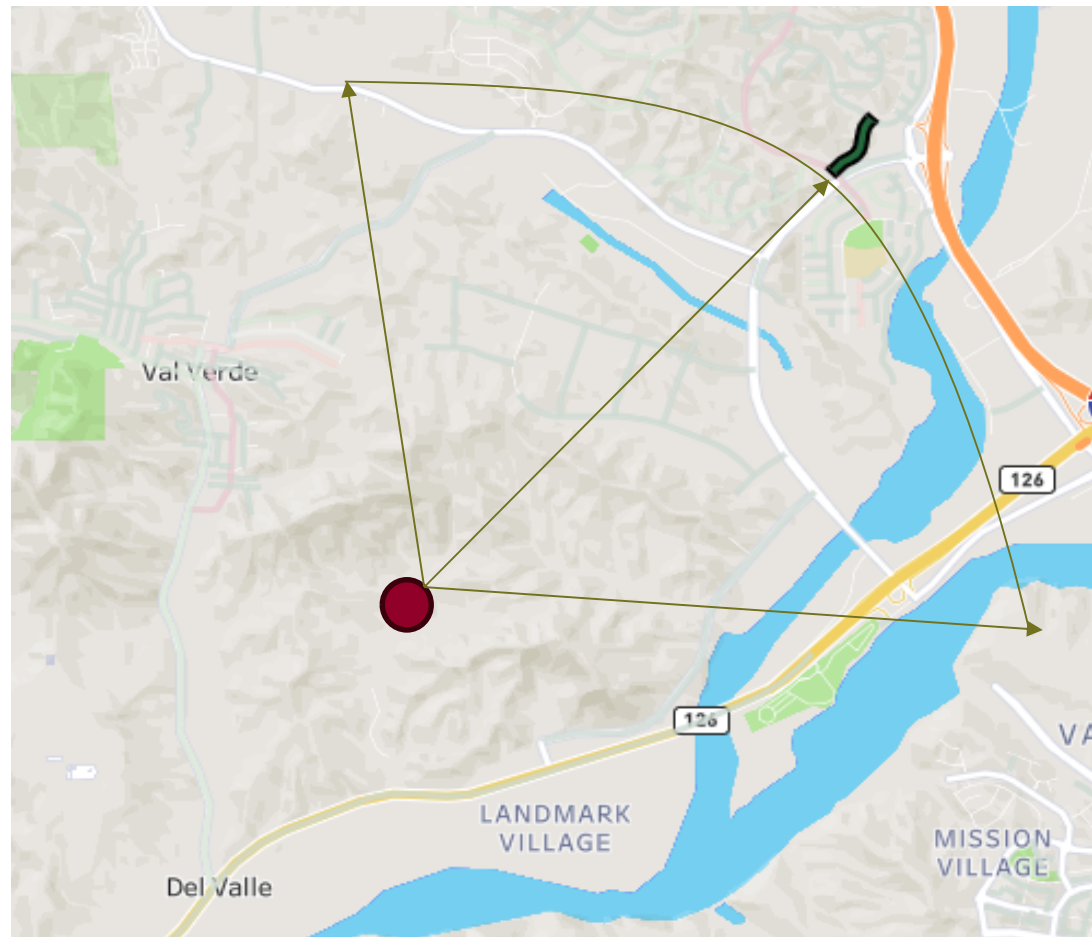


SCAQMD v. CCL Hearing

Patrick
Sullivan, BCES,
CPP, REPA

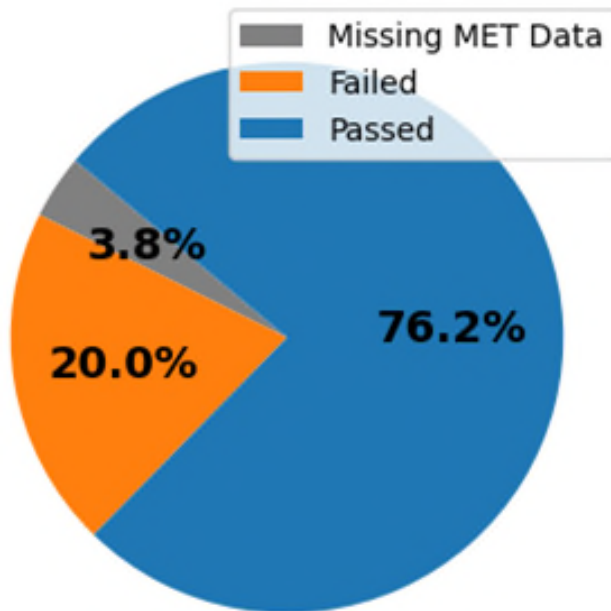
June 4, 17, and 24, 2025

Wind Direction Test

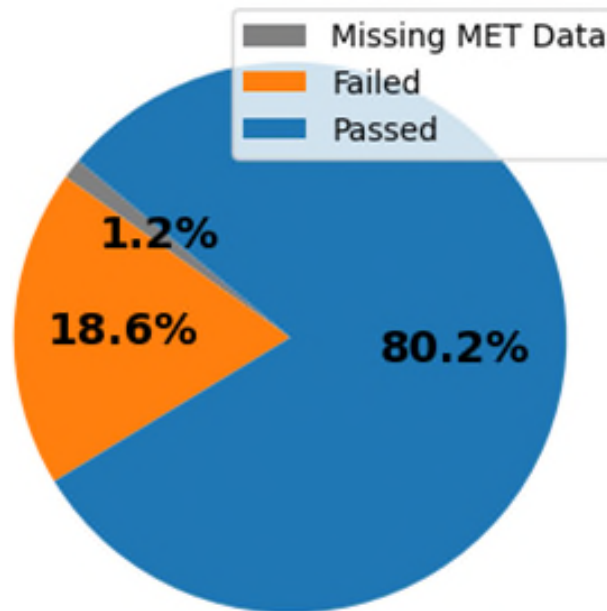


Wind Direction Test – Results

