Continued Landfill Operations Air Impact Study, Chiquita Canyon Landfill

Chiquita Canyon Landfill
29201 Henry Mayo Drive
Castaic, California 91384

SCS ENGINEERS

01204123.21 Task 22 | January 2026

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This Continued Landfill Operations Air Impact Study for the Chiquita Canyon Landfill, dated January 2026, located at 29201 Henry Mayo Drive, Castaic, California, was prepared and reviewed by the following:

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1.0 INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION

This document presents the results of a continued Landfill Operations Air Impact Study (AIS) for the Chiquita Canyon Landfill (Landfill), prepared by SCS Engineers (SCS) in collaboration with Chiquita Canyon, LLC (Chiquita), and in compliance with Condition No. 83(a) of the Modified Stipulated Order for Abatement (SOFA) (Case No. 6177-4), dated December 9, 2025. Condition No. 83(a) states the following:

> *Respondent shall conduct a continued study for a period of 10 months, from January 1, 2025 through October 31, 2025. The continued study shall exclude leachate vapors from the landfill gas flow rate, and add to the list of events to be considered leachate leaks and gas collection and leachate collection/storage system leak testing events.*
>
> *Following the study, Respondent shall prepare a report detailing the landfill operational events, meteorological data, air monitoring station data, general findings of the study, and the landfill gas flow rate trend comparison used to determine a 10% reduction. The analysis of potential air impacts shall consider at minimum the 15 most significant events, in terms of emission potential and air impact potential, for each individual operational event criteria, and shall detail and explain the selection of the events as most significant. The analysis shall also compare and explain impacts at the station or stations most likely to be impacted by the event, considering, emission/event location, wind speed, wind direction, topographical impacts, and any additional factors as needed. The report shall be submitted to South Coast AQMD [attn: Baitong Chen, bchen@aqmd.gov; Nathaniel Dickel, ndickel@aqmd.gov; Christina Ojeda, cojeda@aqmd.gov] by January 30, 2026.*

As described in Condition No. 83, this AIS is the continuation of a prior AIS, conducted from June through December of 2024, titled *Landfill Operations Air Impacts Study, Chiquita Canyon* Landfill, dated March 2025 (2024 Study). Based on the 2024 Study, and in accordance with Condition No. 83, SCS recommended an additional/continuation of the operational study, which was memorialized in the updated SOFA.

This AIS presents the results of a 10-month study (January through October, 2025) of specific landfill operational events and their potential emissions impacts to the surrounding community, as determined from an analysis of air quality data recorded at air monitoring stations MS-01 through MS-12, which are located around the perimeter of the Landfill and in the surrounding community.

1.2 BACKGROUND

1.2.1 Landfill Location and Topography

The Landfill is located at 29201 Henry Mayo Dr., Castaic, California, 91384 (SCAQMD Facility No. 119219), which is located approximately 2 miles west of the City of Santa Clarita in Los Angeles County, California. The Landfill is on undulating hills directly north of Highway 126 at milepost 3; it is also flanked by the Santa Clara River approximately 0.5 miles to the south and an un-named ephemeral drainage approximately 0.3 miles to the west. Elevations range from approximately 1,430 feet above mean sea level (msl) on the north to approximately 985 feet msl on the southern extent of the landfill, with an average elevation of 1,233 feet msl.

1.2.2 Study Duration

Per SOFA Condition No. 83(a), the duration of this AIS was ten months. The specific study period was from January 1, 2025 through October 31, 2025. This is the equivalent of a total of 303 days or 436,320 minutes. During this period, there was a total of 209 workdays (Monday through Friday, excluding holidays). These statistics will be used throughout the AIS.

1.2.3 Landfill Operational Events

Per SOFA Condition No. 83(a), the focus of this AIS is to evaluate the potential emission impacts of the following types of landfill operational events to the surrounding community:

- Leachate exposure to atmosphere via seeps, spills, and/or pressurized discharges;
- Landfill excavation activities;
- Downtime or decreased operation of landfill gas (LFG) collection or control equipment resulting in a reduction of landfill gas flow rate to an instantaneous value of a landfill-wide total of 11,000 standard cubic feet per minute (scfm), or a reduction of 10% or more of current operational flows; and
- Leachate leaks and gas collection and leachate collection/storage system leak testing events.

As defined in the SOFA, for each of these four categories, the 15 most significant events were considered.

This AIS is organized into sections summarizing each of these event types over the study period and providing comparison and analysis of air monitoring data collected during each of these events.

1.2.4 Air Monitoring Stations

The air monitoring data used in this study was collected from a network of 12 monitoring stations (MS), designated MS-01 through MS-12. Five stations, MS-01 through MS-05, are located around the perimeter of the Landfill, with the remaining 7 stations (MS-06 through MS-12) located in the community surrounding the Landfill.

Beginning in 2020, a combined gas analyzer and nephelometer were installed at MS-01 through MS-12, originally associated with the implementation of a Conditional Use Permit (CUP) for the Landfill, under the Community Air Monitoring Program (CAMP).

The CAMP is comprised of a network of 12 continuous air monitoring stations (designated MS-01 through MS-12), installed in 2020, which continuously monitor particulate matter with an aerodynamic diameter of 10 micrometers or less (PM_{10}), particulate matter with an aerodynamic diameter of 2.5 micrometers of less ($PM_{2.5}$), and hydrogen sulfide (H_2S). In addition, each of these units was equipped with a meteorologic (MET) monitor, capable of continuously monitoring wind speed (WS), wind direction (WD), temperature (TEMP), relative humidity (RH), and barometric pressure (PRESS).

Starting in August 2023, Chiquita initiated the Enhanced Air Monitoring Program (EAMP), which added continuous monitoring of sulfur dioxide (SO_2) and methane (CH_4) to the existing monitoring stations, as well as select volatile organic compounds (VOCs) via dedicated micro gas chromatographs (Micro-GCs), first at two stations (MS-10 and MS-12), and later at a total of 10 stations (MS-01, MS-02, MS-03, MS-04, MS-06, MS-07, MS-08, MS-10, MS-11, and MS-12).

A timeline of monitoring components of the CAMP and ECAMP is provided in **Table 1**, below.

Table 1. Chiquita Air Monitoring Timeline

Milestone	Program	Monitored Parameters	Completion Date (Mo/Yr)
Installation of On-Site Air Monitoring Stations (MS-01 through MS-05)	CAMP	H_2S $PM_{2.5}$ PM_{10}	May 2021
Installation of Off-Site Air Monitoring Stations (MS-06 through MS-12)	CAMP	H_2S $PM_{2.5}$ PM_{10}	Sep 2022
Addition of Monitoring Parameters to AQMs	EAMP	CH_4	Nov 2023
Addition of Monitoring Parameters to AQMs	EAMP	SO_2	Jun 2024
Installation of Micro-GC at MS-10 and MS-12	EAMP	VOCs	May 2024
Installation of Micro-GC at MS-01, MS-02, MS-03, MS-04, MS-06, MS-07, MS-08, and MS-11	EAMP	VOCs	Oct 2024
Upgrade of all Micro-GCs to analyze for Acrolein	EAMP	VOCs	August 2025

A summary of the parameters monitored at each of the MS locations is provided in **Table 2**, below.

Table 2. Landfill Continuous Monitoring Summary

Location/Analyte		MET	CH_4	H_2S	$PM_{2.5}$	PM_{10}	SO_2	VOCs[1]
On-Site	MS-01	X	X	X	X	X	X	X
	MS-02	X	X	X	X	X	X	X
	MS-03	X	X	X	X	X	X	X
	MS-04	X	X	X	X	X	X	X
	MS-05	X	X	X	X	X	X	
Off-Site	MS-06	X	X	X	X	X	X	X
	MS-07	X	X	X	X	X	X	X
	MS-08	X	X	X	X	X	X	X
	MS-09	X	X	X	X	X	X	
	MS-10	X	X	X	X	X	X	X
	MS-11	X	X	X	X	X	X	X
	MS-12	X	X	X	X	X	X	X

[1]VOC analysis is accomplished via Micro-GC. List of analytes is included in **Table 3**.

A full list of monitoring constituents associated with Chiquita's air monitoring network is provided in **Table 3**, below.

Table 3. Continuous Monitoring Constituent List

Category	Analyte	CAS No.	Monitoring Unit	Detection Limit (parts per million)
MET	WS	N/A	MetOne – Met Station One	N/A
	WD	N/A		
	TEMP	N/A		
	RH	N/A		
	PRESS	N/A		
Particulate Matter	$PM_{2.5}$	N/A	AQM	1μg/m^3
	PM_{10}	N/A		
Other Gasses	CH_4	74-82-8		0.04
Sulfur Compounds	H_2S	7783-06-4		0.003
	SO_2	7446-09-5		0.2
	DMS	75-18-3	Micro-GC	0.0001
VOCs	Acetone	67-64-1		0.0001
	Acrolein[1]	107-02-8		0.0001
	Benzene	71-43-2		0.0001
	2-Butanone	78-93-3		0.0008
	Carbon Disulfide	75-15-0		0.0003
	Ethanol	64-17-5		0.0005
	Ethylbenzene	100-41-4		0.0001
	Hexane	110-54-3		0.0008
	Isopropyl Alcohol	67-63-0		0.0001
	Isopropyltoluene	99-87-6		0.0001
	Methanol	67-56-1		5
	Propene	115-07-1		0.0001
	Styrene	100-42-5		0.0001
	Tetrahydrofuran	109-99-9		0.0005
	Toluene	108-88-3		0.0001
	m,p-Xylene	1330-20-7		0.0001

[1]Acrolein was not a monitoring constituent for the entire duration of the study period for all stations because Micro-GCs were not upgraded to analyze acrolein until February 2025.

A map, showing the location of the various monitoring stations, is presented in **Figure 1.**

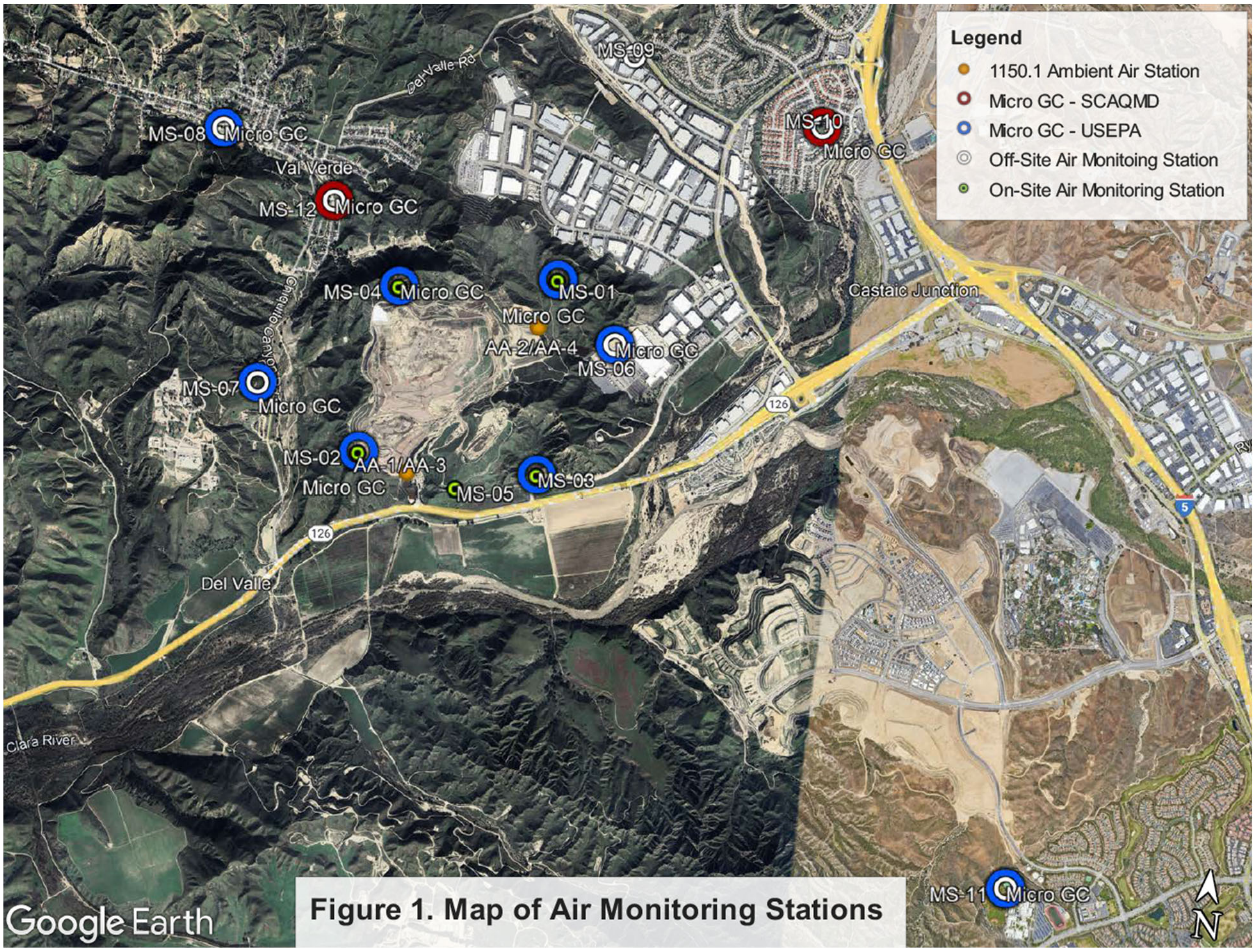


Figure 1. Map of Air Monitoring Stations.

1.2.4.1 Air Monitoring Data

During the study period, there were 19 different non-MET and non-PM analytes monitored continuously. A summary of the analytes, including detections, max/min, etc., are presented in **Table 4**, below.

Table 4. Continuous Monitoring Analyte Summary

Analyte	CAS No.	Total Samples	Total Detections	Frequency of Detection (%)	Maximum Detection (ppb)	OEHHA ACUTE REL[1] (ppb)
CH_4[2]	74-82-8	82,314	79,443	96.5%	91,460	N/A
H_2S[2]	7783-06-4	84,852	15,379	18.1%	21	30
SO_2[2]	7446-09-5	85,247	1,234	1.4%	1,393	N/A
DMS	75-18-3	26,202	2,862	10.9%	75	N/A
Acetone	67-64-1	66,827	54,443	81.5%	105	N/A
Acrolein[3]	107-02-8	25,655	2,015	7.8%	1.08	1.1
Benzene	71-43-2	67,737	17,216	25.4%	7.53	8
2-Butanone	78-93-3	67,737	28,712	42.4%	86.19	4,500
Carbon Disulfide	75-15-0	61,056	4,524	7.4%	4.24	N/A
Ethanol	64-17-5	67,704	6,766	10.0%	199.19	N/A
Ethylbenzene	100-41-4	66,860	30,941	46.3%	507.89	N/A
Hexane	110-54-3	67,737	2,922	4.3%	29.26	N/A
Isopropyl Alcohol	67-63-0	72,066	70,494	97.8%	4	1,300
Isopropyltoluene	99-87-6	61,042	1,384	2.3%	26.1	N/A
Methanol	67-56-1	66,827	56,192	84.1%	68.09	21,000
Propene	115-07-1	37,265	3,039	8.2%	25.66	N/A
Styrene	100-42-5	67,737	4,177	6.2%	89.81	N/A
Tetrahydrofuran	109-99-9	67,737	41,025	60.6%	51.37	N/A
Toluene	108-88-3	34,535	1,026	3.0%	17.68	1,300
m,p-Xylene	1330-20-7	67,737	22,749	33.6%	165.23	5,000

[1]OEHHA REL – State of California Office of Environmental Health Hazard Assessment, Recommended Acute Exposure Limit (REL)
[2]Constituent sampled more frequently than hourly
[3]Excludes invalidated data, per QA/QC with Micro-GC vendor, Tricorn Tech.

Based on review of **Table 4**, CH_4 is the most frequently detected compound, likely due to its presence in ambient background atmosphere as well as being the primary constituent of LFG. Due to its significant composition in LFG (up to 50%), CH_4 will be used as an evaluation surrogate compound for the purpose of this study.

For other analytes, no other compounds were detected above their respective Office of Environmental Health Hazard Assessment (OEHHA) acute Recommended Exposure Limits (RELs). Thus, these analytes are good indicators of air impacts as well as CH_4. Also, there are known VOCs, whose concentrations have increased due to the on-site reaction, which are also frequently detected, including acetone, ethanol, isopropyl alcohol, and propene, in addition to Benzene.

1.2.5 Meteorological Setting

In the Santa Clarita area, average annual rainfall is approximately 13 inches. Temperatures range from approximately 70-100 degrees during the summer and 40-65 degrees during the winter, with an average temperature of 61 degrees.

Specific to the study period, with a total of 13 MET station readings available, SCS chose to use the Site MET station, located at the main flare station (flare), on-site, because it represents a centroid for the study, which had been established during previous MET studies to most consistently represent the regional wind conditions that may drive pollutants into the community. Referencing the Site MET station, during the study period, rainfall ranged from 0 to 0.16 inches, and temperatures ranged from 31.6-110.2 degrees, with an average temperature of 64.2. Wind Speed had an average of 4.9 miles per hour (mph), with a low of 0 mph, and a high of 35 mph. Barometric pressure during the study ranged from 27.816 inches to 29.115 inches, with an average of 28.526 inches.

2.0 LANDFILL OPERATIONS IMPACT ANALYSIS

Within this section, for each landfill operation event type, SCS will provide a summary of the number of events, as well as an evaluation of any air impacts associated with the events. The analysis of the event will include overall impacts to average air quality data from all monitoring stations, as well as a review of impacts to individual stations from certain events where specific stations are the most representative of downwind impact areas.

2.1 LEACHATE EXPOSURE EVENTS

For this study, a leachate exposure event is defined consistent with Condition No. 83(a) as an instance where leachate from the Landfill was exposed to the atmosphere via a leachate spill, a seep from the toe of a slope/side slope, a leak testing event, or a pressurized discharge from a wellhead, the surface, or another conduit. During the study period, there were no pressurized releases. A total of 13 spills and two seeps are discussed in the sections below, representing the most significant leachate release events based on quantity of leachate released and the duration of the event.

In addition, although there are numerous analytes that are monitored by the Chiquita air monitoring stations, Benzene was selected as the most representative constituent for identification of leachate releases due to its presence in raw landfill leachate at elevated concentrations, which increased due to the reaction.

2.1.1 Leachate Spills

During the study period, records of leachate spills were available from January through October 2025. Based on available data, there were a total of 66 leachate spill, leak, or seep events recorded. Details of the 13 largest spill events (date, approximate time, location, and estimated quantity) are presented in Table 5 below.

Table 5. Leachate Spill Event Summary

Event #	Est. Quantity (gal)	Date	Time	Location
1	5,000	4/11/2025	10:00 PM	95
2	3,100	1/6/2025	7:30 AM	Tank Farm 7
3	1,050	10/26/2025	7:00 AM	207
4	300	1/22/2025	6:00 AM	227
5	300	4/10/2025	3:00 PM	241
6	100	5/21/2025	4:00 PM	79/89
7	100	3/7/2025	4:50 AM	247
8	100	2/19/2025	2:00 AM	246
9	80	3/13/2025	12:00 PM	178
10	52	8/26/2025	2:45 PM	207

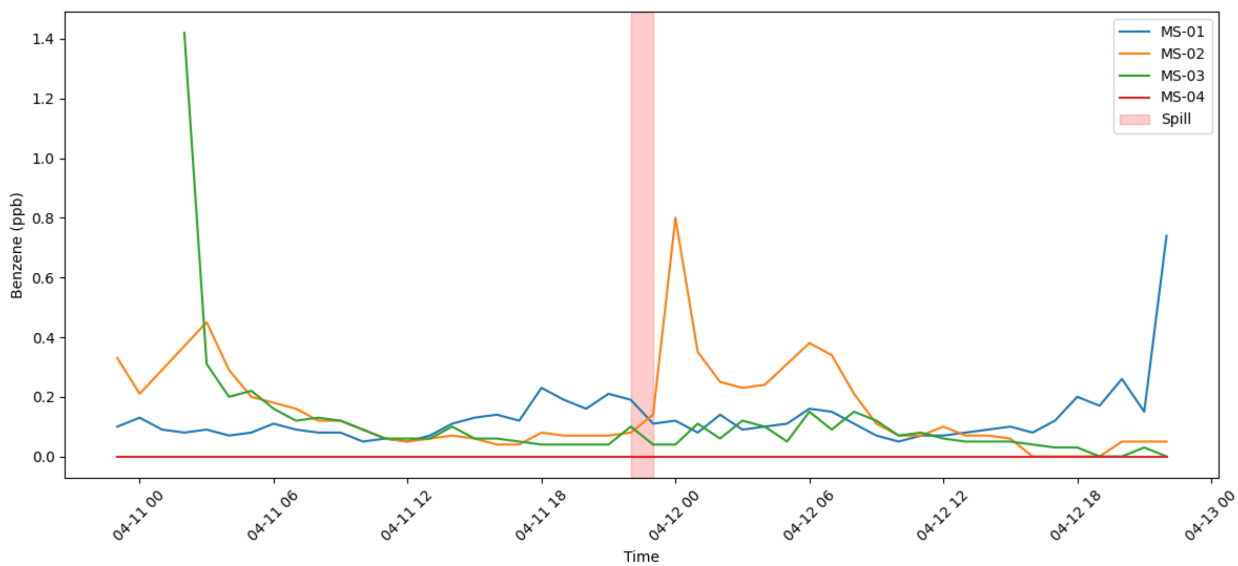
11	50	8/5/2025	6:30 PM	232
12	50	4/16/2025	7:30 AM	149
13	50	3/22/2025	3:00 AM	32/82

To assess potential air impacts from leachate events to the surrounding community, SCS performed a comparative emissions analysis of Benzene levels measured around the perimeter of the Landfill, using on-site Micro-GC stations MS-01 through MS-04 (note there is no Micro-GC located at MS-05), and compared this data to the leachate spill events greater than 1,000 gallons, specifically, Events #1, #2, and #3.

Spill Event #1

Leachate Spill Event #1 (LSE #1) occurred on April 11, 2025, at approximately 10:00 pm. The event occurred within Grid 95, which is located in the southeast portion of the Landfill. The spill event resulted in the spill of approximately 5,000 gallons of leachate over approximately 1-hour. Wind direction at the time of the spill was from the east. A comparison of ambient air monitoring data before and after the time of the spill is presented in **Figure 2**, below.

