

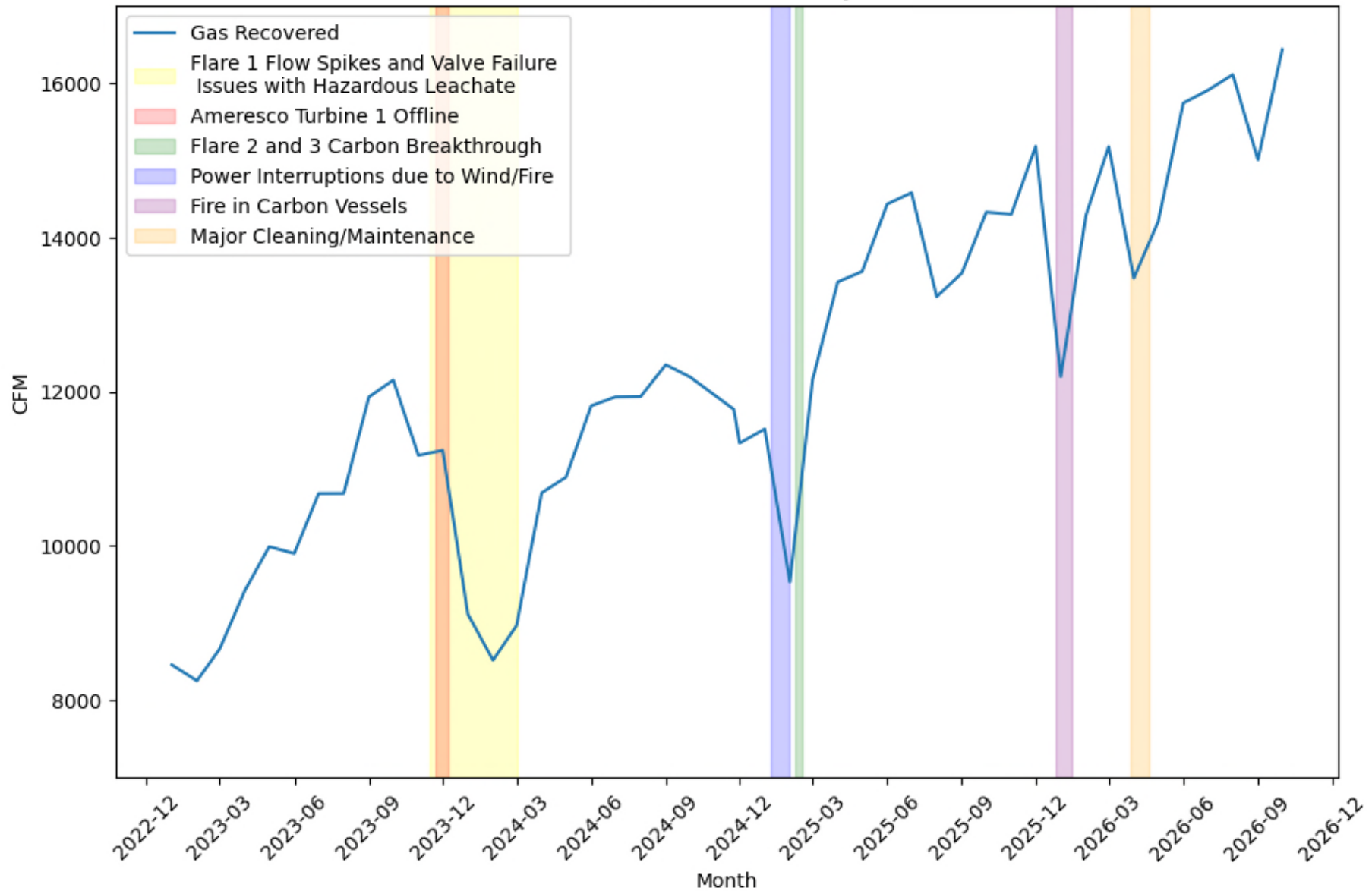
SCAQMD v. CCL Hearing

Patrick
Sullivan, BCES,
CPP, REPA

October 28 and 29, 2026

SCS ENGINEERS

Landfill Gas Recovery



*Data updated through October 14, 2026. Exhibit XXXXX – Exhibit A

Landfill Gas Recovery

Time Period	Total Average Gas Recovery (cfm)	Leachate Vapor Flow (cfm)	Average Gas (cfm)
Oct-25	14,996	671	14,325
Nov-25	14,828	531	14,297
Dec-25	15,709	531	15,178
Jan-26	12,796	603	12,193
Feb-26	15,126	841	14,285
Mar-26	15,870	697	15,173
Apr-26	14,521	1,052	13,469
May-26	14,468	267	14,201
Jun-26	16,234	496	15,738
Jul-26	16,394	491	15,903
Aug-26	16,630	524	16,106
Sep-26	15,941	938	15,003
Oct-26	16,871	438	16,433

Landfill Gas Generation and Control Capacity Chart

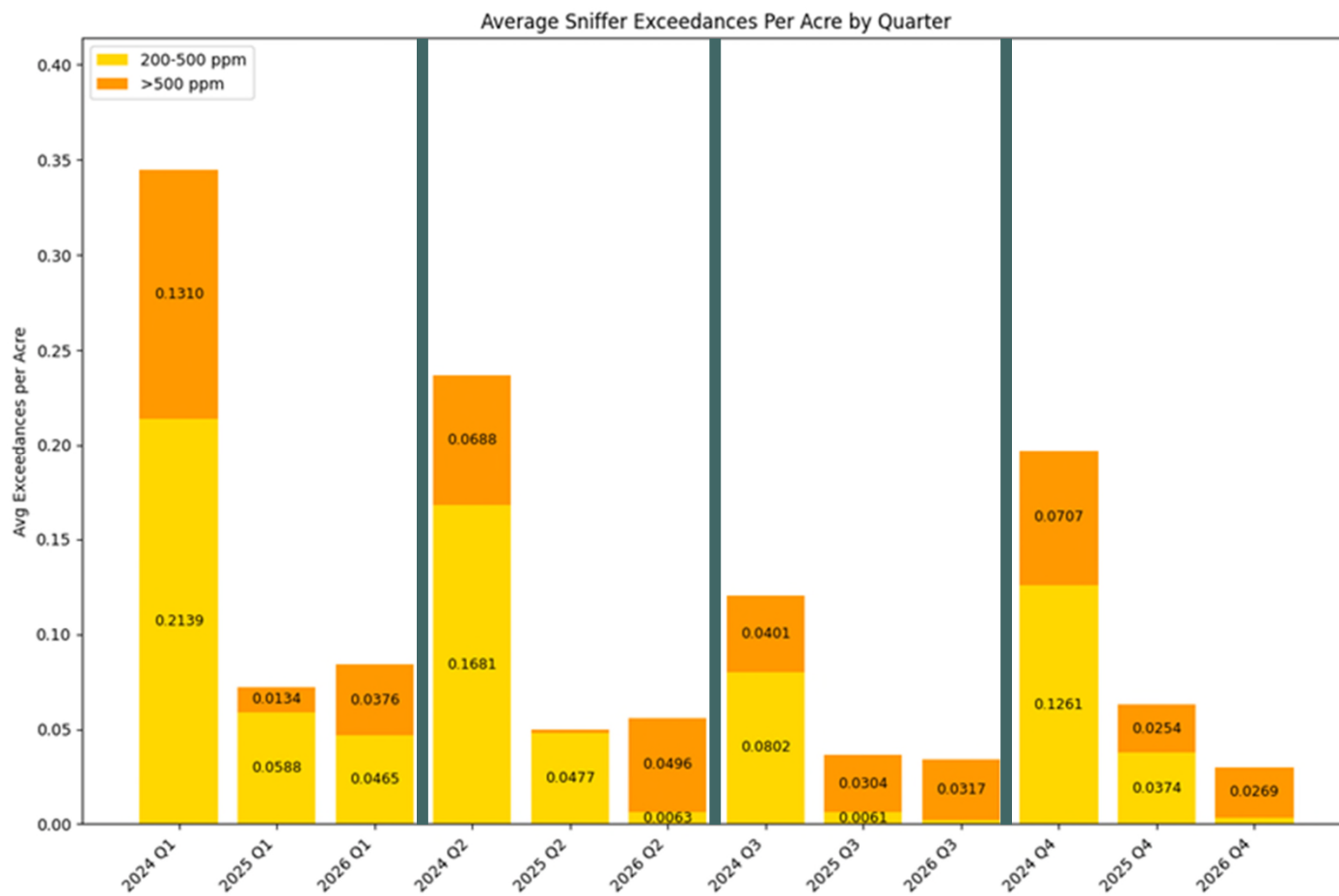
Year		2026				2027	2028	2029	2030
		Q1	Q2	Q3	Q4				
LandGEM LFG Generation	(cfm)	15,070	15,070	15,070	15,070	14,770	14,480	14,190	13,910
LFG Generation (with reaction gas increase)	15%	17,331	17,331	17,331	17,331	16,986	16,652	16,319	15,997
LFG Generation (with 6000 scfm redundancy)		23,331	23,331	23,331	23,331	22,986	22,652	22,319	21,997
Flare 1 (FL-1995) ¹	(cfm)	4,000	4,000	4,000	4,000	4,000	-	-	-
Flare 2 (FL-2009)		4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
TOX (Zeeco 7)		2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500
Flare 3 (FL-2023)		6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000
Flare 4		-	-	-	6,000	6,000	6,000	6,000	6,000
TOX (Parnel)		2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
TOX (HERO)		2,500	2,500	2,500	-	-	-	-	-
Flare 5 ²		-	-	-	-	-	-	-	-
New TOX #1 (Zeeco 1)		-	2,500	2,500	2,500	2,500	2,500	2,500	2,500
New TOX #2 (Zeeco 6)		-	2,500	2,500	2,500	2,500	2,500	2,500	2,500
New TOX #3 (Zeeco 2)		-	-	2,500	2,500	2,500	2,500	2,500	2,500
Flare/TOX Capacity		21,000	26,000	28,500	32,000	32,000	28,000	28,000	28,000
Ameresco	(cfm)	-	-	-	-	-	-	-	-
Total Capacity	(cfm)	21,000	26,000	28,500	32,000	32,000	28,000	28,000	28,000

