

Ascon Huntington Beach Solving the Odor Concern

March 2022

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. **Responding to public concern about odor, the Ascon team dedicated much of the last two and a half years working on solutions to minimize odor.** Knowing where odors may be found on the 38-acre Ascon Site is critical to how those areas will be managed during the remaining cleanup.

Systematic Field Investigations

We are committed to better managing odors in future work. In response to community concerns, we conducted a technical odor assessment during the emergency northwest berm repair work in spring 2020. To build on what we learned, we developed a Sitewide Odor Assessment workplan. The Assessment was conducted in spring 2021, and the Department of Toxic Substances Control (DTSC) approved the final report in January 2022. **The Odor Assessment work was conducted with soil and vapor sampling in areas of the Site planned for future excavation.**

Samples were submitted to State certified laboratories, and results were reviewed by environmental and air quality professionals to identify and characterize potential odor-causing compounds. Maps were then created showing areas of odorous materials at the Site. Determining what compounds cause odor and their location on the Site will help determine the way future work is conducted.



- Sampling was conducted in future excavation areas (yellow)
- Approx. boring locations onsite (black)

Odor Assessment Analysis

The Odor Assessment collected **approximately 100 samples** in a grid pattern for laboratory analysis from numerous locations and at varied depths across the Site:

Soil Vapor Probe Samples 1

(samples collected by inserting a metal probe up to approximately 20 feet into the soil):

Analyzed to identify compounds present above odor threshold levels, and also analyzed by a panel of trained professional odor experts for detection and recognition thresholds, intensity, and odor characteristics.

Soil Core Samples 2

(soil samples collected up to 15 feet into the soil and placed in containers to allow for vapors to be collected):

These samples were collected when there were high soil vapor results from the soil vapor probes or when dense soil conditions did not allow for vapor sample collection.

Odor Assessment Analysis (Cont.)

The data from soil vapor and soil core samples were used to map areas with the potential to generate odors in remaining areas for excavation.

Odor Assessment Technical Conclusions

Chemical and odor analyses show the northwestern corner of the Ascon Site has higher values for each of the odor-related parameters (see right box). Samples with higher values are potentially higher odor areas, and those with lower values have lower potential for odor.

- The southeastern corner has lower odor potential.
- Western and souther areas, in deeper soils, may have more odor potential when excavated.
- In the areas where odors were detected, lower odor intensity soils were found at ground surface and higher odor intensity soils were found at deeper levels.

Odor Analysis Parameters:

Soil samples were assessed for detection threshold (DT), recognition threshold (RT), and odor intensity by the professional odor panel. Odor activity values (OAVs) were calculated using the laboratory chemical data and the chemical-specific odor thresholds.

All sources used to establish odor analysis parameters and thresholds can be found on Page 22 of the Sitewide Odor Assessment on DTSC's EnviroStor.

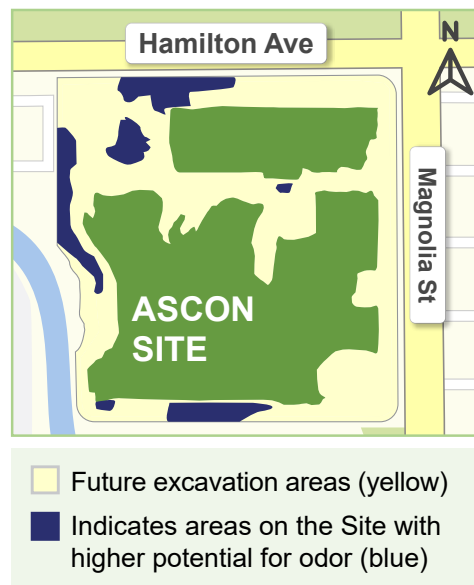
The Assessment shows there are significant areas remaining to be excavated that do not have high odor potential. There are **approximately 150,000 cubic yards** of soils left to be excavated during the final cleanup. **Approximately 10% (15,000 cubic yards)** of these soils have a higher odor potential.

Volatile petroleum compounds are the predominant contributors of potential odor. However, there are a few locations, **predominantly located in the northwestern portion of the Site**, where sulfur compounds are the primary contributors to odor. Air data from the last two years, both onsite and in the community, show that while these **odors do not create a public health risk**, they are unpleasant and will require the use of enhanced odor control technologies.

Odor Assessment Informing Next Steps

The Sitewide Odor Assessment findings will help create a workplan that uses the best technologies to minimize potential odors during the remaining final cleanup. Ongoing technical discussions with DTSC of these findings, and **data collected during 2020 and 2021, are part of the planning for the restart of field work.**

This aerial illustration (see right image) shows the **northwestern and southwestern areas** of the Site with **higher potential for odor based on odor related parameters.**



Glossary of Odor Analysis Parameter Terms

Detection threshold (DT): represents the lowest concentration of the sample that could be smelled by the professional odor panel. It is measured as the number of dilutions needed to dilute an air sample until the odor is barely detectable.

Recognition threshold (RT): represents the lowest concentration of the sample that could be recognized by the professional odor panel. It is measured as the number of dilutions needed to dilute an air sample until the odor is recognized.

Odor intensity: the perceived strength of the odor above the RT and is measured in reference to n-butanol.

FAQs

How were the odor sampling parameters established for this assessment?

The odor sampling parameters for the Ascon Sitewide Odor Assessment were selected based on typical parameters used to evaluate odors and experience gained during the 2020 North Berm odor assessment, which was conducted during emergency repair work in an identified high odor area.

Where is the actual data from the Sitewide Odor Assessment?

The Ascon Sitewide Odor Assessment report is posted on DTSC's online database, [EnviroStor](#). References, tables with data and odor parameter results, figures and additional details can be viewed beginning on page 22.

Why wasn't an Odor Assessment conducted before now?

The DTSC-approved air quality monitoring program for Ascon was designed to confirm the protection of human health, focusing on compounds that may pose a potential health risk to nearby neighbors. While monitoring onsite and in the community – during active fieldwork and during work suspension – shows that **air quality is safely below health-protective screening levels**, there remains public concern about odor. The Odor Assessment focused on identifying and analyzing compounds with the potential to generate odor.

What's next?

We share the community's concern about odor. **We are committed to putting our best foot forward when we re-start this project, and that means evaluating a range of available technologies to control odor.** The Odor Assessment's extensive field investigations and technical analysis give us the information needed to identify opportunities to improve how we will work during the final phase of cleanup.



Note: Prior to full restart of remediation activities, there will be public notification and a community



Want more information? 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.