Figure 2. Benzene Levels During On-Site LSE #1

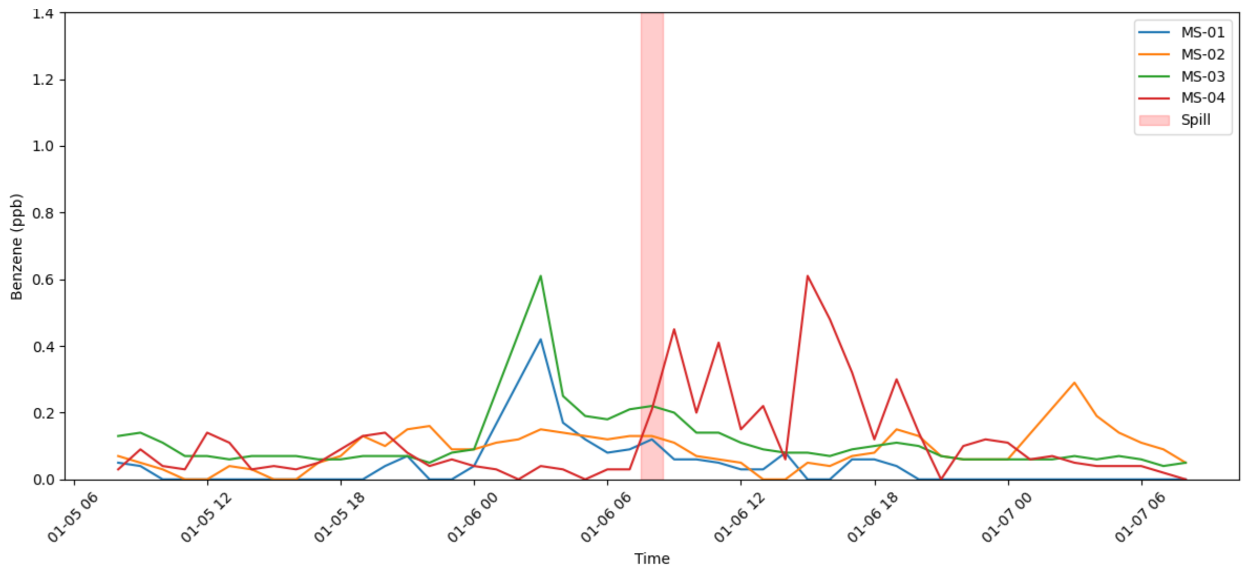


As shown in **Figure 3**, Benzene readings did rise at MS-02 following the spill, but not at any other location. Although Grid 95 is located in the southeast portion of the landfill, MS-02 is located on the southwest ridge of the landfill. The wind direction during this event was roughly coming from the east, meaning that it is possible that this spill contributed to the Benzene readings at MS-02. It should be noted that the elevated reading was still below 1 ppb and thus does not exceed the acute or chronic REL (8 ppb and 1 ppb, respectively). It also should be noted that LFG flare flow dropped from roughly 15,000 SCFM to below 10,000 SCFM at roughly the same time that the spill occurred. As discussed in **Section 2.3**, This level of reduction is usually not enough to cause a large response but may have contributed to this slightly elevated reading.

Spill Event #2

LSE #2 occurred on January 6, 2025, at approximately 7:30 am. The event occurred at Leachate Tank Farm #7, with a total spill of approximately 3,100 gallons of leachate over approximately 1-hour. Wind direction at the time of the spill was from the northeast. A comparison of ambient air monitoring data before and after the time of the spill is presented in **Figure 3**, below.

Figure 3. Benzene Levels During On-Site LSE #2

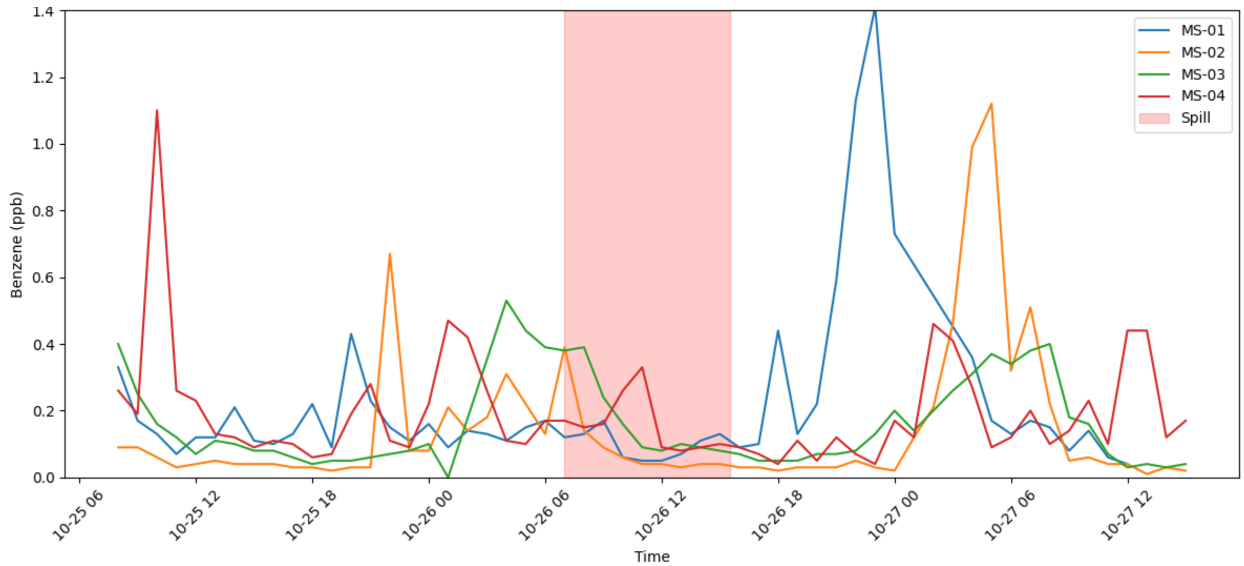


As shown in **Figure 3**, Benzene concentrations at MS-04 appear to increase following the spill. However, Tank Farm 7 is located southwest of the landfill, making MS-02 the nearest monitoring station. Benzene levels at MS-02 show little to no corresponding change. MS-04, by contrast, is located north of the landfill, and wind direction during this period was predominantly from the northeast, which does not support the leachate spill as the source of the observed Benzene readings. It should be noted that the elevated reading was still below 1 ppb and thus does not exceed the acute or chronic REL (8 ppb and 1 ppb, respectively). Additionally, the elevated Benzene measurements at MS-04 occurred at 8:00–9:00 a.m., a time when elevated readings are commonly observed. Methane and H_2S levels also rose at MS-04 during this period, further indicating that the observed Benzene concentrations are more likely attributable to routine landfill emissions rather than the leachate spill.

Spill Event #3

LSE #3 occurred on October 26, 2025, at approximately 7:00 am. The event occurred within Grid 207, with a total spill of approximately 1,050 gallons of leachate over approximately 8.5 hours. Wind direction at the time of the spill was from the west, south, and northeast. A comparison of ambient air monitoring data before and after the time of the spill is presented in **Figure 4**, below.

Figure 4. Benzene Levels During On-Site LSE #3



As shown in **Figure 4**, this spill event did not result in any observable impact on Benzene levels.

A review of the 10 next-largest leachate spills similarly showed no correlation with Benzene concentrations.

Based on this analysis, SCS concludes that while leachate spills may have the potential to influence Benzene levels, any such impact would require a spill of substantially greater magnitude than LSE #3 and such impact would likely remain minimal.

Spill Events #4-13

The following 10 events (Spill #4-13) were also evaluated using the same analytical methods. To avoid duplicative reporting, benzene time graphs are presented collectively and discussed together.