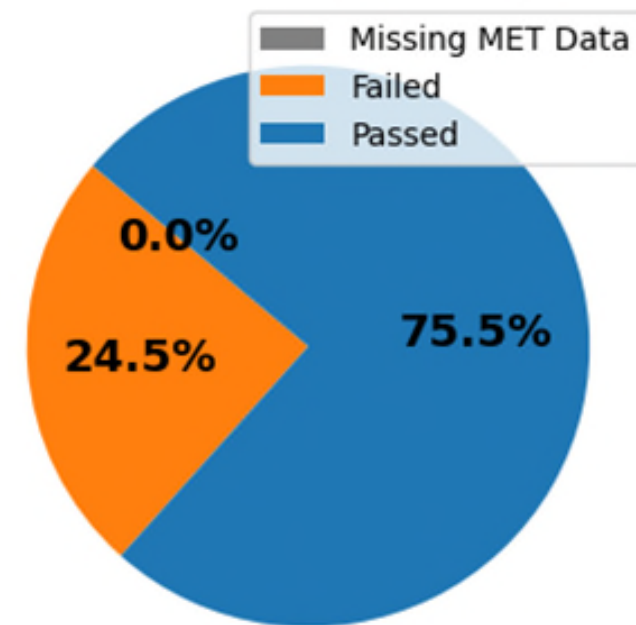
2023 Complaints
Wind Direction Test



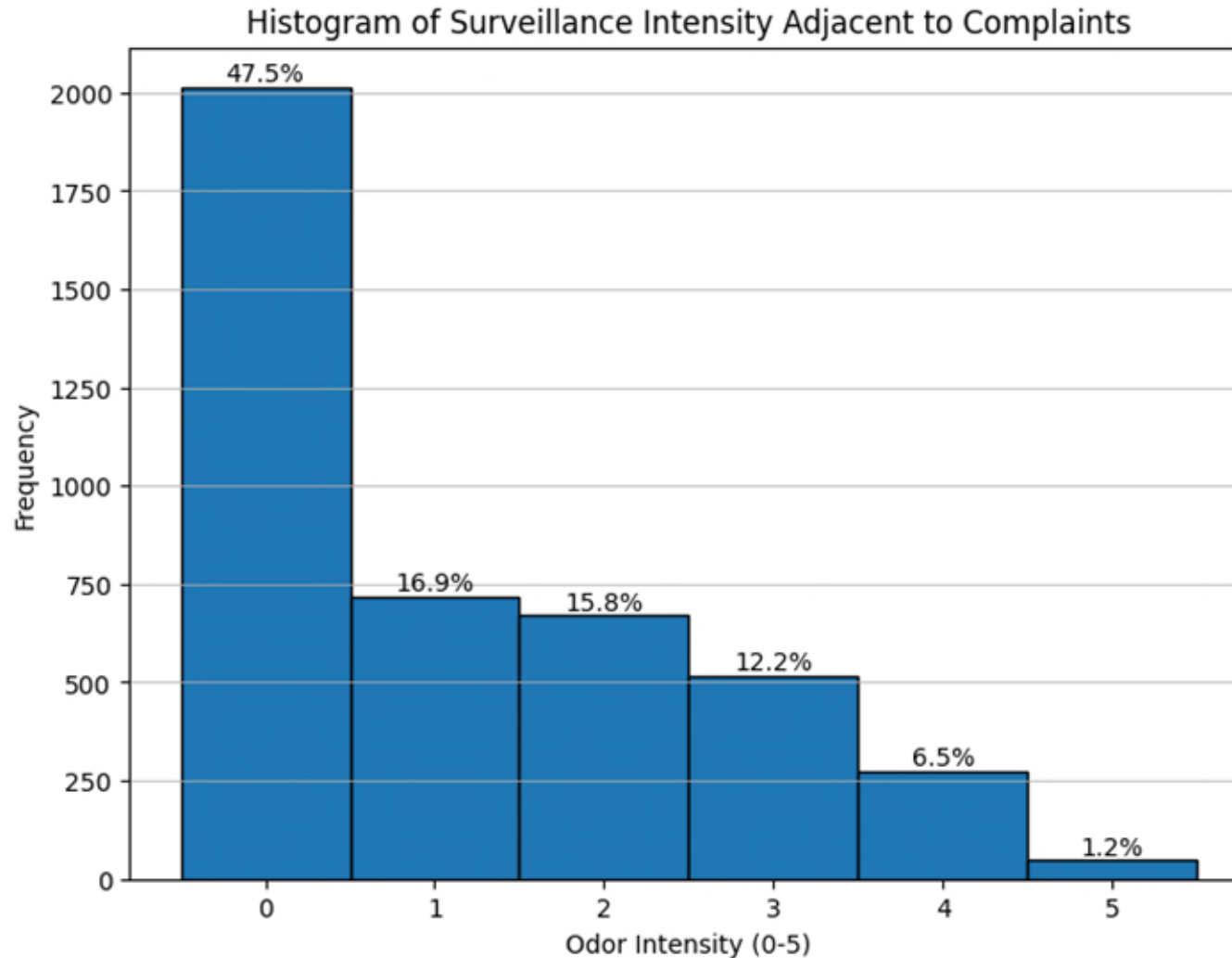
2024-2025 Complaints
Wind Direction Test



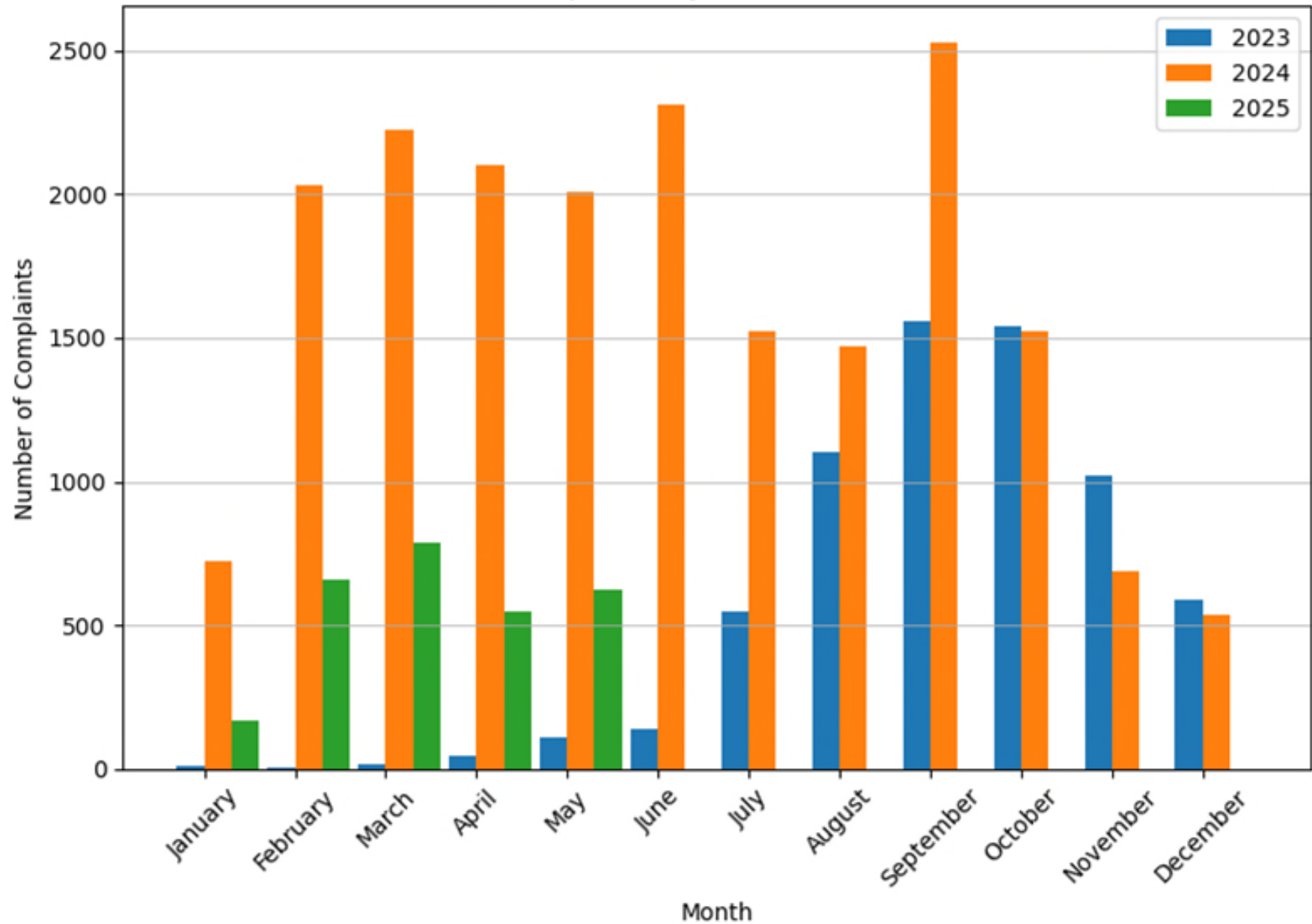
2024-2025 Verified Complaints
Wind Direction Test



