

# Air Monitoring Summary Tables

The table below summarize monitoring data collected on using EPA's Viper wireless remote monitoring system.

Project Name: Biolabs Chlorine Fire

From: 10/9/24  
5:00 AM

To: 10/9/24  
5:00 PM



Station 2 - Mammy's							
Instrument	Analyte	Action Level Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	Action Level
AreaRAE Pro	VOC	No	699	2	0-1824 ppb	2.69 ppb	9000 ppb 8hr avg
	H2S	No	699	0	0-0 ppm	0 ppm	0.51 ppm 1hr avg
	CL2	No	1398	0	0-0 ppm	0 ppm	0.5 ppm 1hr avg
SPM Flex	HYDROGEN CHLORIDE (HCL)	No	13451	0	0-0 ppm	0 ppm	1.8 ppm 1hr avg

Station 8- Iris Drive SW Near Pyro Fireworks							
Instrument	Analyte	Action Level Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	Action Level
AreaRAE Pro	VOC	No	563	132	0-1235 ppb	168.85 ppb	9000 ppb 8hr avg
	H2S	No	563	1	0-0.50 ppm	0.00 ppm	0.51 ppm 1hr avg
	CL2	No	1582	994	0-0.70 ppm	0.32 ppm	0.5 ppm 1hr avg
SPM Flex	HYDROGEN CHLORIDE (HCL)	No	13729	0	0-0 ppm	0 ppm	1.8 ppm 1hr avg

Station 10 - Gated Community Near Rockdale Plaza Shopping Center							
Instrument	Analyte	Action Level Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	Action Level
AreaRAE Pro	VOC	No	645	3	0-0 ppb	0 ppb	9000 ppb 8hr avg
	H2S	No	647	0	0-0 ppm	0.00 ppm	0.51 ppm 1hr avg
	CL2	No	1298	308	0-0.70 ppm	0.05 ppm	0.5 ppm 1hr avg

Station 11 -Patrick & Associates Inc							
Instrument	Analyte	Action Level Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	Action Level
AreaRAE Pro	VOC	No	772	206	0-29 ppb	7.31 ppb	9000 ppb 8hr avg
	H2S	No	206	0	0-0 ppm	0 ppm	0.51 ppm 1hr avg
	CL2	No	1544	0	0-0 ppm	0 ppm	0.5 ppm 1hr avg
SPM Flex	HYDROGEN CHLORIDE (HCL)	No	13332	0	0-0 ppm	0 ppm	1.8 ppm 1hr avg

Station 13 - 3rd Ave Chekpoint							
Instrument	Analyte	Action Level Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	Action Level
AreaRAE Pro	VOC	No	711	42	0-99 ppb	0.52 ppb	9000 ppb 8hr avg
	H2S	No	711	0	0-0 ppm	0 ppm	0.51 ppm 1hr avg
	CL2	No	1422	488	0-0.20 ppm	0.03 ppm	0.5 ppm 1hr avg
SPM Flex	HYDROGEN CHLORIDE (HCL)	No	1646	0	0-0 ppm	0 ppm	1.8 ppm 1hr avg

Station 14 - Smyrna Road							
Instrument	Analyte	Action Level Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	Action Level
AreaRAE Pro	VOC	No	340	0	0-0 ppb	0 ppb	9000 ppb 8hr avg
	H2S	No	340	0	0-0 ppm	0 ppm	0.51 ppm 1hr avg
	CL2	No	680	0	0-0 ppm	0 ppm	0.5 ppm 1hr avg
SPM Flex	HYDROGEN CHLORIDE (HCL)	No	13797	0	0-0 ppm	0 ppm	1.8 ppm 1hr avg

Station 16 - Corner of General Arts and Farmers Rd							
Instrument	Analyte	Action Level Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	Action Level
AreaRAE Pro	VOC	No	685	243	0-4565 ppb	12.93 ppb	9000 ppb 8hr avg
	H2S	No	685	2	0-0.50 ppm	0.00 ppm	0.51 ppm 1hr avg
	CL2	No	1366	272	0-0.3 ppm	0.04 ppm	0.5 ppm 1hr avg

Station 17 - Lester Biolab							
Instrument	Analyte	Action Level Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	Action Level
AreaRAE Pro	VOC	No	807	16	0-4 ppb	0.03 ppb	9000 ppb 8hr avg
	H2S	No	807	0	0-0 ppm	0 ppm	0.51 ppm 1hr avg
	CL2	No	1614	2	0-0.10 ppm	0.00 ppm	0.5 ppm 1hr avg

Station 18 - Dogwood and VSW Checkpoint							
Instrument	Analyte	Action Level Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	Action Level
AreaRAE Pro	VOC	No	806	8	0-41 ppb	0.12 ppb	9000 ppb 8hr avg
	H2S	No	806	0	0-0 ppm	0 ppm	0.51 ppm 1hr avg
	CL2	No	1612	52	0-0.10 ppm	0.00 ppm	0.5 ppm 1hr avg



# Air Monitoring Summary Tables – Review

**Project Name:** Bio Lab Chlorine



The EPA uses air monitoring instruments with real-time alerts to track air quality during an emergency response. This air monitoring summary table report is used by EPA and local responders to review the thousands of measurements that can be collected in a single day.