Figure 5a. Benzene Levels During On-Site LSE #4

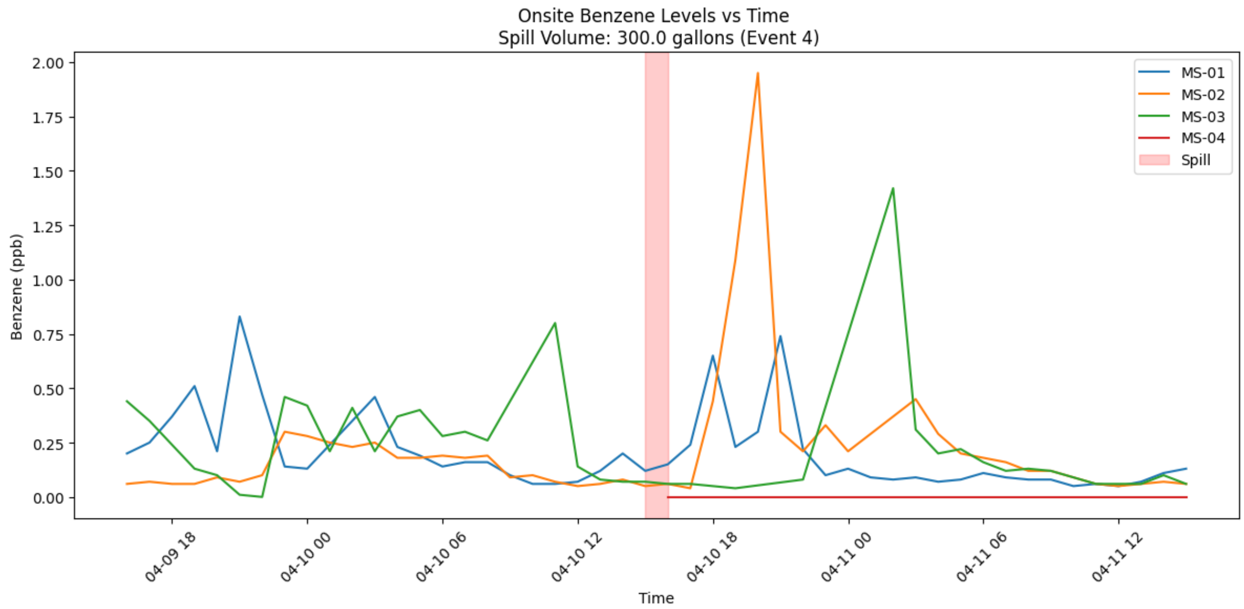


Figure 5b. Benzene Levels During On-Site LSE #5

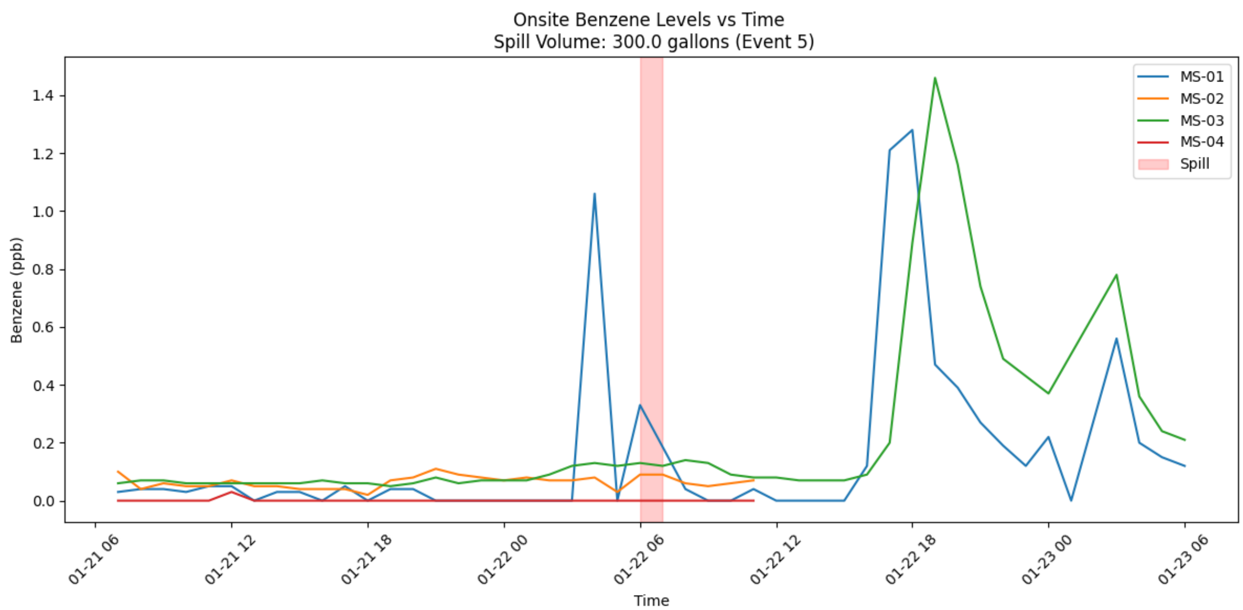


Figure 5c. Benzene Levels During On-Site LSE #6

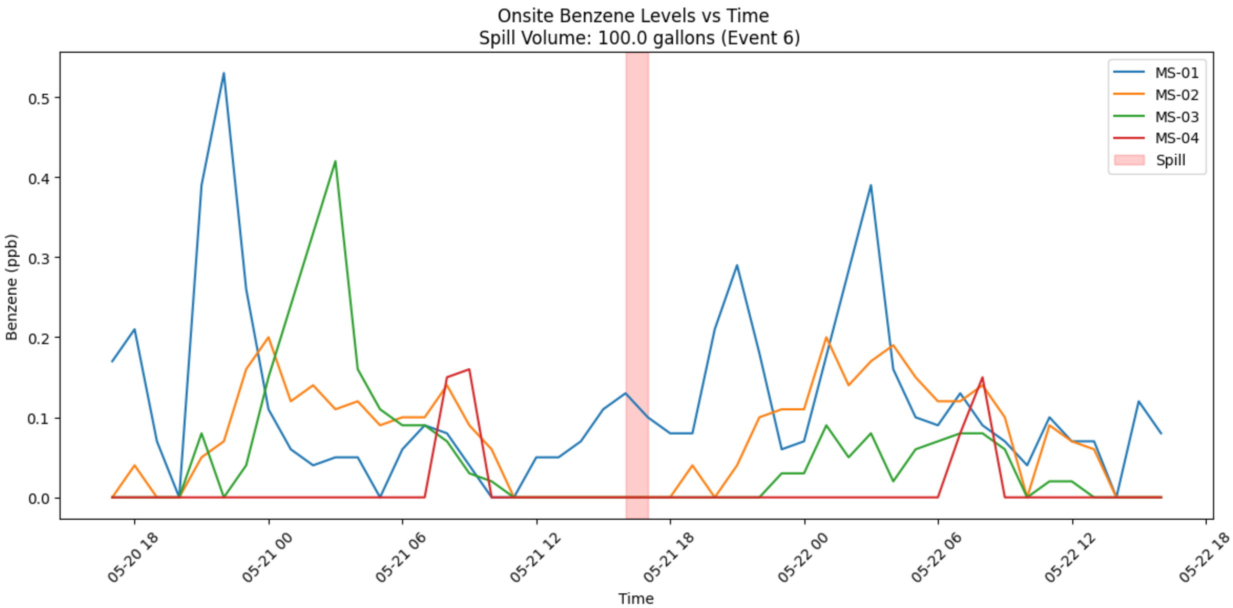


Figure 5d. Benzene Levels During On-Site LSE #7

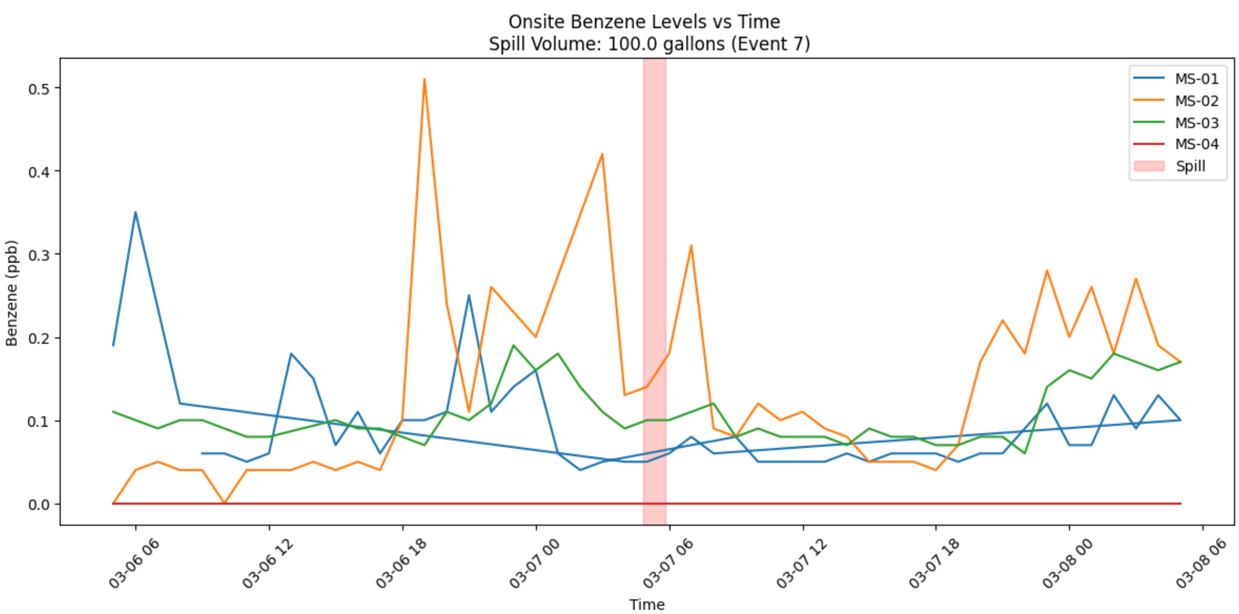


Figure 5e. Benzene Levels During On-Site LSE #8

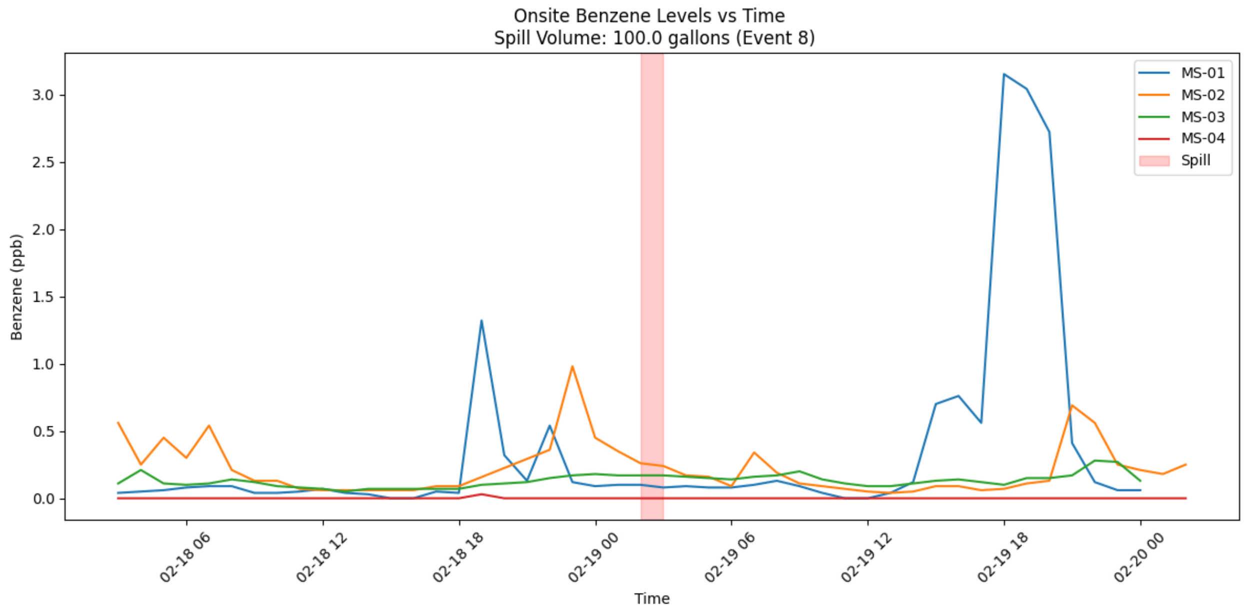


Figure 5f. Benzene Levels During On-Site LSE #9

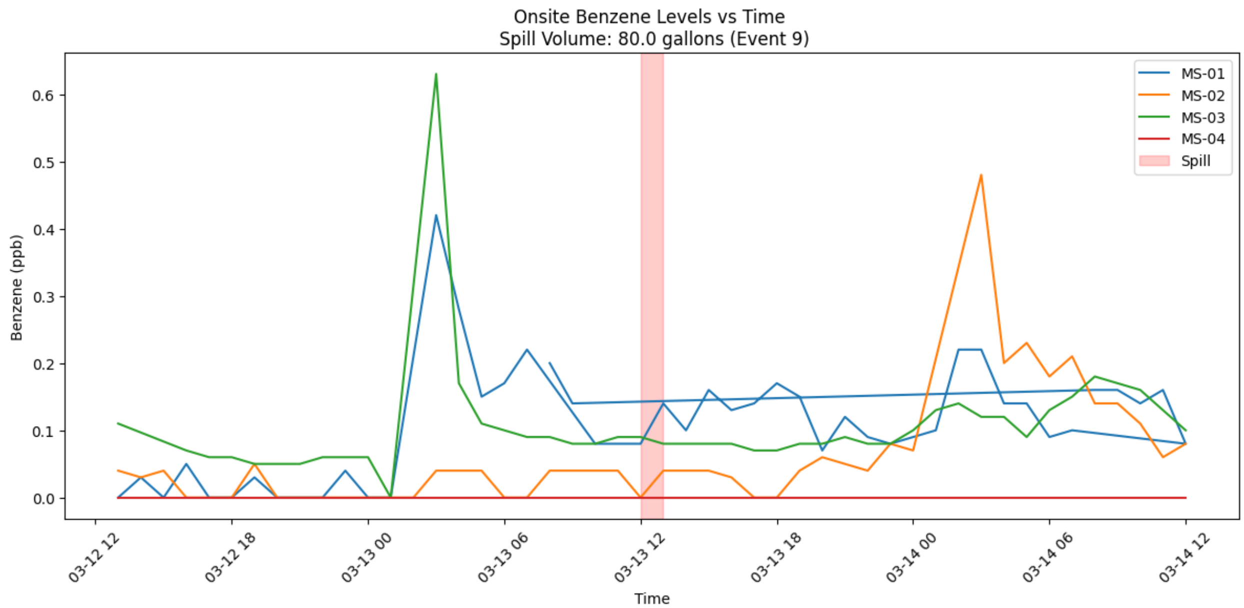


Figure 5g. Benzene Levels During On-Site LSE #10

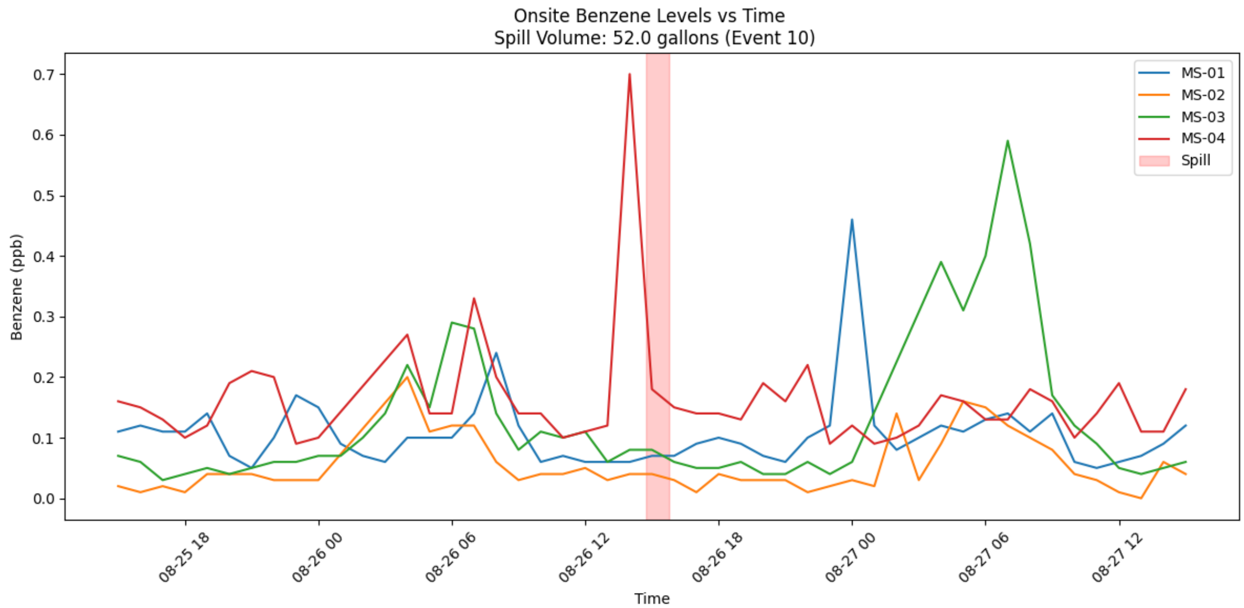


Figure 5h. Benzene Levels During On-Site LSE #11

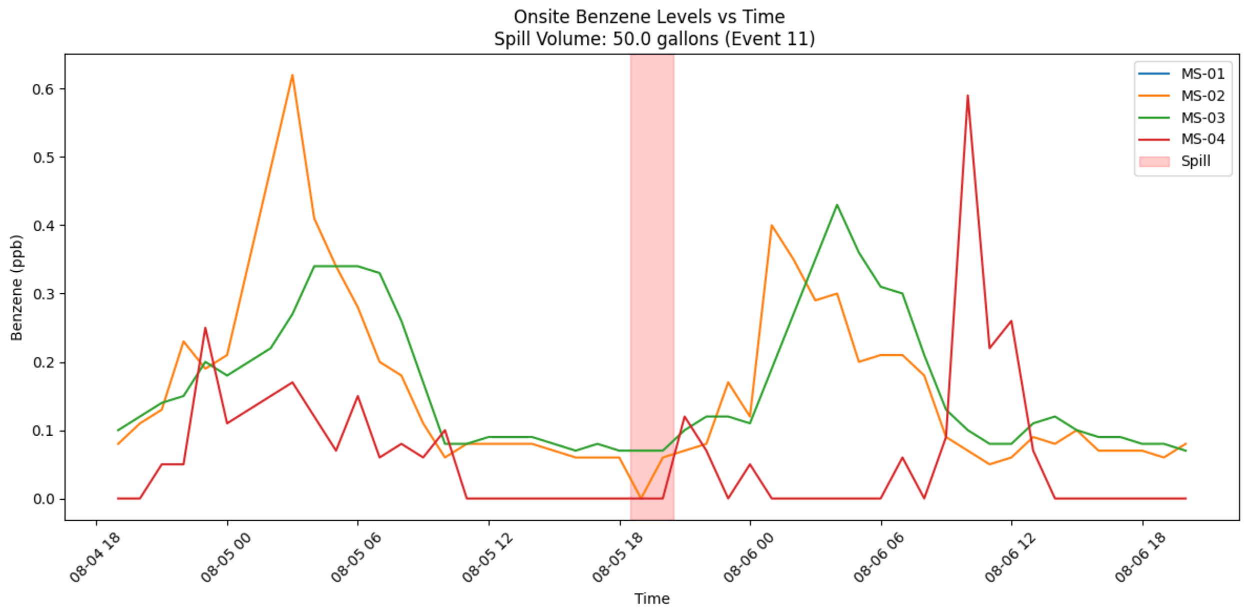


Figure 5i.   Benzene Levels During On-Site LSE #12

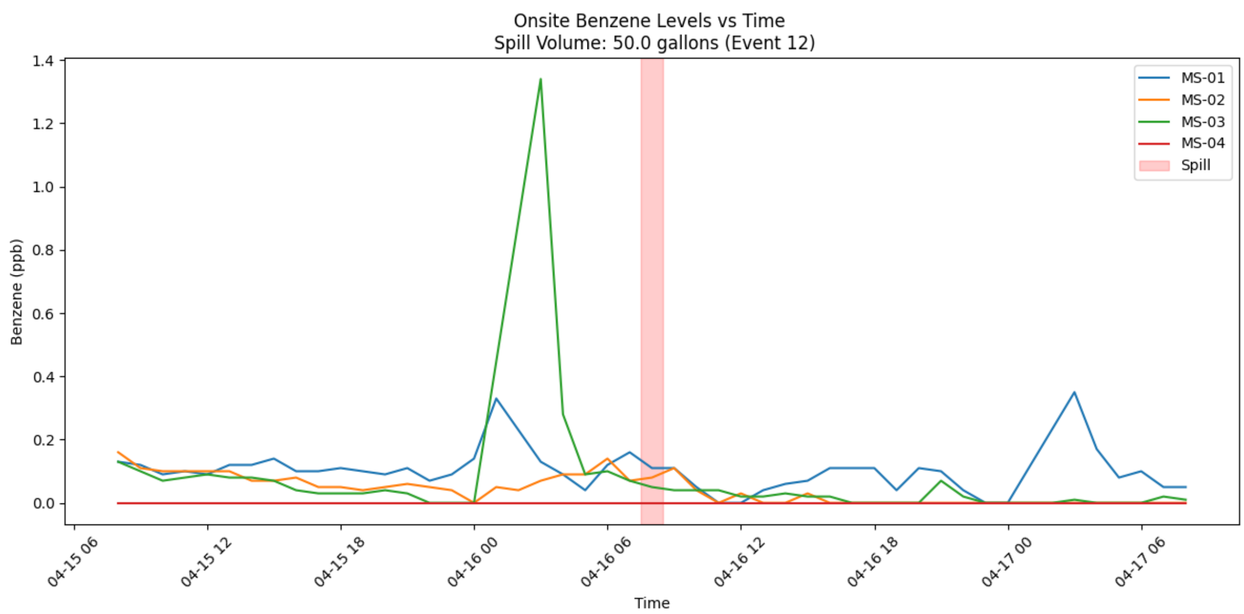
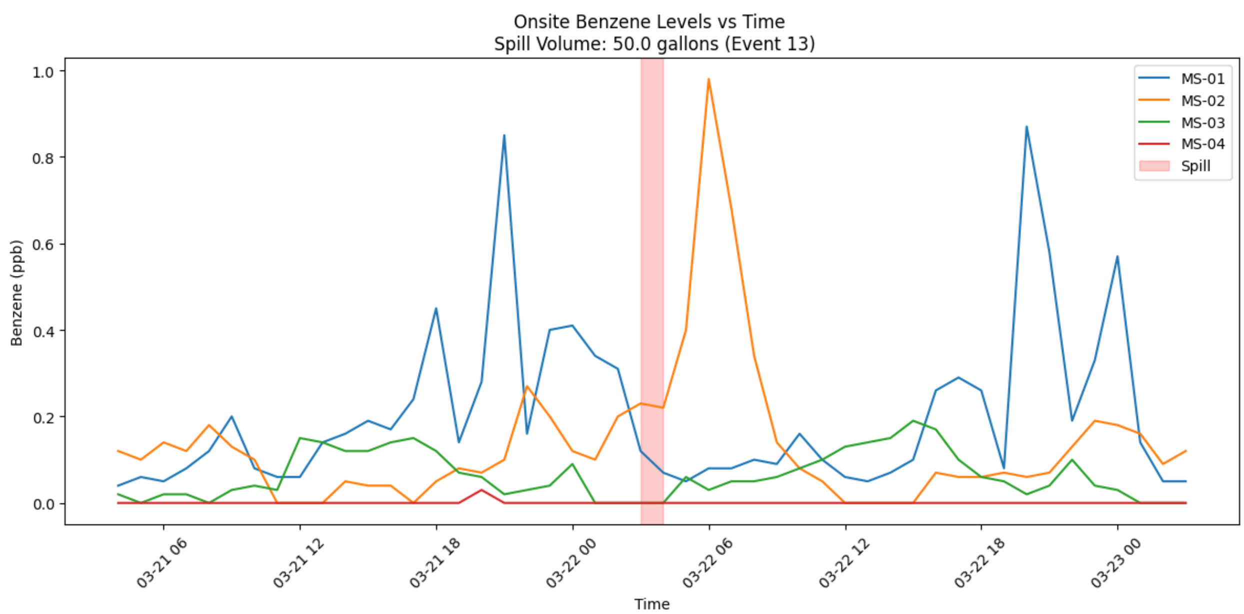


Figure 5j.   Benzene Levels During On-Site LSE #13



A cursory review of LSE #7 and #13 suggests a potential correlation between the events and elevated Benzene concentrations immediately following the events. However, these elevated concentrations are more readily explained by normal diurnal benzene patterns and are therefore more likely attributable to other ongoing site conditions. This interpretation is further supported by the relatively small volume associated with LSE 13.

Aside from LSE #7 and 13, these events do not exhibit a significant impact on benzene concentrations. In some cases, no response is observed. In others, benzene concentrations are elevated but remain within levels consistent with normal diurnal patterns. In several instances, larger benzene spikes occur prior to the events, indicating that these increases were not caused by the event.

2.1.2 Leachate Leaks

Leachate leak events encompass anytime where testing of the leachate vapor recovery system identified VOCs being emitted from the leachate tanks and handling system. There were no leachate vapor system leakage events identified during the study period.

2.1.3 Leachate Seeps

During the study period, there were a total of 2 leachate seep events recorded. Details on each seep event (date/time, location, estimated duration, estimated range of quantity, and odor index on a scale of 1 to 5) are presented in **Table 6**, below.

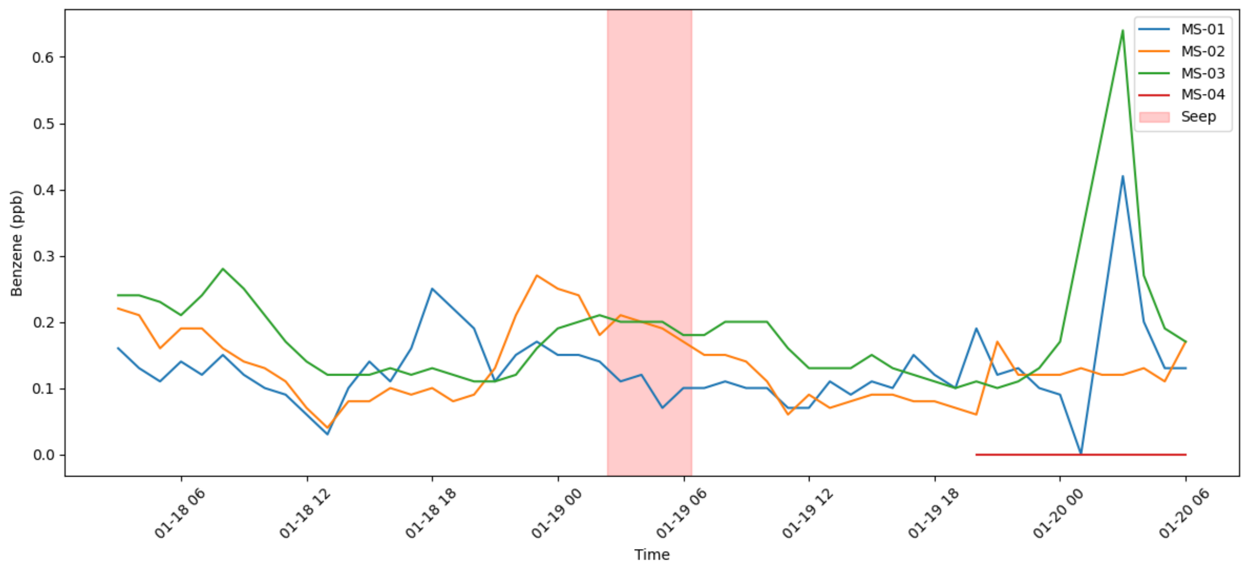
Table 6. Leachate Seep Event Summary

Date	Time	Grid Location	Est. Duration (hr)	Est. Quantity (gal)	Odor Scale[1] (1-5)
01/19/2025	2:21	78	4	11-20	1
02/07/2025	1:06	207	3	51-80	3

[1]Odor Scale:
1 – Very Light Odor, 2 – Light Odor, 3 – Moderate Odor, 4 – Strong Odor, 5 – Very Strong Odor

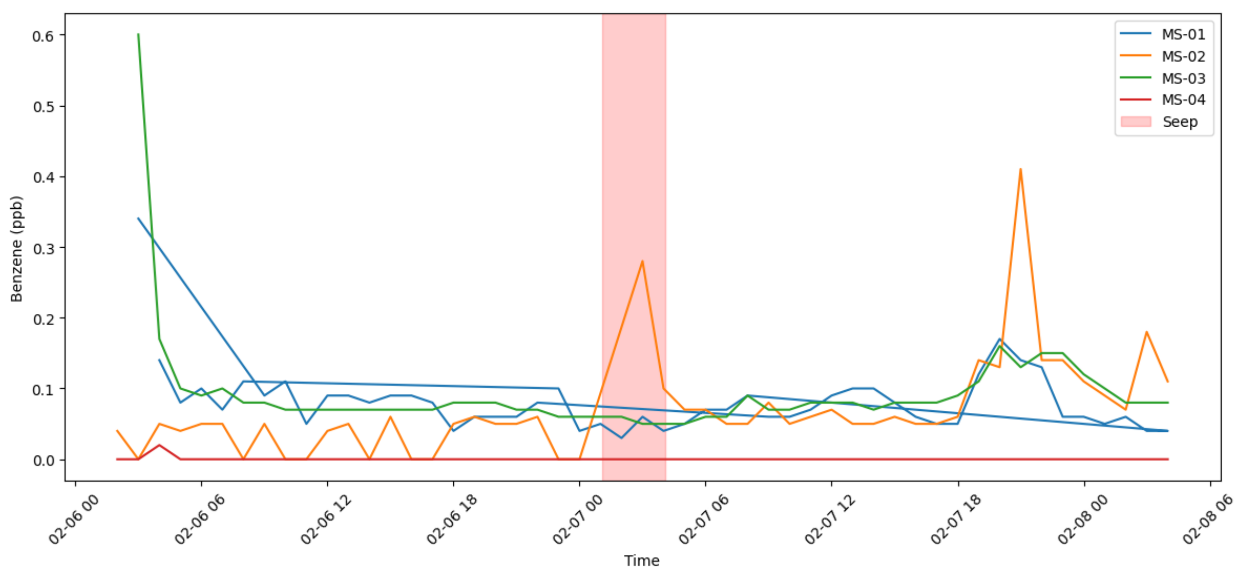
To assess potential air impacts from leachate seep events to the surrounding community, SCS performed a comparative emissions analysis of Benzene levels measured around the perimeter of the Landfill and compared this data to the recorded LSE. As discussed above, Benzene was selected as a surrogate compound due to its presence in leachate, as noted previously. The perimeter stations (MS-01 through MS-04) were chosen for analysis since it is anticipated that any indication of off-site movement of Benzene from leachate would be identified in the perimeter stations before it was identified in the community. The results of the comparative analysis are provided in **Figures 5 and 6**, below, respectively.

Figure 5. Benzene Levels During Leachate Seep Event #1.



As shown in **Figure 5**, Benzene concentrations at MS-02 increased following the seep, while no corresponding changes were observed at other monitoring locations. Because the seep occurred in the southwest portion of the landfill, where MS-02 is also located, it is possible that the seep contributed to the elevated Benzene reading at this station.

Figure 6. Benzene Levels During Leachate Seep Event #2



In contrast, **Figure 6** shows no indication that the seep contributed to Benzene levels. That seep occurred in the northwest area of the landfill, nearest to MS-01, which in fact recorded the lowest Benzene concentrations during the period.

Given the limited dataset, no definitive conclusions can be drawn. As such, SCS maintains that although leachate spills, leaks, or seeps may have the potential to influence Benzene concentrations, any such impacts would require a substantial spill, leak, or seep and any impact would likely remain minimal compared to LFG emissions. It appears that the seep events are generally too small to result in air quality impacts, and only larger spills of leachate, greater than 1,000 gallons, are contributing to elevated Benzene levels at the air monitoring stations.

2.2 LANDFILL EXCAVATION EVENTS

For the purpose of this study, a landfill excavation event is defined as any time that the landfill cover was partially excavated, regardless of whether waste was encountered. This definition is different from, and broader than, landfill excavation as defined by the SCAQMD. Based on available information, during the study period, there were no landfill excavation events.

2.3 LANDFILL GAS SYSTEM DOWNTIME AND REDUCED FLOW EVENTS

For the purpose of this study, an LFG equipment event is defined as any time there was a downtime or decreased operation of LFG collection or control equipment that resulted in a reduction of the LFG flow rate to an instantaneous value of a landfill-wide total of below 11,000 standard cubic feet per minute (scfm), when LFG flows are above 11,000 scfm, or when there was a reduction of 10% or more in LFG flows, when LFG flows are above 11,000 scfm. The 10% reduction in flow rate was determined based on total LFG flow rate data trends; comparing the current total hourly LFG flow rate to the prior week's average LFG flow rate and the prior day's average LFG flow rate, consistent with Condition No. 83(a). A 10% reduction in comparison to the weekly or daily average value was considered and analyzed as an operational event, also consistent with Condition No. 83(a), and the 2024 Study.

To assess the potential air impacts from LFG equipment events to the surrounding community, SCS collected LFG recovery[1] data from the LFG collection and control system (GCCS) during the study period. This data was compared to both the 11,000 scfm threshold and subjected to the 10% reduction evaluation, for times when the flow rate was above 11,000 scfm.

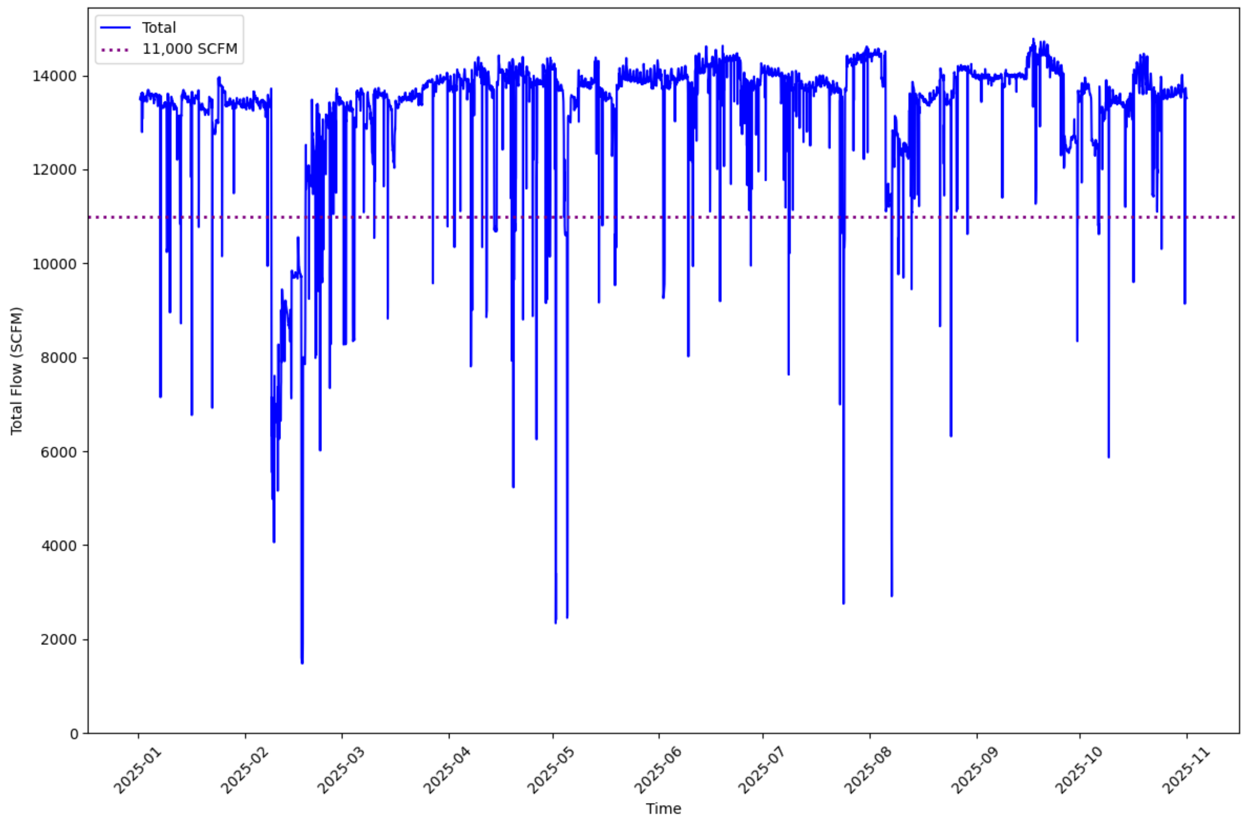
Since the average LFG flow rate over the study period was approximately 14,300 scfm, flows below 11,000 scfm always resulted in a larger flow reduction than 10%, therefore, we have focused on events where flows were below 11,000 scfm as an initial criterion. A discussion of each of these evaluations is provided below.

2.3.1 Instantaneous Flow Threshold

The GCCS at the Landfill records flow data in two-minute intervals. Therefore, for the purposes of this study, a two-minute reading drop below 11,000 scfm was considered an exceedance of the 11,000 scfm threshold, even though there may not have been an actual exceedance. The results of this evaluation are provided in **Figure 7**, below.

[1] For purposes of this study, leachate vapor recovery flows were excluded from the analysis of data in accordance with Condition 83(a).

Figure 7. Instantaneous Threshold Exceedance.



In total, out of the 218,430 two-minute intervals (436,860 minutes total) that occurred during the study period, LFG flow dropped below the 11,000 scfm threshold, as defined herein, a total of 14,525 times. This represents approximately 6.6% of the study period.

In order to evaluate the significance of the flare flow dropping below the 11,000 scfm threshold, SCS organized the data into events starting when the flare flow dropped below the threshold and ending when the flare flow returned above the threshold. To evaluate the potential severity of each event, SCS calculated the area of the graph under the 11,000 threshold for the five most significant events during the study period. The highest severity events being the ones that are farthest below the threshold for the longest duration. The five highest severity events according to these calculations are summarized in Table 7, below.

