



Santa Ana Regional Water Quality Control Board and Ford Motor Company

Community Fact Sheet No. 14

Former Ford Aeronutronics Facility – Newport Beach, CA

January 2025

Why Am I Receiving This?

The Santa Ana Regional Water Quality Control Board (Santa Ana Water Board) and Ford Motor Company (Ford) are distributing this fact sheet to provide information on Ford's ongoing environmental activities at the former Ford Aeronutronics property at 1000 Ford Road, Newport Beach (Site). The Santa Ana Water Board is the lead state agency overseeing environmental investigation and remediation activities. You are receiving this fact sheet because you reside, work, or own property within or near the Site boundaries.

Frequently Asked Questions

What is vapor intrusion?

Vapor intrusion is a process where chemicals in the vapor phase can travel below ground in soil gas and enter a building through cracks and other openings in a building's foundation and potentially impact the quality of indoor air.

What are trichloroethene (TCE) and tetrachloroethene (PCE)?

TCE is a chemical compound that was commonly used as an industrial solvent and metal degreaser. PCE is a chemical compound commonly used in clothes dry cleaning and metal degreasing. TCE and PCE are among a group of chemicals known as volatile organic compounds (VOCs) and are also considered chlorinated solvents, which evaporate easily, are highly stable, and non-flammable at room temperature. Due to their widespread use, low levels of TCE and PCE are common in urban areas.

Is my drinking water safe?

Your drinking water is safe to drink. Water is provided by the City of Newport Beach Public Works and meets State and Federal standards for quality.

Site History and Investigation/Remediation Overview

Ford conducted aerospace and electronic research, development and production at the facility from 1957 to 1993 (see Figure 1). Ford has been working voluntarily under regulatory oversight since the early 1990s to address environmental impacts associated with these operations. VOCs associated with past operations have been found in soil, soil gas (vapors found beneath the surface) and groundwater both on- and off-Site. On-Site assessment and remediation activities were completed in 1997 and off-Site investigations are ongoing under the oversight of the Santa Ana Water Board. Recent environmental work has included:

- Determining the extent of volatile organic compounds (VOCs), specifically trichloroethene (TCE) and tetrachloroethene (PCE), in groundwater and soil gas and how this is impacting indoor air within some buildings in the vicinity of the Site.

- Operation and maintenance of two soil vapor extraction (SVE) systems in the Bayridge Park and Belcourt Terrace communities to help remove VOC contamination since August 7, 2024.
- Ongoing monitoring and maintenance of 14 sub-slab depressurization (SSD) systems in select homes with impacted indoor air quality in the Bayridge Park community to temporarily improve the quality of indoor air at those homes while the SVE systems work to remove contamination long-term.
- Installing additional soil vapor probes and/or groundwater monitoring wells in the southern portion of the Newport North Apartment Homes and Corsica Villas to support continued monitoring of VOC contamination in groundwater and soil gas. Monitoring results will be used to evaluate the plumes to determine if they are stable or moving and whether concentrations are reducing or increasing over time.

Additional details about current and past activities can be found at GeoTracker, the State Water Boards' data management system, at https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SL188023848 or Ford's webpage for the Site at www.FordNBFacts.com.

What is the Current Vapor Intrusion Investigation Status?

- Much of the soil gas plume has been defined and will continue to be monitored two to three times a year at 438 subsurface sampling locations. The soil gas data collected aids our understanding of the soil gas plume stability and determines if concentrations at each sampling location are stable, decreasing, or increasing, which helps the Santa Ana Water Board determine the next steps.
- As of December 31, 2024, approximately 390 residential properties and 3 commercial properties have had their indoor air sampled. Low levels of PCE and TCE have been detected above screening levels in the indoor air of 153 homes. Air-purifying units or SSD systems have been offered to 33 of those properties where data suggested vapor intrusion was occurring based on property-specific evaluations. The remaining properties with indoor air exceedances appear to have indoor sources of VOCs (e.g., cleaning products, dry-cleaned clothes, scented candles, etc.)
- Additional soil gas and indoor air data will be used to prepare and submit addenda to the previously submitted community-specific Human Health Risk Assessment (HHRA) reports to evaluate properties that were not included in prior HHRA reports and to document changes in previous risk calculations, as warranted. All HHRA reports, including addenda, are reviewed by a toxicologist from the Santa Ana Water Board's sister agency, the Office of Environmental Health Hazard Assessment (OEHHA). For properties that have already been evaluated in a community-specific HHRA or in a subsequent addendum, Ford will continue sampling soil gas and indoor air to ensure conditions remain protective of human health. Sampling frequency for each property will be either every six months, annually, every two years, or every five years, based on soil gas concentrations.