Existing units as of end of June 2026

¹ Flare 1 will likely continue thru 2027 until Flare 5 has completed is operating full time, after which Flare 1 will be taken offline. If Flare 5 is no longer determined to be necessary, Flare 1 will be decomised in 2028.

² Flare 5 is currently listed at a capacity of 6,000 scfm; however, with the landfill closure, a smaller capacity may be capable of meeting the redundancy criterion or it may not be needed at all.

*Data updated through August 31, 2026. Exhibit XXXXX – Table 1



*Data updated to October 14, 2026. Exhibit XXXXX – Exhibit C

Flux Chamber Study Data

Compound	Units	1 (8/23)	2 (3/24)	3 (11/24)	4 (3/25)	5 (7/25)	6 (11/25)	7 (3/26)	8 (7/26)
Carbon dioxide	tons/yr	41,312	327,049	216,177	100,526	46,702	92,157	98,854	12,697
Methane	tons/yr	3,357	11,456	6,880	4,756	285	2,979	6,055	163
Total VOC	tons/yr	207	853	61	26	2.6	4.39	19.04	3.93
Trichloroethene (TCE)	tons/yr	<0.1	<4	<0.05	<0.05	<0.05	1.07	0.04	4.58
Ethanol	tons/yr	<0.1	<4	<0.05	<0.05	<0.05	<0.05	<0.05	1.73
Acetone	tons/yr	17.64	50.66	1.30	1.38	0.54	0.69	2.33	1.43
Methanol	tons/yr	9.09	<4	0.51	0.79	0.45	0.34	5.59	0.63
Hexane	tons/yr	<0.1	<4	<0.05	<0.05	<0.05	0.09	0.05	0.55
2-Butanone (MEK)	tons/yr	9.06	51.20	0.24	0.30	0.07	0.14	1.15	0.43
Isopropyltoluene	tons/yr	3.72	15.23	0.18	0.51	<0.05	0.14	0.72	0.43
2-Hexanone	tons/yr	<0.1	<4	<0.05	<0.05	<0.05	<0.05	<0.05	0.30
Hydrogen Sulfide	tons/yr	0.13	3.81	0.72	0.24	0.15	0.40	0.21	0.23
Acrolein	tons/yr	NA	NA	NA	NA	0.05	0.07	0.16	0.20
Dimethyl Sulfide	tons/yr	15.2	57.9	0.9	1.0	ND	0.84	0.91	0.20
Benzene	tons/yr	9.33	104.31	0.27	0.90	0.14	0.20	2.05	0.19
Total Xylenes	tons/yr	1.52	9.79	0.30	0.48	0.08	0.10	1.17	0.19
Toluene	tons/yr	2.00	18.64	0.22	0.29	0.06	0.11	0.85	0.12
Chloromethane	tons/yr	<0.1	<4	<0.05	<0.05	<0.05	<0.05	<0.05	0.11
Ethylbenzene	tons/yr	1.14	10.07	0.16	0.20	0.03	0.05	0.80	0.10
Propylene (Corrected)	tons/yr	6.62	29.82	0.69	0.41	0.05	0.08	0.24	0.10
Chloroform	tons/yr	<0.1	<4	<0.05	<0.05	<0.05	0.05	0.10	0.081
Nonane	tons/yr	<0.1	<4	<0.05	<0.05	<0.05	0.05	0.28	0.069
Octane	tons/yr	<0.1	<4	<0.05	<0.05	<0.05	0.05	0.20	0.035
Tetrahydrofuran	tons/yr	13.62	106.99	0.06	0.23	0.01	0.12	1.02	0.031
n-Heptane	tons/yr	<0.1	<4	<0.05	<0.05	<0.05	0.05	0.23	0.026
Chloroethane	tons/yr	<0.1	<4	<0.05	<0.05	<0.05	0.03	0.03	0.016
1,2-Dichloroethane	tons/yr	<0.1	<4	<0.05	<0.05	<0.05	0.02	0.04	0.013
Cyclohexane	tons/yr	<0.1	<4	<0.05	<0.05	<0.05	0.03	0.15	0.011

Exhibit XXXXX – Table 2

Flux Chamber Studies

Pollutant	Aug 2023	Mar 2024	Nov 2024	Average (2023-2024)	July 2026	Change (%)
H ₂ S	0.13	3.81	0.72	1.55	0.23	-85%
DMS	15.2	57.9	0.93	24.61	0.20	-99%
Acetone	17.6	51	1.3	23.3	1.43	-94%
THF	13.6	107	0.06	40.22	0.031	-99.9%
Benzene	9.33	104	0.27	37.87	0.19	-99%
Toluene	2.00	18.6	0.25	6.95	0.12	-98%
MEK	9.06	51.2	0.24	20.17	0.43	-98%
Methane	3357	11,456	6880	7231	163	-98%
VOC	203	853	60.5	372.17	3.93	-99%
LFG Recovery	9,779	7,786	13,210	10,258	15,903	+55%

Units in tpy except LFG (cfm)

Flux Chamber Study Comparison

	<i>Average of Flux Events 5 and 6</i>			<i>Non- Reaction Area Comparison to:</i>	
Key Reaction Chemical	Soil-Covered Reaction Area	Membrane-Covered Reaction Area	Soil-Covered Non-Reaction Area	Soil-Covered Reaction Area*	Membrane-Covered Reaction Area**
Flux Rate (milligrams per square meter per minute (mg/m ² -min))					
Total VOC	0.00564	0.00737	0.00459	-18.71%	-37.75%
Benzene	0.00034	0.00060	0.00014	-58.21%	-76.67%
DMS	0.00039	0.00030	0.00027	-31.28%	-9.15%

*Non-Reaction Area to Soil-Covered Reaction Area (% Less Than Soil-Covered Reaction Area Data)