Table 7. Five Most Significant Flow Reduction Events

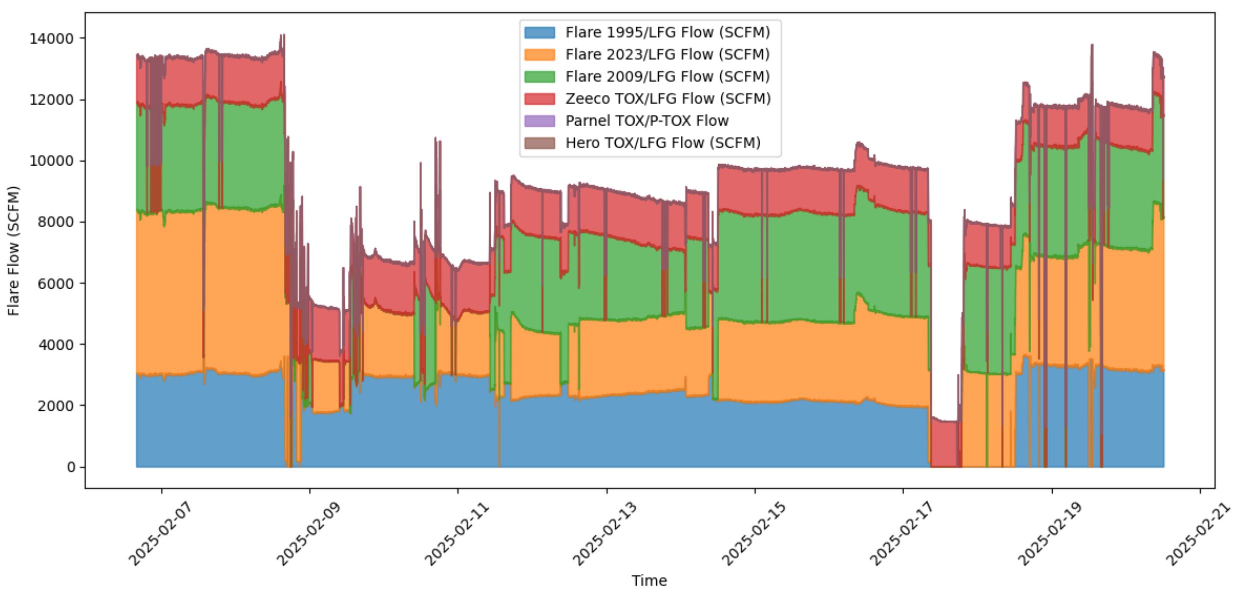
Flow Reduction Event (FRE) #	Start	End	Duration below 11,000 scfm (hours)
1	2025-02-08 15:51	2025-02-17 12:17	212.4
2	2025-05-04 16:09	2025-05-05 14:09	22.0
3	2025-05-02 00:25	2025-05-02 04:41	4.3
4	2025-03-04 06:09	2025-03-04 18:17	12.1
5	2025-07-24 08:31	2025-07-24 21:01	12.5

To better understand the potential air impacts of GCCS flow rate on the surrounding community, SCS analyzed the data from the five most significant GCCS operational events provided in **Table 8**. Each of these events are discussed in detail below.

2.3.1.1 Flow Reduction Event #1

Flow Reduction Event (FRE) #1 occurred from 15:51 on February 8, 2025, through 12:17 on February 17, 2025. During this period, system flow declined from approximately 13,000 scfm to a low of about 5,000 scfm, later increasing to roughly 7,000 scfm, and eventually to approximately 10,000 scfm. Flows did not exceed 11,000 scfm again until February 17 at approximately 12:17. During the event, there was a brief interval when total GCCS flow dropped below 2,000 scfm. **Figure 8**, below shows the total and individual device flows during the event.

Figure 8. GCCS Device Flow Rates During FRE #1.



As shown in **Figure 8**, the 2009 flare was offline, and the 2023 flare had reduced flow at the onset of FRE #1. Toward the end of the event, the Zeeco TOx was the only GCCS device online.

FRE #1 lasted 219 hours, or roughly nine days. During the 219-hour duration, on-site Benzene levels ranged from <0.10 to 5.97 ppb, CH_4 ranged from <2 to 91.46 ppm, and H_2S ranged from <2 to 16 ppb. Concentrations of Benzene, CH_4, and H_2S are shown in **Figure 9a through 9c**, below.

Figure 9a. Benzene Levels During FRE #1

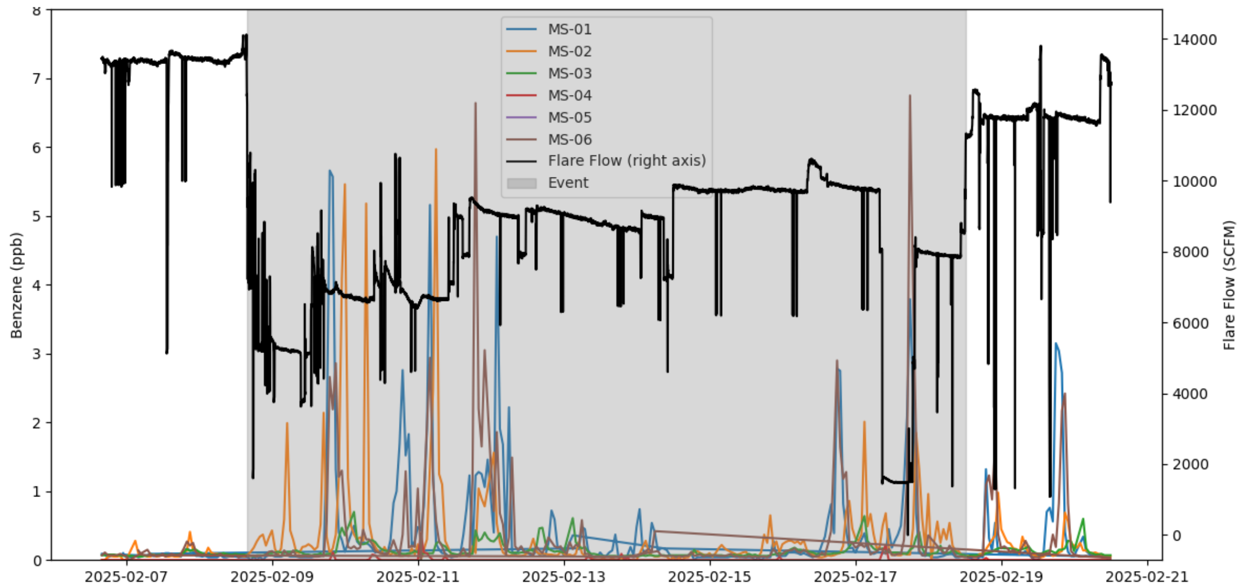
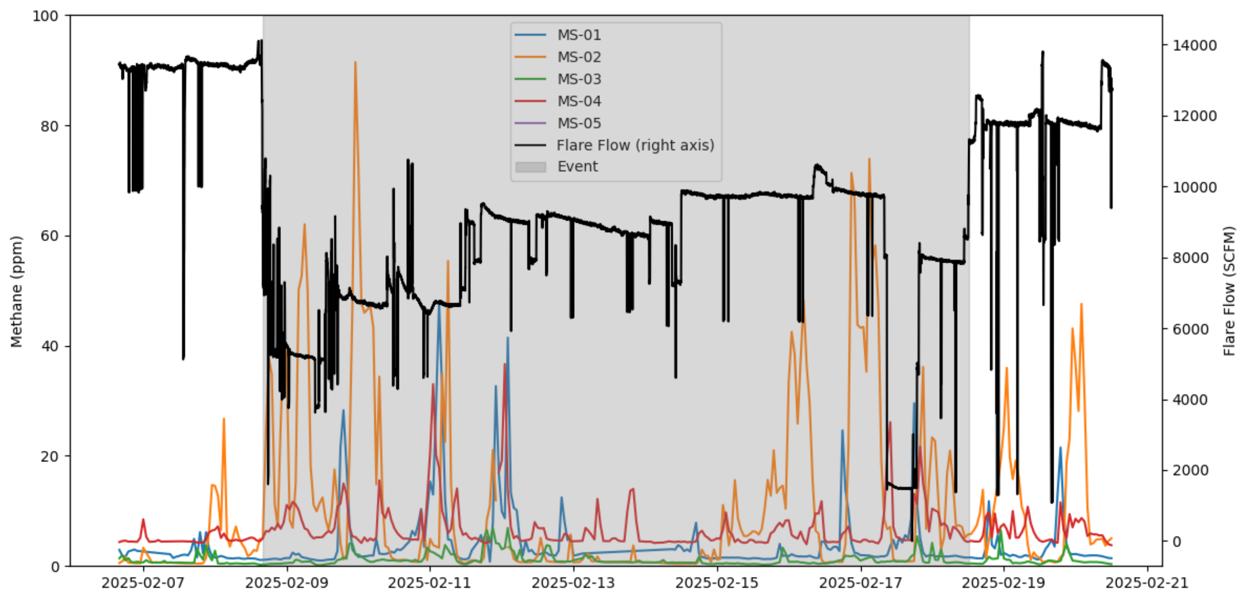
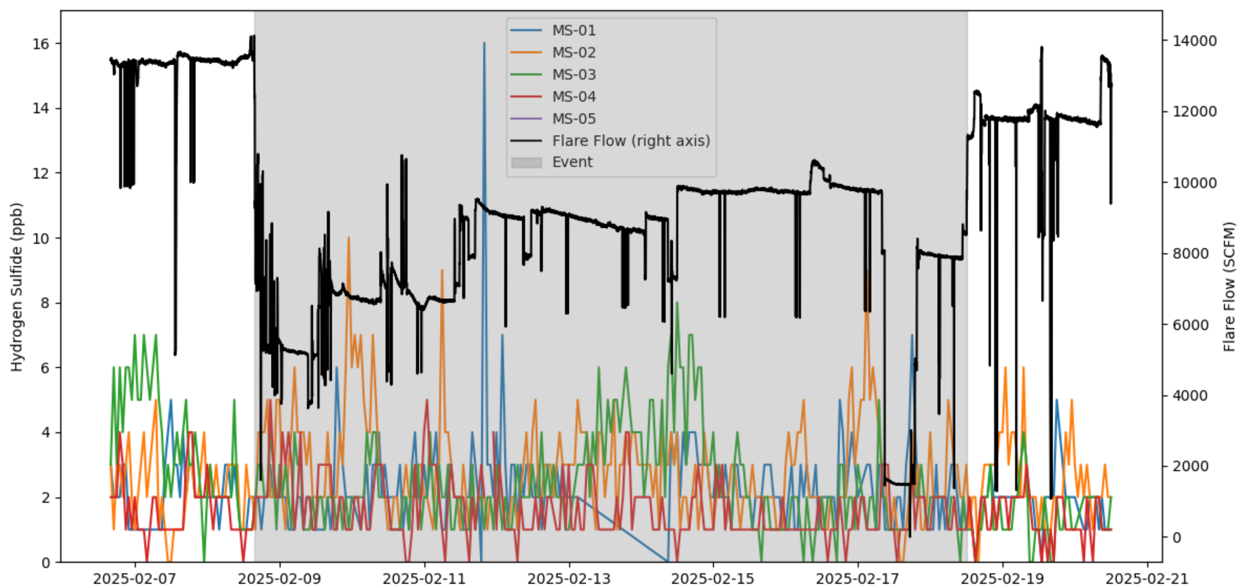


Figure 9b. CH_4 Levels During FRE #1



As shown in **Figures 9a** and **9b**, Benzene and CH_4 concentrations increased noticeably between February 9th through February 13th. Based on findings from the previous study and the magnitude and duration of this event, an impact on constituent concentrations was anticipated. The greatest increases occurred during the lowest flow period, e.g., from February 9th through February 11th.

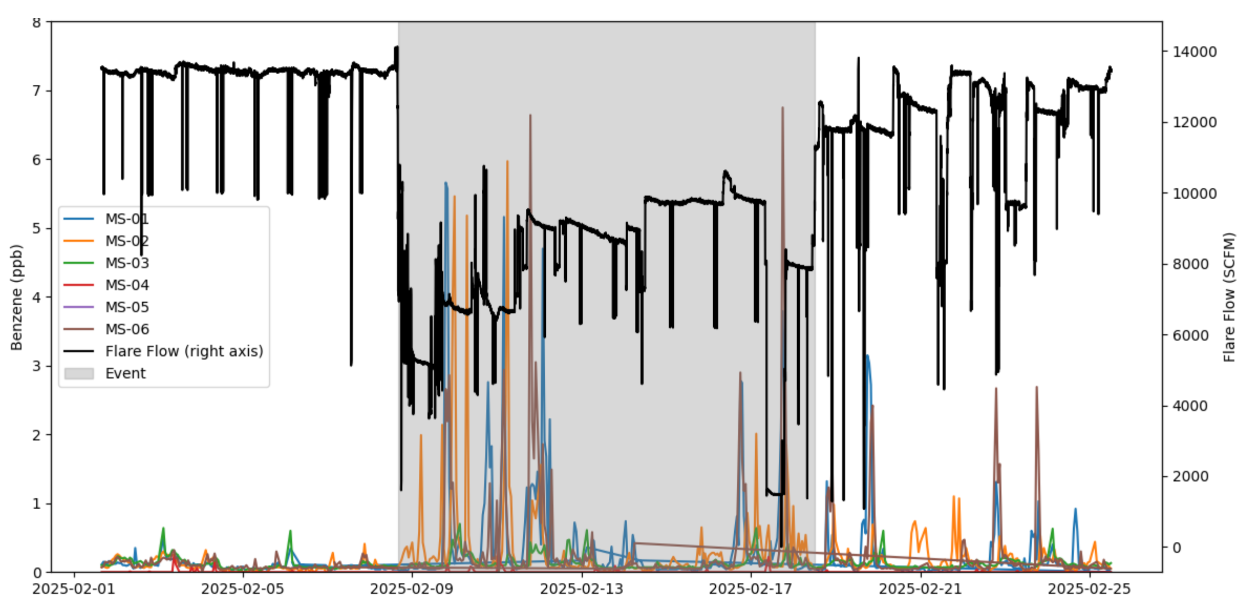
Figure 9c. H_2S Levels During FRE #1



As shown in **Figure 9c**, H_2S exceeded 10 ppb only once during the event. While the flow reduction may have contributed to this elevated H_2S measurement, the overall impact on H_2S was less pronounced than the impacts observed for CH_4 and Benzene.

Figure 10, below, presents the same event over a broader time window. Benzene levels prior to the event were relatively low and stable, followed by a distinct increase during the event. Concentrations then gradually decreased and stabilized as flare flow returned to normal.

Figure 10. Benzene Levels During FRE #1 – Extended Time Window



It should be noted that, although the correlation in this event is clear, the event itself was highly unusual due to the failure of multiple flares and TOxs. However, note that while this example demonstrates that flow reduction events can influence compound concentrations, it does not imply that more routine/minor flow reductions will produce similar impacts.

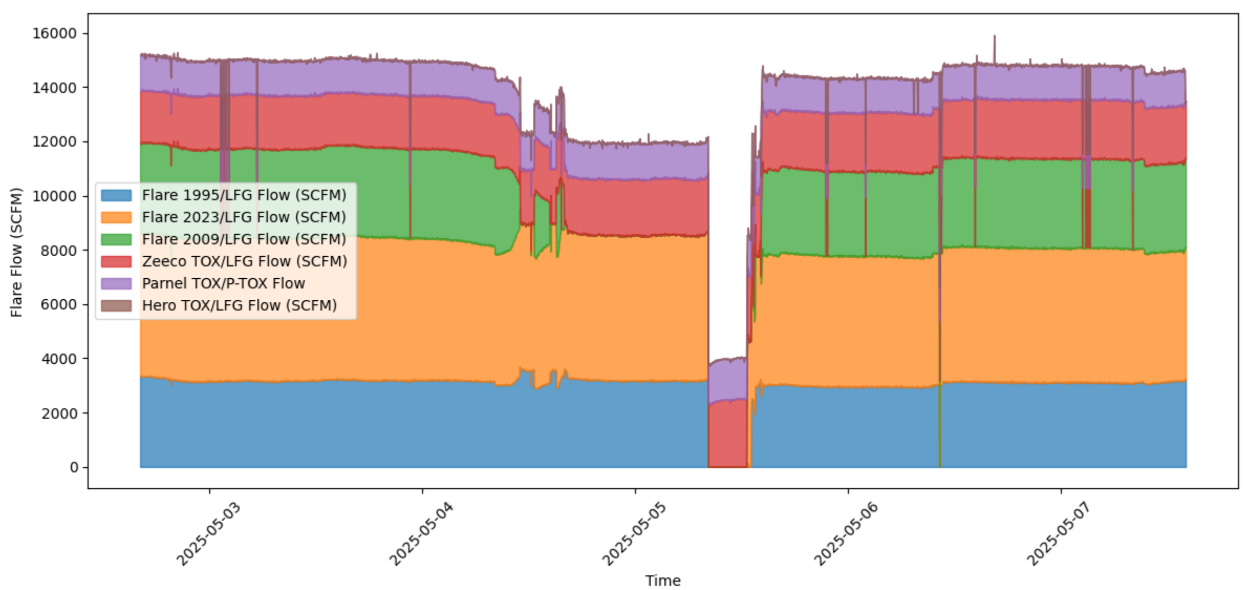
2.3.1.2 Flow Reduction Event #2

FRE #2 occurred from 16:09 on May 4, 2025 through 14:09 on May 5, 2025. During this period, flow started decreasing, from approximately 13,000 scfm, to approximately 10,000 scfm, then to a low of approximately 2,000 scfm.

During FRE #2, winds were generally from the south/southwest and north/northwest, with afternoon winds from the west and northwest. Based on this information, MS-06 was selected as the downwind monitoring station for comparison.

Figure 11, below shows the total and individual device flows during the event.

Figure 11. GCCS Device Flow Rates During FRE #2



As shown in **Figure 11**, FRE #2 started with the 2009 flare going off-line, and continued with the shutdown of both the 1995 and 2003 flares. During this period, only the TOx units were online.

During the 21-hour duration of FRE #2, onsite Benzene levels ranged from <0.10 to 0.51 ppb, methane (CH_4) ranged from <2 to 13.44 ppm, and hydrogen sulfide (H_2S) ranged from <2 to 4 ppb. Concentrations of Benzene, CH_4, and H_2S are shown in **Figure 12a through 12c**, below.

Figure 12a. Benzene Levels During FRE #2

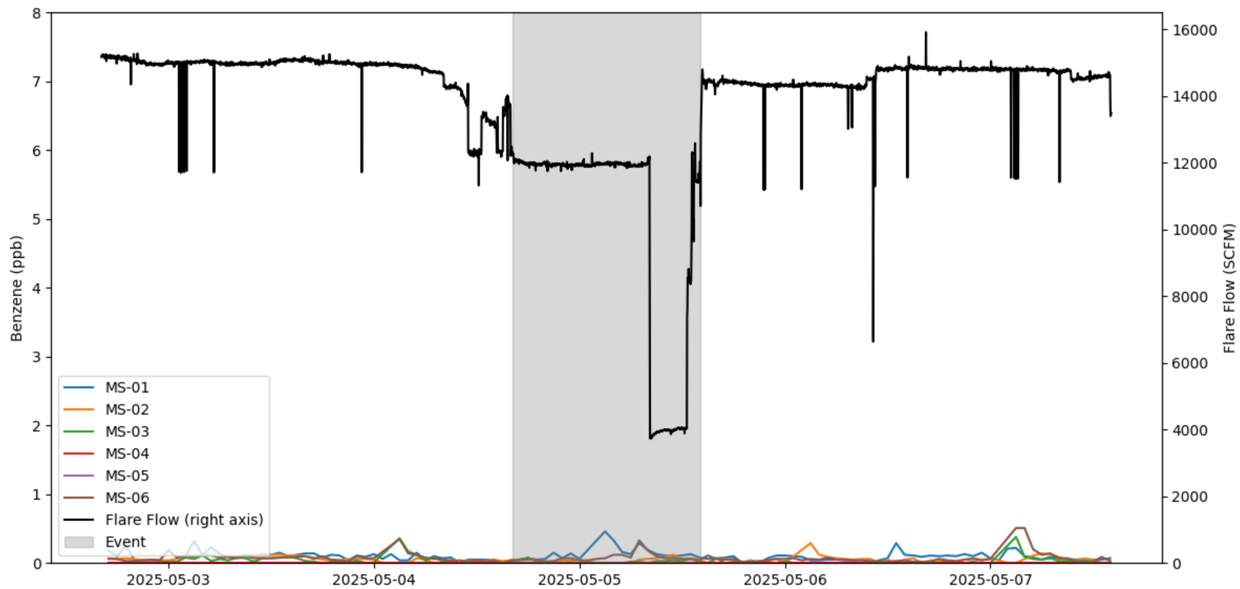


Figure 12b. CH_4 Levels During FRE #2

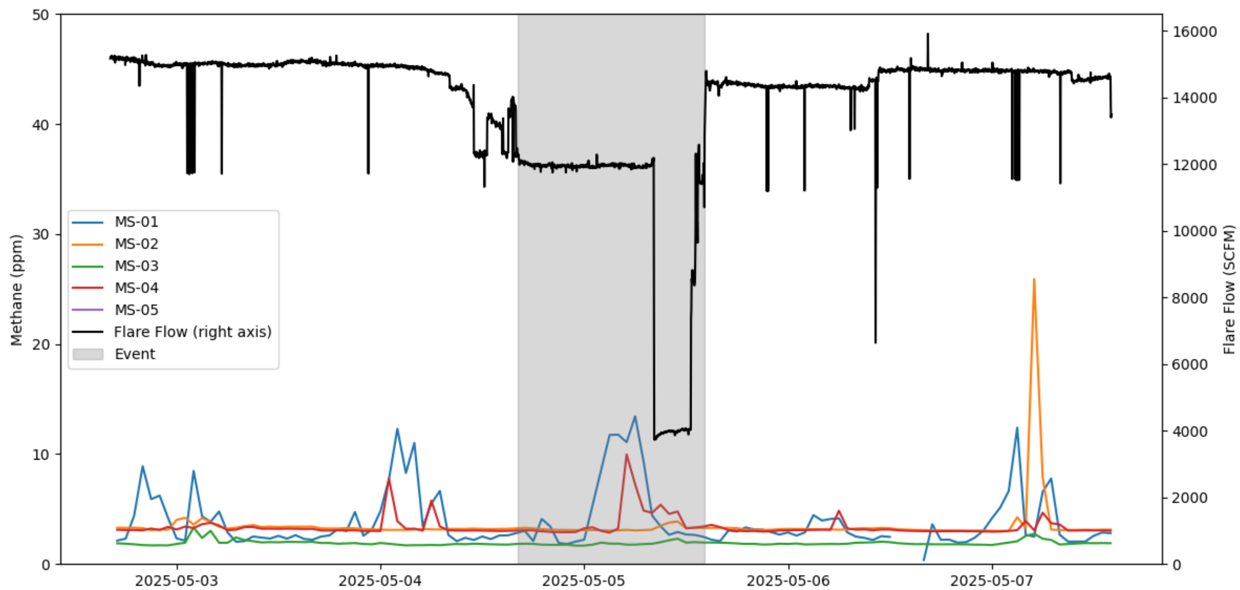
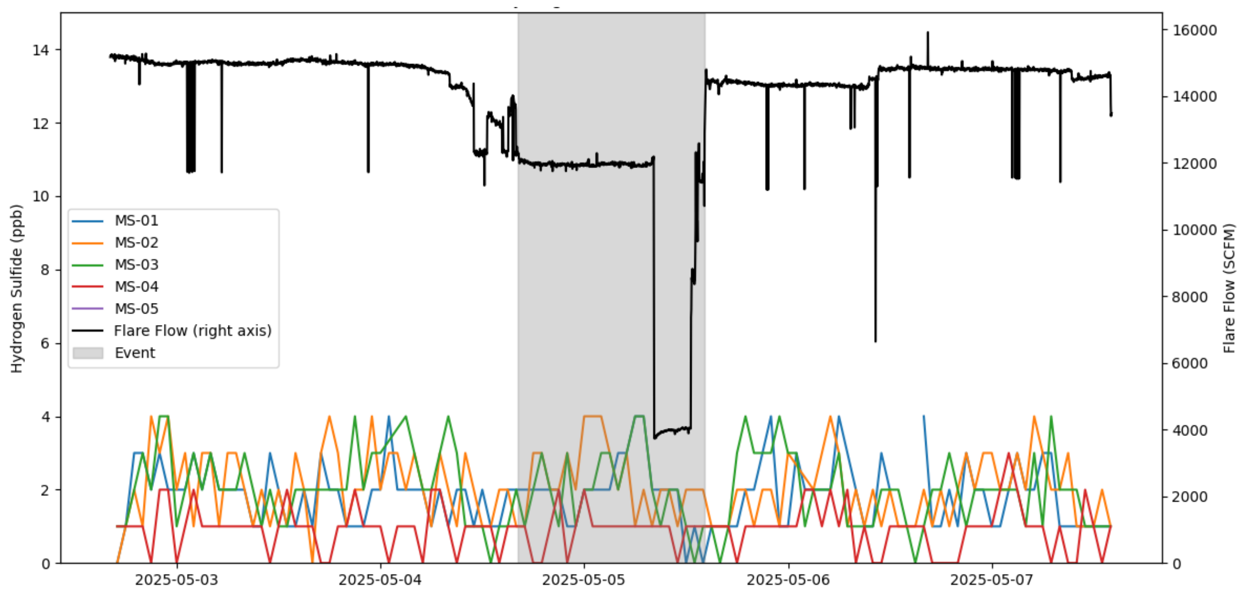


Figure 12c. H_2S Levels During FRE #2



As shown in **Figures 12a through 12c**, FRE #2 did not produce a significant impact on compound concentrations. Both Benzene and CH_4 exhibit a peak on the morning of the 5th, which falls within the event period; however, these peaks remain well within the range typically observed during morning hours. In the case of CH_4, an even larger peak occurred on the 7th with no associated flow reduction. Additionally, the lowest flow occurred around noon on the 5th, with no corresponding increase in either methane or Benzene. H_2S levels remained below 5 ppb throughout the event, which is considered low, even under normal operating conditions.

