City of Irvine
Ambient Air Sampling
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South Coast Air Quality Management District
COMMUNITY MEETING
ALL AMERICAN ASPHALT
Zoom Meeting
February 24, 2021

City's Air Sampling Program - Objectives

Purpose and Objectives:

- Characterize pollutants near property and in community
  - Establish detailed chemical profile of ambient air
  - Include chemicals reported annually to SCAQMD (Facility ID 82207)
  - Include chemicals associated with Asphalt plant operations
- Compare fence-line and community air monitoring results
  - Compare results with regional (so-called "background") levels
- Odor nuisance Testing in response to Public complaints

Sampling Program Criteria:

- Use SCAQMD and U.S. EPA standards & test methods
- Report analytical results in a manner that could be compared to test data collected by SCAQMD and health-based standards

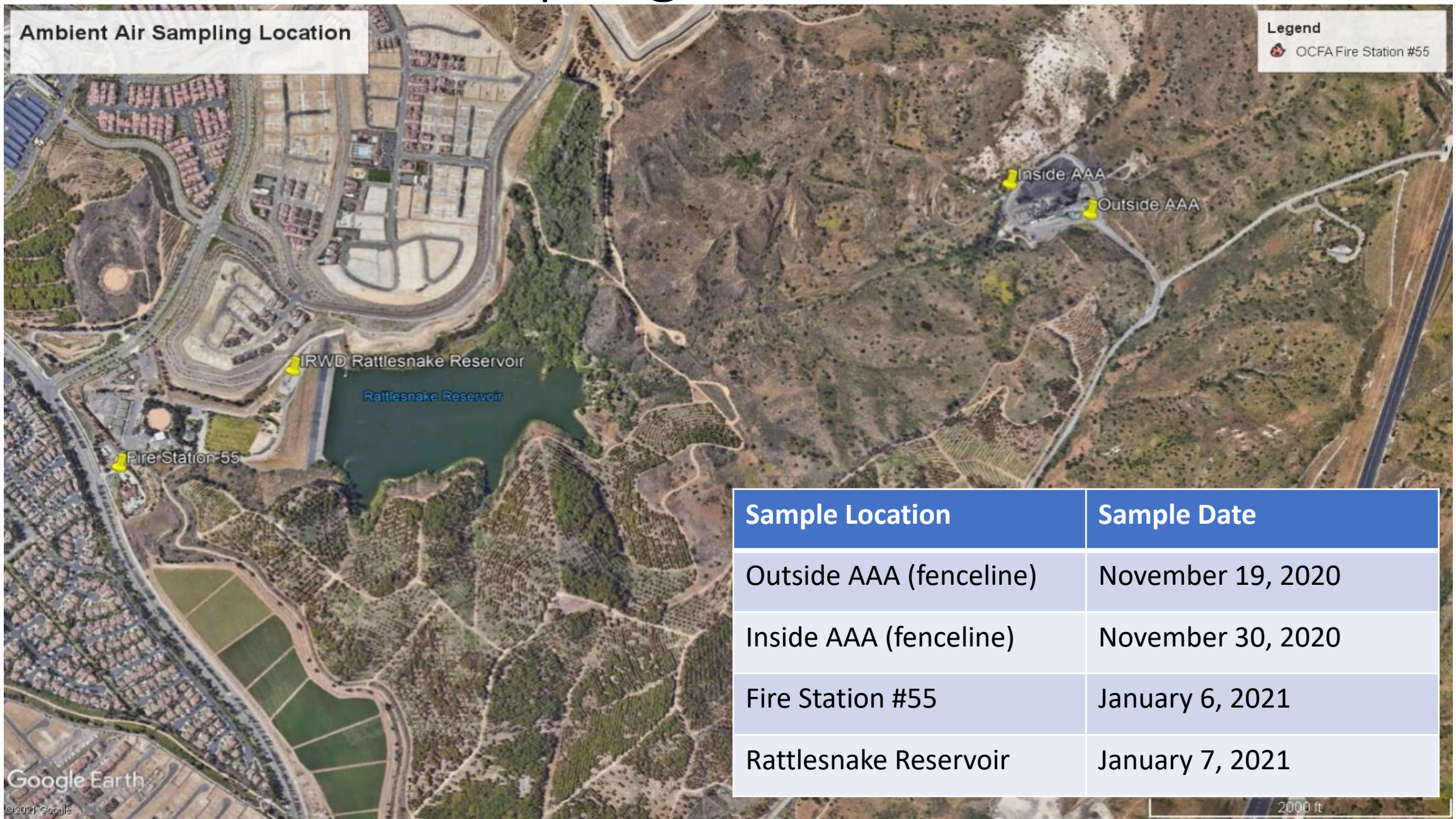
City's Air Sampling Program - Framework

Chemical Compounds of Interest	Analytical Test Method	No. of Analytes Tested	Purpose of Analysis[1]	Integrated Sample Duration
Semi volatile organic compounds (SVOC)	U.S. EPA Method TO-15	83 chemicals	Health Impacts	24 hours
Sulfurous compounds	SCAQMD Method 307-91	21 chemicals	Odor Nuisance Health Impacts	24 hours
Polycyclic aromatic hydrocarbons (PAH)	U.S. EPA Method TO-13A	18 chemicals	Health Impacts	24 hours
Ambient metals	NIOSH Method 7300 Modified	26 chemicals	Health Impacts Odor Nuisance	24 hours
Odor	ASTM Method Euro E679-19	N/A	Odor Nuisance	1 Hour
Formaldehyde and Aldehydes[2]	U.S. EPA Method TO-11A	12 chemicals	Health Impacts Odor Nuisance	24 hours

[1] Listed in order of primary and secondary potential impact, if applicable

[2] Added for second sampling event forward, based on concerns expressed during Nov. 19 community meeting

Ambient Air Sampling Locations



Sample Location	Sample Date
Outside AAA (fenceline)	November 19, 2020
Inside AAA (fenceline)	November 30, 2020
Fire Station #55	January 6, 2021
Rattlesnake Reservoir	January 7, 2021

Sampling Results - Summary

- Relatively consistent levels between fenceline and community sample locations
  - Some compounds showed higher results in the community than fenceline
    - Common organics (ethanol, benzene, isopropyl alcohol), Sulfur compound
  - Total particulates at fenceline monitoring were higher than those in the community
- No chemical compounds were detected above general concentrations considered to be background for the region
- Benzene was measured slightly above 8-hour and chronic reference exposure level, no other pollutants were above any environmental health-based standard
- Some chemicals showed concentration above the odor detection thresholds, specifically sulfur compounds
- Results are posted on the City's website at: https://www.cityofirvine.org/community-development/all-american-asphalt-air-sample-summary-details