**Non-Reaction Area to Membrane-Covered Reaction Area (% Less Than Membrane-Covered Area Data)

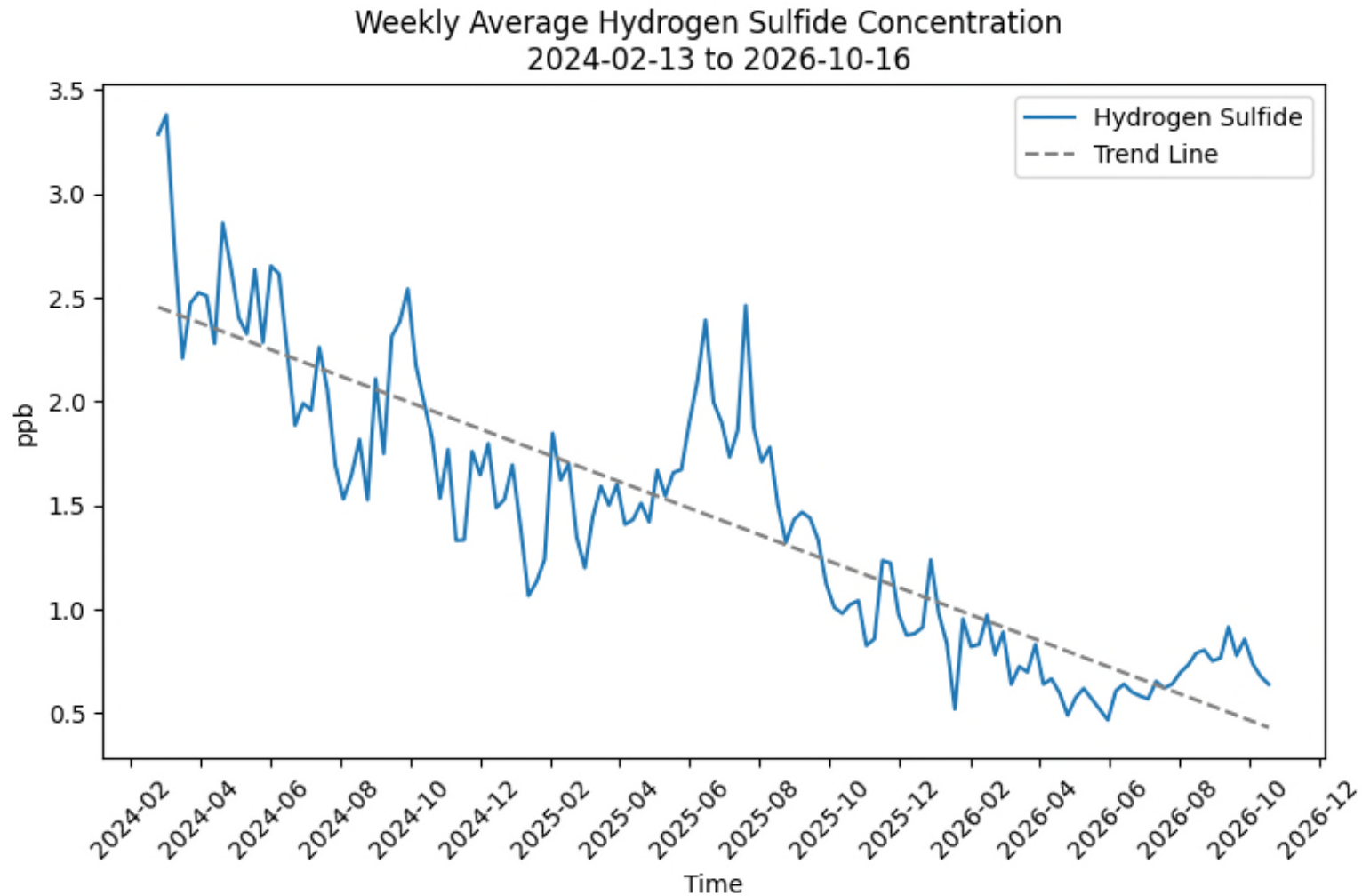
Air Monitoring Program

Location/ Sample Name		Continuous			Monthly Discrete	24-Hour	12-Hour
		H ₂ S/ PM ₁₀ / PM _{2.5}	CH ₄ SO ₂	VOC via Micro-GC	307.91 - Sulfur TO-15 - Full List Sampling	307.91 - Sulfur TO-15 - SIM	H ₂ S 1150.1 Table 1 VOCs
Sample Schedule					*	Mon-Tues	Monthly
On-Site	MS-01	X	X	X	X		
	MS-02	X	X	X	X		
	MS-03	X	X	X	X		
	MS-04	X	X	X	X		
	MS-05	X	X		X		
	1150.1 Upwind						X
	1150.1 Downwind						X
Off-Site	MS-06	X	X	X	X	X	
	MS-07	X	X	X	X	X	
	MS-08	X	X	X	X	X	
	MS-09	X	X		X	X	
	MS-10	X	X	X	X	X	
	MS-11	X	X	X	X	X	
	MS-12	X	X	X	X	X	