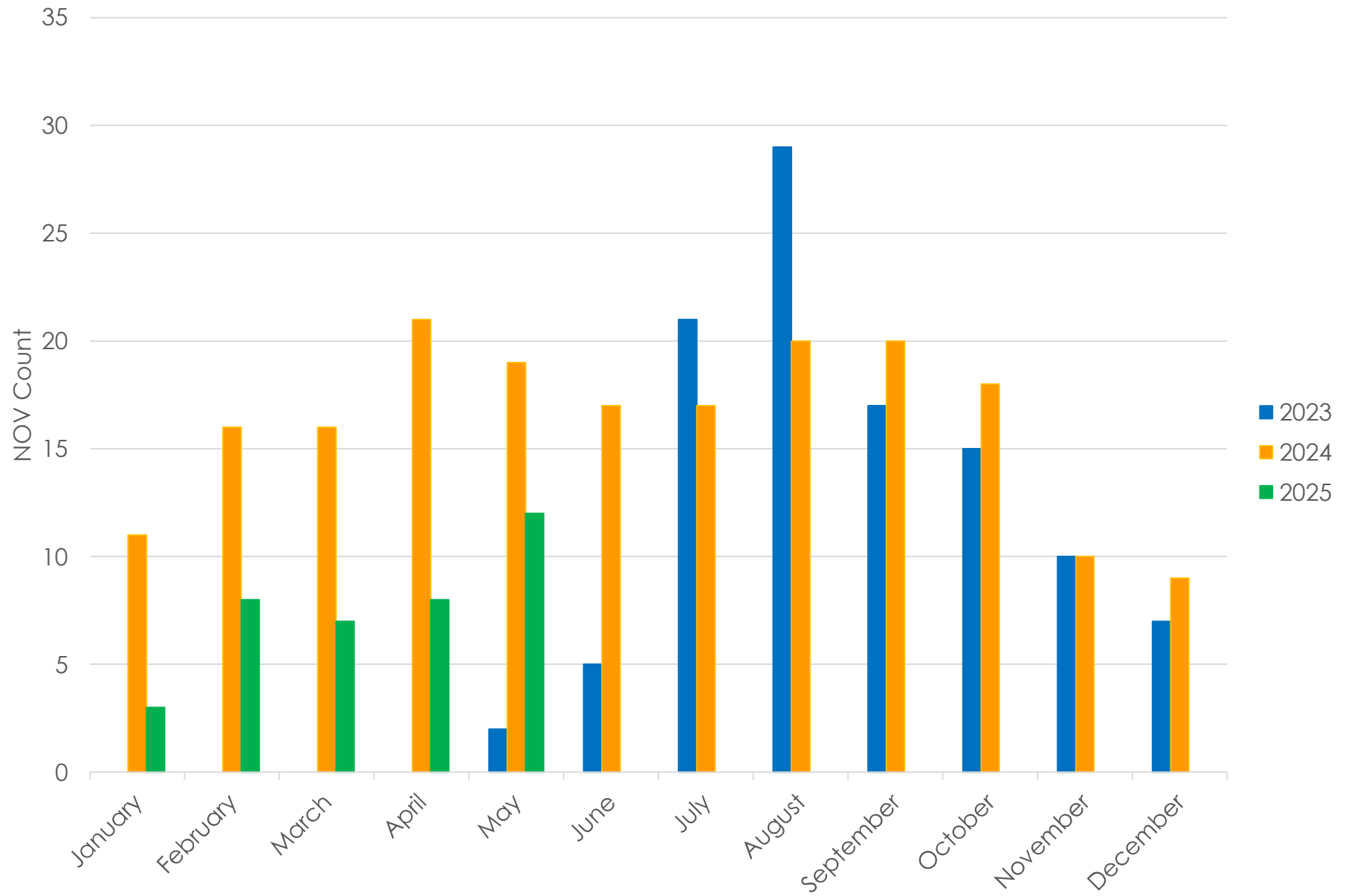
Odor Surveillance vs. Complaint Data



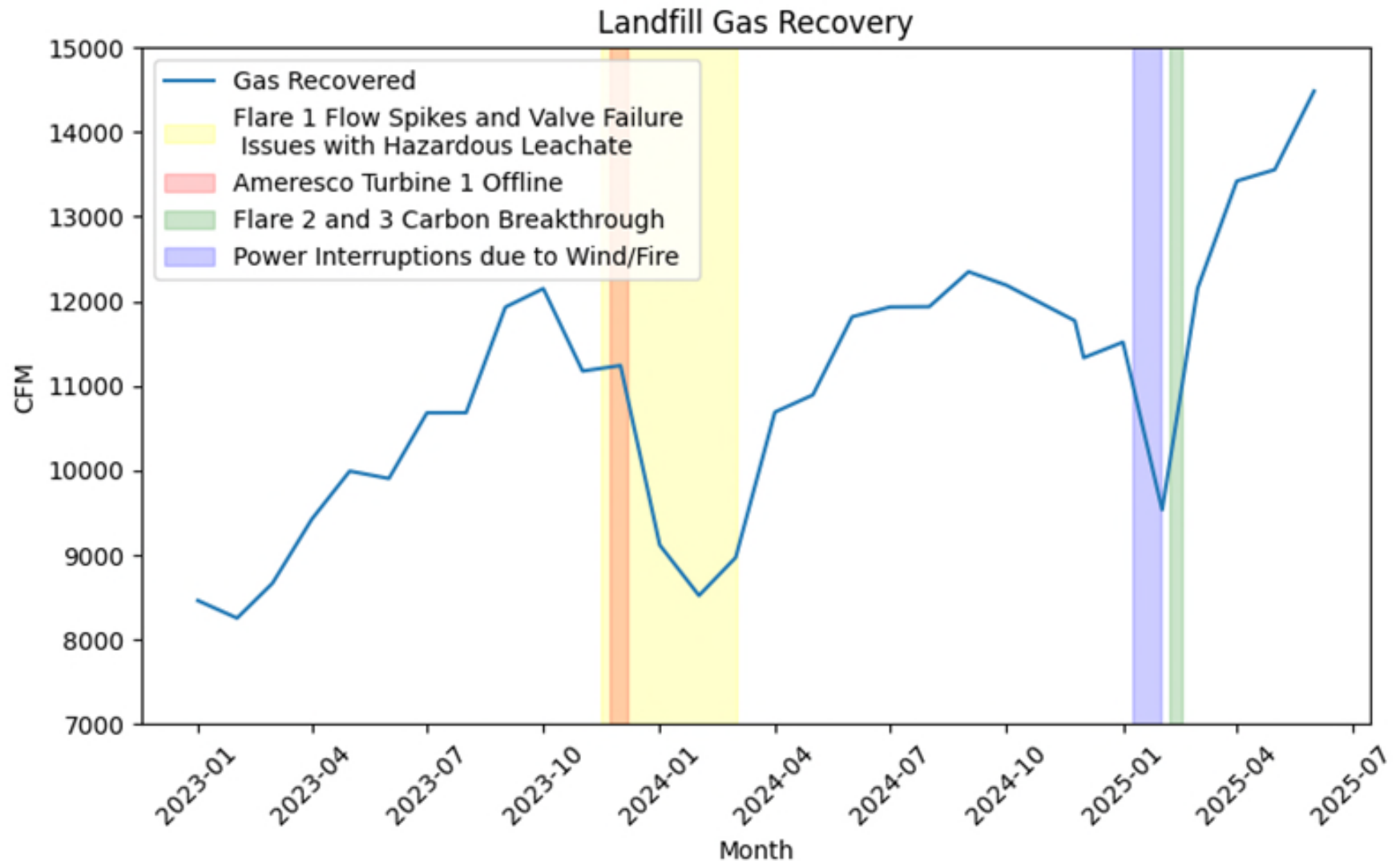
Complaints by Month and Year



Rule 402 NOVs by Month and Year



Landfill Gas Recovery



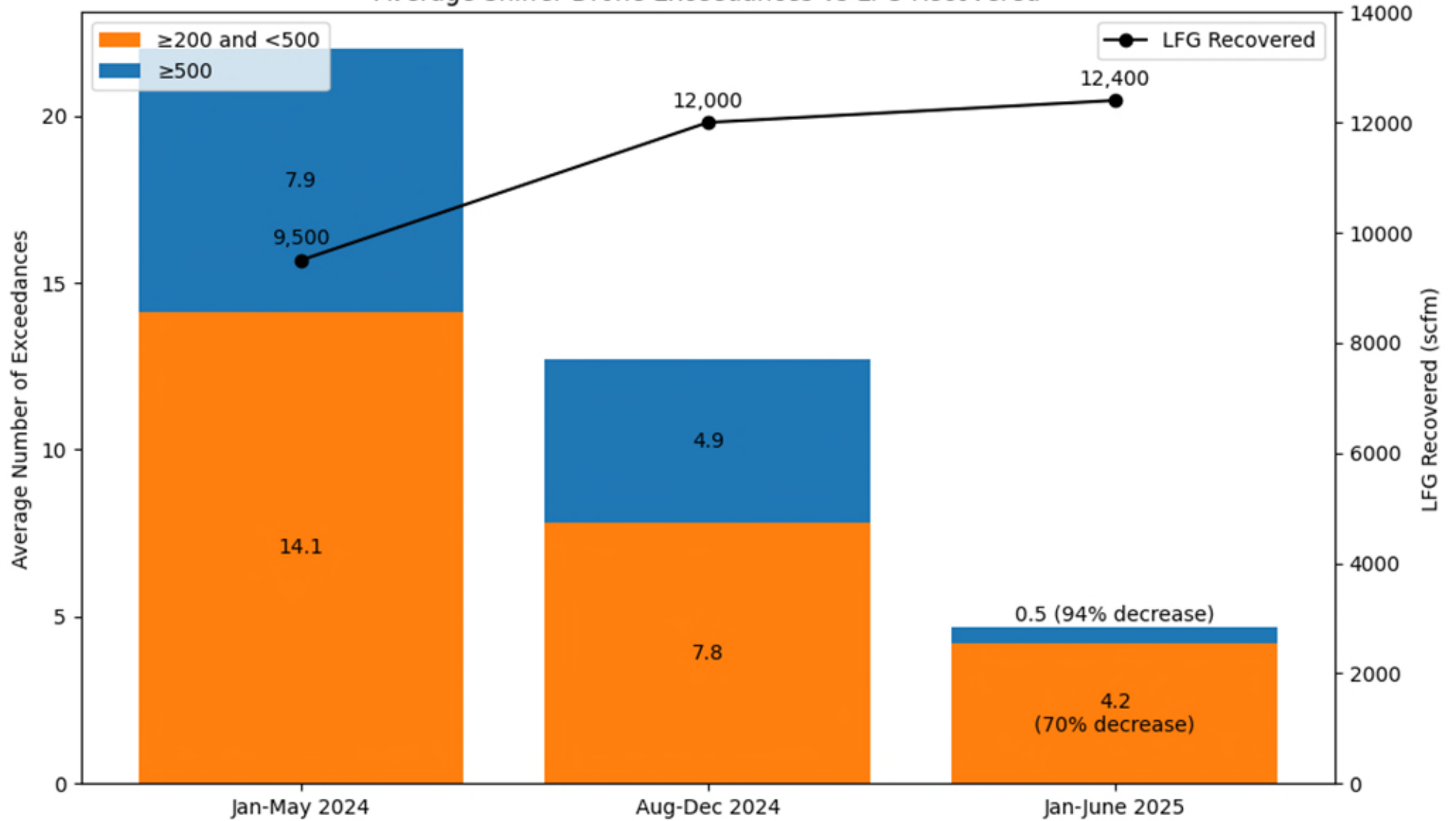
Landfill Gas Recovery

Time Period	Total Average Gas Recovery (cfm)	Leachate Vapor Flow (cfm)	Average Gas (cfm)
March 2025	13,286	1,134	12,152
April 2025	14,268	847	13,421
May 2025	14,371	816	13,555
June 1-16, 2025	15,090	652	14,438

Impact of Direct Power at Flare Station

Period	Average Gas Recovery - Uptime Only	Average Gas Recovery-Downtime Included	Flow Decrease due to Power
	(cfm)	(cfm)	(cfm)
Aug-24	12,641	12,441	78
Sep-24	13,790	13,197	214
Oct-24	13,615	13,184	42
Nov-24	13,650	12,727	711
Dec-24	12,876	12,424	265
Jan-25	13,326	13,275	54
Feb-25	11,952	11,093	32
Mar-25	13,465	13,286	0
Apr-25	14,999	14,268	1
May-25	14,993	14,371	0
June 1-16	15,287	15,053	0