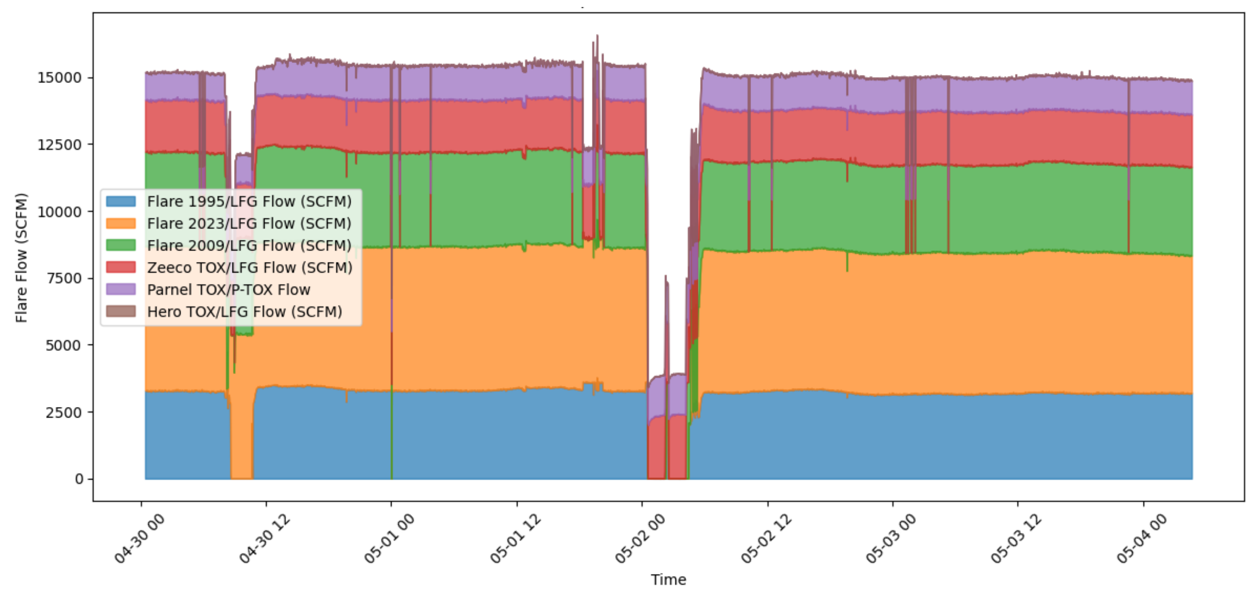
2.3.1.3 Flow Reduction Event #3

FRE #3 occurred from 00:25 through 04:41 on May 2, 2025. During this period, flow started decreasing, from approximately 13,000 scfm, to approximately 2,000 scfm.

During FRE #3, winds were generally from the north/northeast. Based on this information, MS-02 was selected as the downwind monitoring station for comparison.

Figure 13, below shows the total and individual device flows during the event.

Figure 13. GCCS Device Flow Rates During FRE #3



As shown in **Figure 13**, during FRE #3, the three primary flares (1995, 2009, and 2023) were off-line. During this period, only the TOx units were online.

During the 4-hour duration, onsite Benzene levels ranged from <0.10 to 0.91 ppb, CH_4 ranged from <2 to 39.23 ppm, and H_2S levels ranged from <2 to 7 ppb. Concentrations of CH_4, H_2S, and Benzene are shown in **Figures 14a through 14c**, below.

Figure 14a. Benzene Levels During FRE #3

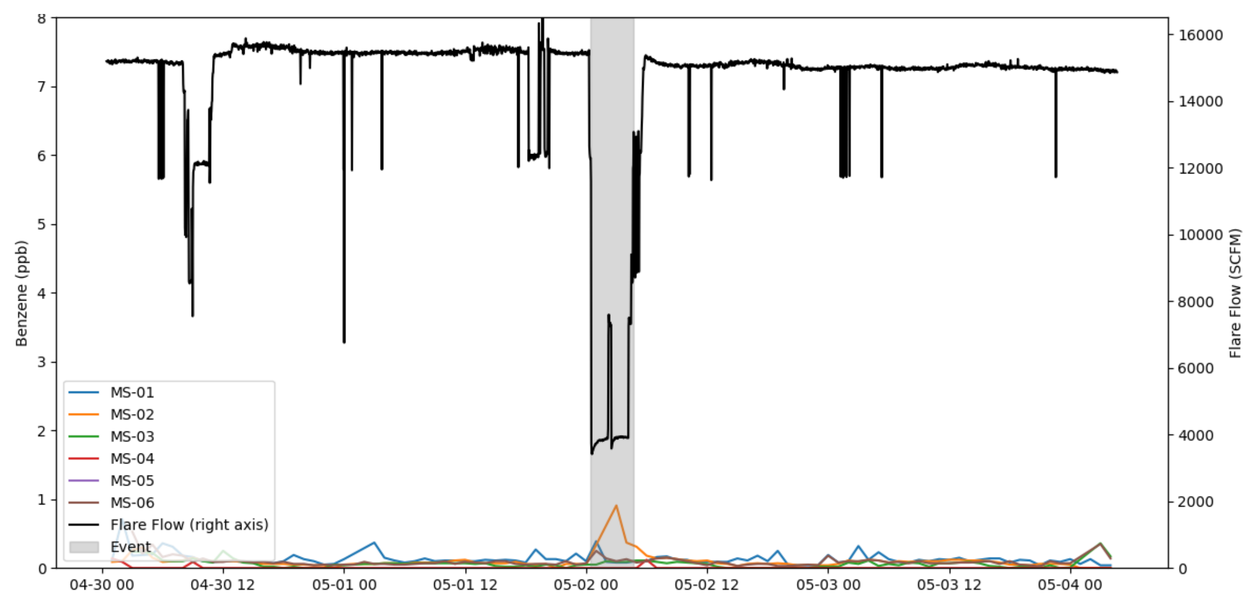


Figure 14b. CH_4 Levels During FRE #3

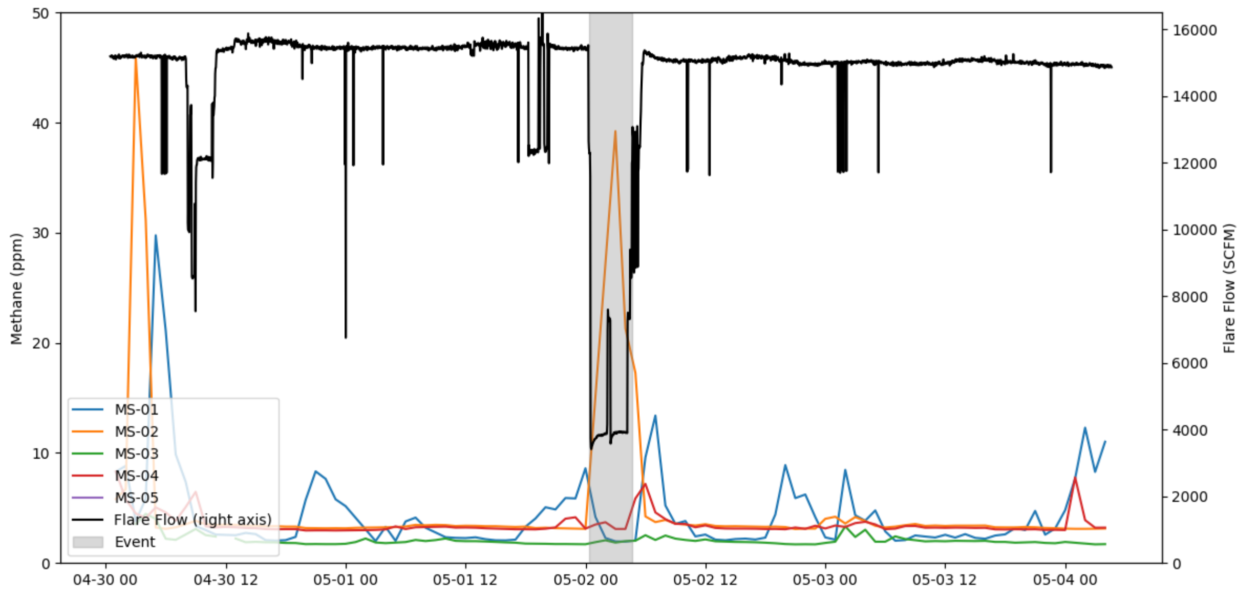
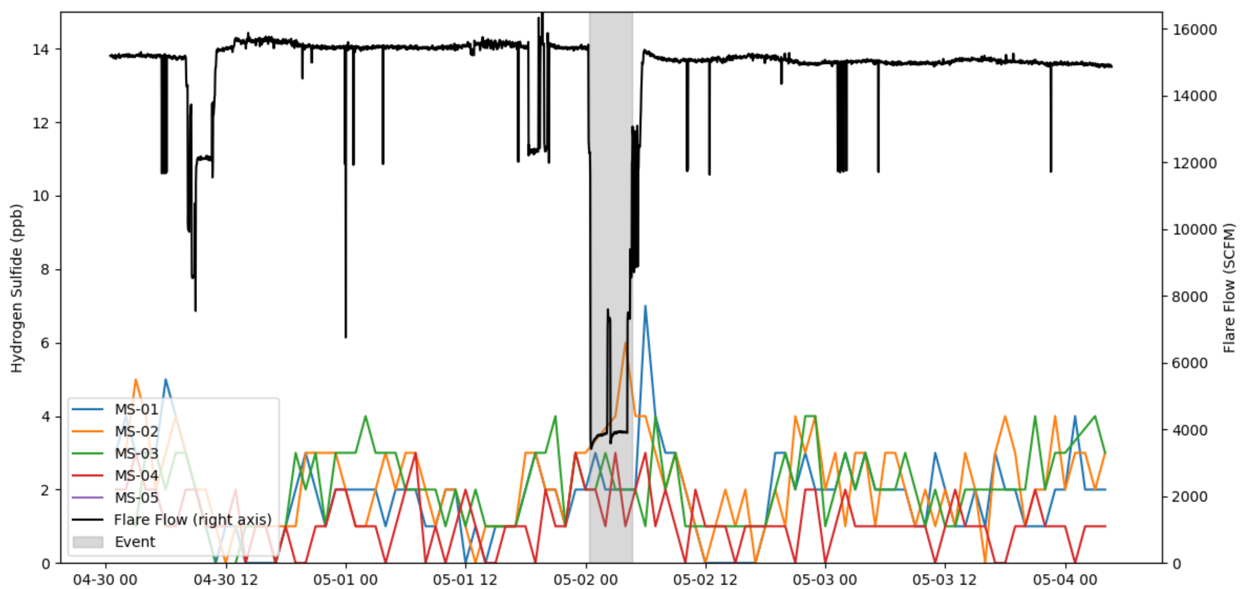


Figure 14c. H_2S Levels During FRE #3



As shown in **Figures 14a through 14c**, MS-02 recorded increases in Benzene, CH_4, and H_2S during the event, indicating a potential correlation between FRE #3 and air quality impacts.

While visual evidence suggests a possible correlation, several confounding factors should be considered. H_2S concentrations at MS-02 increased from approximately 3–4 ppb to about 6 ppb (**Figure 14c**), representing a relatively small change that would not be unusual in the absence of a flare-related event. Benzene concentrations increased from roughly 0.1–0.3 ppb to approximately 0.9 ppb, which constitutes a more noticeable rise. However, this value remained below 1 ppb and within the range of natural variability and expected as average from the MATES V study.[2] CH_4 showed the largest increase, rising from approximately 2–5 ppm to nearly 40 ppm during the event. However, an even larger CH_4 peak was observed two days earlier in the absence of a comparable flow reduction, indicating that slightly elevated methane concentrations can occur under normal operating conditions.

Overall, while FRE #3 may have contributed to the observed concentration increases, the measured values remain within the expected range for this site and monitoring location. Accordingly, the overall impact of this flow reduction event is considered to be relatively minor.

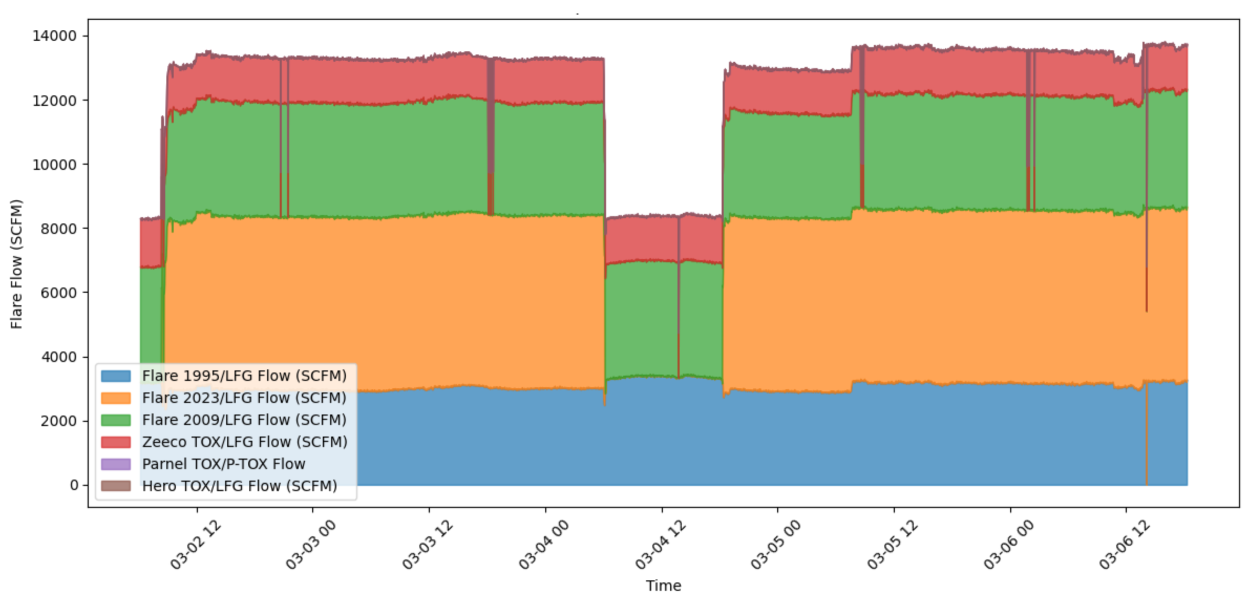
2.3.1.4 Flow Reduction Event #4

FRE #4 occurred from 06:09 through 18:17 on March 4, 2025. During this period, the 2023 Flare was off-line, which decreased total flow from approximately 13,000 scfm, to approximately 8,000 scfm.

During FRE #4, winds were generally from the south and east in the morning, and from the west/northwest in the afternoon. Based on this information, MS-01, MS-02, and MS-04 were all downwind of the landfill for portions of the event, so these were the stations selected as the downwind monitoring stations for comparison.

Figure 15, below, shows the total and individual device flows during the event.

Figure 15. GCCS Device Flow Rates During FRE #4



As shown in **Figure 15**, during FRE #4, Flare 2023 was off-line.

[2] SCAQMD, Multiple Air Toxics Exposure Study (MATES) V, August 2021.

During the 11-hour duration and following the event, onsite Benzene levels ranged from <0.10 to 2.84 ppb, CH_4 ranged from <2 to 27.42 ppm, and H_2S ranged from <2 to 7 ppb. Concentrations of Benzene, CH_4, and H_2S are shown in **Figures 16a through 16c** below.

Figure 16a. Benzene Levels During FRE #4

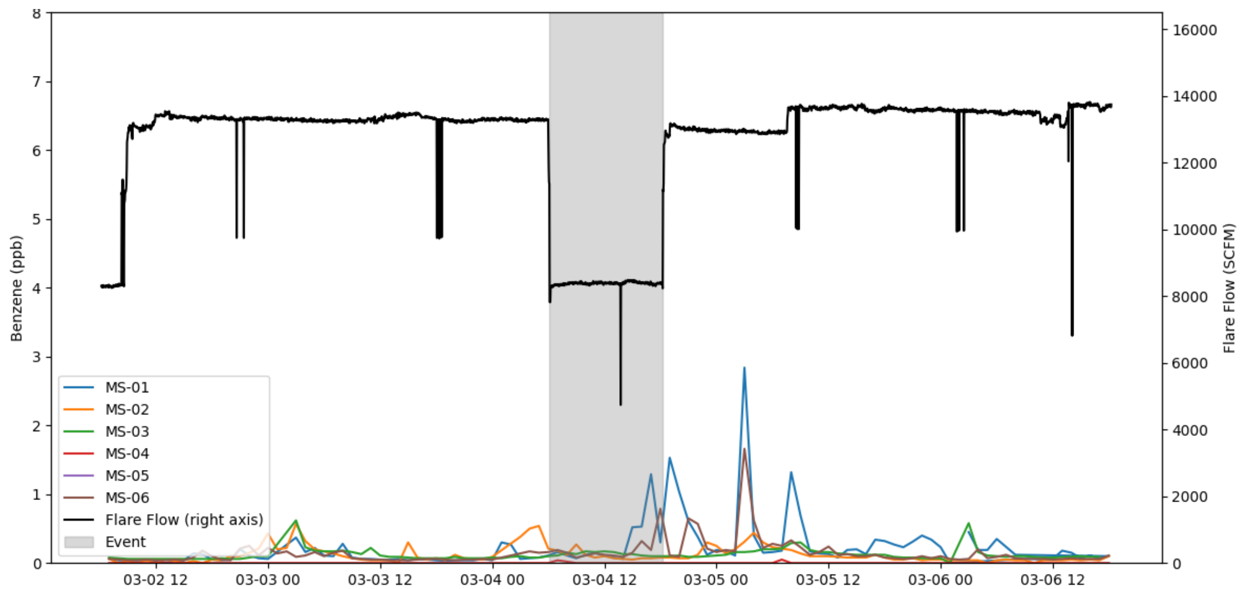


Figure 16b. CH_4 Levels During FRE #4

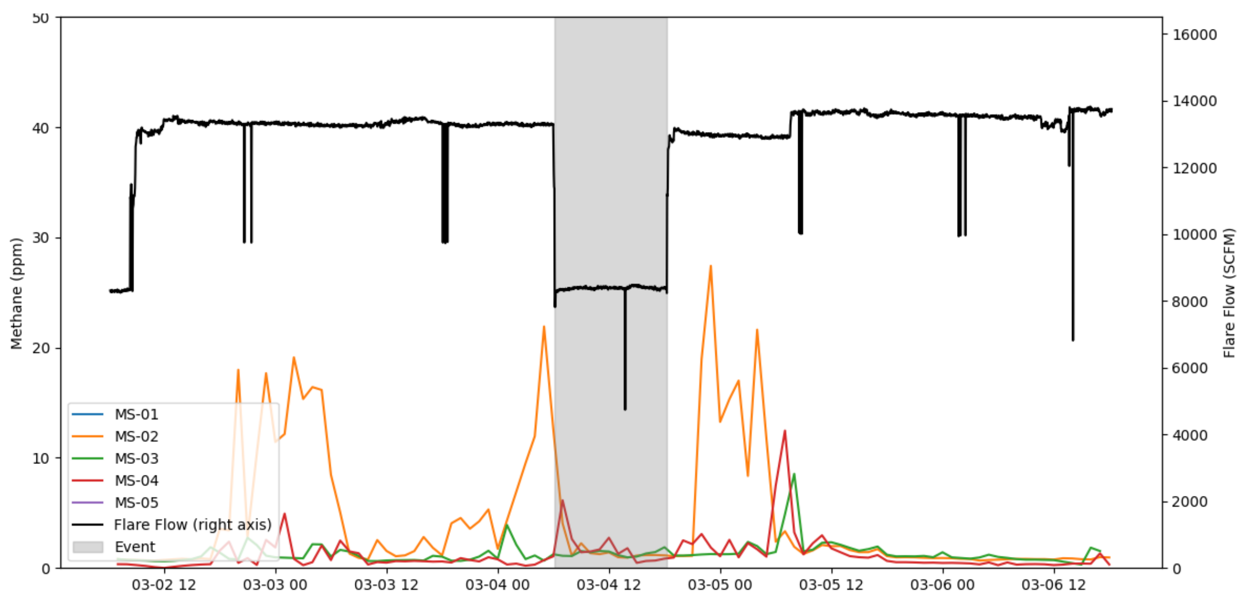
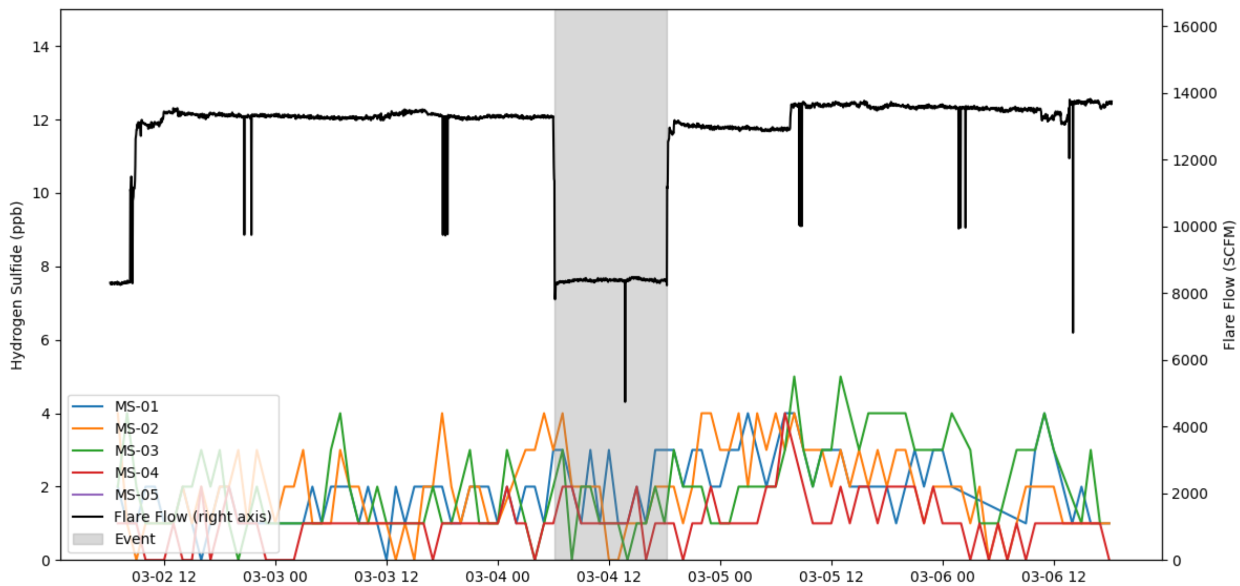


Figure 16c. H_2S Levels During FRE #4



As shown in **Figures 16a through 16c**, although potential impacts on Benzene and CH_4 were observed; however, these responses were delayed. H_2S concentrations exhibited negligible response throughout the event.