*Discrete sampling at 5 out of 12 locations each month on a rotating basis

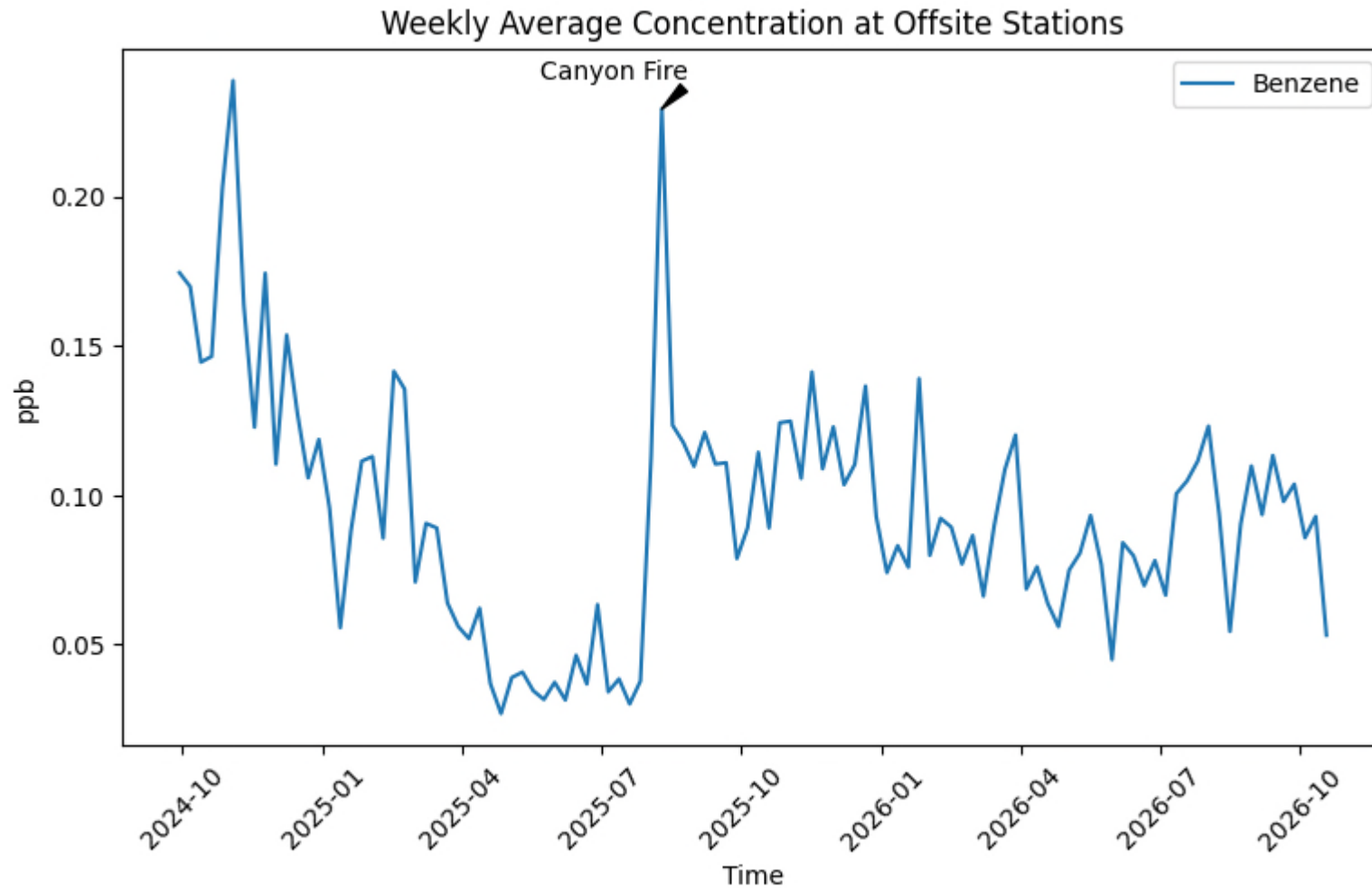


Offsite Hydrogen Sulfide Data



*Data updated through October 16, 2026. Exhibit XXXXX – Exhibit E

Offsite Benzene Data



*Data updated through October 16, 2026. Exhibit XXXXX – Exhibit F

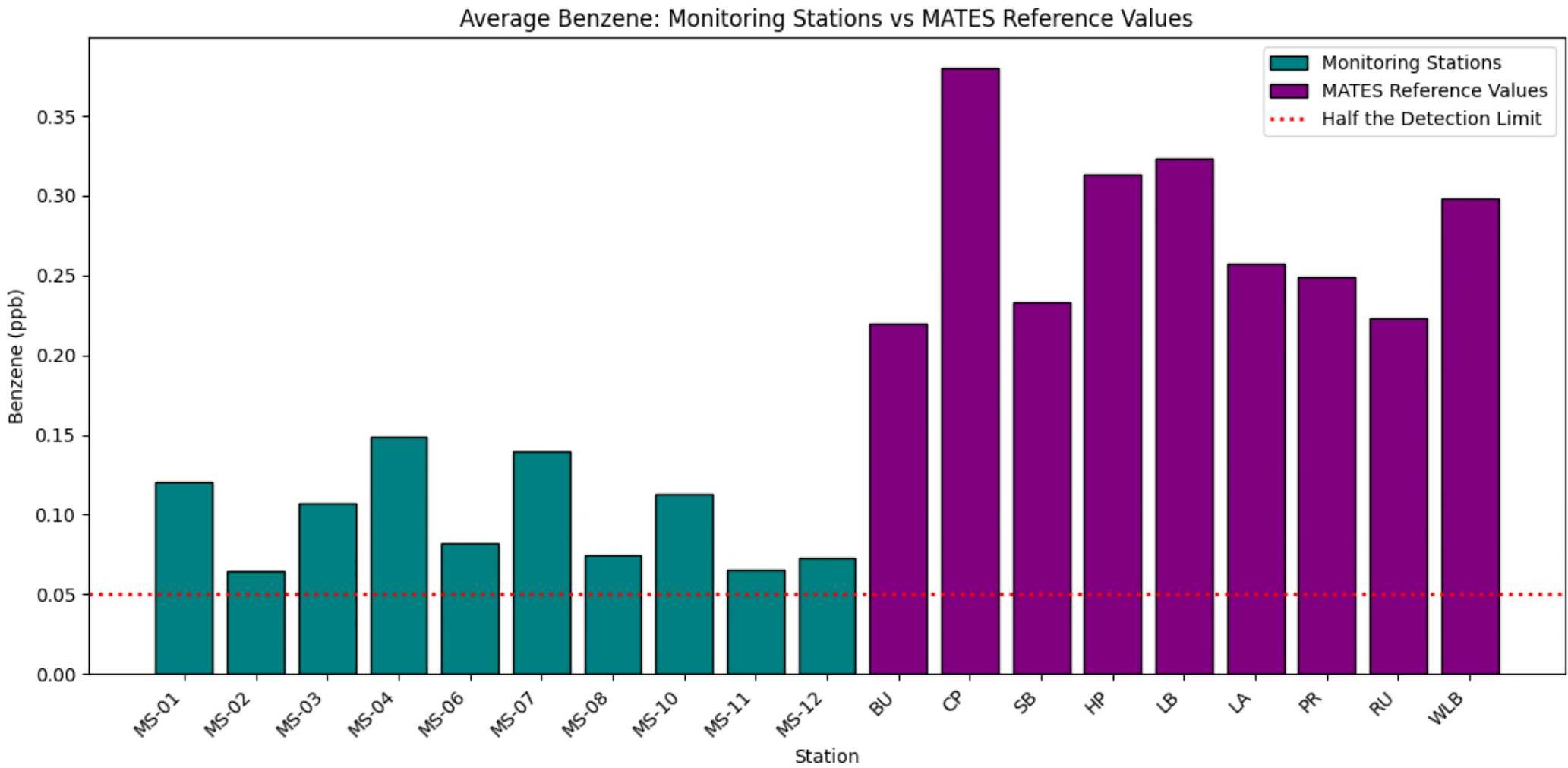
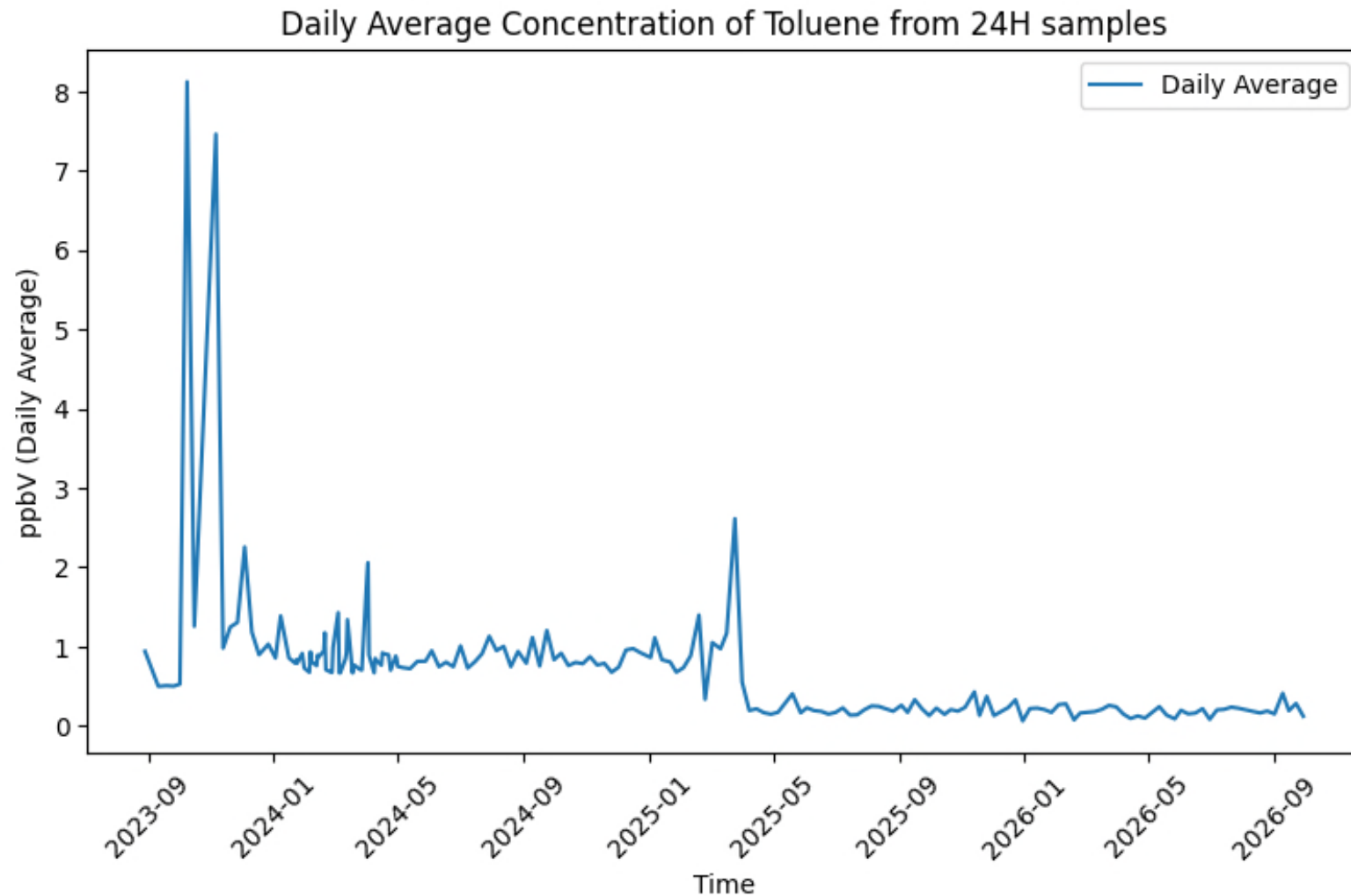


Exhibit XXXXX – Exhibit G

Toluene Lab Data



*Data updated through September 29, 2026

Offsite Acute REL Exceedances

Compound	Max Recorded	OEHHA REL	Number of Data Points	Number Above Threshold	Percent Above Threshold
	(parts per billion – PPB)				
Benzene	14.24	8	102631	3	0.003
2_Butanone	35.85	4,500	102628	0	0
Hydrogen Sulfide**	29	30	137783	0	0
Isopropyl Alcohol	68.09	1,300	101638	0	0
Methanol	89.81	21,000	102602	0	0
Toluene	28.32	1,300	102631	0	0
m,p-Xylene	57.45	5,000	101117	0	0
Acrolein**	1.49	1.1	65873	2	0.003