What is the Status of the Remediation and Mitigation Activities in Bayridge Park and Belcourt Terrace?

The Santa Ana Water Board has approved the Final Feasibility Study/Remedial Action Plans (FS/RAPs) and Remedial Design and Implementation Plans (RDIPs) for Bayridge Park and Belcourt Terrace where remediation and mitigation activities are underway. The FS/RAPs evaluated different methods to address groundwater, soil gas, and indoor air impacts based on the HHRAs and recommended the following remedy to address conditions in these communities:

- Ongoing monitoring of groundwater and/or soil gas to determine if concentrations are naturally decreasing over time (i.e., monitored natural attenuation).
- Installing and operating a soil vapor extraction (SVE) system to remove VOCs in soil gas.
- Installing and operating SSD systems at properties where indoor air remains impacted by VOCs due to vapor intrusion.
- Ongoing monitoring of indoor air to ensure the effectiveness of the proposed remedy at providing long-term protection of human health (i.e., long-term monitoring).

The approved RDIPs provide detailed information on the design and implementation of the mitigation and remediation measures in those communities to support the following work that has recently been completed.

Soil Vapor Extraction Systems

On August 7, 2024, Ford began operating two Soil Vapor Extraction systems (SVE systems) in the Bayridge Park and Belcourt Terrace communities. The SVE systems use a vacuum to extract soil gas present below ground and draw it above ground into the treatment building, where this vapor is treated to remove the VOCs before being safely released into the atmosphere. Preliminary performance evaluations indicate the SVE systems are operating as designed and are effectively removing contamination from below the ground.



Above: Photo of the SVE System installed at Belcourt Terrace.

Ford will continue performing SVE system evaluations during the first quarter of 2025. This data will be used to determine if the SVE systems should continue running 24 hours a day or if they should be turned on and off (pulsed) as needed to maximize efficiency, in accordance with approved permits from the City of Newport Beach and the South Coast Air Quality Management District. The data will also be reviewed to determine if operating the SVE systems for one year will be sufficient to remove enough VOC contamination to allow for the long-term protection of human health or if the SVE systems will need to operate for a longer period of time. The Santa Ana Water Board will determine whether to cease or continue operations after one year and whether the systems should continue to operate 24 hours a day or if they should be pulsed. These determinations will be shared with the residents of each community and be summarized in the next community fact sheet.

Sub-Slab Depressurization Systems

Fourteen sub-slab depressurization (SSD systems) are operating at homes within the Bayridge Park community. These SSD systems have replaced the air-purifying units previously operating in homes and function by creating a pressure difference between the home's sub-slab (area under the building foundation) and the inside of the building to prevent vapor intrusion. SSD systems are a mitigation tool, meaning they lessen the effects of vapor intrusion, while the SVE systems are a remediation, or clean up, tool that will address the sources of contamination. Preliminary performance evaluations indicate the SSD system is effectively creating a pressure difference between the sub-slab and the inside of the building. Ford plans to remove the SSD systems after the SVE systems have effectively addressed the contamination and there is no longer a risk of vapor intrusion.



Above: Photo of an SSD System installed at Bayridge Park.

Ford continues to monitor the SSD systems regularly and make adjustments, as needed. The Water Board reviews Ford's monitoring data and associated adjustments to ensure the SSD systems are operating properly and effectively.

Long-Term Monitoring

While the SVE and SSD systems are operating and after the eventual removal of these systems, Ford will continue to monitor soil gas, groundwater, and indoor air long-term to ensure the selected remedies are protective of the health of residents, the larger community, and the environment.

Remedial/Mitigation Strategies for the Other Communities in the Investigation Area

As requested by the Santa Ana Water Board, Ford has prepared community-specific Feasibility Studies (FS), or Feasibility Studies/Remedial Action Plans (FS/RAP) based on findings of their HHRA report and the Santa Ana Water Board's review of the HHRA's for other communities in the investigation area, including One Ford Road, Newport North Apartment Homes, Corsica Villas, Sea Island, and Belcourt Hills. Proposed remedies may include one or a combination of the following short and long-term options:

- Ongoing monitoring of groundwater and/or soil gas to determine if concentrations are naturally decreasing over time (i.e., monitored natural attenuation).
- Installing and operating an SVE system to remove VOCs in soil gas.
- Conducting in-situ groundwater cleanup to reduce VOCs in groundwater.
- Installing and operating SSD systems at properties where indoor air remains impacted by VOCs due to vapor intrusion.
- Ongoing monitoring of indoor air to ensure the effectiveness of the proposed remedy at providing long-term protection of human health (i.e., long-term monitoring).