Previous analyses indicate that midday conditions are generally associated with lower concentrations due to atmospheric conditions, which could be an explanation for the delayed concentration response following a midday event.

At MS-02, CH_4 concentrations began increasing at approximately 10:00 p.m., after the conclusion of the event. However, as discussed previously, MS-02 frequently experiences elevated methane levels, and the extended delay between the event and the observed increase suggests that FRE #4 likely did not substantially contribute to this methane elevation.

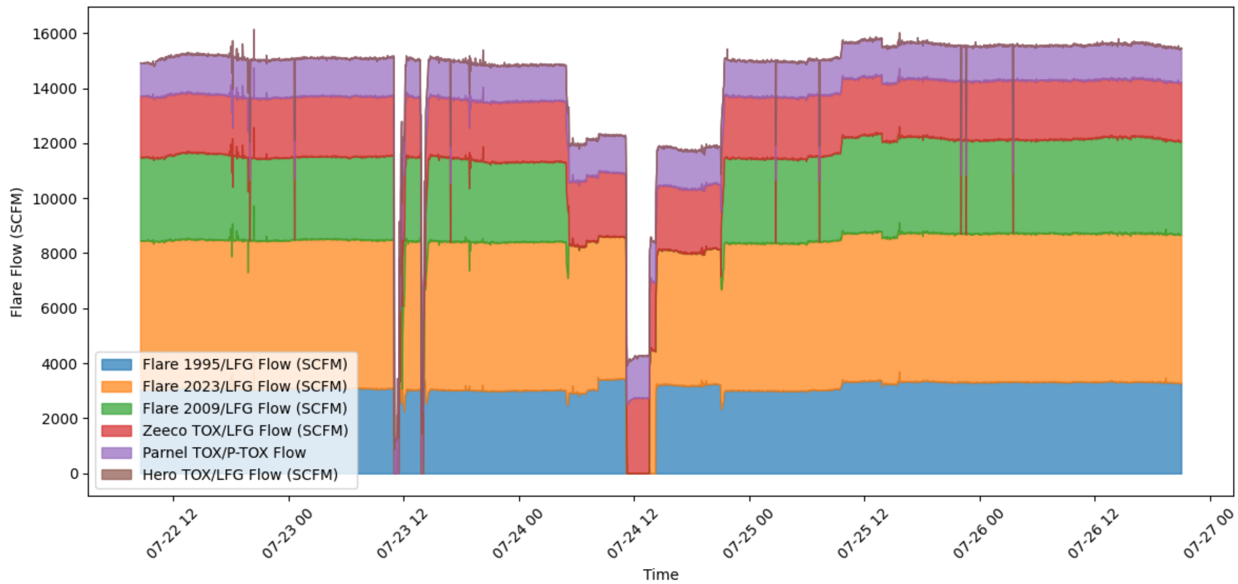
At MS-01, Benzene concentrations increased near the end of the event, followed by a larger increase after midnight. MS-06, which is also located east of the landfill, recorded a similar pattern. Benzene concentrations reached approximately 1.5 ppb shortly after the event and roughly 2.8 ppb after midnight. Unlike FRE #3, these concentrations are uncommonly high compared to typical background, and may indicate the presence of landfill emissions. Although winds were not predominantly from the west during this period, which introduces uncertainty regarding the source, the consistent response observed at both MS-01 and MS-06 suggests that the landfill may be a contributing source to those observed readings.

2.3.1.5 Flow Reduction Event #5

FRE #5 occurred from 08:31 through 21:01 on July 24, 2025. During this period, flow started decreasing, from approximately 14,000 scfm, to approximately 10,000 scfm and then briefly down to 2,000 scfm.

During FRE #5, winds were predominantly from the north and west, resulting in MS-01, MS-02, and MS-03 being downwind of the landfill for portions of the event, so these were the stations selected as the downwind monitoring stations for comparison.
Figure 17, below shows the total and individual device flows during the event.

Figure 17. GCCS Device Flow Rates During FRE #5



During the 15-hour duration and following the event, onsite Benzene levels ranged from <0.10 to 0.73 ppb, methane (CH_4) ranged from <2 to 36.15 ppm, and hydrogen sulfide (H_2S) ranged from <2 to 7 ppb. Concentrations of CH_4, H_2S, and Benzene are shown in **Figure 18a through 18c**, below.

Figure 18a. Benzene Levels During FRE #5

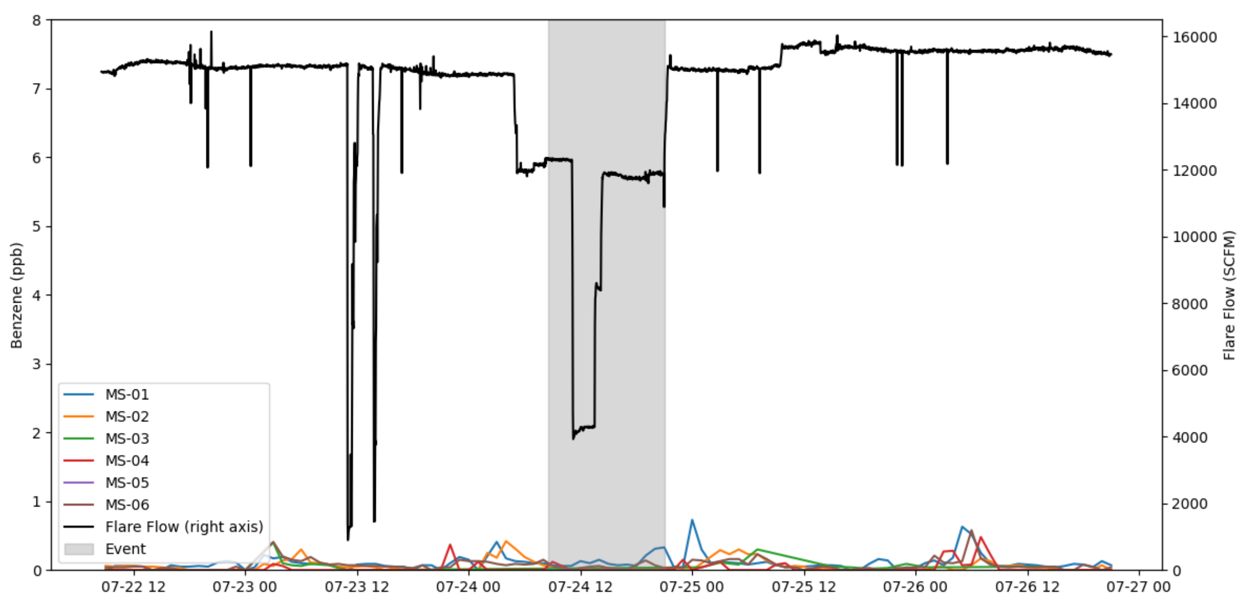


Figure 18b. CH_4 Levels During FRE #5

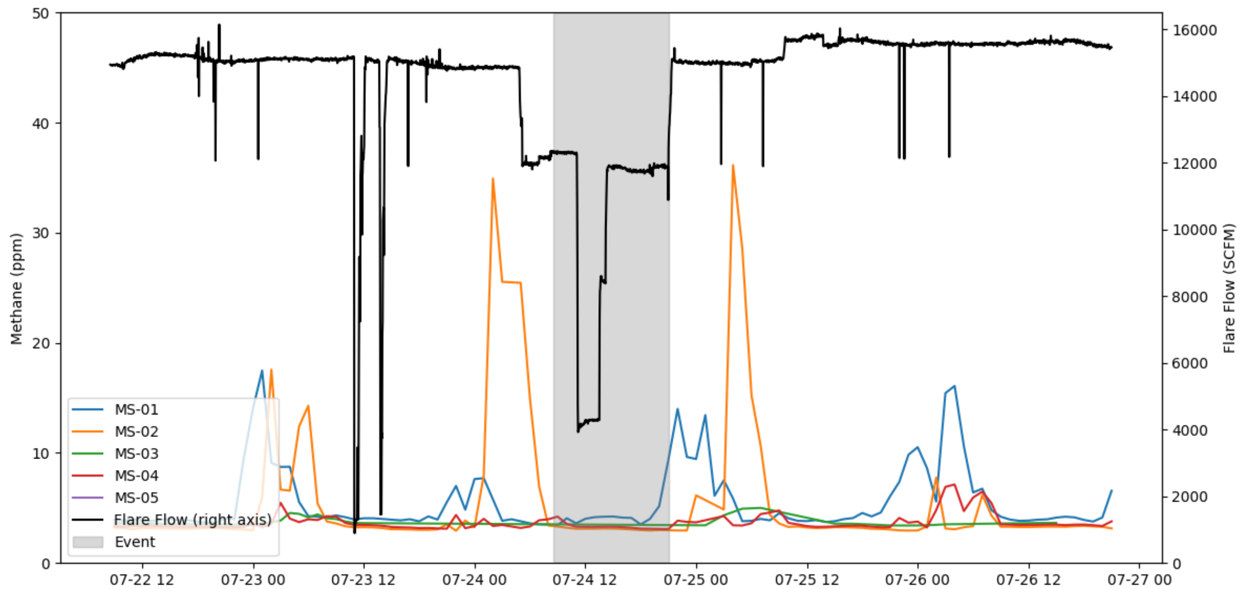
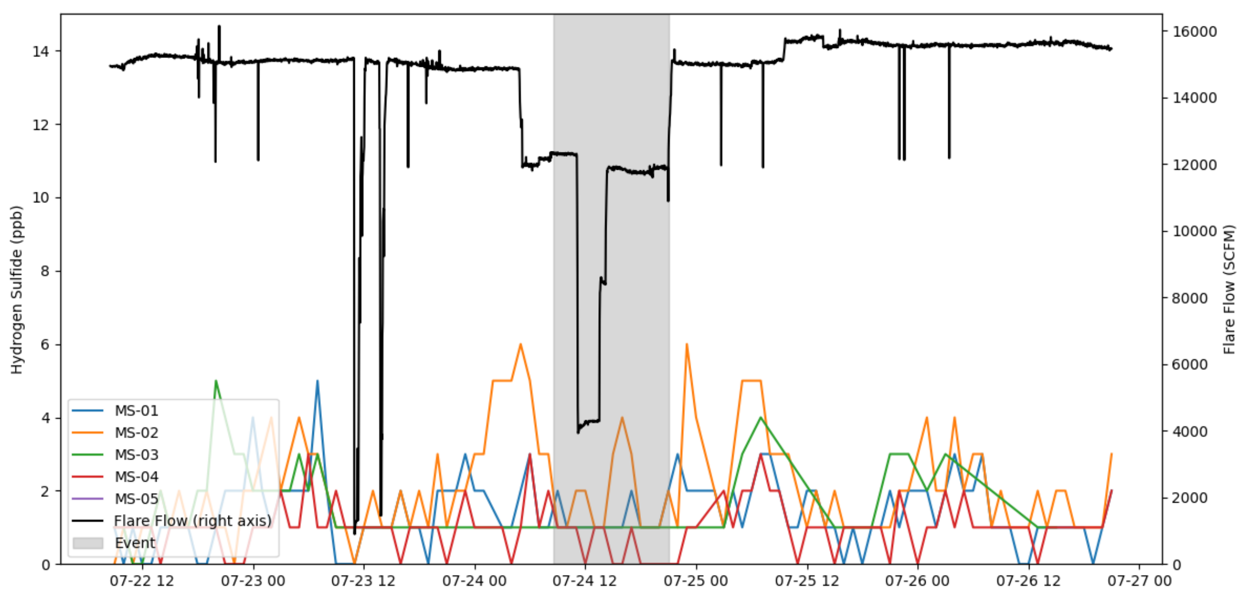


Figure 18c. H_2S Levels During FRE #5



As shown in **Figures 16a through 16c**, response to this event was very similar to FRE#4. Once again, this event occurred in the middle of the day, so we saw very little immediate response. Potential impacts on Benzene and CH_4 were observed; however, these responses were delayed. H_2S readings exhibited a possible response from this event, but for the reasons discussed previously, mainly the very low concentrations, the effect on H2S from this event can be considered negligible.

As with the previous event, CH_4 concentrations at MS-02 began increasing at approximately 10:00 pm, after the conclusion of the event. However, as discussed previously, MS-02 frequently experiences elevated methane levels, and the extended delay between the event and the observed increase suggests that FRE #5 likely did not substantially contribute to this CH_4 elevation.

At MS-01, Benzene concentrations increased near the end of the event, followed by a larger increase after midnight. MS-06, which is also located east of the Landfill, recorded a similar pattern. Benzene concentrations reached approximately 1.5 ppb shortly after the event and roughly 2.8 ppb after midnight. Unlike FRE #3, these concentrations are uncommonly high and may indicate the presence of additional emissions. Although winds were not predominantly from the west during this period, which introduces uncertainty regarding the source, the consistent response observed at both MS-01 and MS-06 suggests that the landfill may be a contributing source.

2.3.1.6 Flow Reduction Event #6-15

The following ten events (FRE #6-15) were also evaluated using the same analytical methods. These events represent the 10 worst downtime events after the five noted above. To avoid duplicative reporting, benzene time graphs are presented collectively and discussed together.

