Mobile Monitoring in El Segundo to Assess Potential Emissions from Hyperion

08/05/2021

Overview

Mobile measurements using South Coast AQMD's Optical Remote Sensing (ORS) Mobile Laboratory were conducted in El Segundo on 08/05/2021

South Coast AQMD Optical Remote Sensing Laboratory

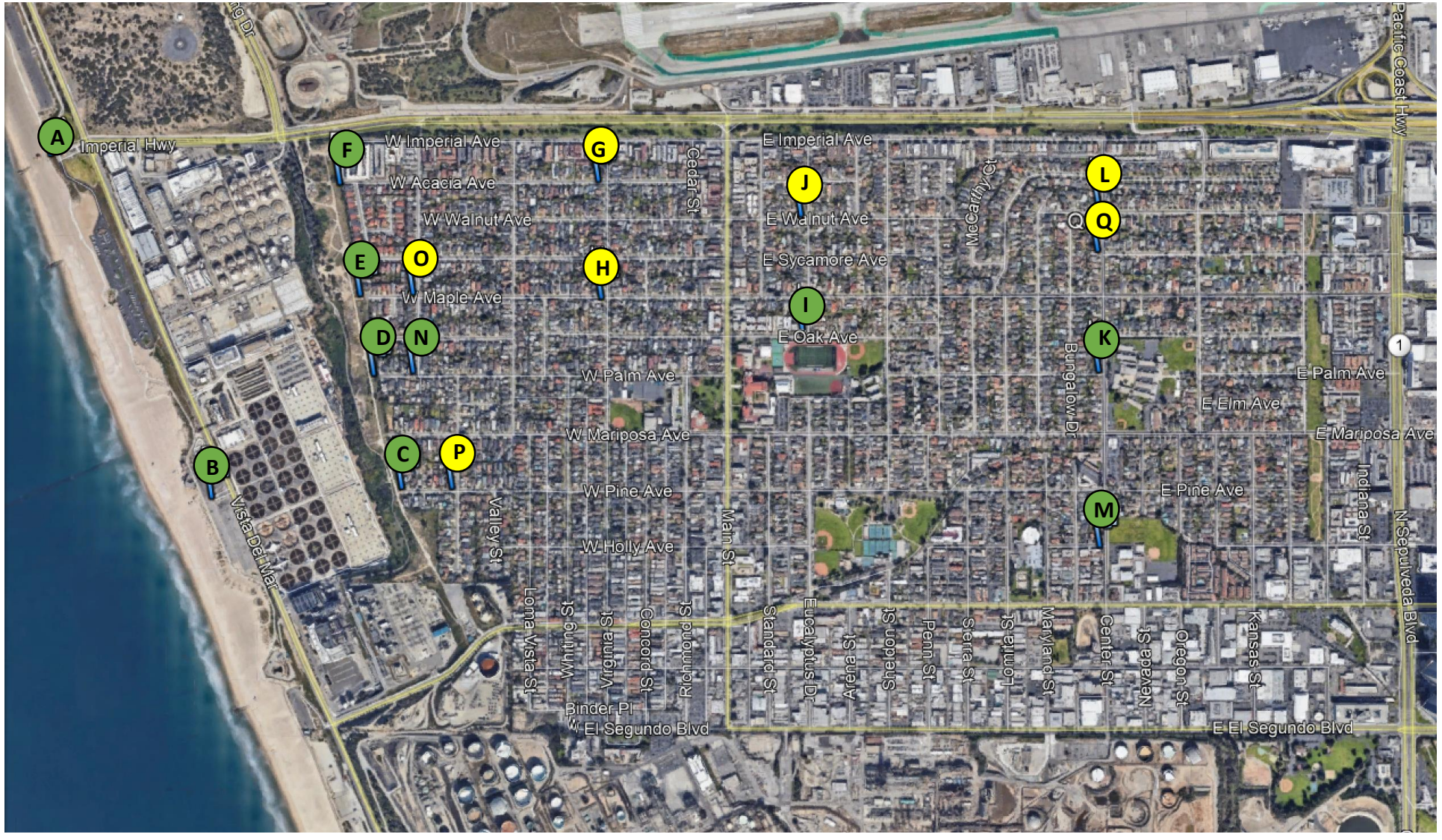
Instantaneous (~10s) measurements of:

