

December 29, 2025

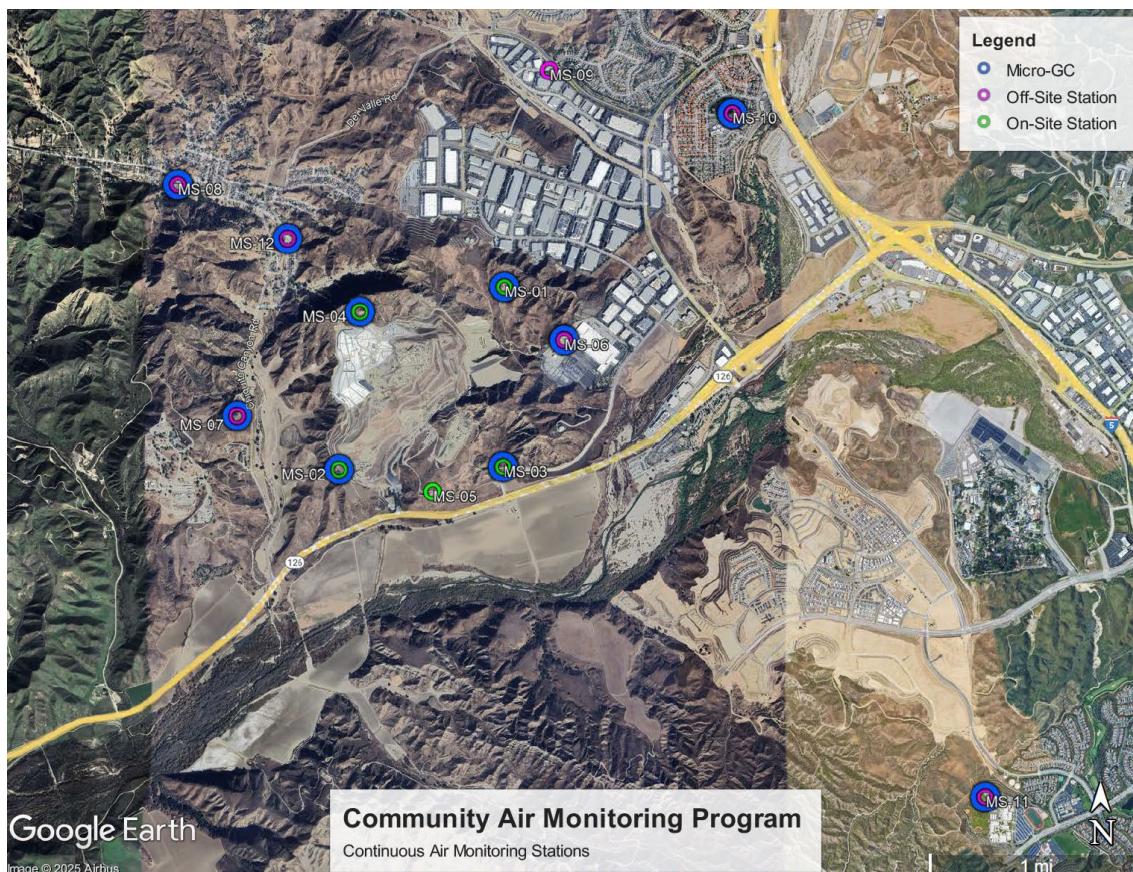
Mr. Stephen Dutz
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, California 91765

POST-EXCEEDANCE AIR MONITORING INVESTIGATION MS-04, DECEMBER 22-23, 2025 – STIPULATED ORDER FOR ABATEMENT CONDITION NO. 34(d)

Dear Mr. Dutz:

As required by Condition 34(d) of the Stipulated Order for Abatement (SOFA) for Chiquita Canyon Landfill (CCL or Landfill), an investigation into air monitoring exceedances was conducted to assess the validity of the benzene exceedances detailed below and determine whether the exceedances may have originated from the Landfill. This report constitutes the full documentation, which is required to be submitted within four business days of the exceedance event per the SOFA. A map showing the relative locations of the various air monitoring stations around the Landfill and within the community is provided in **Figure 1**, below.