Figure 19a. Benzene Levels During FRE #6

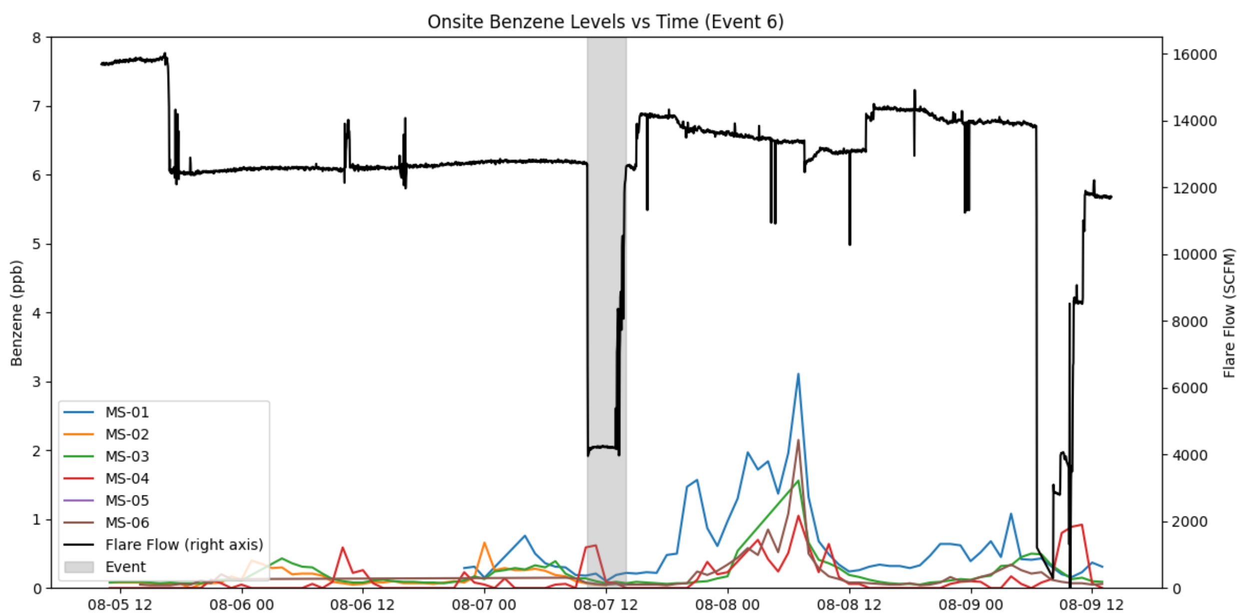


Figure 19b. Benzene Levels During FRE #7

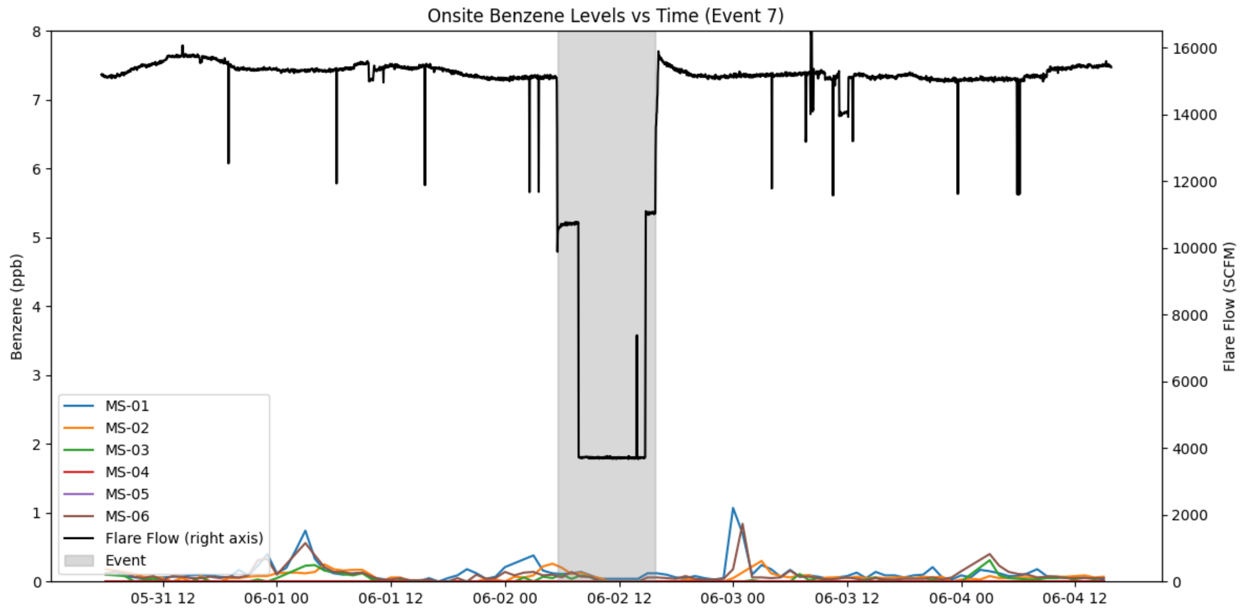


Figure 19c. Benzene Levels During FRE #8

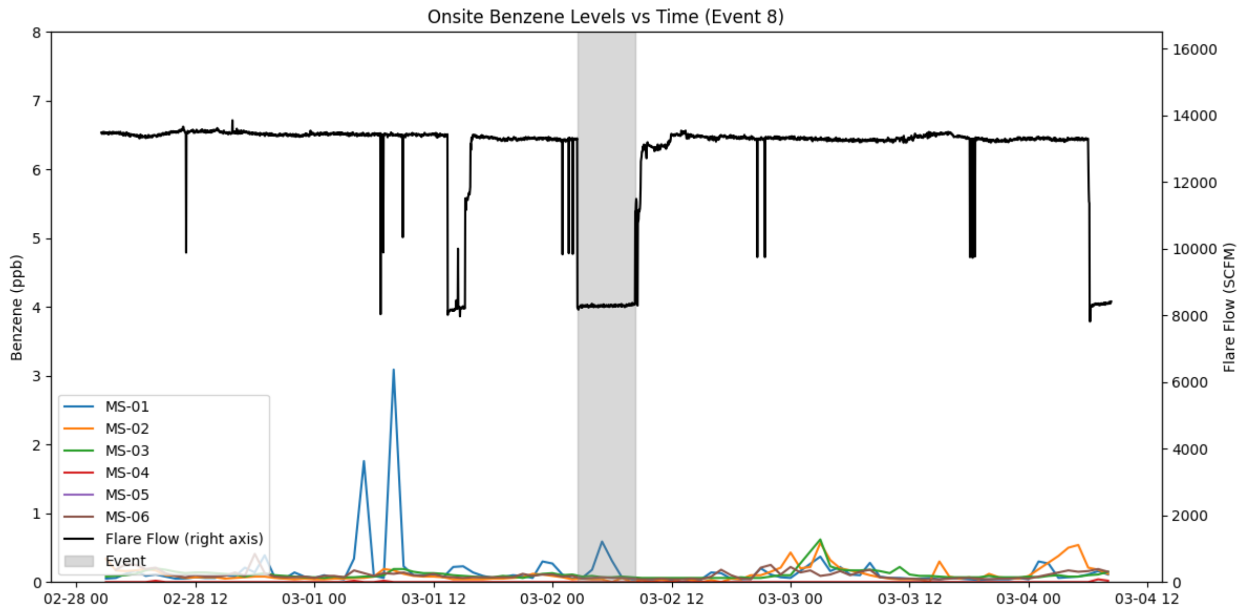


Figure 19d. Benzene Levels During FRE #9

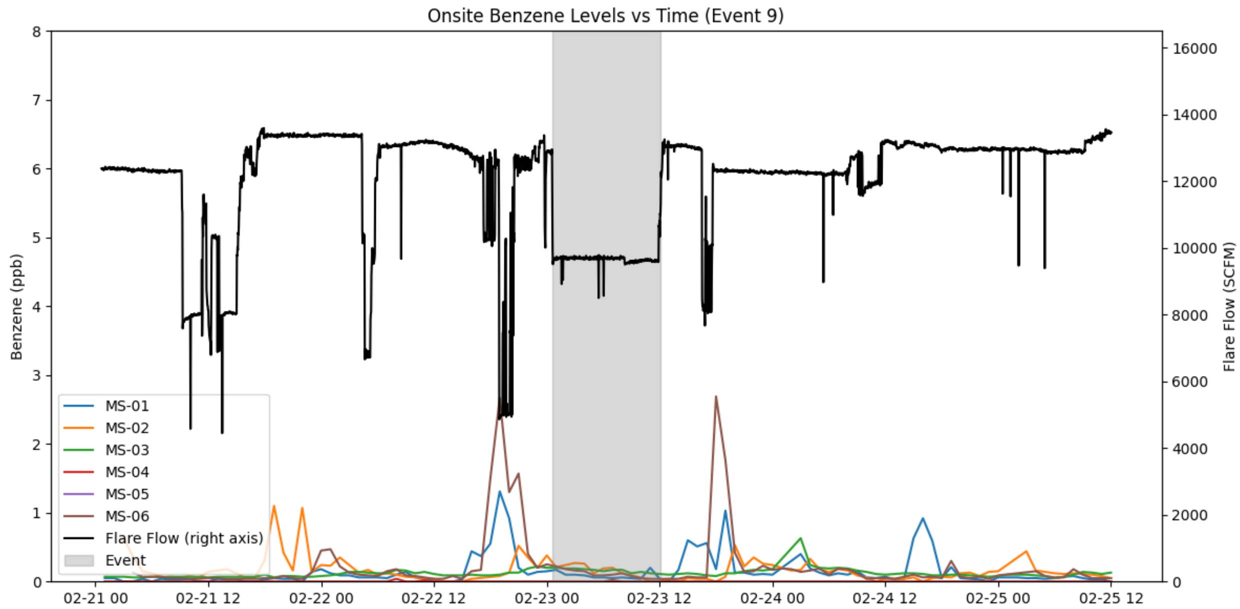


Figure 19e. Benzene Levels During FRE #10

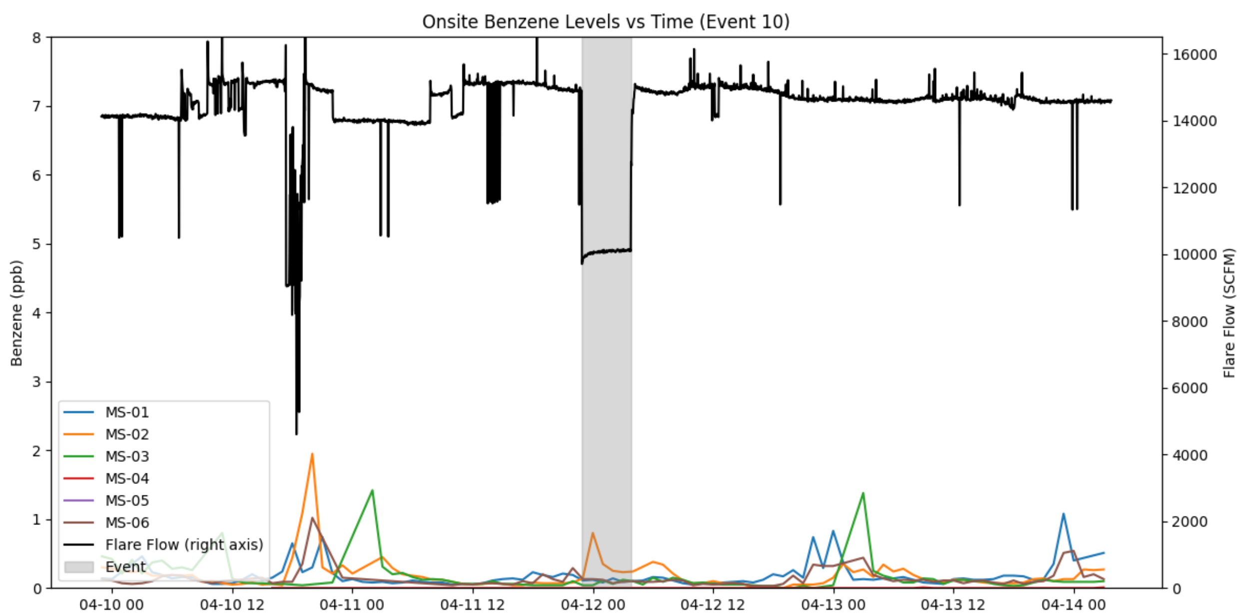


Figure 19f. Benzene Levels During FRE #11

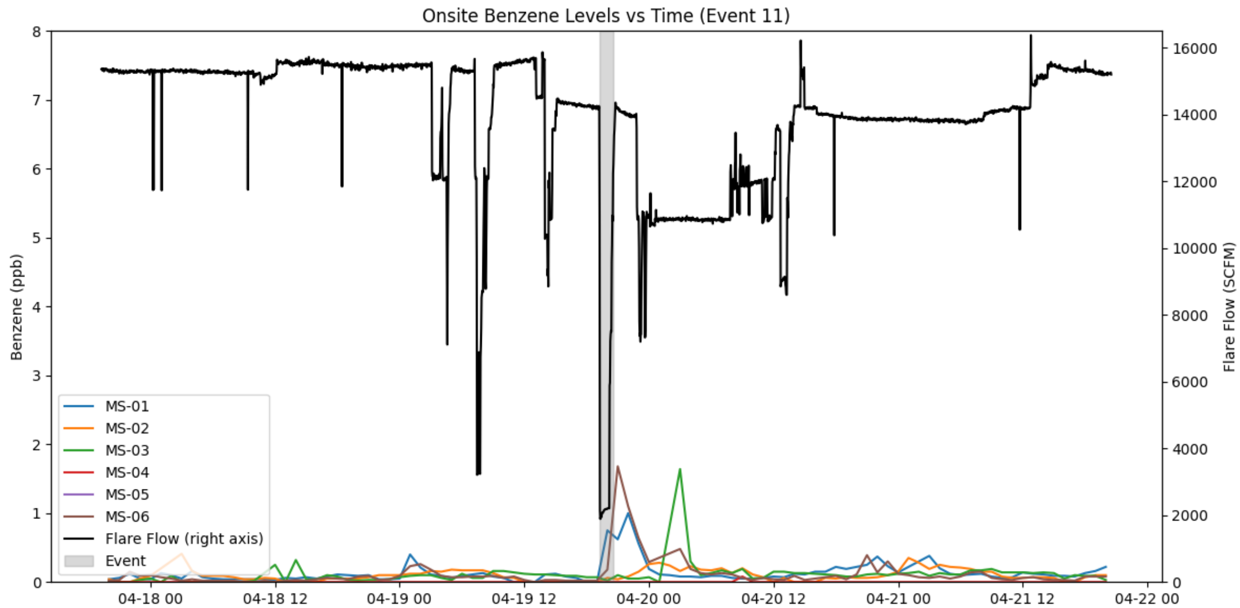


Figure 19g. Benzene Levels During FRE #12

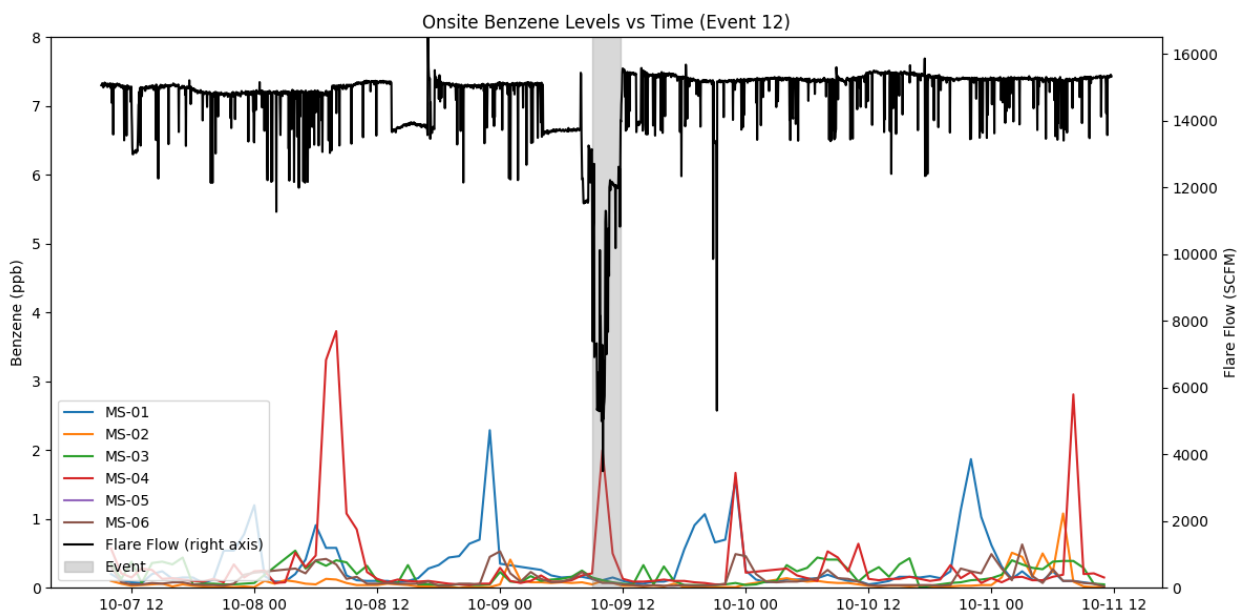


Figure 19h. Benzene Levels During FRE #13

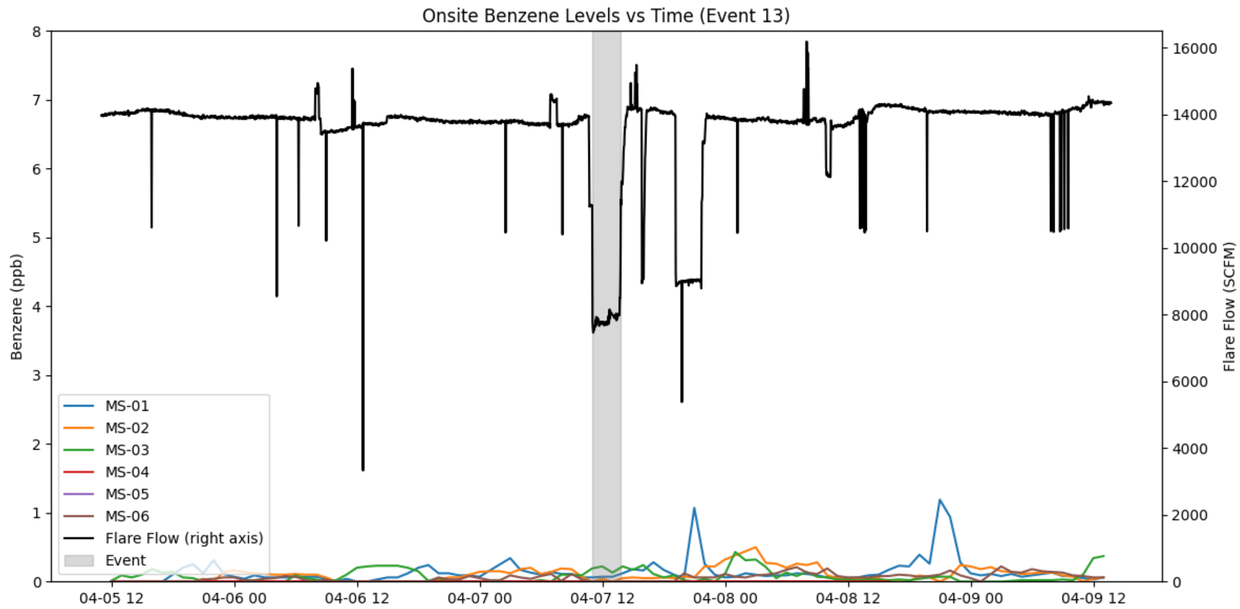


Figure 19i. Benzene Levels During FRE #14

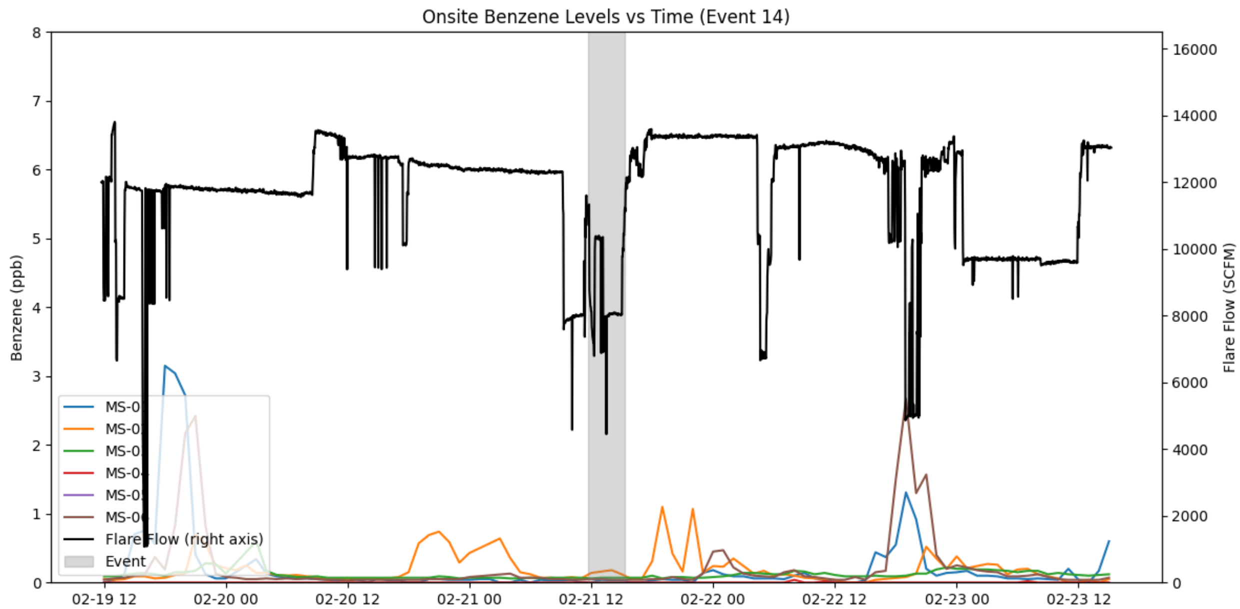
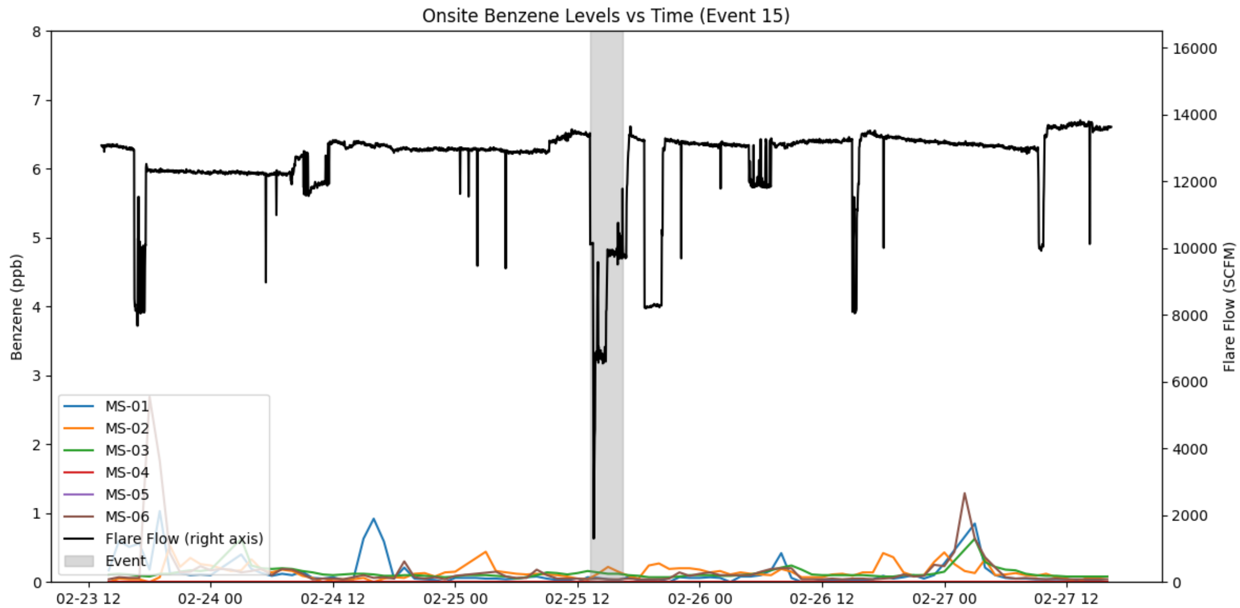


Figure 19j. Benzene Levels During FRE #15



FRE #6 was preceded by an extended period during which one flare was offline, followed by a brief period when all three flares were offline. On the following day, a larger than typical early-morning benzene increase was observed. Given the delay between the flare outages and the observed increase, it is possible that the elevated concentrations were unrelated to flare operations. However, the magnitude of the increase and its occurrence at multiple onsite monitoring locations suggest that the flow reduction likely contributed to the elevated benzene readings.

FRE #11 similarly followed flare operational issues earlier in the day and was associated with subsequent benzene increases later in the day or during the early morning hours. Both the magnitude of the flow reduction and the resulting benzene concentrations were lower than those observed during FRE #6. As a result, direct causation is more difficult to establish; however, a relationship remains plausible.

Aside from FRE #6 and 11, these events do not exhibit a significant impact on benzene concentrations. In some cases, no response is observed. In others, benzene concentrations are elevated but remain within levels consistent with normal diurnal patterns. In several instances, larger benzene spikes occur prior to flow reductions, indicating that these increases were not caused by changes in landfill gas flow.

2.3.2 Flow Reduction Threshold

As discussed previously, the 10% reduction in flow rate threshold was determined based on total LFG flow rate data trends: comparing the current total hourly LFG flow rate to the prior week's average LFG flow rate and the prior day's average LFG flow rate, consistent with Condition No. 83. A 10% reduction in comparison to the weekly or daily average value was considered and analyzed as an operational event, also consistent with Condition No. 83(a).

For the most part, instances of hourly 10% reduction threshold occurrence were coupled with instantaneous threshold exceedances, meaning that hourly average flow rates that are reduced by more than 10% generally also involved a drop in instantaneous flow below the instantaneous threshold. Since drops below the instantaneous threshold were covered in the previous section, these events were removed from this section's data set.

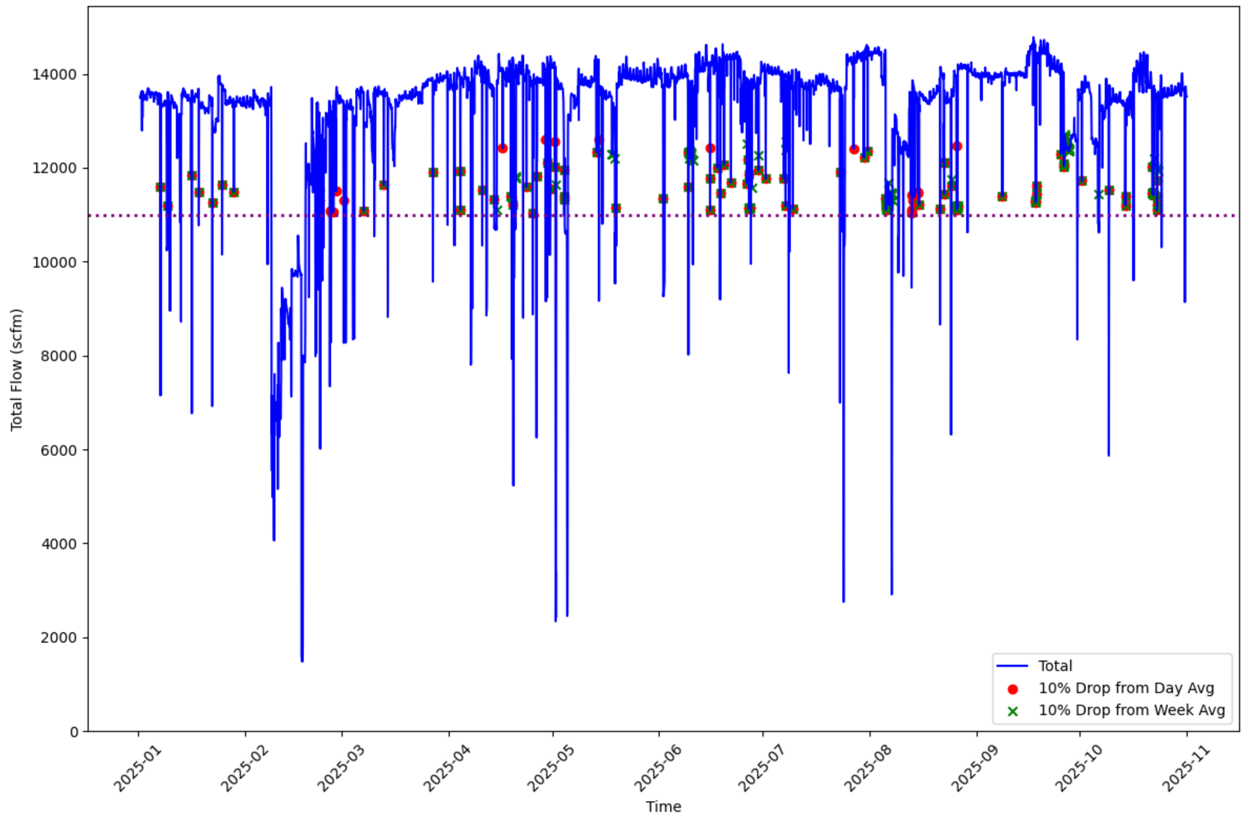
During the study period, a summary of the reduction threshold occurrences (day and week average) is provided in Table 8 below.

Table 8. Reduction Threshold Occurrence Summary

Threshold	Number of Exceedances
10% Drop from Daily Average	137
10% Drop from Weekly Average	209
Total Threshold Exceedances	346
Total 10% Threshold Exceedance Events	233

Based on review of Table 8, there are a total of 233 threshold exceedance events using the 10% reduction method. These instances are graphed in Figure 19, below.

Figure 19. Hourly Flow and 10% Reduction Thresholds



In reviewing the 233 instances of the 10% flow reduction threshold exceedance, the highest drop based on the daily average occurred on September 18, 2025 and the highest drop based on the weekly average occurred on August 5, 2025. Both of these events are discussed in detail below.

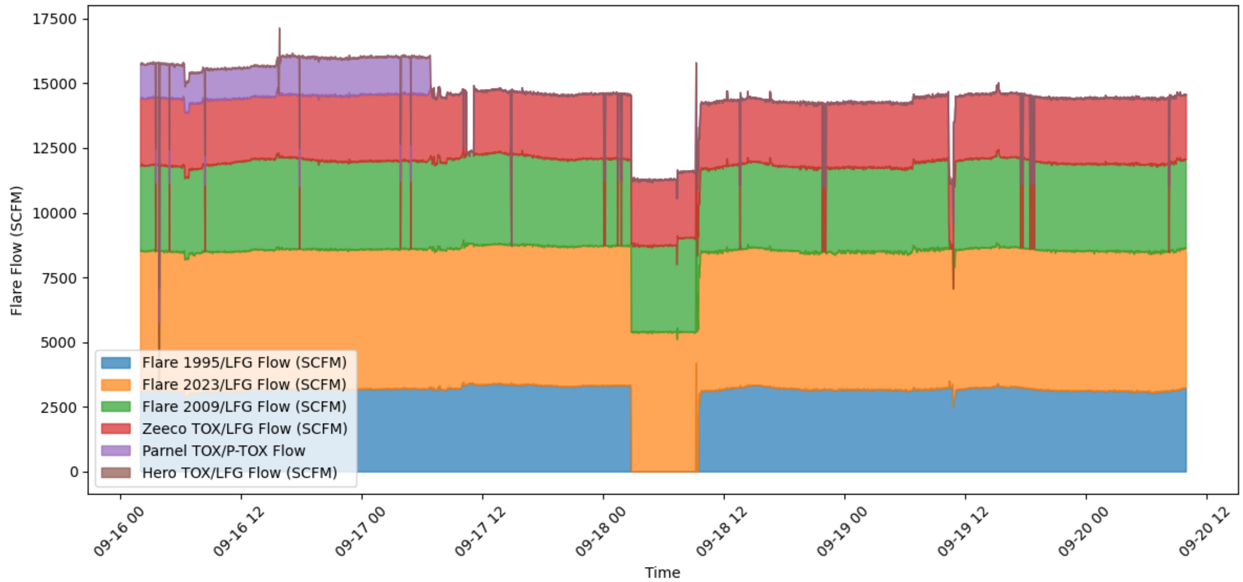
2.3.2.1 September 2025 Threshold Event

The September flow reduction threshold event (RTE #1) occurred during the morning of September 18, 2025, from approximately 2 am to 10 am. During this period, flow dropped from over 14,000 scfm down to just over 11,000 scfm. This was due to the shutdown of Flare 1995.