- Gaseous Air Toxics
  - Benzene, toluene, ethylbenzene, xylenes (BTEX)
- Other Pollutants
  - Methane, total VOC's

Instantaneous (~30s) measurements of H_2S at selected locations using a portable hand-held analyzer

Portable hand-held H_2S analyzer

H_2S
08/05/21

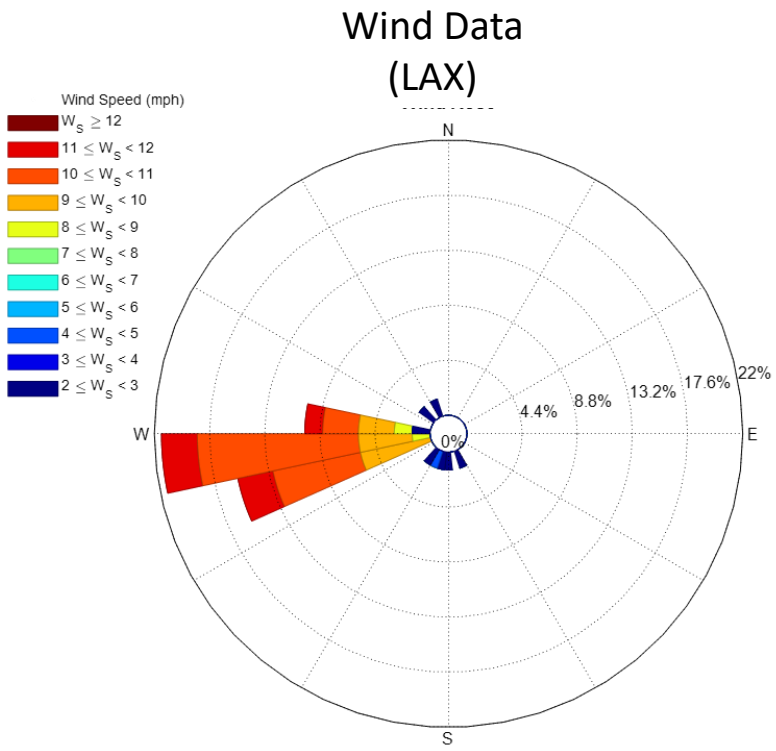


Site	Time	Maximum Instantaneous* H_2S (ppb)
A	6:41 AM	0.0
	9:36 AM	0.0
B	6:49 AM	0.0
C	7:04 AM	0.0
D	7:14 AM	0.0
E	7:22 AM	0.0
F	7:27 AM	0.0
	8:35 AM	0.0
G	7:32 AM	0.0
	8:05 AM	6.7
H	7:43 AM	0.0
	8:14 AM	6.7
I	7:51 AM	0.0
J	7:55 AM	0.0
	9:03 AM	3.7
K	7:59 AM	0.0
	9:17 AM	0.0
L	8:02 AM	0.0
	9:11 AM	3.4
M	8:07 AM	0.0
N	8:21 AM	0.0
O	8:26 AM	9.0
P	8:47 AM	8.2
	11:24 AM	5.3
Q	11:13 AM	4.9

*Three consecutive readings were taken at each location

Measurements Route and Meteorology

08/05/2021 6:20 am – 11:50 am



Methane
08/05/2021

NOTE: The color scale has been optimized to visualize minimum and maximum concentrations