*Data from 6-20-2024 through 10-16-2026. Exhibit XXXXX – Exhibit H

**Invalidated exceedances were removed from this table

Instantaneous SEM Exceedance Comparison

Area	2024 Initial Instantaneous SEM Exceedances	2025 Initial Instantaneous SEM Exceedances	2026 Initial Instantaneous SEM Exceedances (January – August)
	(average #/acre)	(average #/acre)	(average #/acre)
Area Chiquita Proposes Not to Cover (66 acres)	0.22	0.30	0.22
Membrane-Covered Reaction Area	0.45	0.37	0.26

Exhibit XXXXX – Table 4

Traditional SEM Exceedances Normalized by Acre

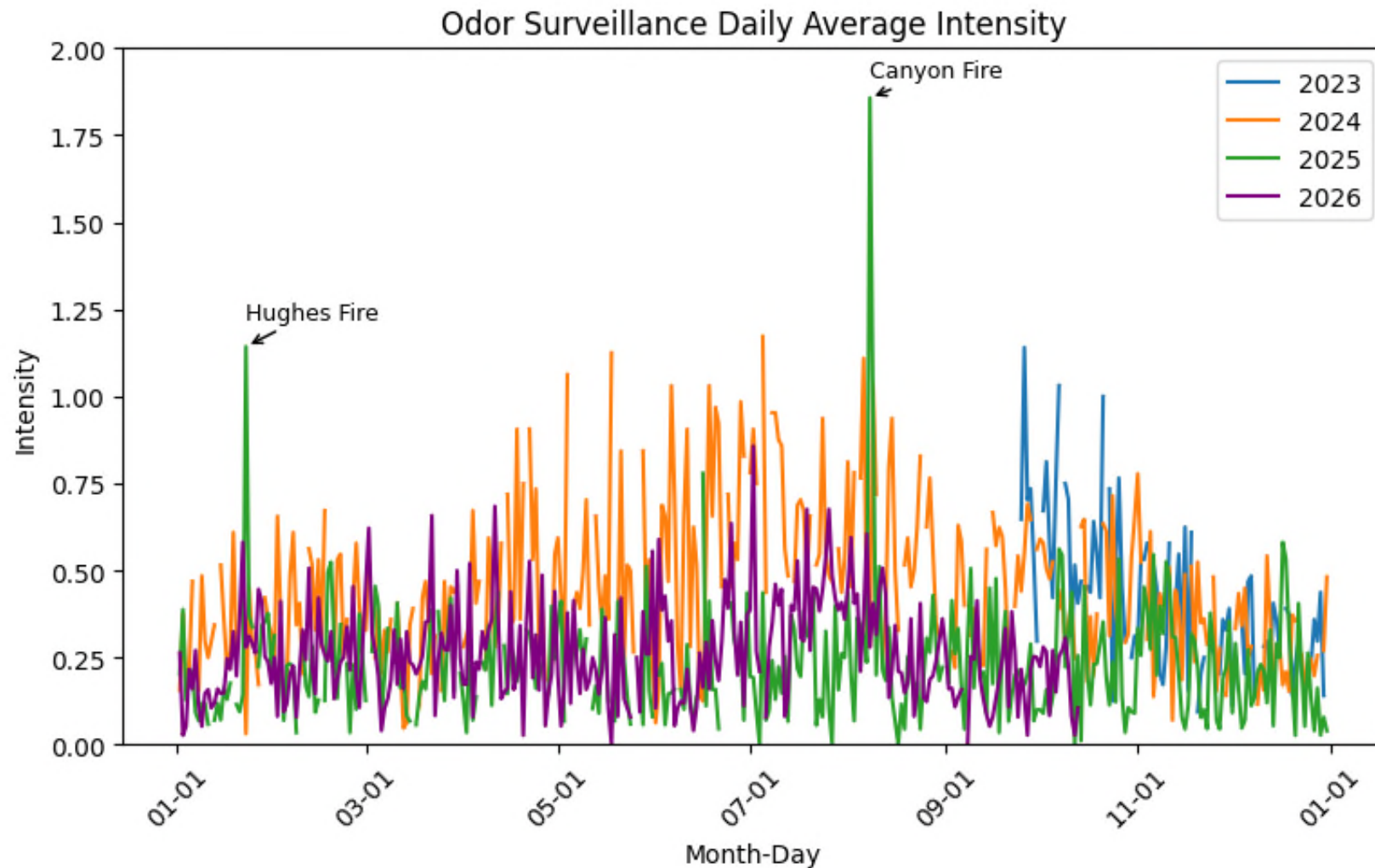
Year	Average Exceedances per Acre Monitored	Percent Reduction Compared to Average of 2024-2025
2024	0.309	-
2025	0.333	-
2026	0.182	-43.4%

Landfill Gas Composition Comparison

Constituent	Units	Reaction Area/ ETLF	66-Acre Area	Difference between 66-Acre Area and Reaction Area
Methane	%	2.32	51.80	95.53%
Carbon Dioxide	%	63.00	39.20	-60.71%
Hydrogen	%	14.50	0.61	-2292.74%
Carbon Monoxide	ppmv	1275.00	21.00	-5971.43%
Dimethyl Sulfide	ppmv	2075.00	28.32	-7226.98%
Hydrogen Sulfide	ppmv	127.93	147.60	13.33%
Methyl Mercaptan	ppmv	727.50	11.38	-6292.79%
Benzene	ppmv	265.00	7.20	-3580.56%
Isopropyl Alcohol	ppmv	142.50	88.60	-60.84%
Acetone	ppmv	1412.50	81.80	-1626.77%
2-Butanone	ppmv	732.50	61.20	-1096.90%
Tetrahydrofuran	ppmv	530.00	36.20	-1364.09%
Ethyl Acetate	ppmv	50.50	19.53	-158.58%

