

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: 2/5/22
6:00 PM**

**To: 2/6/22
5:59 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	746	746	1 - 113 µg/m3	27.5 µg/m3	See PM2.5 Action Level Sheet
SPM Flex 1	Nitrogen Dioxide (NO2)	No	748	748	0 - 0.1 ppm	0 ppm	0.5 ppm
SPM Flex 1	Ammonia (NH3)	No	758	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	750	750	7 - 13 µg/m3	9.6 µg/m3	See PM2.5 Action Level Sheet
SPM Flex 2	Nitrogen Dioxide (NO2)	No	757	757	0 - 0.1 ppm	0 ppm	0.5 ppm
SPM Flex 2	Ammonia (NH3)	No	757	154	0 - 0 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	500	500	1 - 21 µg/m3	6.2 µg/m3	See PM2.5 Action Level Sheet
SPM Flex 3	Nitrogen Dioxide (NO2)	No	1497	1497	0 - 0.1 ppm	0.1 ppm	0.5 ppm
SPM Flex 3	Ammonia (NH3)	No	13513	0	0 - 0 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	8 - 23 µg/m3	15.4 µg/m3	See PM2.5 Action Level Sheet
SPM Flex 4	Nitrogen Dioxide (NO2)	No	755	755	0 - 0.1 ppm	0.1 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	1492	966	0 - 60 ppb	8.4 ppb	1000 ppb
	CO	No	1492	0	0 - 0 ppm	0 ppm	83 ppm
	O ₂	No	1492	1492	20.9 - 20.9 %	20.9 %	<19.5 or >23 %
	LEL	No	1492	0	0 - 0 %	0 %	10 %
	NH ₃	No	1492	1429	0 - 4 ppm	1.5 ppm	30 ppm
	NO ₂	No	1492	613	0 - 0.4 ppm	0 ppm	0.5 ppm
	γ	No	1492	1492	2 - 6 µrem/h	5.2 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	1497	1414	0 - 23 ppb	7.9 ppb	1000 ppb
	H ₂ S	No	1497	0	0 - 0 ppm	0 ppm	0.51 ppm
	O ₂	No	1497	1497	20.9 - 20.9 %	20.9 %	<19.5 or >23 %
	NO ₂	Yes	1497	1196	0 - 0.5 ppm	0.1 ppm	0.5 ppm
	γ	Yes	1497	1497	5 - 17 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	1417	20	0 - 2 ppb	0 ppb	1000 ppb
	H ₂ S	No	1417	0	0 - 0 ppm	0 ppm	0.51 ppm
	O ₂	Yes	1417	1417	18.5 - 19.8 %	19 %	<19.5 or >23 %
	NH ₃	No	1417	118	0 - 4 ppm	0.2 ppm	30 ppm
	NO ₂	No	1417	1400	0 - 0.3 ppm	0.2 ppm	0.5 ppm
	γ	Yes	1417	1417	1 - 19 μrem/h	6 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	1500	0	0 - 0 ppb	0 ppb	1000 ppb
	H ₂ S	No	1500	0	0 - 0 ppm	0 ppm	0.51 ppm
	O ₂	No	1500	1500	20.9 - 20.9 %	20.9 %	<19.5 or >23 %
	LEL	No	1500	0	0 - 0 %	0 %	10 %
	NO ₂	No	1500	622	0 - 0.2 ppm	0 ppm	0.5 ppm
	γ	Yes	1500	1500	2 - 14 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