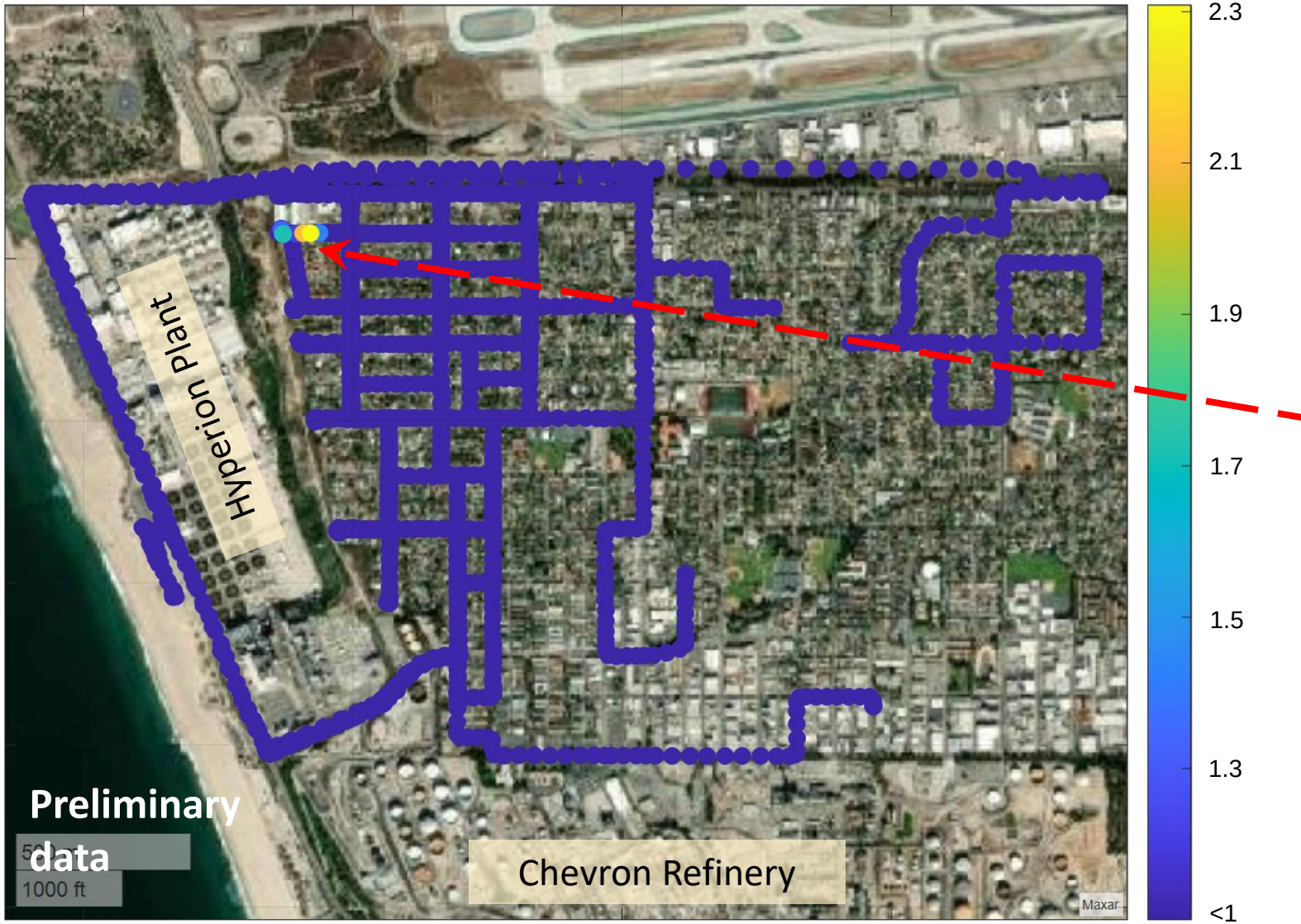
Ambient Methane* (ppm)

*The typical methane background concentration is about 2.1 ppm

Air Toxics (BTEX)

08/05/21

NOTE: The color scale has been optimized to visualize minimum and maximum concentrations



- Localized BTEX enhancements (mostly benzene) were observed during multiple passes
- Slight increase in benzene levels north-west of El Segundo (2.3 ppb)
- South Coast AQMD is conducting a further investigation in the area to identify potential sources

*Note: a background benzene concentration of ~0.1 ppb was assumed based on measurements at South Coast AQMD's St. Anthony air monitoring station during the mobile measurements period.

Typical benzene background level in the Los Angeles Basin is between 0.2 and 1.6 ppb (MATES V).

Summary

- Mobile monitoring for gaseous air toxics and other air pollutants, and stationary measurements of H_2S at different locations using a hand-held device, were conducted in El Segundo on 8/5/21 between ~6:00 am and noon
- Instantaneous H_2S readings at different locations ranged from 0.0 ppb to 8.2 ppb
- Most methane and air toxic measurements were within typical levels found in an urban area
  - Slightly elevated methane levels (up to 5ppm) were observed near the Hyperion facility. Similar methane concentrations have been observed in other urban areas.
  - A slightly elevated level of benzene was detected northwest of El Segundo; South Coast AQMD staff is currently investigating potential sources