Average Sniffer Drone Exceedances vs LFG Recovered

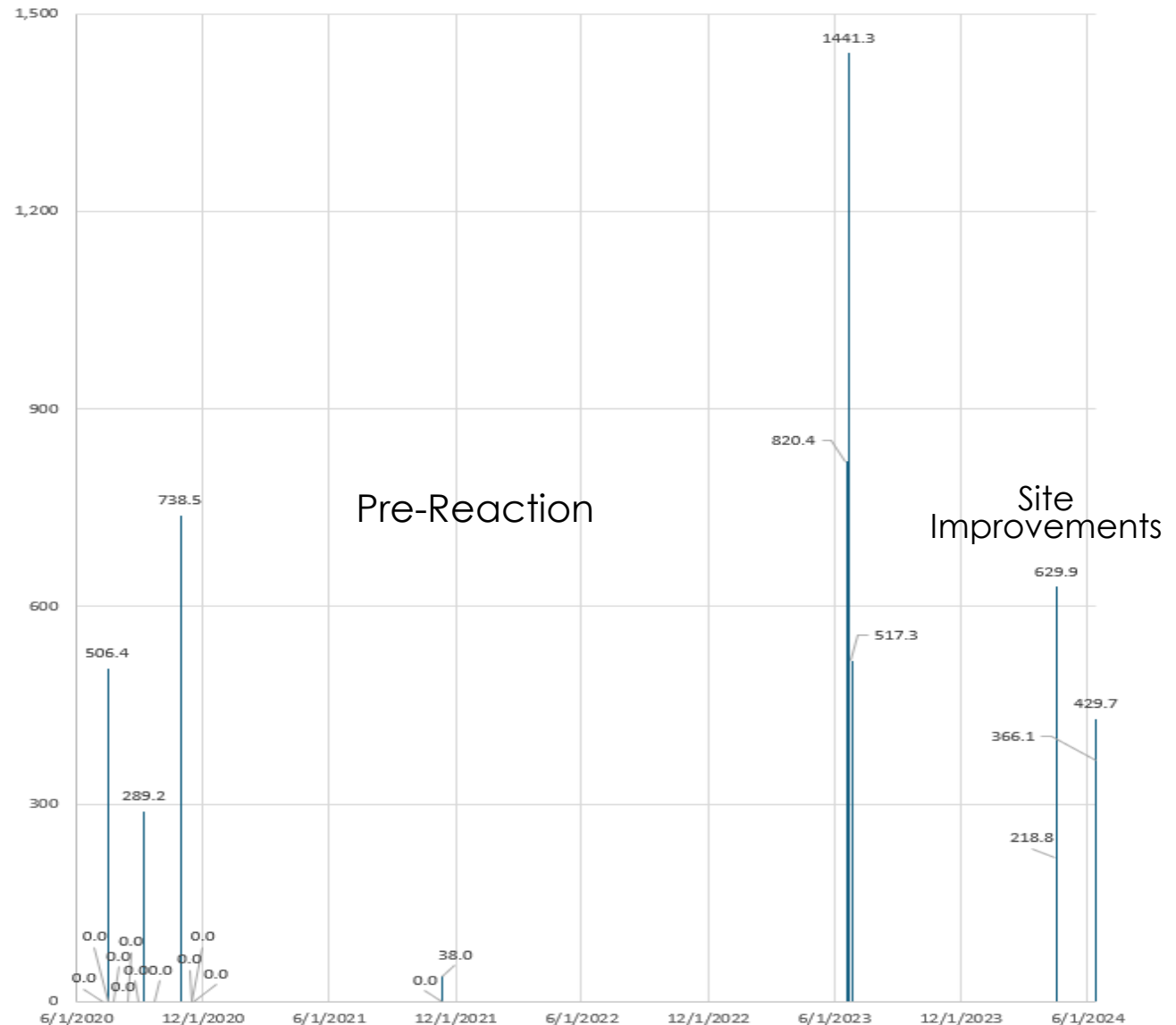


Flux Chamber Study Data

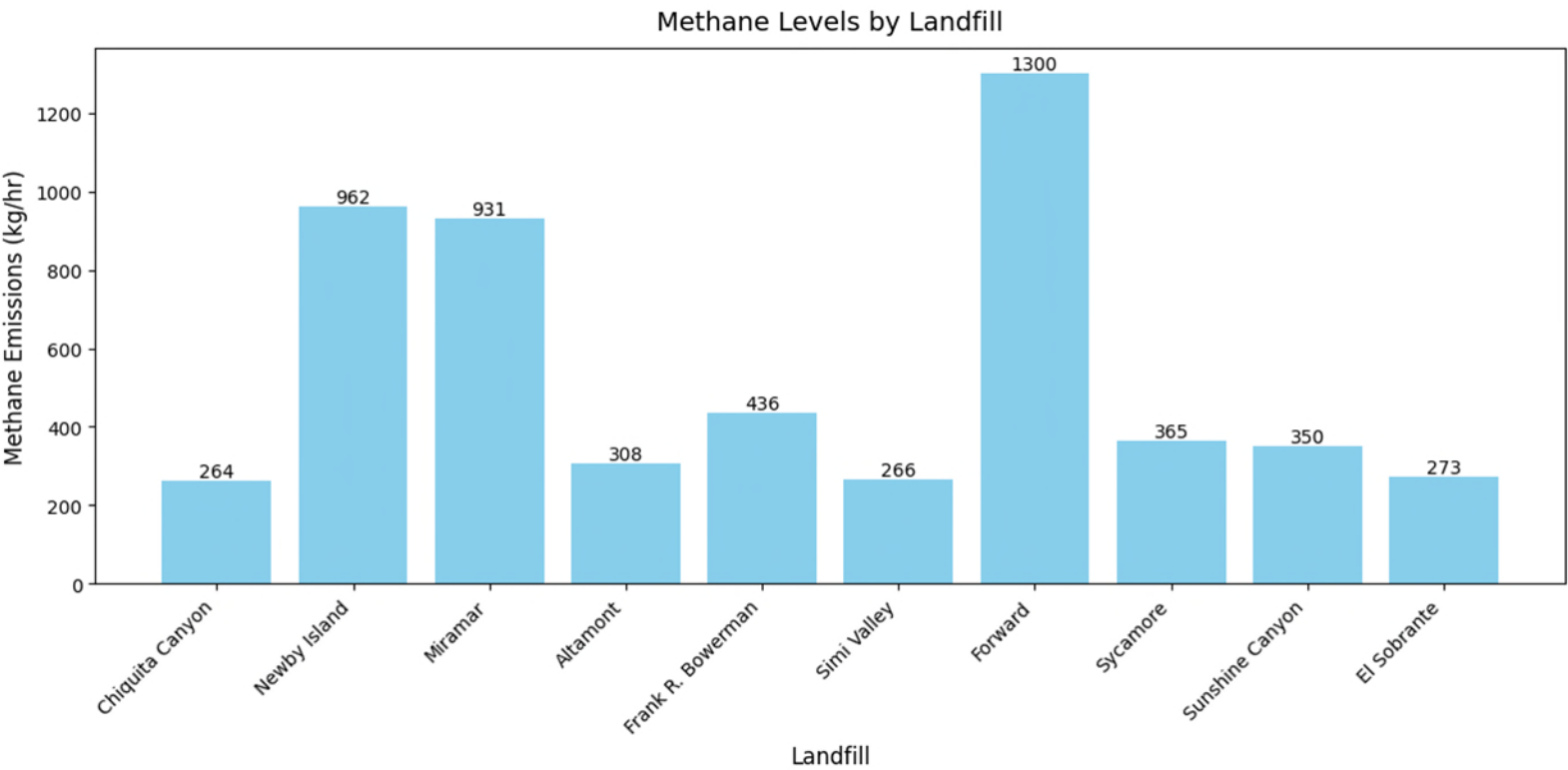
	Event			
Compound	1 (8/23)	2 (3/24)	3 (11/24)	4 (3/25)
Carbon dioxide	41,312	327,049	216,177	100,526
Methane	3,357	11,456	6,880	4,756
Total VOC	207	853	61	26.1
Ethanol	18.3	NQ	0.42	0.23
Acetone	17.6	51	1.30	1.38
Dimethyl sulfide	15.2	57.9	0.93	0.95
Tetrahydrofuran	13.6	107	0.06	0.23
Benzene	9.33	104	0.27	0.90
Methanol	9.09	NQ	0.51	0.79
Methyl ethyl ketone (MEK)	9.06	51.2	0.24	0.30
Propylene	6.62	29.8	0.69	0.41
Isopropyl alcohol (IPA)	3.72	15.2	0.18	0.51
Isopropyl toluene	3.25	13.7	0.25	0.42
Toluene	2.00	18.6	0.22	0.29
Total Xylenes	1.52	9.79	0.30	0.48
Ethylbenzene	1.14	10.1	0.16	0.20
Hydrogen sulfide	0.13	3.81	0.72	0.24
Note: NQ = Not Quantified				

Aircraft Survey Data – 2020 to 2024

- Pre-Reaction emissions quantified from 0 to 738 kg CH₄/hr
- Reaction emissions increased to 1,441 kg CH₄/hr