Figure 1. Map of Air Monitoring Stations



SUMMARY OF EVENT

On December 22 and 23, 2025, benzene was recorded above the Office of Environmental Health Hazard Assessment (OEHHA) acute Reference Exposure Level (REL) of 8 parts per billion (ppb) with readings between 9.41 to 11.14 between the hours of 9 PM to 4 AM at MS-04. The exceedance did not result in a public notification event via the CCL website, as further discussed below.

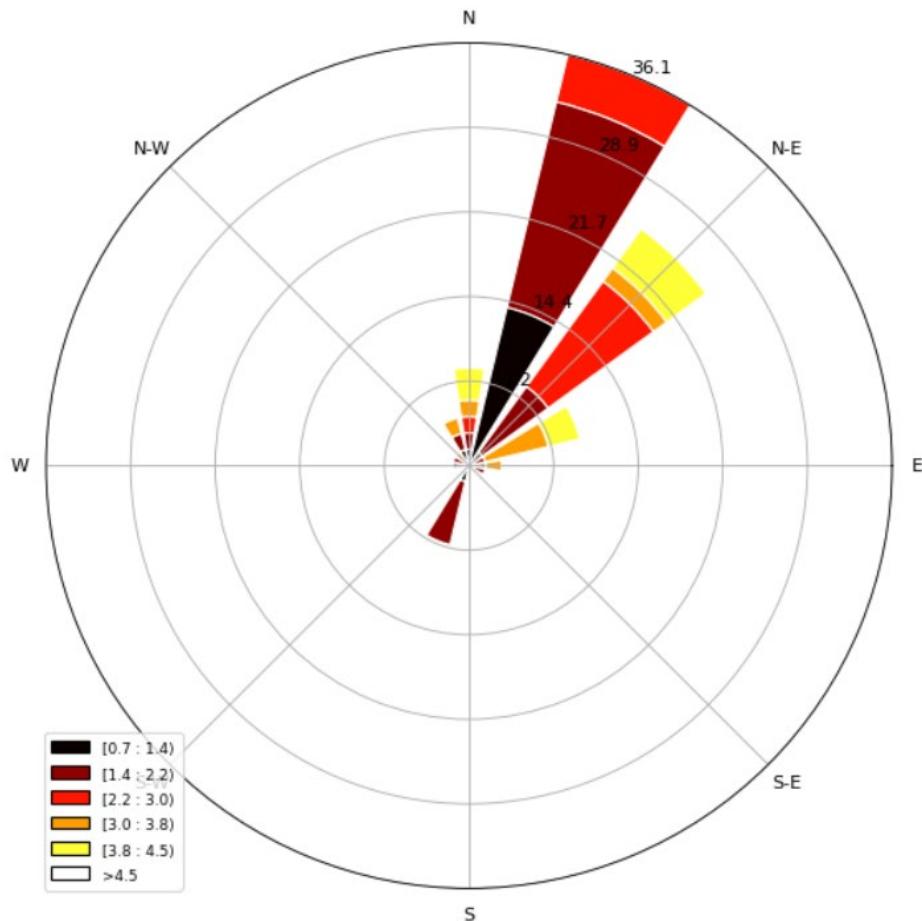
INVESTIGATION

Meteorological Conditions

Area Near Event

SCS Engineers (SCS) conducted a review of the meteorological (MET) data for MS-04 from an hour prior to and during the time of the REL exceedance. **Figure 2** contains the wind rose data for MS-04 during the time of the REL exceedance.

Figure 2. Wind Rose for MS-04, December 22-23, 2025, 8 PM through 4 AM



Wind data suggests that the air monitoring unit was not directly downwind from the Landfill during the time prior to and during the exceedance event although wind speeds were generally very low, indicating limited air mixing and dispersion likely occurred.

Downwind Monitor Review

As shown in **Figure 2** above, winds were generally observed to be coming from the northwest and north-northwest. As such, additional data review was conducted at MS-07, located south-west of MS-04. Analysis indicates no strong trend observed at MS-07 during the time of the REL exceedance. This suggests that the measured constituents were mainly located near MS-04, which is the nearest station to the reaction area.