The following is a review of station results for the time period from 5:00am on 10/9/2024 to 5:00pm on 10/9/2024:

- **Station 2:** No issues observed.
- **Station 8:** From 5:00am to 9:40am there were sustained measurements of Cl<sub>2</sub> with a peak of 0.7ppm; the maximum 1-hour average was 0.5ppm, the maximum 8-hour average was 0.48ppm.
- **Station 10:** From 1:30pm to 5:00pm there were sustained measurements of Cl<sub>2</sub> with a peak of 0.33ppm; the maximum 1-hour average was 0.3ppm, the maximum 8-hour average was 0.07ppm.
- **Station 11:** No issues observed.
- **Station 13:** From 5:00am to 11:00am there were sustained measurements of Cl<sub>2</sub> with a peak of 0.2ppm; the maximum 1-hour average was 0.1ppm, the maximum 8-hour average was 0.10ppm.
- **Station 14:** No issues observed.
- **Station 16:** From 5:00am to 7:00am there were sustained measurements of Cl<sub>2</sub> with a peak of 0.3ppm; the maximum 1-hour average was 0.3ppm, the maximum 8-hour average was 0.20ppm.
- **Station 17:** No issues observed.
- **Station 18:** No issues observed.
- **Station 19:** From 5:00am to 1:30pm there were sustained measurements of Cl<sub>2</sub> with a peak of 0.4ppm; the maximum 1-hour average was 0.4ppm, the maximum 8-hour average was 0.37ppm.
- **Station 20:** From 5:00am to 10:30am there were sustained measurements of Cl<sub>2</sub> with a peak of 0.2ppm; the maximum 1-hour average was 0.1ppm, the maximum 8-hour average was 0.15ppm.
- **Station 21:** From 12:20pm to 4:30pm there were sustained measurements of Cl<sub>2</sub> with a peak of 0.4ppm; the maximum 1-hour average was 0.1ppm, the maximum 8-hour average was 0.03ppm.

# Air Monitoring Summary Tables – Explanation of Tables



**Project Name:** Bio Lab Chlorine

The following information is provided in each report:

- **Station** – at the top of each table is a name and location for each air monitoring station. These are mobile stations that may change over time and new station numbers are established. Previously used station numbers will not appear on this report.
- **Instrument** – this is the model of instrument being used to measure the air. Some stations may use multiple instruments, and some instruments may measure multiple things at once
- **Analyte** – these are the chemicals or other compounds that the instrument is measuring:
  - **VOC:** Volatile Organic Compounds; this is not a specific chemical but includes a long list of possible chemicals, many of which have strong odors
  - **CO:** Carbon Monoxide; this compound is commonly associated with combustion (i.e. fires)
  - **H<sub>2</sub>S:** Hydrogen Sulfide; this is a default sensor for the instrument and is used for industrial safety
  - **LEL:** Lower-Explosive Limit; this is a default sensor for the instrument and is used for industrial safety
  - **O<sub>2</sub>:** Oxygen; this is a default sensor for the instrument and is used for industrial safety
  - **Cl<sub>2</sub>:** Chlorine; chlorine gas is an inhalation hazard with a pungent suffocating odor and is a contaminant of concern for the site
  - **HCl:** Hydrogen Chloride; a corrosive gas with a sharp, pungent odor and is a contaminant of concern for the site
  - **COCl<sub>2</sub>:** Phosgene; a potential combustion product that EPA monitors for at chemical and industrial fires
- **Action Level Exceedance** – is an easy-to-read determination whether one of the Action Levels in the column on the right *may have* been exceeded. The action levels are based on *averages over time* but this column may say “Yes” whenever a single measurement exceeds that number. This helps responders assess whether further protective measures are needed.
- **Number of Readings** – the number of measurements collected by the sensor, usually collected once every second or every minute.
- **Number of Detections** – the number of measurements greater than zero
- **Concentration Range** – the minimum and maximum measurement that was collected
- **Period Average** – the average measurement for the entire collection period
- **Action Levels** – based on the most protective AEGLs (Acute Exposure Guideline Levels) which are used by emergency responders when dealing with chemical spills or other exposures and describe the human health effects from once-in-a-lifetime, or rare, exposure to airborne chemicals. Further information is available at [EPA.gov/AEGL](http://EPA.gov/AEGL).