Methane Emissions from Active Large Landfills in California



Landfill	Years Averaged
Chiquita Canyon	2017-2024
Newby Island	2017-2025
Miramar	2027-2025
Altamont	2017-2025
Frank R. Bowerman	2016-2024
Simi Valley	2020-2024
Forward	2017-2025
Sycamore	2023-2024
Sunshine Canyon	2016-2024
El Sobrante	2020-2024

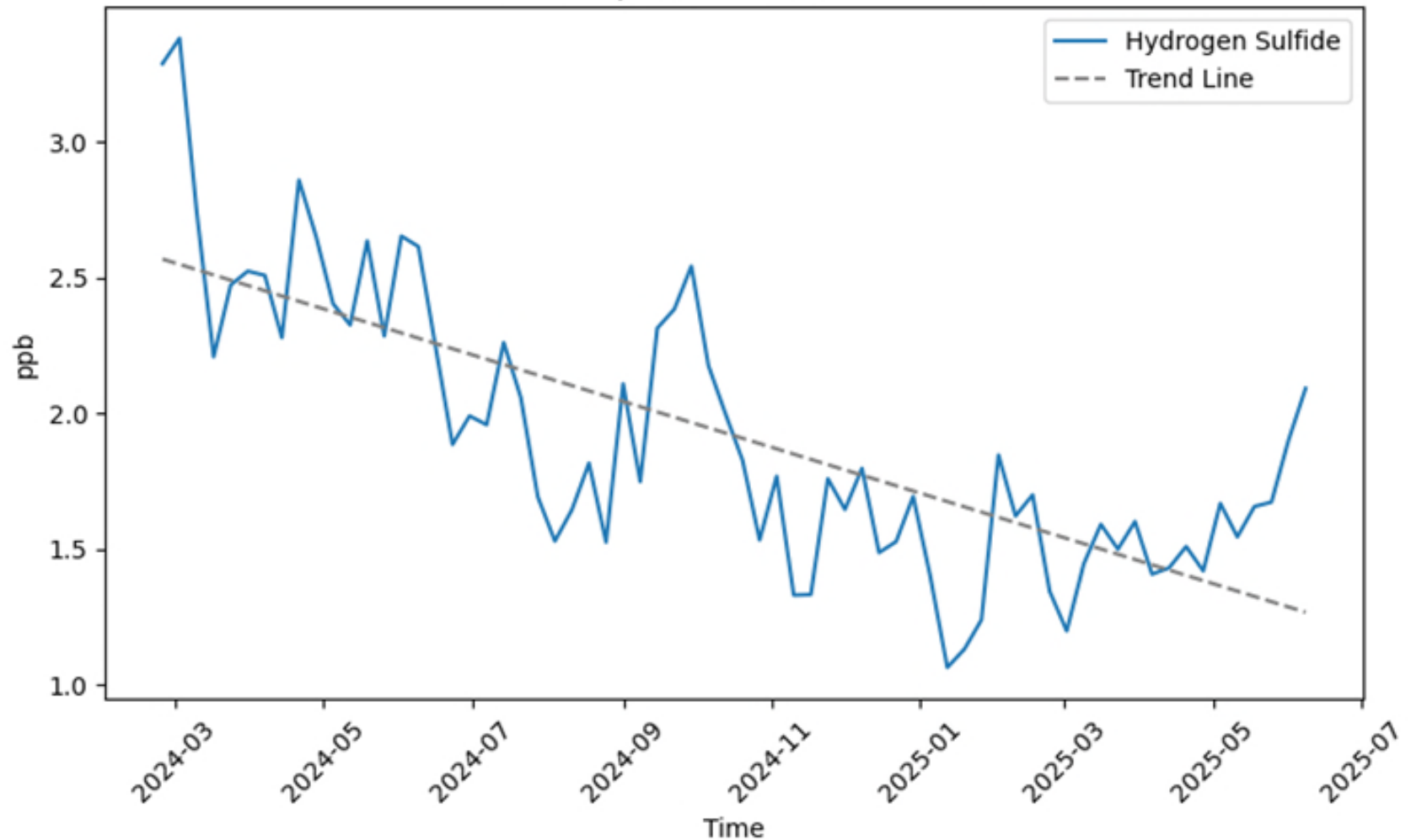
Air Monitoring Program

Location/ Sample Name	Continuous			Weekly Discrete	24-Hour	12-Hour
	H ₂ S/ PM ₁₀ / PM _{2.5}	SO ₂	VOC via Micro-GC	307.91 - Sulfur TO-15 - Full List Odor Sampling	307.91 - Sulfur TO-15 - SIM	H ₂ S 1150.1 Table 1 VOCs
Sample Schedule				Monday	Mon-Tues	Monthly
On-Site	MS-01	X	X	X		
	MS-02	X	X	X		
	MS-03	X	X	X		
	MS-04	X	X	X		
	MS-05	X	X	X		
	Working Face			X		
	Reaction Area			X		
	1150.1 Upwind					X
	1150.1 Downwind			X		X
Off-Site	MS-06	X	X	X	X	
	MS-07	X	X	X	X	
	MS-08	X	X	X	X	
	MS-09	X	X	X	X	
	MS-10	X	X	X	X	
	MS-11	X	X	X	X	
	MS-12	X	X	X	X	
	SCV			X		
	Chiquito Cyn Rd			X		
	S End Lincoln			X		