Review of Landfill Activities

On December 23, 2025, SCS reached out to the Chiquita Landfill staff to inquire as to on-site activities, flare operations, and local conditions to determine if any on-site occurrences could be the source of the exceedance. Chiquita responded on the same day and their response did not indicate any anomalous on-site activities that could be attributed as the cause for the exceedance event. No other information was obtained since the initial report that would suggest a source of the exceedances.

The flare station, including Flares 1, 2, and 3, were operational prior to and during these exceedance events, but the SCS Field Services (SCS-FS) team has indicated that the Parnel thermal oxidizer (TOX) was offline during most of December 22nd due to electricity issues. During the same day, there was an approximately 15-minute period prior to the event when all three TOX units were offline. Furthermore, there was a six-hour period on the 22nd where the HERO TOX was reporting flows without achieving the complete combustion temperature (note that MS-04 is also close to the HERO TOX). Each of these upset events may have contributed to an increase in landfill gas/reaction gas releases that may have contributed to these exceedances.

Review of Recent Activity at MS-04

SCS also reviewed recent activity at MS-04 (e.g., calibrations, servicing of monitoring stations, etc.). The micro-GC at MS-04 was in calibration mode during the 1am, 2am, and 3am sampling events on December 23, 2025, which is in the middle of the benzene exceedance event assessed in this report. This helps to verify the elevated benzene readings, as the instrument went through calibration during the event.

Prior to the December 23rd calibration, the MS-04 micro-GC had been calibrated on December 19th, at the same time period, with no anomalies noted. Post-exceedance event, the micro-GC was calibrated on December 26th with no issues noted.

The last equipment service conducted on the micro-GC at MS-04 was completed on August 19, 2025. Following the exceedance event, TCT visited the micro-GC at MS-04 on December 23rd and found nothing anomalous.

After identifying the reading, SCS also notified the micro-GC vendor, Tricorn Tech (TCT), to perform a third-party review of the exceedance event, including any potential issues with the validity of the readings in question. TCT conducted an internal analysis of the micro-GC at MS-04, concluding that

the benzene readings are valid exceedances. A copy of the full TCT analysis is provided in **Attachment A**.

Review of Other Environmental Factors

SCS surveyed news sources, on-site personnel, and any available data in order to evaluate if there were any other environmental factors in the community (leaks, auto servicing, accidents, etc.) that may have contributed to the REL exceedance. No anomalous other environmental factors were identified.

Analysis was also done for other volatile organic compounds (VOCs) and hydrogen sulfide (H₂S) at MS-04 which showed several compounds increasing along with the benzene exceedances.

CONCLUSIONS

Based on a review of on-site activities, wind direction, and QA/QC analysis, SCS has concluded that the benzene exceedance at MS-04 on December 22 and 23, 2025, was a valid exceedance. The exceedance may have been caused by downtime of the TOX units previously discussed in this report, although localized wind data suggests the unit was not directly downwind from the Landfill. Wind data from the air monitoring station suggest that the winds were low with daily averages between 1.07 to 2.08 miles per hour (mph), which would lead to less mixing/dilution of any emission plumes. Furthermore, MS-04 is the closest station to the reaction area and commonly sees elevated readings when there is downtime for the LFG system.

RECOMMENDATIONS

With improvements to the TOX runtime via electrical infrastructure improvements, along with the HERO TOX providing additional capacity and back-up, it is expected that there will be fewer instances of TOX downtime in the future, which should reduce the chance that emissions may cause ambient air to exceed REL thresholds. The electrical issue with the Parnell TOX has been repaired, so that should not recur. It is recommended that SCS continue to evaluate and monitor the data for any evidence of additional exceedances and data validity, especially when site control devices are not operating continuously.

With regard to the absence of REL exceedance notifications, upon investigation, it appears that the absence of a public notification was due to automated flagging of the exceedance data as “under review” as a component of recent quality assurance/quality control (QA/QC) upgrades to data flagging on the application programming interface (API) for the micro-GCs. The alert system has been updated to recognize exceedances, including those flagged with the updated data qualifiers.

