Ascon Huntington Beach
Soil Vapor Extraction Pilot Test

May 2023

A safer, cleaner future for the community

Nothing is more important than the health and safety of the Huntington Beach community as we work together to finish the cleanup of the Ascon Landfill Site.

Ascon began landfill operations in 1938 in what is now southeast Huntington Beach. Due to some of the materials brought to the landfill over the decades, controlling odor during the final Site remediation is one of our biggest challenges.

In coordination with the Department of Toxic Substances Control (DTSC), Ascon will conduct a pilot test to evaluate the effectiveness of soil vapor extraction (SVE) to reduce odors within the waste prior to excavation. We're committed to controlling and managing odors as much as possible and are continually evaluating products and best practices to improve odor management.

Since 2019, when remediation work was paused, the Ascon technical team has dedicated significant time and effort working on odor-minimizing solutions.

Technical Terms

Soil Vapor Extraction Well: A four-inch diameter plastic pipe that is installed into the soil. This will be connected to a vacuum to extract vapors from the soil.

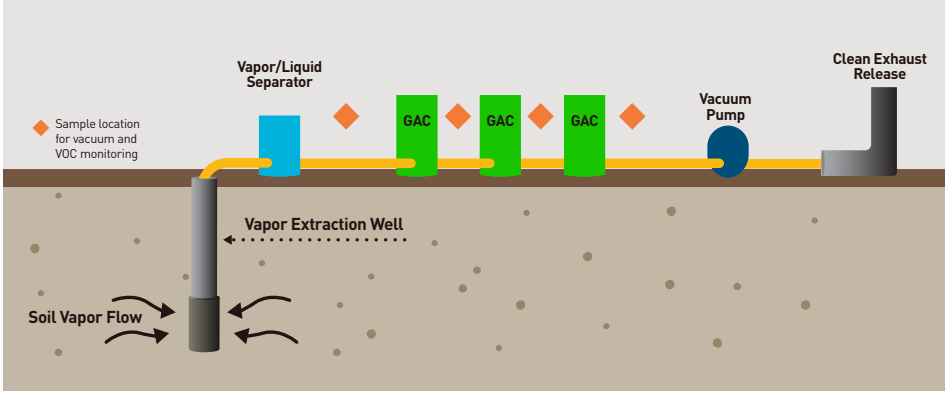
Soil Vapor Probe: A tube drilled into the soil to monitor air flow and vacuum response to the SVE system.

Baseline Conditions: Odor observations and ambient air will be monitored during small excavations to compare conditions prior to and after the SVE pilot test.

Rebound in Vapor Concentrations: Vapor concentrations in previously SVE-treated soil may return to pre-treatment levels.

What is Soil Vapor Extraction (SVE)?

Soil Vapor Extraction uses a vacuum to remove vapors from the subsurface by drilling a well into contaminated soils and pulling vapors through the soil and up the well. The extracted vapors are cleaned with granular activated carbon (GAC) through a treatment system above ground, prior to being released to the air.



How will the SVE pre-treatment technology be tested at Ascon?

The pilot test will evaluate the effectiveness of SVE as an odor-mitigating pre-treatment technology for the excavation of odorous material in three areas onsite. In each area, one SVE well and three soil vapor probes will be installed to monitor airflow and vacuum response of the system and the potential for vapor concentrations to return, or rebound, to pre-SVE conditions.

Before application of the SVE technology, areas within the planned SVE test areas will be excavated, and odor emissions will be monitored to establish baseline conditions and collect data for analysis. Odor monitoring of test excavation areas after the SVE pilot work will also be conducted to compare with pre-SVE conditions.

How will the effectiveness of Soil Vapor Extraction be determined?

The effectiveness of SVE as a pre-treatment technology will be evaluated by comparing odor emissions from pre-SVE treatment excavations and post-SVE treatment excavations in each test area to assess whether SVE results in a material reduction in odor levels. (Refer to figures to the right.)

How long will the SVE pilot work take?

The SVE pilot field work is expected to take approximately 12 weeks. The SVE systems are expected to operate for 4 weeks, followed by a 4 week rebound period. The excavations will be conducted at different stages, but are expected to take less than 2 weeks.

What will be monitored for during pilot work for the safety of the community and workers?

During the pilot work, ambient air will be monitored at the Site perimeter and downwind of excavation areas. Excavation area monitoring will include monitoring and air sampling for Volatile Organic Compounds (VOCs), odor and reduced-sulfur compounds.

Are there public health risks expected from this excavation work?

No. Air monitoring results to-date, including monitoring during active excavation, do not indicate a threat to public health. DTSC will oversee pilot work onsite and review air quality monitoring results. Air and dust monitoring on and offsite will continue 24/7 during this pilot test, and active odor monitoring will be conducted in the neighborhood immediately surrounding the Site when excavation is occurring. Near real-time air quality monitoring results are posted on asconhb.com during active work hours for the community to view.

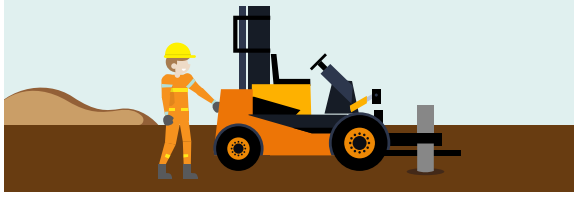
When conducting excavation components of the SVE pilot test, **Posi-Shell®** and **CupriDyne® Clean** odor suppressants will be used to control odor and dust. Safety Data Sheets on these suppressants can be found on asconhb.com.

Pre-SVE Treatment Work

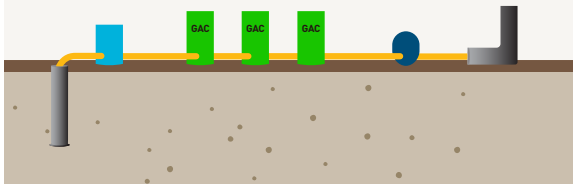
Air quality and odor monitoring conducted during excavation in advance of SVE treatment.

SVE Treatment Work

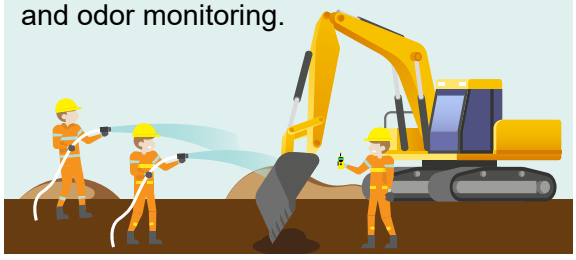
SVE well and soil vapor wells installed.



SVE systems run for ~4 weeks, followed by a 4-week rebound period.



Following SVE treatment, excavation occurs with air quality and odor monitoring.



What's next? When will remediation be complete?

We share the community's concern about odor and are committed to improving public confidence in the project when we restart the final cleanup. This includes evaluating and testing a range of available odor-control technologies.

Concurrent with this pilot work for Soil Vapor Extraction, we will also be conducting a pilot test for Engineered Misting Containment (EMC) **(see explainer here)**. Following both pilot tests, we will submit pilot test findings and work with DTSC on the final restart plan. The findings from the pilot test will help confirm and determine the schedule for the remainder of the remedy.

What the Ascon Site will look like following remediation.

Have Questions? Concerns?

To learn more about the Ascon cleanup, and to sign up for our weekly project update email newsletter, visit our website at **asconhb.com** or call the Ascon Community Information Line at **(714) 388-1825**.