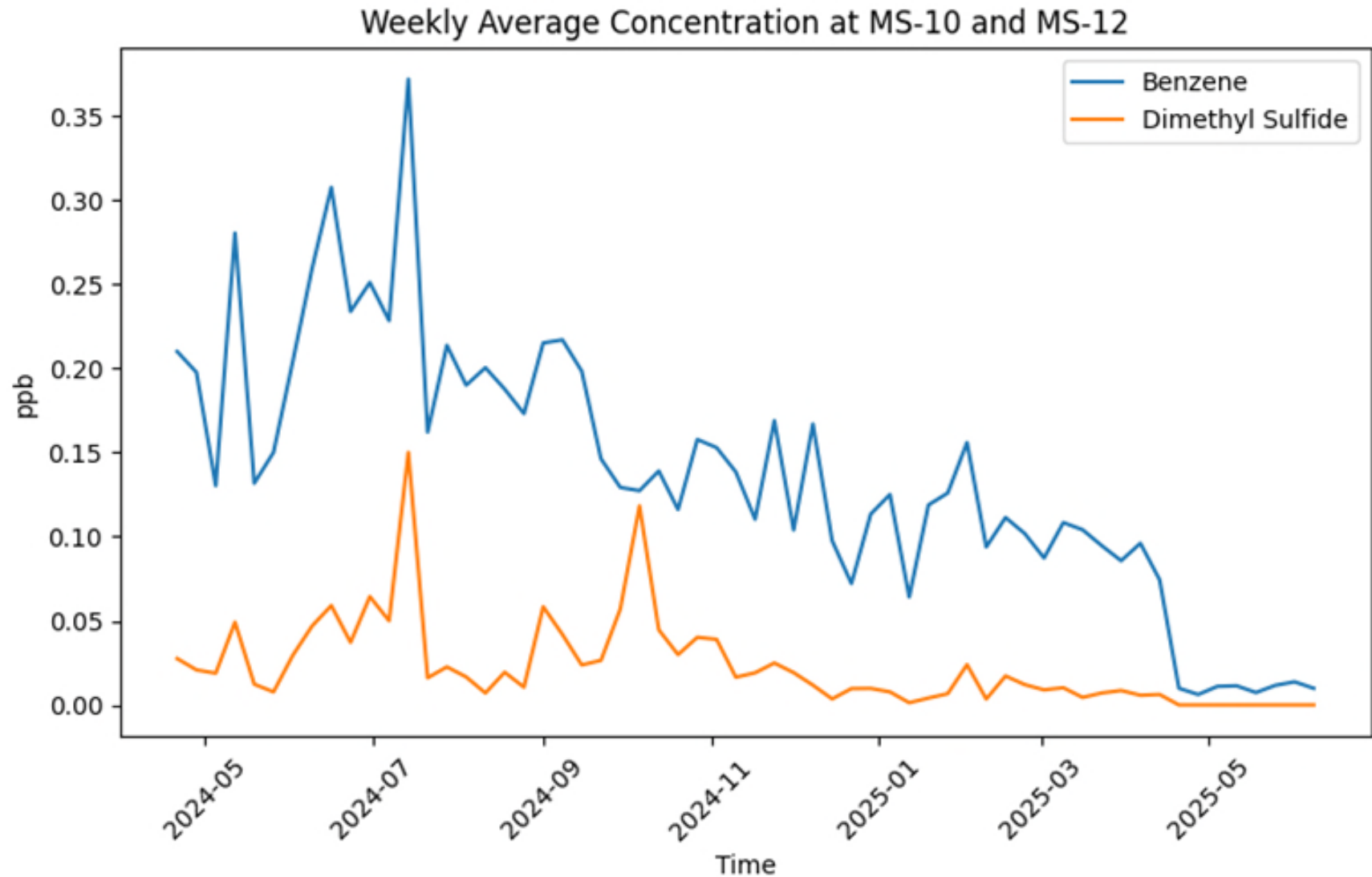


Offsite Hydrogen Sulfide Data

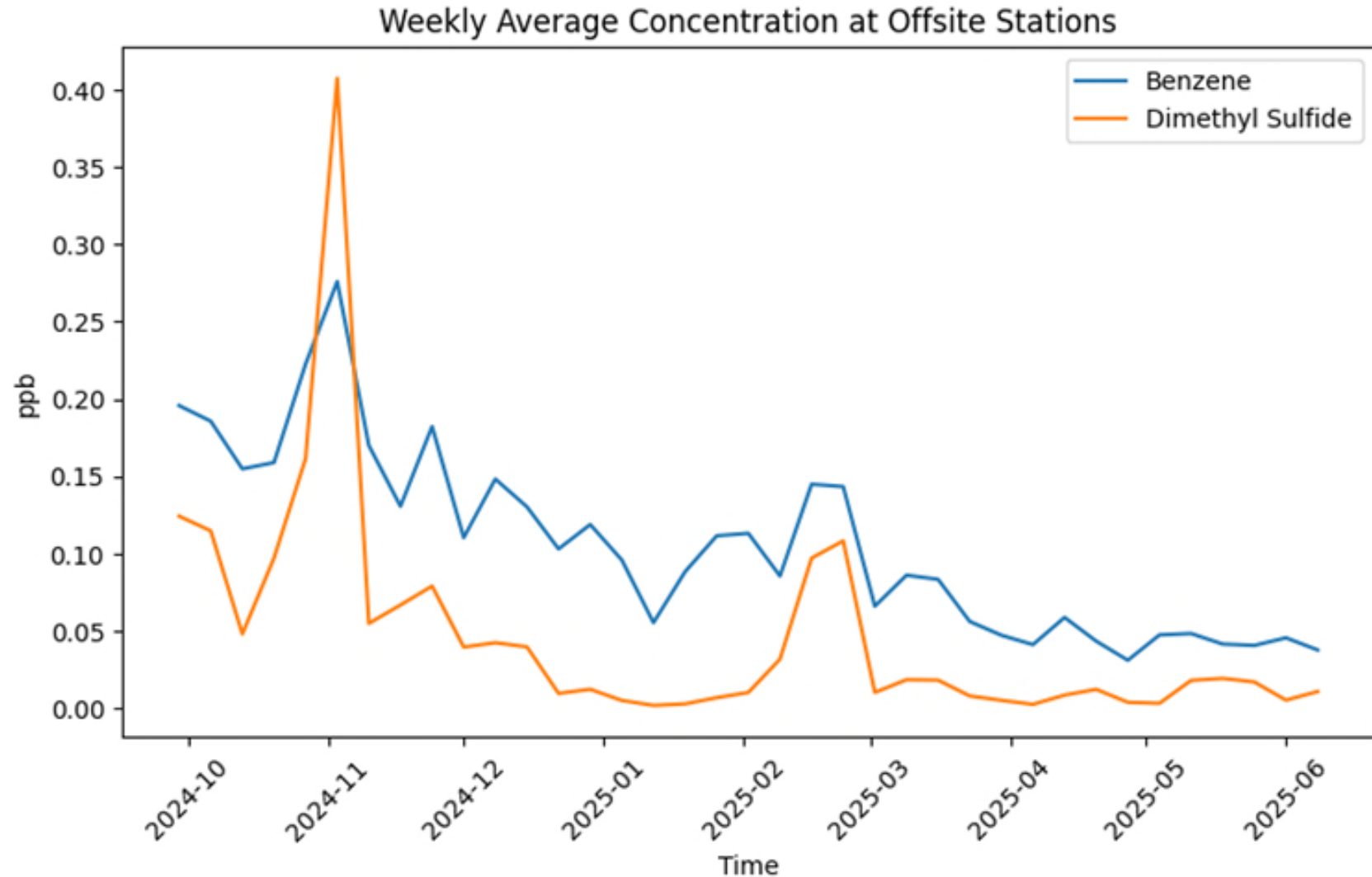
Weekly Average Hydrogen Sulfide Concentration
After Replacement (2024-02-13)