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CLOSING

If you have any questions regarding this submittal or require any additional information, do not hesitate to contact either of the undersigned.

Sincerely,



Stipe Markotic
Staff Scientist
SCS Engineers



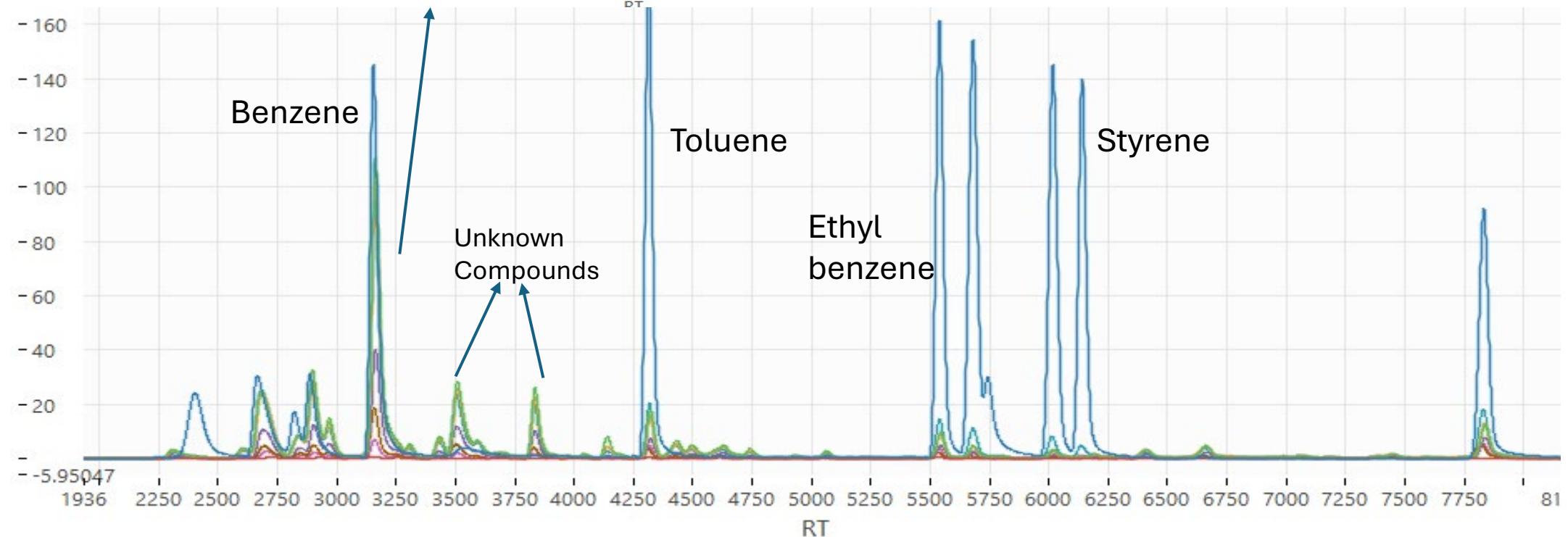
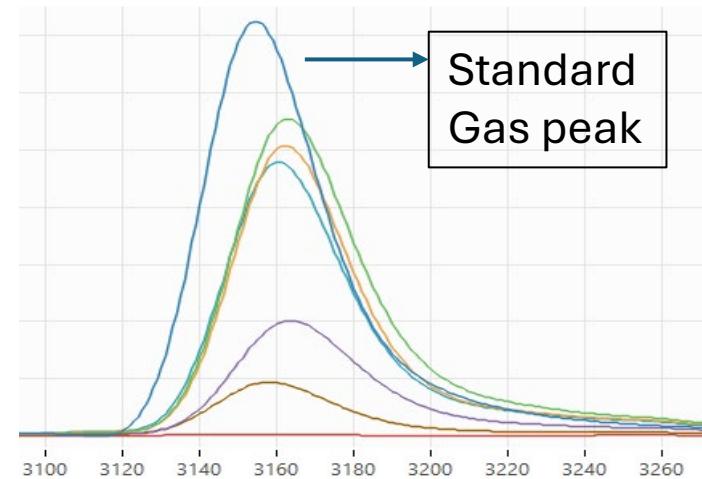
Raymond H. Huff, REPA
Vice President
SCS Engineers