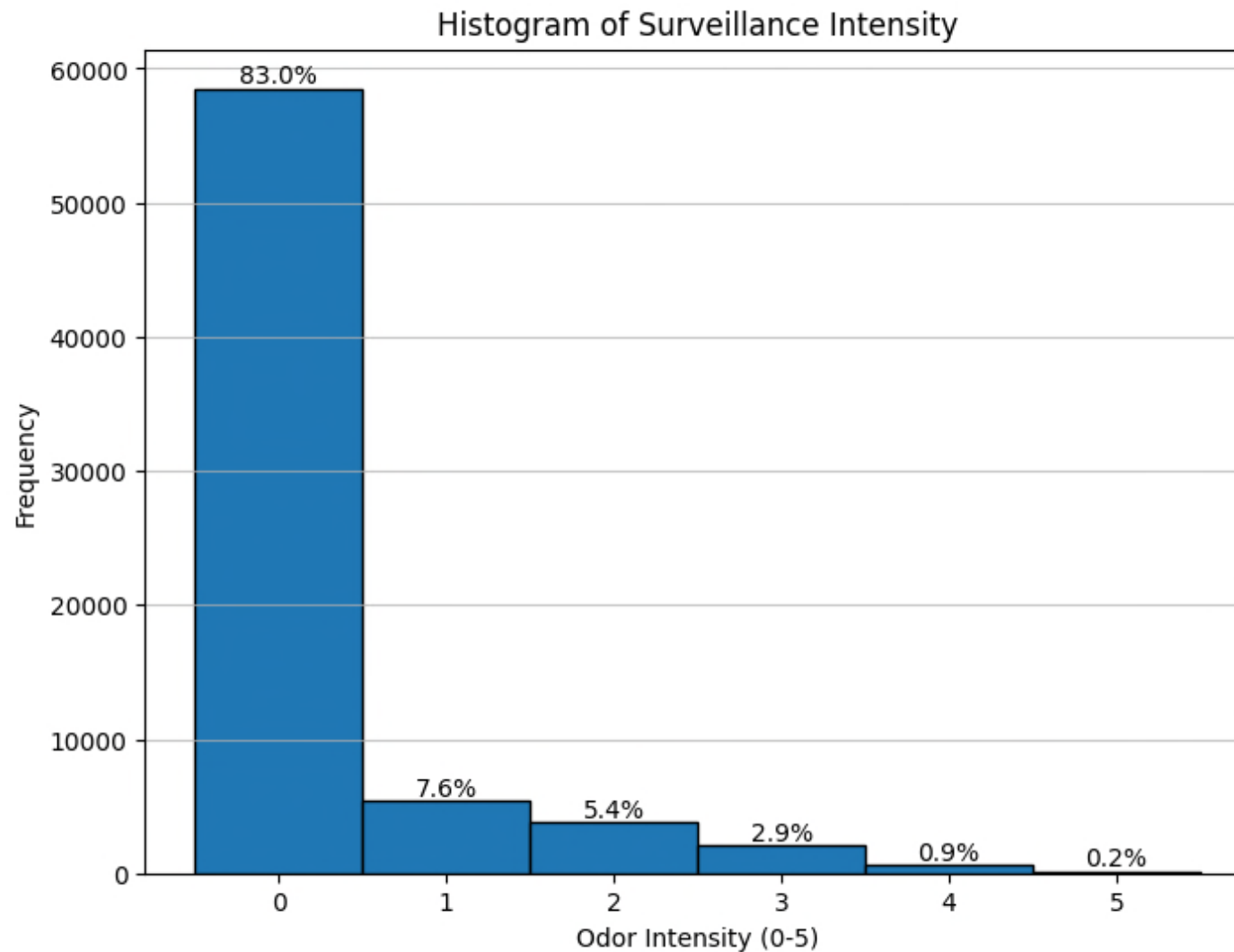
Exhibit XXXXX – Table 5

Odor Surveillance Intensity Data



*Data updated to October 13, 2026

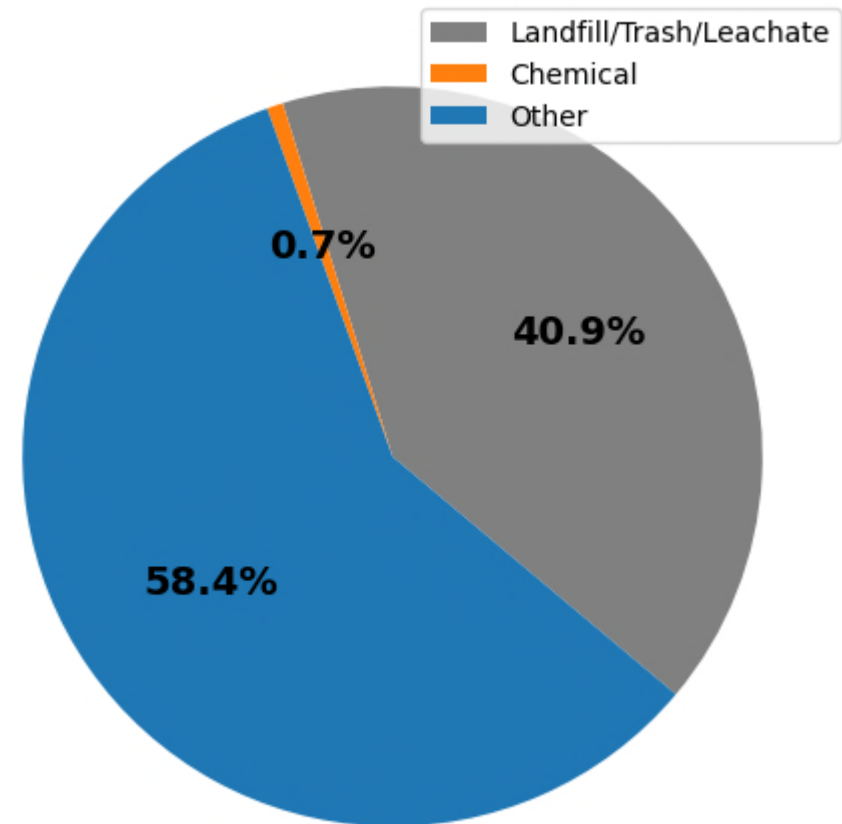
Odor Surveillance Intensity Data



*Data updated to October 13, 2026. Exhibit XXXXX – Exhibit I

Odor Description Data

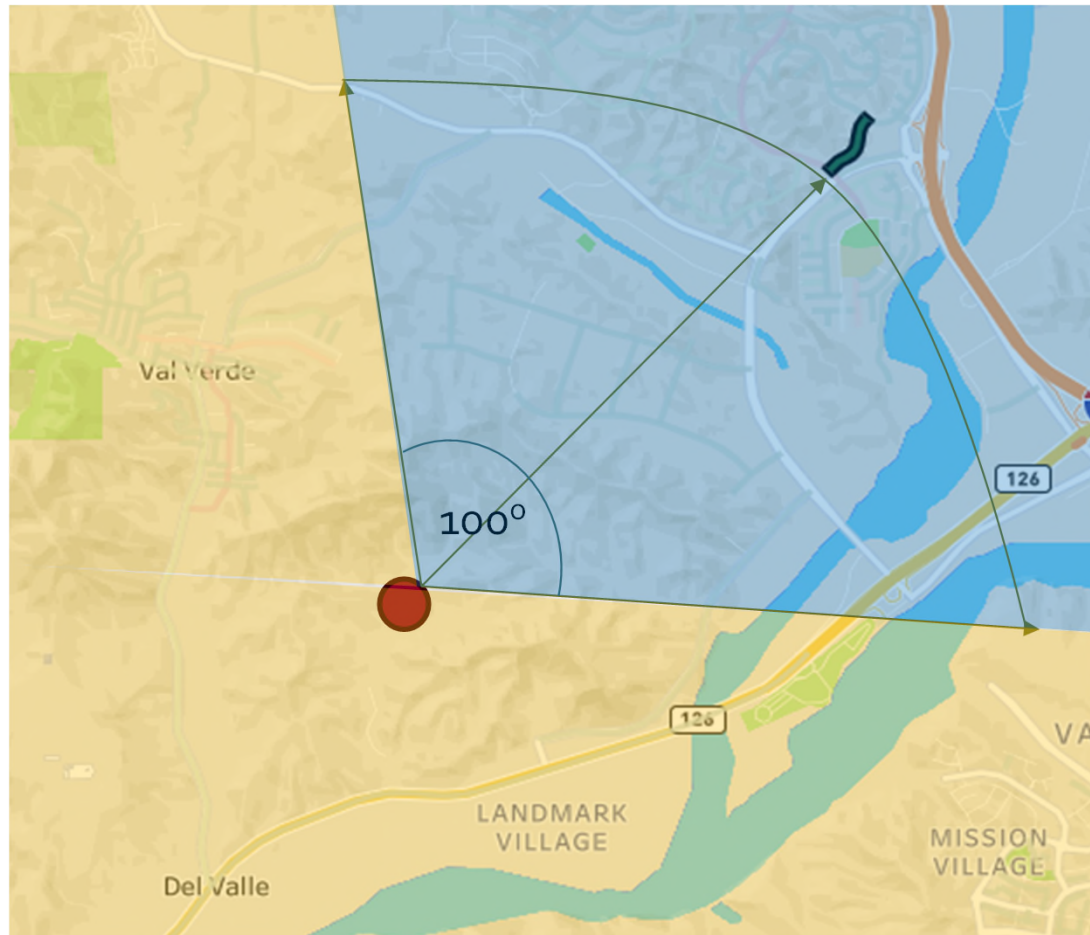
Descriptions of Odors from Surveillance Events