Benzene and Dimethyl Sulfide Data



Benzene and Dimethyl Sulfide Data



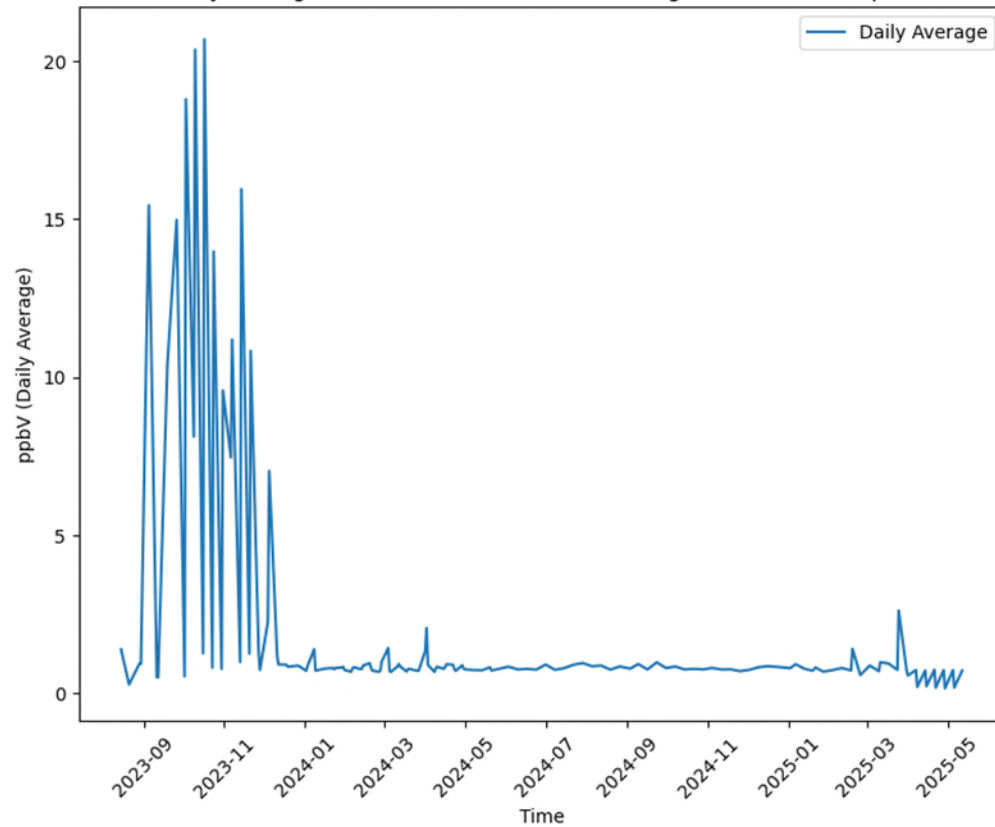
Offsite Acute REL Exceedances

Data From 6-20-2024 To 6-19-2025

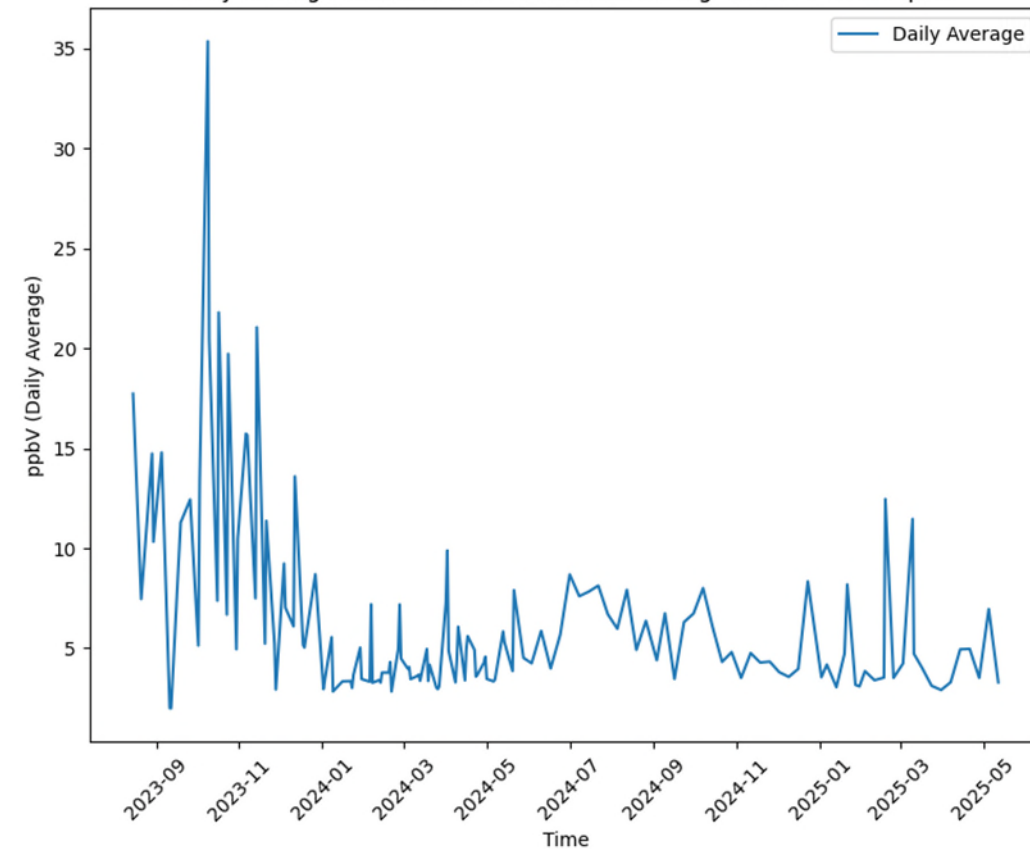
Compound	Max Recorded	OEHHA REL	Number of Data Points	Number Above Threshold	Percent Above Threshold
	(parts per billion – PPB)				
Benzene	14.24	8	38870	2	0.005
2_Butanone	23.48	4,500	38867	0	0
Hydrogen Sulfide	18	30	60269	0	0
Isopropyl Alcohol	68.09	1,300	37964	0	0
Methanol	89.81	21,000	38841	0	0
Toluene	10.84	1,300	38870	0	0
m,p-Xylene	57.45	5,000	37048	0	0
Acrolein	2.43	1.1	3599	17	0.472

Toluene and Acetone Data

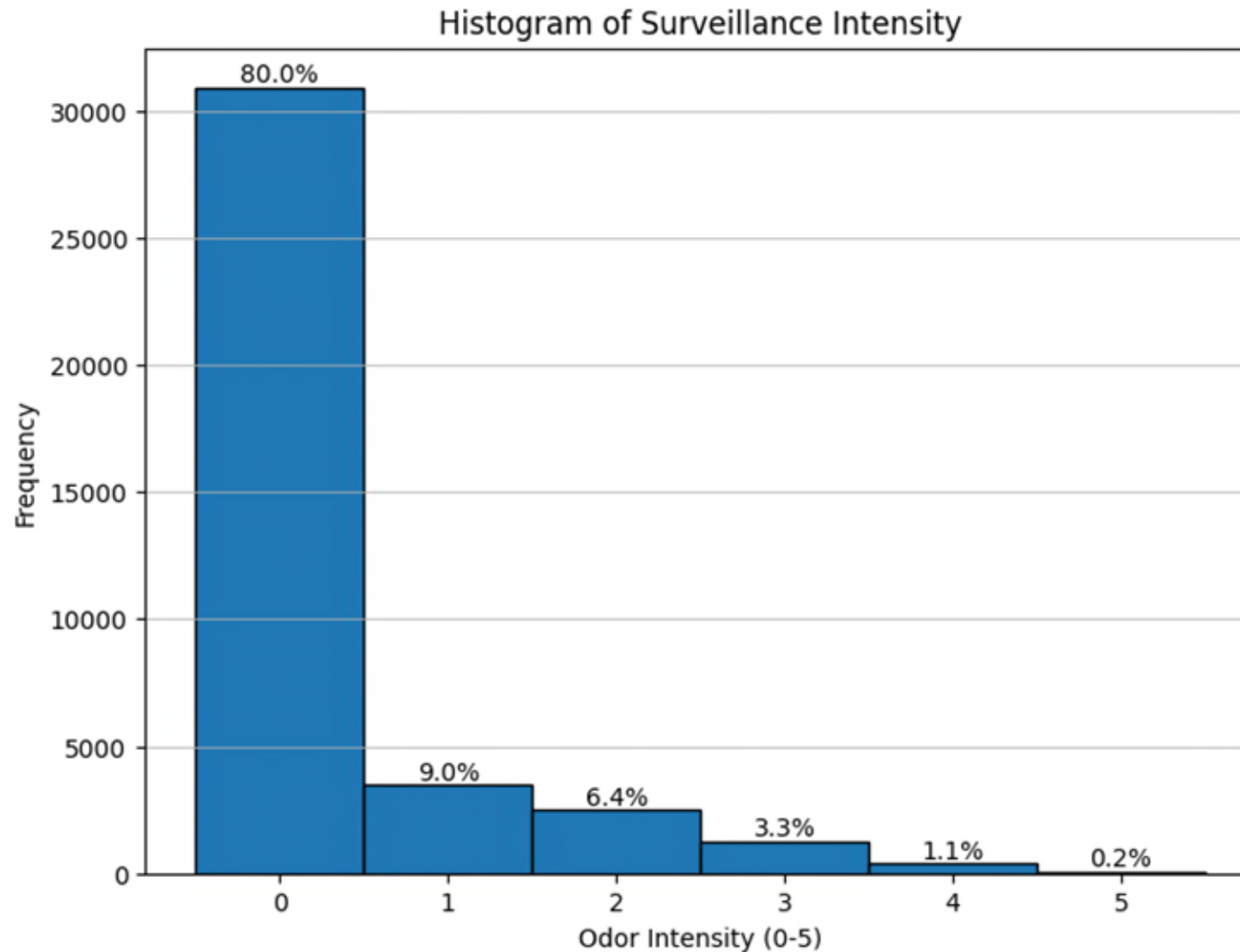
Daily Average Concentration of Toluene from grab and 24H samples