Additional details on FSs and RAPs can be found on past fact sheets and past public meeting recordings listed on GeoTracker or Ford's Project webpage listed below.

The Santa Ana Water Board has approved the Final FS/RAPs for One Ford Road and the Final FSs for Corsica Villas, Sea Island, Belcourt Hill, and the southern portion of the Newport North Apartment Homes. The Santa Ana Water Board has also approved RDIPs for the One Ford Road community, Corsica Villas Townhomes and the southern portion of the Newport North Apartment Homes. The agency is also reviewing the Revised Draft FS for the northern portion of the Newport North Apartment Homes.

Monitored Natural Attenuation at the Southern Portion of Newport North Apartment Homes and Corsica Villa Townhomes

In 2024, Ford began implementing the Santa Ana Water Board-approved remedies for the southern portion of the Newport North Apartment Homes and the Corsica Villa Townhomes. The selected remedies for both communities call for the monitored natural attenuation (MNA) of groundwater, soil gas and/or indoor air. During this process, Ford will rely on natural processes to reduce the concentration of contaminants in groundwater and soil gas and will continue conducting regular soil gas, groundwater and/or indoor air sampling to ensure concentrations are decreasing and are not posing a risk to human health or the environment. To support this monitoring, Ford installed seven monitoring wells and 20 soil gas sampling locations.

This is a form of passive, rather than active, remediation and was selected and approved since both the southern portion of the Newport North Apartment Homes and the Corsica Villa Townhomes have lower impacts in groundwater and soil gas compared to the Belcourt Terrace and Bayridge Court communities.

Data Gap Investigation Activities

Additional environmental investigations are being conducted to provide more information on the lateral and vertical extent of PCE and TCE in soil gas and groundwater in the southern areas of the investigation area, primarily in the Big Canyon Arroyo area. Work includes installing and sampling soil gas probes and groundwater monitoring wells and collecting groundwater samples from multiple depths to support project goals and objectives. This work began in December 2024 and will continue in 2025. Results from this investigation are expected to be available online at GeoTracker in the second half of 2025 and will be summarized in future fact sheets.

Community-Wide Meetings

As Ford and the Santa Ana Water Board move into a phase of this project that is less impactful to community, the Santa Ana Water Board will hold annual community-wide meetings moving forward. The next meeting will be in August 2025 and invitations will be distributed in advance. The Santa Ana Water Board will continue to send fact sheet updates semiannually. Staff from the Santa Ana Water Board and Ford's environmental consultant will continue to be available to answer questions or provide additional information.

For More Information

GeoTracker is the State Water Boards' data management system for sites that impact, or have the potential to impact, water quality in California. Investigation results, project documents, details about past and planned field work, and previous public outreach materials and recordings from recent meetings can be viewed and downloaded from GeoTracker online at:

https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SL188023848.

Select reports pertaining to recent investigation activities may also be viewed and downloaded at www.FordNBFacts.com (see Project Documents tab). For more information, you may also contact:

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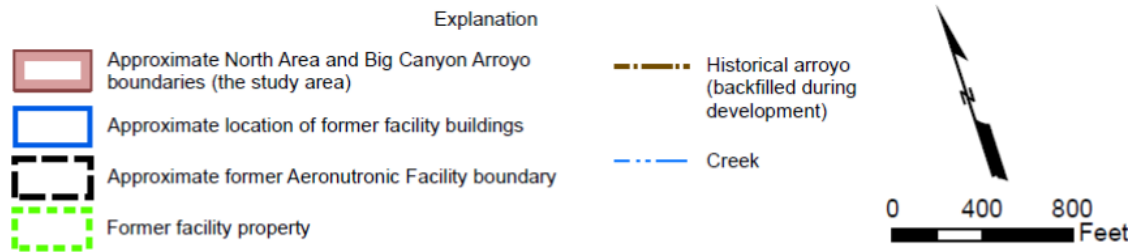


Figure 1 – Map showing the Site and investigation area