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

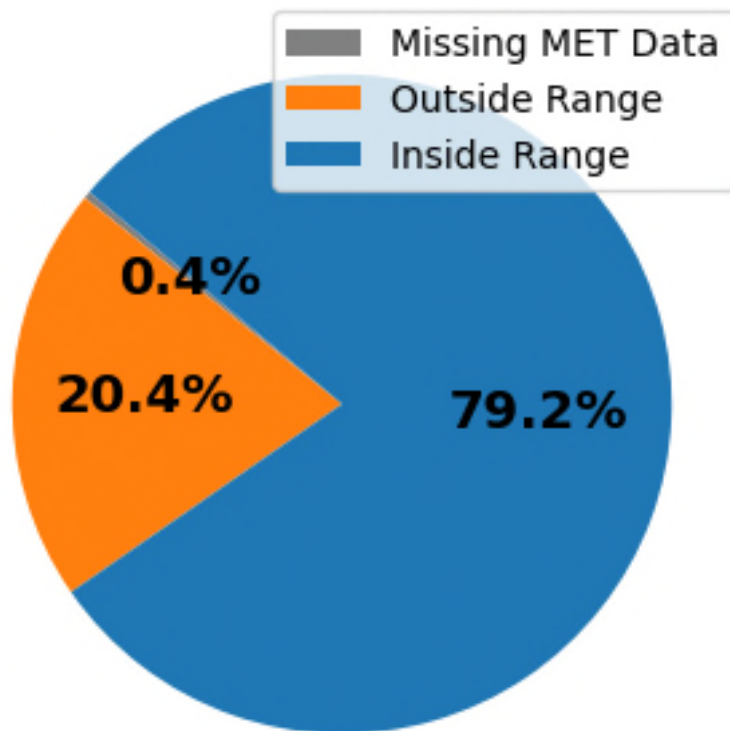
*Data updated to October 13, 2026

Wind Direction Test – Street Midpoints

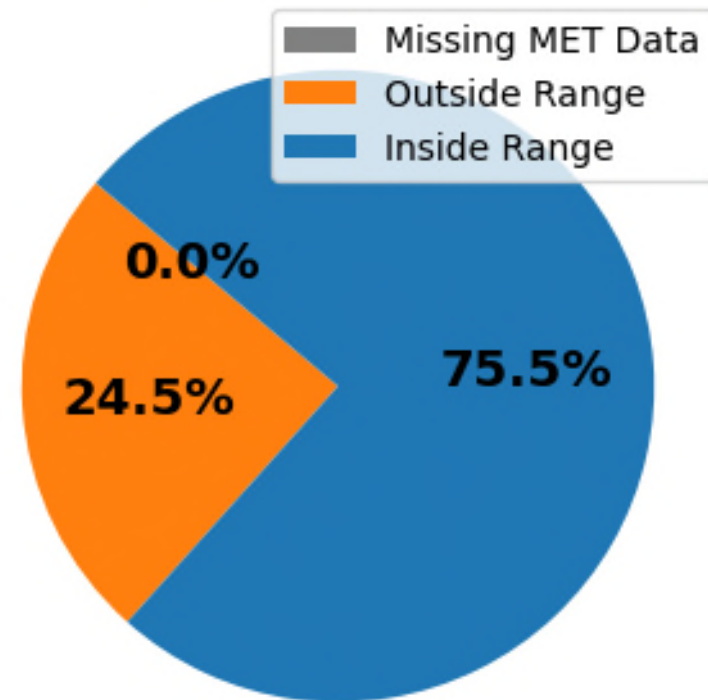


Wind Direction Test – Street Midpoints

2024-2026 Complaints
Wind Direction Test

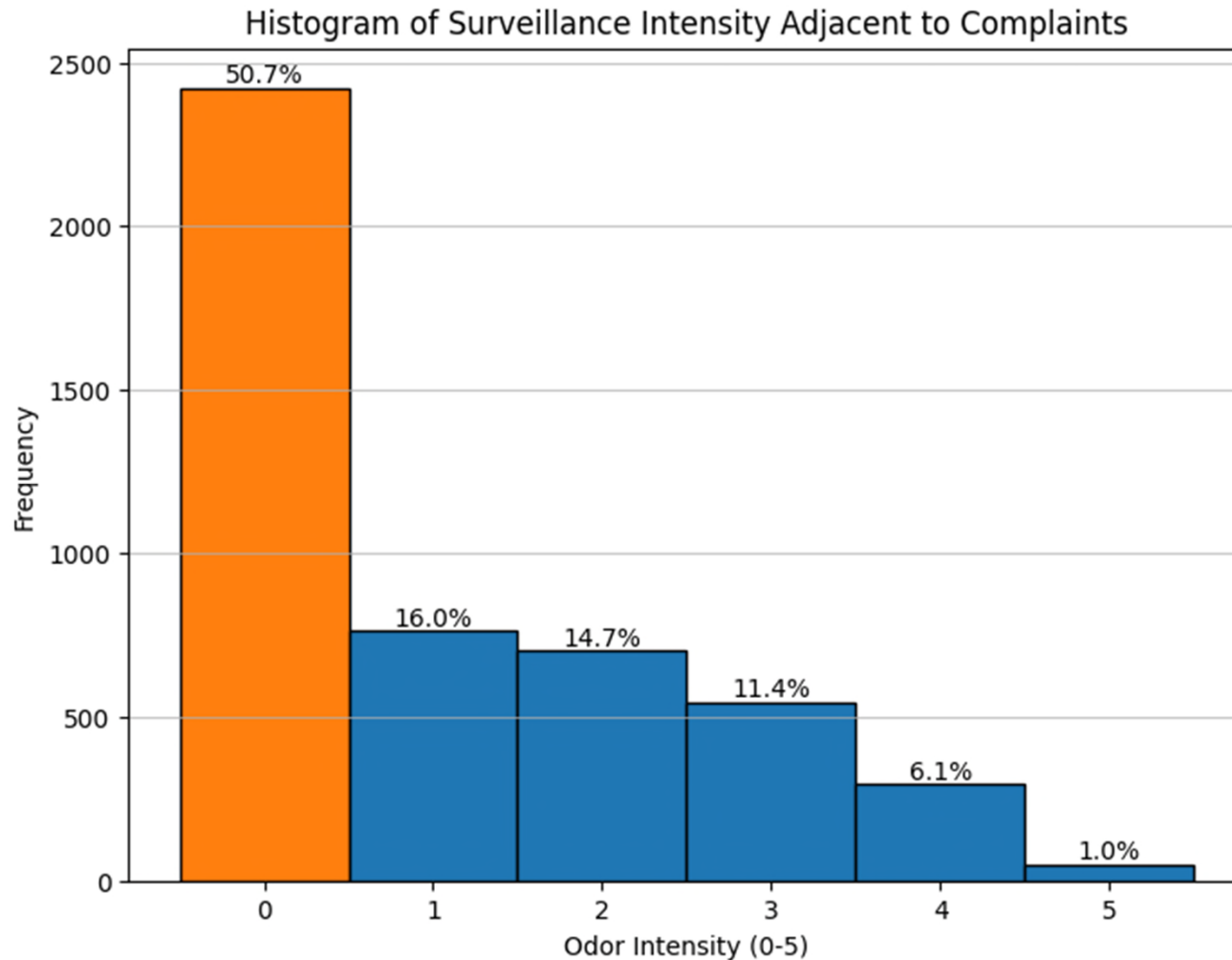


2024 Verified Complaints
Wind Direction Test

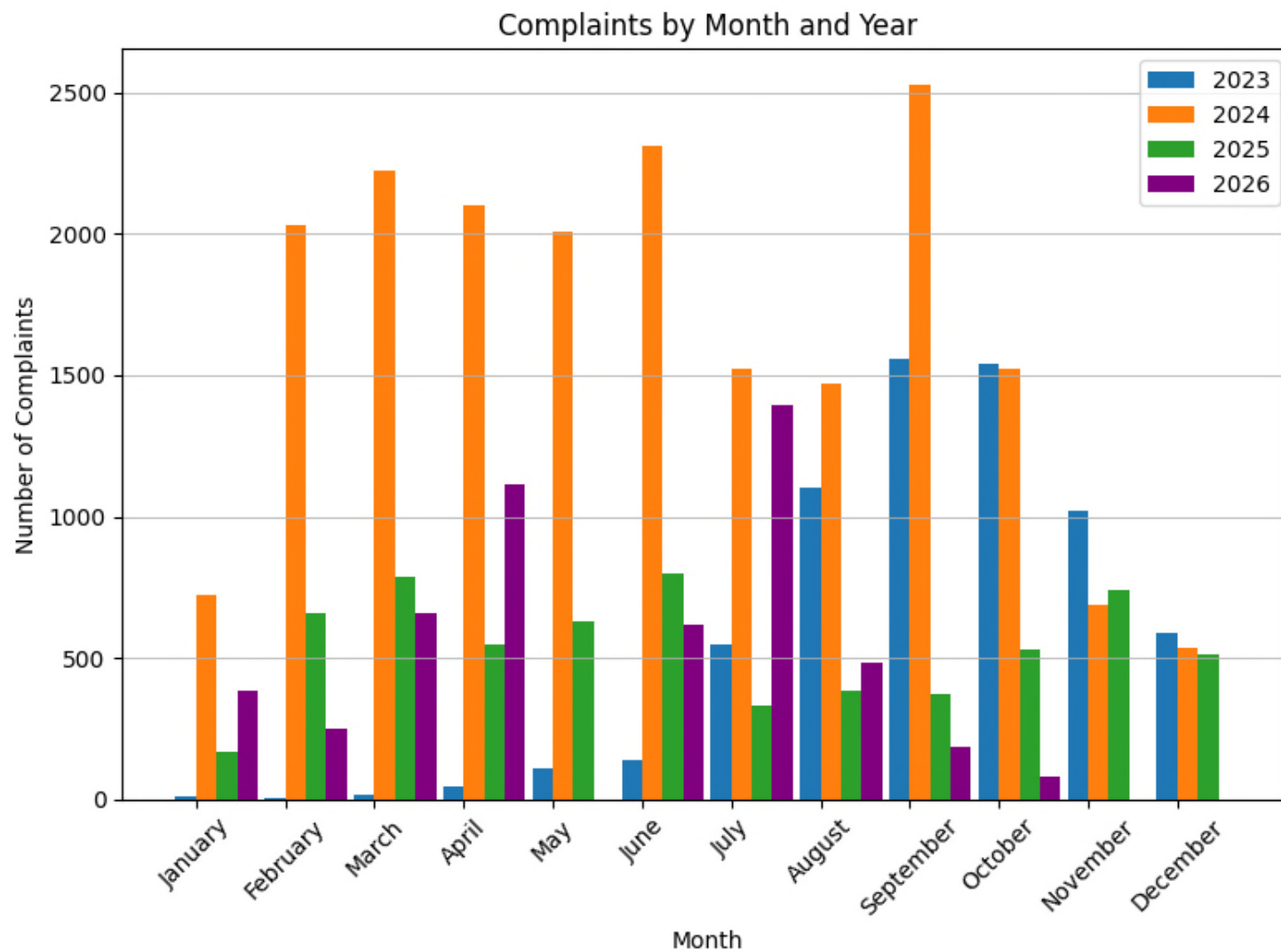


*Data updated through September 4, 2026

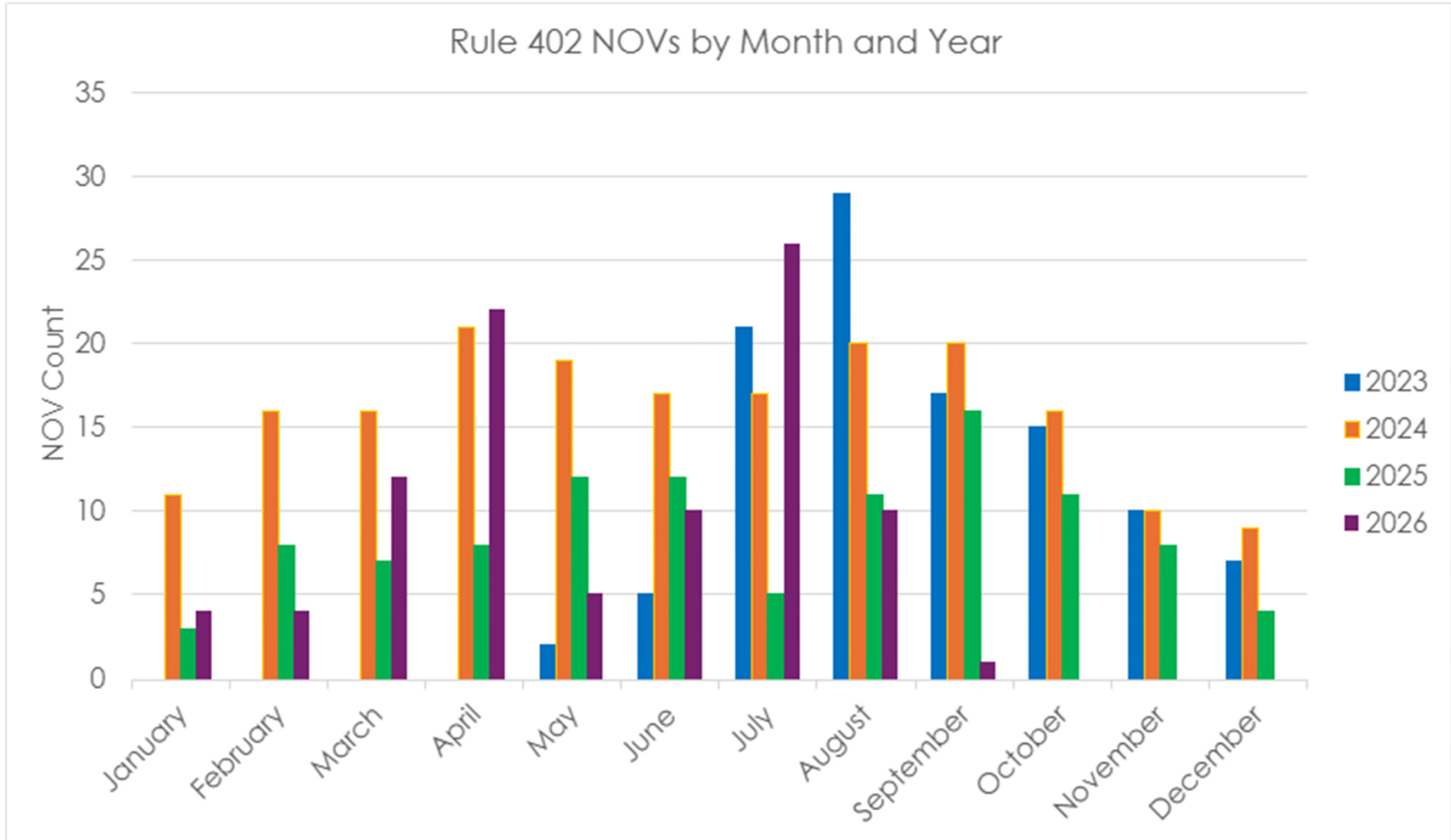
Odor Surveillance & Complaints – Street Midpoints



*Data updated to September 4, 2026