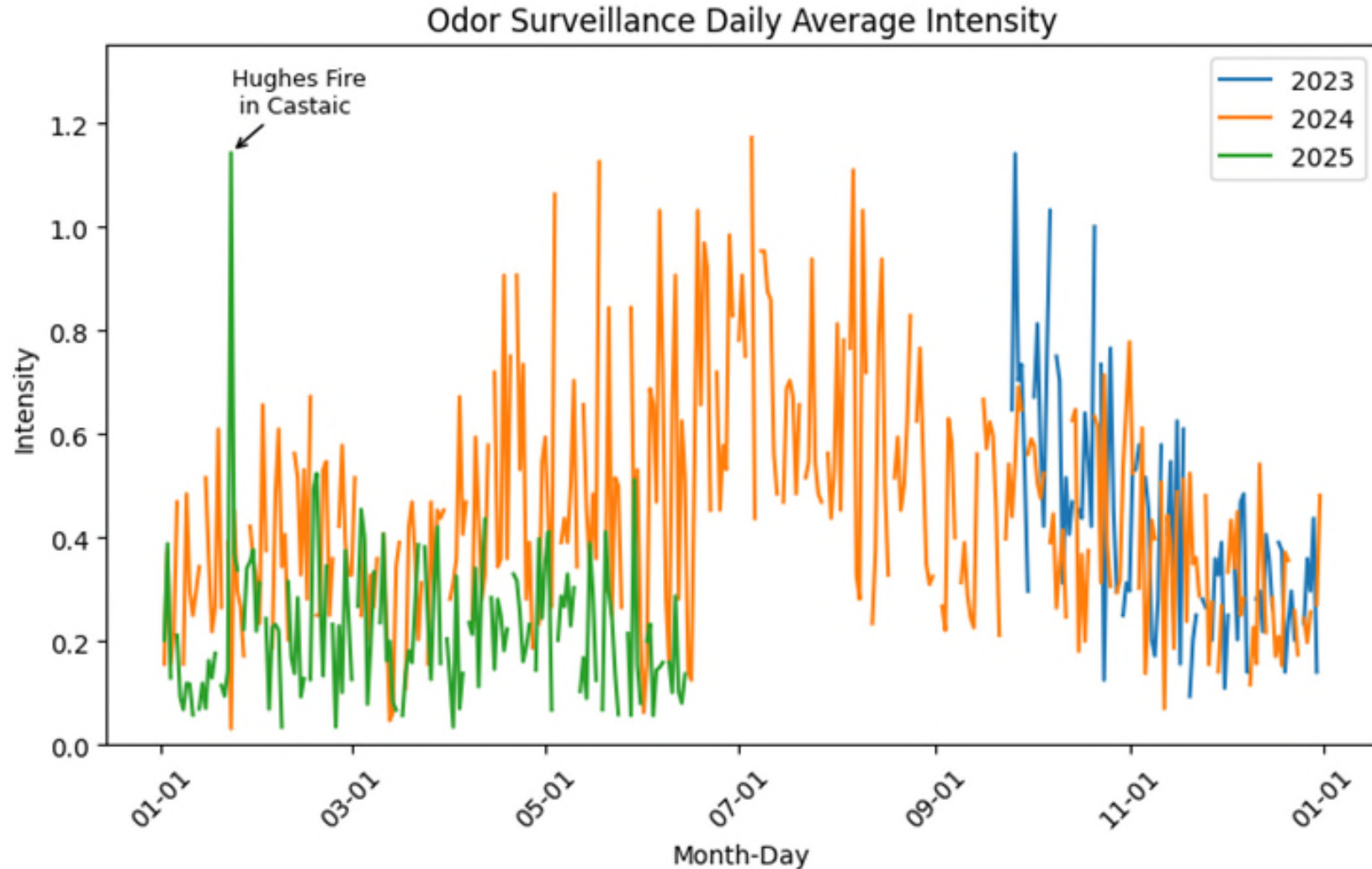
Daily Average Concentration of Acetone from grab and 24H samples



Odor Surveillance Intensity Data



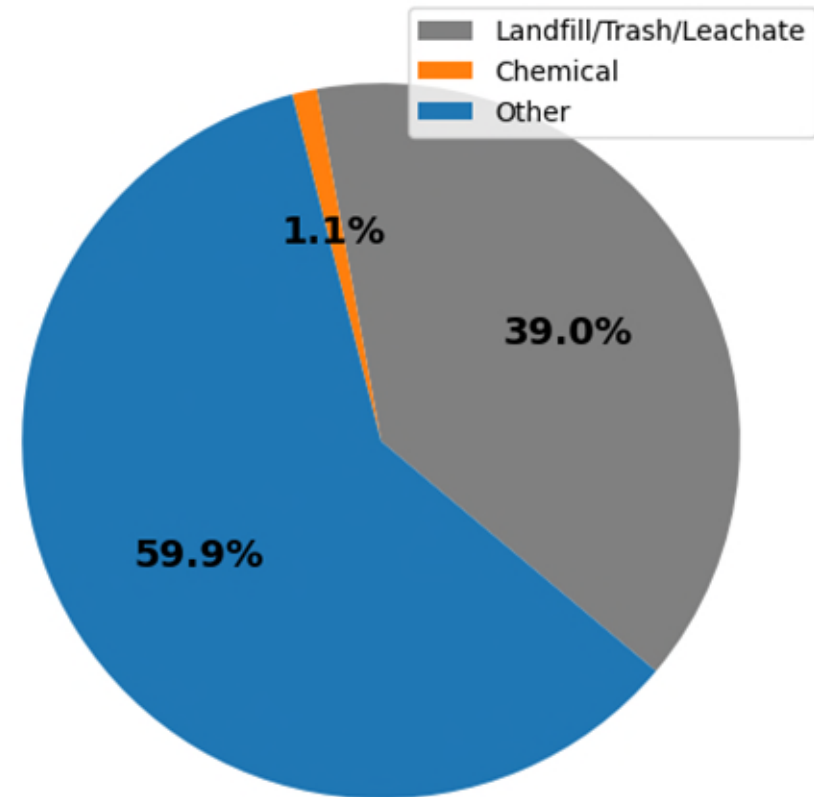
Odor Surveillance Intensity Data



Odor Description Data

Surveyors were instructed to describe odor unrelated to the landfill as "Other"

Descriptions of Odors from Surveillance Events



Reaction Gas

Chemical	Units	Post-Reaction/ETLF	Pre-Reaction	EPA/AP-42	SSO/Fire	Change due to Reaction
Methane	%	2.32	39.30	45-55	25-35	-1597.59%
Carbon Dioxide	%	63.00	35.36	35-40	30-45	43.87%
Hydrogen	%	14.50	0.26	0-2	0-1	98.21%
Carbon Monoxide	ppmv	1275.00	13.80	110.00	1000-2000	98.92%
Dimethyl Sulfide	ppmv	2075.00	6.51	7.80	No change	99.69%
Hydrogen Sulfide	ppmv	127.93	452.03	36.00	No change	-253.35%
Methyl Mercaptan	ppmv	727.50	2.69	2.50	No change	99.63%
Benzene	ppmv	265.00	4.58	11.00	Slight increase	98.27%
Isopropyl Alcohol	ppmv	142.50		50.00	Slight increase	
Acetone	ppmv	1412.50		7.00	Slight increase	
2-Butanone	ppmv	732.50		7.10	Slight increase	
Tetrahydrofuran	ppmv	530.00			Slight increase	
Ethyl Acetate	ppmv	50.50			Slight increase	

Pre-Reaction

Post-Reaction/ETLF

Sulfur Comparison

VOC Comparison

Fixed Gas Comparison

EPA AP-42 Tables 2.4-1/2.4-2

Subsurface Oxidation/Fire