Attachment

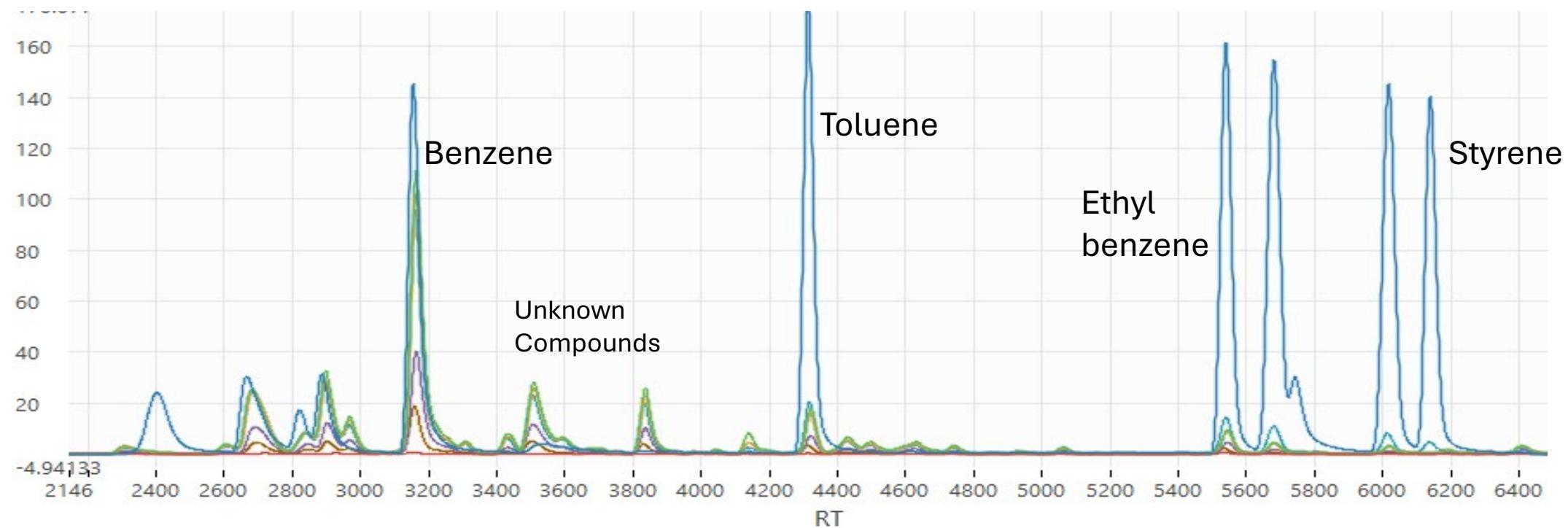
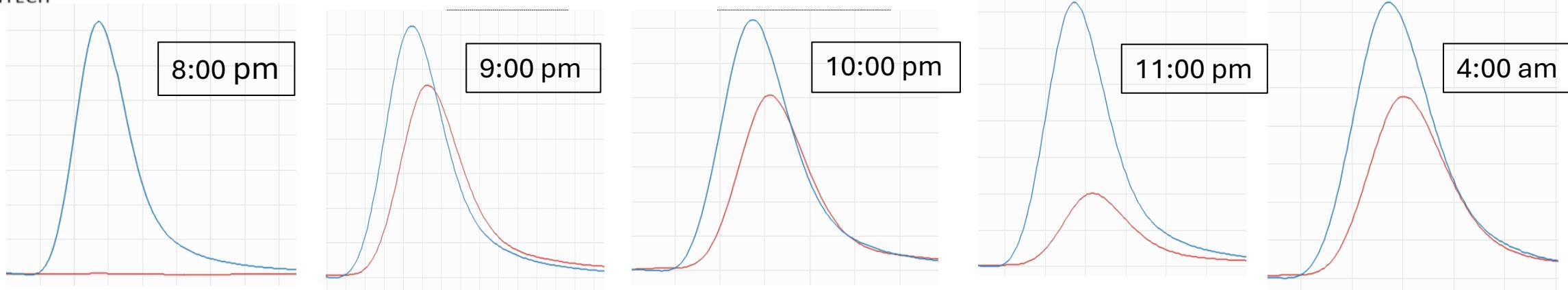
cc (w/attachment): Kathryn Roberts, SCAQMD
Mary Reichart, SCAQMD
Kate Logan, Chiquita Canyon Landfill

