

# Air Monitoring Summary Tables

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

**Project Name: Weaver Fertilizer Plant Fire**

**From: 2/4/22  
6:00 PM**

**To: 2/5/22  
6:00 AM**



Wake Forest University Police Station							
Instrument	Analyte	Action Level Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	Action Level
DustTrak 1	PM-2.5	See PM2.5 Action Level Sheet	743	743	1 - 20 µg/m3	5.9 µg/m3	See PM2.5 Action Level Sheet
SPM Flex 1	Nitrogen Dioxide (NO2)	No	13048	13048	0 - 0.1 ppm	0 ppm	0.5 ppm
SPM Flex 1	Ammonia (NH3)	No	8269	0	0 - 0 ppm	0 ppm	30 ppm

North Hills Elementary							
Instrument	Analyte	Action Level Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	Action Level
DustTrak 2	PM-2.5	See PM2.5 Action Level Sheet	752	752	2 - 5 µg/m3	3.2 µg/m3	See PM2.5 Action Level Sheet
SPM Flex 2	Nitrogen Dioxide (NO2)	No	752	752	0 - 0.1 ppm	0 ppm	0.5 ppm
SPM Flex 2	Ammonia (NH3)	No	756	693	0 - 0.2 ppm	0 ppm	30 ppm

Cherry Street Staging Area							
Instrument	Analyte	Action Level Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	Action Level
DustTrak 3	PM-2.5	See PM2.5 Action Level Sheet	750	750	2 - 7 µg/m3	3.2 µg/m3	See PM2.5 Action Level Sheet
SPM Flex 3	Nitrogen Dioxide (NO2)	No	1491	1491	0 - 0.1 ppm	0 ppm	0.5 ppm
SPM Flex 3	Ammonia (NH3)	No	10038	389	0 - 0.1 PPM	0 ppm	30 ppm

Piney Grove Park							
Instrument	Analyte	Action Level Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	Action Level
DustTrak 4	PM-2.5	See PM2.5 Action Level Sheet	750	750	2- 7 µg/m3	3.2 µg/m3	See PM2.5 Action Level Sheet
SPM Flex 4	Nitrogen Dioxide (NO2)	No	752	752	0 - 0.1 ppm	0 ppm	0.5 ppm

Weaver Fertilizer Plant Perimeter Station 1							
Instrument	Analyte	Action Level Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	Action Level
AreaRAE 4	VOC	No	1500	1500	10 - 42 ppb	21.8 ppb	1000 ppb
	CO	No	1500	0	0 - 0 ppm	0 ppm	83 ppm
	O <sub>2</sub>	No	1500	1500	20.9 - 20.9 %	20.9 %	<19.5 or >23 %
	LEL	No	1500	0	0 - 0 %	0 %	10 %
	NH <sub>3</sub>	No	1500	658	0 - 5 ppm	0.8 ppm	30 ppm
	NO <sub>2</sub>	Yes	1500	954	0 - 0.8 ppm	0.1 ppm	0.5 ppm
	γ	Yes	1500	1500	2 - 11 µrem/h	5.5 µrem/h	9 µrem/h

Weaver Fertilizer Plant Perimeter Station 2							
Instrument	Analyte	Action Level Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	Action Level
AreaRAE 5	VOC	No	1499	1499	27 - 51 ppb	41 ppb	1000 ppb
	H <sub>2</sub> S	No	1499	0	0 - 0 ppm	0 ppm	0.51 ppm
	O <sub>2</sub>	No	1499	1499	20.9 - 20.9 %	20.9 %	<19.5 or >23 %
	NO <sub>2</sub>	Yes	1499	1499	0.1 - 0.7 ppm	0.3 ppm	0.5 ppm
	γ	Yes	1499	1499	4 - 13 µrem/h	5 µrem/h	9 µrem/h

Weaver Fertilizer Plant Perimeter Station 3							
Instrument	Analyte	Action Level Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	Action Level
AreaRAE 6	VOC	No	1493	1493	18 - 32 ppb	25.5 ppb	1000 ppb
	H <sub>2</sub> S	No	1493	0	0 - 0 ppm	0 ppm	0.51 ppm
	O <sub>2</sub>	Yes	1493	1493	18.5 - 20.9 %	19.6 %	<19.5 or >23 %
	NH <sub>3</sub>	No	1493	1329	0 - 5 ppm	2.6 ppm	30 ppm
	NO <sub>2</sub>	No	1493	991	0 - 0.3 ppm	0.1 ppm	0.5 ppm
	γ	Yes	1493	1493	2 - 12 μrem/h	6.1 μrem/h	9 μrem/h

Weaver Fertilizer Plant Perimeter Station 4							
Instrument	Analyte	Action Level Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	Action Level
AreaRAE 7	VOC	No	1496	1496	27 - 49 ppb	41.8 ppb	1000 ppb
	H <sub>2</sub> S	No	1496	0	0 - 0 ppm	0 ppm	0.51 ppm
	O <sub>2</sub>	No	1496	1496	20.9 - 20.9 %	20.9 %	<19.5 or >23 %
	LEL	No	1496	0	0 - 0 %	0 %	10 %
	NO <sub>2</sub>	Yes	1496	1409	0 - 0.5 ppm	0.2 ppm	0.5 ppm
	γ	No	1496	1496	2 - 3 μrem/h	3 μrem/h	9 μrem/h

Notes:

%

Percent

<

Less than

>

Greater than

AEGL

Acute Exposure Guideline Levels for Airborne Chemicals

mg/m3

milligrams per cubic meter

min

Minute

ppb

Parts per billion

ppm

Parts per million

PM

Particulate matter

SOG

Standard Operating Guidelines

SPM

Single Point Monitor

μg/m³

Micrograms per cubic meter

μrem/h

Microrem per hour

γ

Gamma-wave radiation

Analyte	Definition	Action Level Reference
VOC	Volatile Organic Compounds	TEEL-0,15 minute TWA for Benzene
CO	Carbon Monoxide	AEGL-2 1hr
H2S	Hydrogen Sulfide	AEGL-1 1hr
O2	Oxygen	29 CFR 1910.146, Confined Spaces
LEL	Lower Explosive Limit	29 CFR 1910.146, Confined Spaces
NH3	Ammonia	AEGL-1 1hr
γ	Gamma-wave Radiation	Lowest 3x median (background) for RAEs in period
PM-2.5	Particulate Matter <2.5 microns	
Nitrogen Dioxide (NO2)	Nitrogen Dioxide (NO2)	AEGL-1 1hr
Ammonia (NH3)	Ammonia (NH3)	AEGL-1 1hr