Conduct more environmental sampling:** ATSDR encourages DTSC to conduct more environmental sampling to better understand the PCE plume's boundaries, monitor indoor air quality, and assess potential health risks from vapor intrusion. This includes regular indoor air sampling during different seasons and collecting soil gas samples from below building foundations.
- **Continue collaborating with City officials and developers:** The City of Delano should keep DTSC informed about any construction plans near the PCE plume. DTSC should work closely with property owners and developers to ensure new buildings are designed to prevent vapor intrusion.

Where to get more information

Contact ATSDR Region 9 with questions about the report. You can find contact information

- by visiting https://www.atsdr.cdc.gov/regional-offices/index.html or
- by calling 800-CDC-INFO (800-232-4636)

About ATSDR

The Agency for Toxic Substances and Disease Registry (ATSDR) is a federal public health agency of the U.S. Department of Health and Human Services. ATSDR works with other agencies, tribal, state, and local governments to investigate possible health risks in communities where people could contact dangerous chemicals. For more information, visit our website at https://www.atsdr.cdc.gov/.