Attachment A

Dec 22 , MS04 – Benzene reading



MS04 – Benzene Environmental sample signals





QA/QC Conclusion – Benzene (MS04)

Benzene concentrations at MS04 exceeded the REL on 22 December.

Hourly environmental benzene responses show strong correlation with recent calibration standards.

System Health checkup report confirmed normal instrument (Auto GC) performance, with no abnormalities in flow rate, nitrogen pressure, temperature, or signal stability.

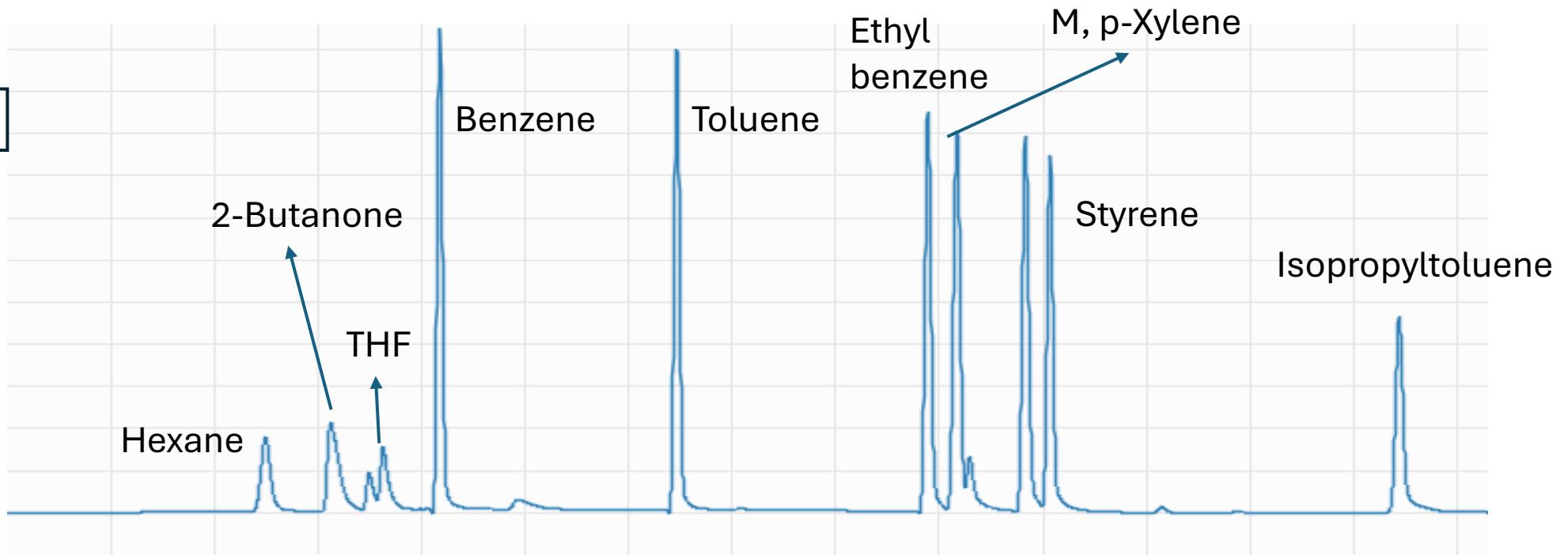
Chromatographic retention and peak characteristics are consistent with calibration benchmarks.

All measured concentrations fall within the validated calibration range.

Conclusion:

All benzene data recorded at MS04 are valid, reliable, and representative of environmental conditions, with no evidence of analytical or operational anomalies.

Sensor 1



Normal
Calibration
Peaks

Sensor 3