During RTE #1, MET data was not available from the on-site MET station. However, MET data from the closest air monitoring station (MS-05) indicates that winds were predominantly from the northwest during the first half of the event and easterly during the second half of the event. Thus, MS-02, MS-03, and MS-05, were selected as the downwind MET stations during RTE #1.

Figure 20, below shows the total and individual device flows during the event.

Figure 20. GCCS Device Flow Rates During RTE #1



During the 8-hour duration and following the event, highest onsite Benzene reading was 0.39 ppb, methane (CH_4) was 8.02 ppm, and hydrogen sulfide (H_2S) was 5 ppb. Concentrations of CH_4, H_2S, and Benzene are shown in **Figure 21a through 21c**, below.

Figure 21a. Benzene Levels During RTE #1

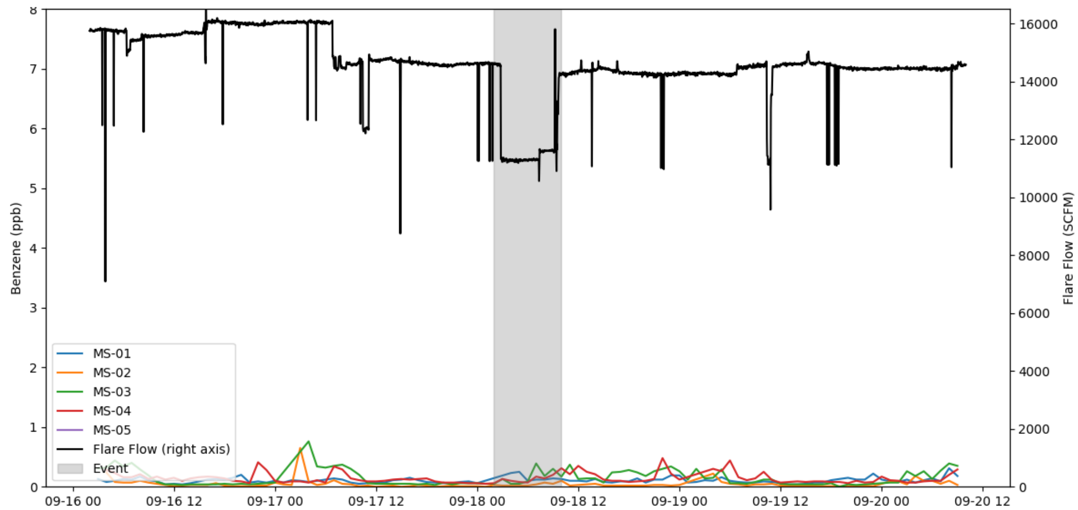


Figure 21b. CH_4 Levels During RTE #1

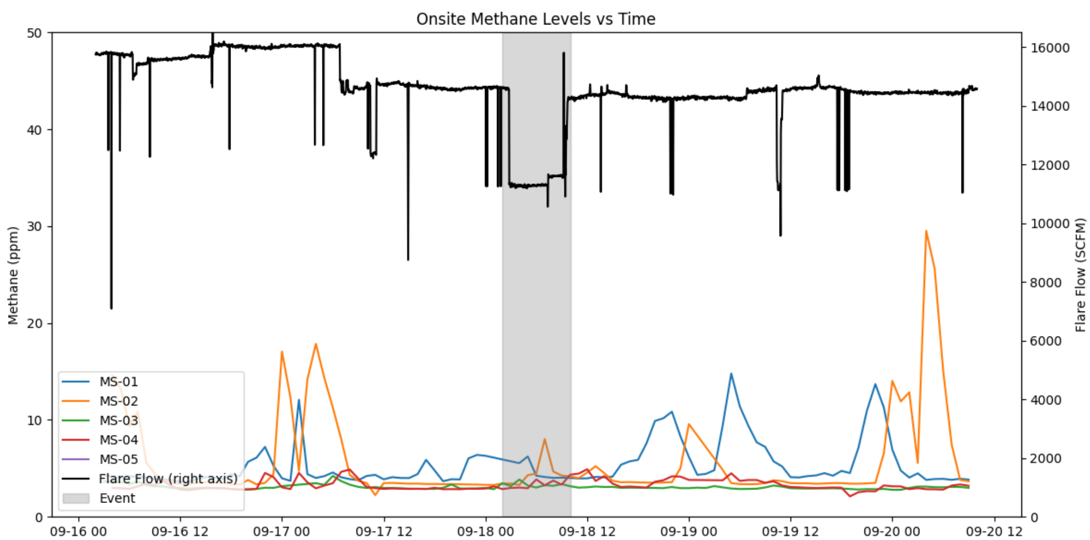
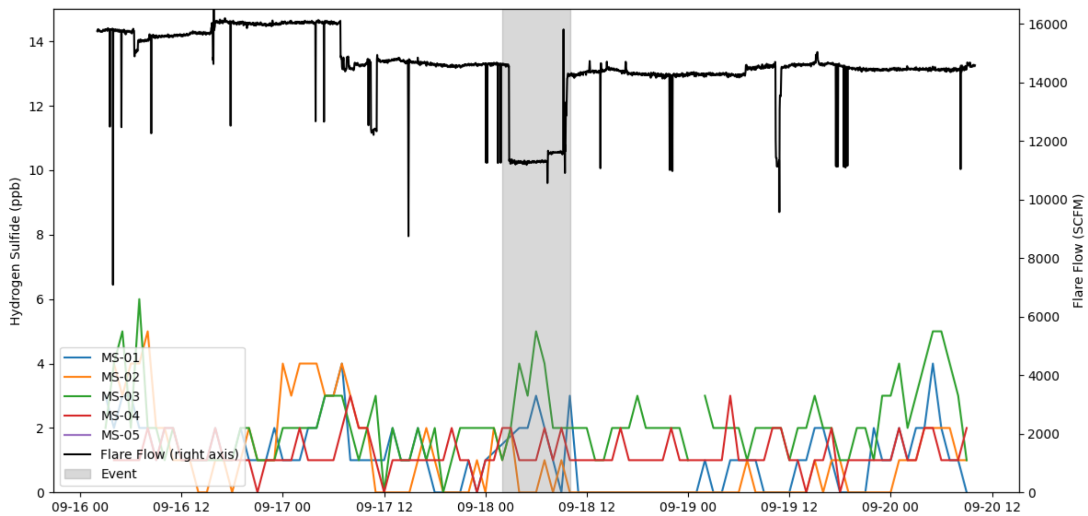


Figure 21c. H_2S Levels During RTE #1



Based on **Figures 21a through 21c**, RTE #1 does not appear to have resulted in an increase in constituent pollutant concentrations. Most notable was the increase in H_2S observed at MS-03 during the event, with concentrations rising from 2 ppb to 5 ppb. While this increase may be attributable to the RTE, the magnitude of the change is minimal and remains well below the REL. In addition, the event occurred during the early morning hours, a period commonly associated with elevated concentrations.

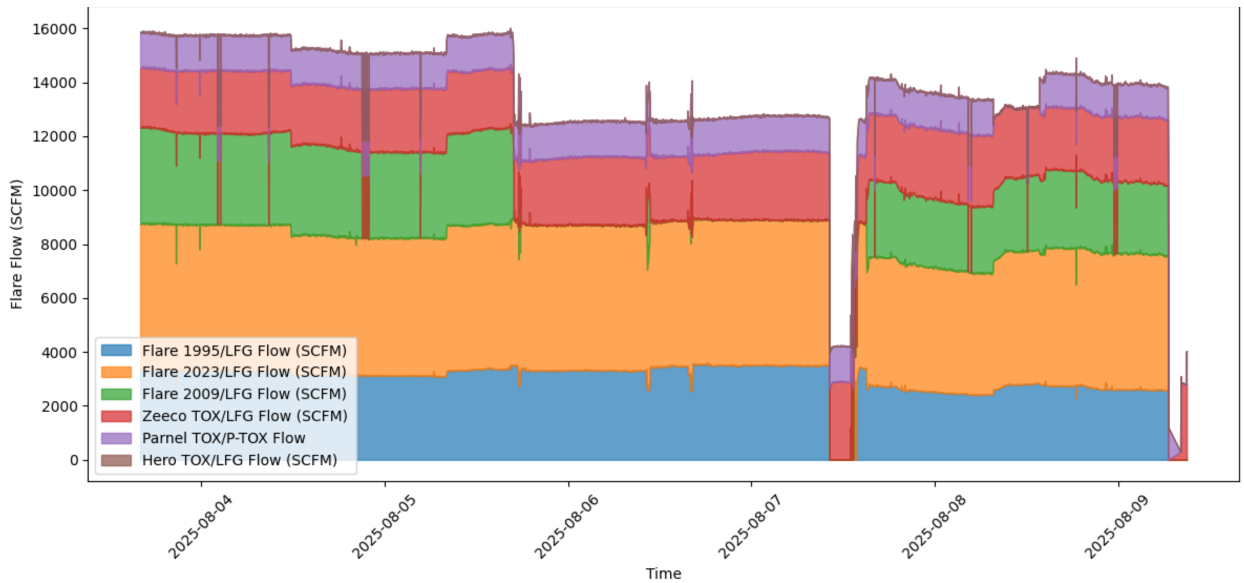
2.3.2.2 August 2025 Threshold Event

The August flow RTE (RTE #2) started August 5, 2025, at approximately 4 pm. During this period, flow dropped from over 14,000 scfm down to just over 11,000 scfm. This was due to the shutdown of Flare 2009. This reduction continued until August 7, 2025, at approximately 9 am, when Flare 1995 and Flare 2023 also shut down. At this point, the flow dropped below 11,000 scfm and became an FRE for the purpose of this study.

During RTE #2, MET data ranged indicated wind from the west, south, and east, due to the long period of the event. Therefore, all MS on-site stations were selected as the downwind MET stations during RTE #2.

Figure 22, below shows the total and individual device flows during the event.

Figure 22. GCCS Device Flow Rates During RTE #2



During the 41-hour duration and following the event, highest onsite Benzene reading was 0.79 ppb, methane (CH_4) was 26.28 ppm, and hydrogen sulfide (H_2S) was 7 ppb. Concentrations of CH_4, H_2S, and Benzene are shown in **Figures 23a through 23c** below.

Figure 23a. Benzene Levels During RTE #2

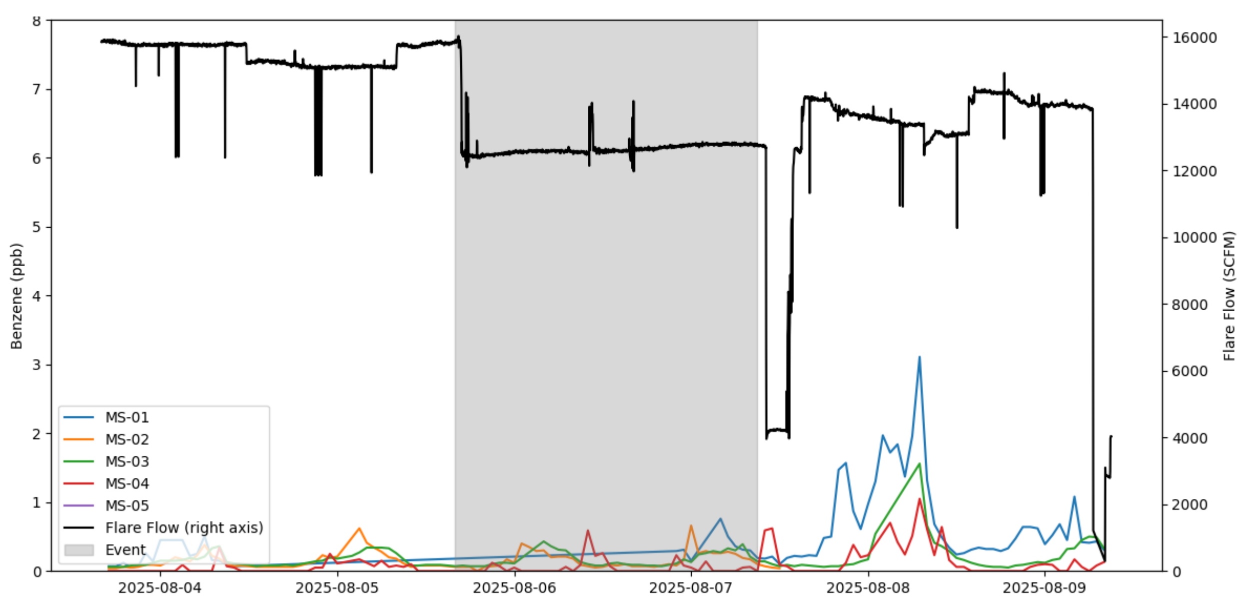


Figure 23b. CH_4 Levels During RTE #2

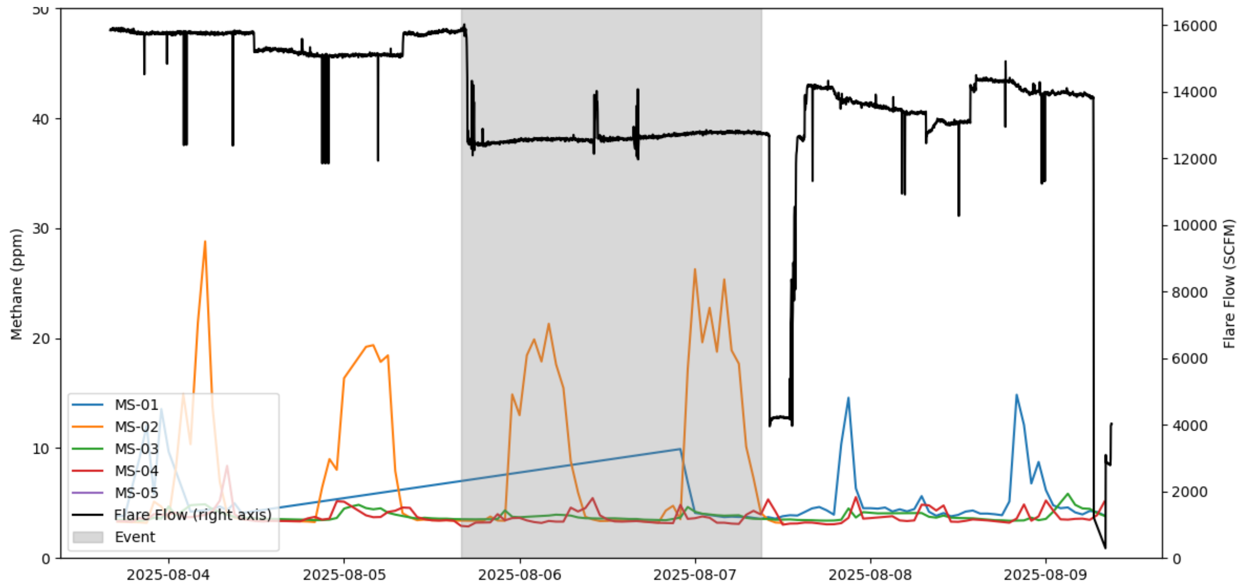
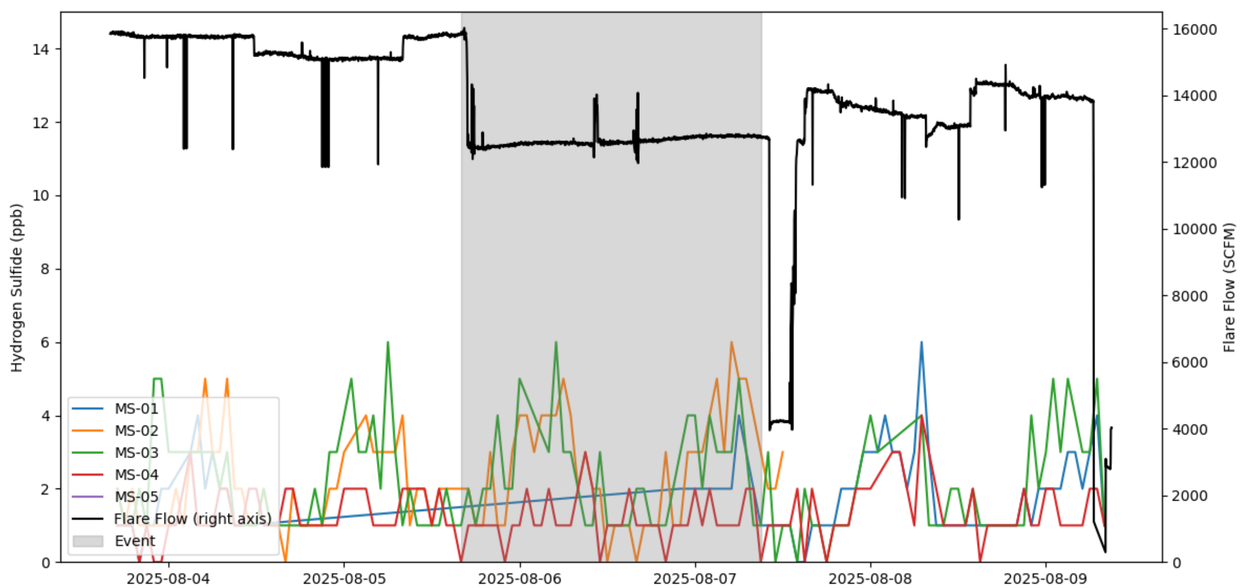


Figure 23c. H_2S Levels During RTE #2



Based on **Figures 23a through 23c**, RTE #2 does not appear to have resulted in a significant increase in constituent concentrations. All three compounds exhibit consistent diurnal patterns, with concentrations increasing during the morning hours. These patterns do not appear to be materially influenced by the flow reduction associated with the RTE. The most notable impact occurs following the event period, when all three flares were shut down. Specifically, Benzene concentrations on August 8, 2025 show a noticeable increase after this shutdown. This suggests impacts associated with the 11,000 scfm threshold described above but does not indicate a significant impact related to the 10 percent reduction threshold.

2.3.3 Summary

Both the instantaneous and 10% reduction thresholds have shown that there may be air impacts associated with a reduction in flow to the existing GCCS. The magnitude of the impacts is more pronounced for reduction in flow below the 11,000 scfm threshold but are also noticeable in GCCS changes above 11,000 scfm flow, specifically in relation to TOx operation,, which was a common element in the two threshold exceedances evaluated above.

2.4 LANDFILL GAS EQUIPMENT LEAK EVENTS

As a component of GCCS operation, GCCS components (e.g., wells, blowers, sumps, etc.) are periodically monitored for LFG leakage. As a component of the leak testing, total VOCs, as methane, is monitored at surface penetrations (e.g, wells and sumps), as well as positive pressure side components of the GCCS (e.g., blowers, flares, etc.). During the study period, the eight highest penetration monitoring events and eight highest component monitoring events recorded were reviewed and are listed in Table 9, below.

Table 9. LFG Equipment Leak Test Summary

Event #	Type	GCCS Component	Location	Date	Time	Measured VOCs (ppm)
1	Surface Penetration	Unmarked Well	198	01/06/2025	09:56	50,000
2		Unmarked Well	215	04/07/2025	10:57	40,000
3		Reaction Area Sump 2	156	05/28/2025	08:39	30,999
4		Reaction Area Sump 2	156	03/26/2025	10:15	13,000
5		Unmarked Well	80	05/27/2025	08:50	10,690
6		Unmarked Well	166	02/21/2025	08:31	10,060
7		North Sump 4	80	07/23/2025	08:01	8,000
8		Sump	150	06/09/2025	10:22	7,564
9	Blower/Flare station	Air Mixer	FL-2009	03/08/2025	13:30	96
10		Air Mixer	FL-2009	03/11/2025	09:30	96
11		Flame Arrestor	FL-2009	03/11/2025	09:30	46
12		Air Mixer	FL-2023	03/11/2025	10:00	59
13		Flame Arrestor	FL-1995	04/23/2025	13:00	53.5
14		Air Mixer	FL-2009	08/29/2025	11:30	33
15		Air Mixer	FL-2023	04/10/2025	11:00	26.3
16		Flame Arrestor	FL-2023	02/19/2025	10:00	25.2

For each of these events, SCS reviewed the ambient air data from the on-site monitoring stations. No noticeable variation to monitored constituent levels was identified from these individual events.

3.0 CONCLUSIONS AND RECOMMENDATIONS

3.1 CONCLUSIONS

3.1.1 Leachate Exposure Events

Based on the data reviewed as a part of this AIS, both leachate seep and spill data were available for the study duration. There were no pressurized releases of leachate during the study period. Based on the available data, there does not appear to be any correlation between smaller leachate spills and air impacts. This is likely due to the relatively small quantities of leachate that were spilled and/or the chemical mechanisms involved in volatilization of VOCs from leachate spills.

However, larger leachate spills do seem to correlate with increased constituent detections (aka, LSE #1, which was approximately 5,000-gallons).

With regard to Leachate Seeps, it should be noted that there were inconclusive correlations between leachate seeps and air impacts. Per **Figure 6**, the levels of Benzene in the air increased at MS-02 during the February 7, 2025 LSE, but MS-02 was not downwind of the LSE at the time of release.

The key indicators of whether a leachate leak, spill, or seep event will impact air quality include volume of the leachate release and the duration of the release prior to the cleanup.

3.1.2 Landfill Excavation Events

There were no landfill excavation events during the extended study period.

3.1.3 Landfill Gas System Downtime and Flow Reduction Events

Based on the analysis of GCCS events, as defined herein, it appears that the strongest correlation exists between LFG system downtime and reduced flow events and air impacts. This is evident by review of the increase in monitored analytes concurrent with reduced and/or no flow from the GCCS. Based on our analyses, we saw air quality impacts when there was a reduction in LFG flow in the amount of 4,000 scfm.

3.1.4 Landfill Gas Equipment Leak Events

Based on the analysis of GCCS events, as defined herein, it appears that there is minimal correlation between individual component leak events and air impacts.

3.2 RECOMMENDATIONS

Based on the identified correlation between GCCS operations and air impacts, and in accordance with Condition 83(a) of the Stipulated Order, SCS recommends continued integration of GCCS downtime as a consideration factor with air monitoring REL exceedance events, due to the correlation between GCCS down time and increased monitoring constituent detection.