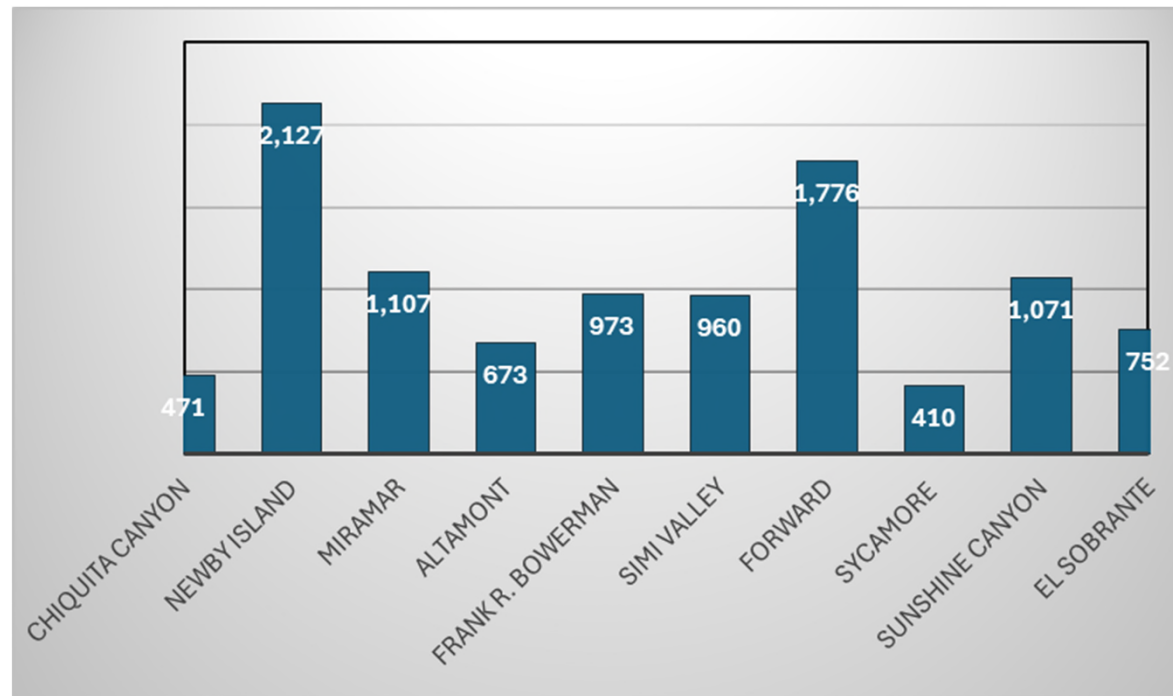


*Data updated through October 16, 2026. Exhibit XXXXX – Exhibit J



*Data updated through October 16, 2026. Exhibit XXXXX – Exhibit K

Methane Emissions from Active Large Landfills in California



Landfill	District	Years
Chiquita Canyon	SCAQMD	2017-2024
Newby Island	BAAD	2017-2025
Miramar	SDAPCD	2027-2025
Altamont	BAAD	2017-2026
Frank R. Bowerman	SCAQMD	2016-2026
Simi Valley	VCAPCD	2020-2025
Forward	SJVAPCD	2017-2025
Sycamore	SDAPCD	2023-2026
Sunshine Canyon	SCAQMD	2016-2026
El Sobrante	SCAQMD	2020-2026

Exhibit XXXXX – Exhibit L

