Air Monitoring Summary Tables

The tables below summarize preliminary air monitoring data collected using Handheld DustTrak, SPM Flex, and MultiRAE Pro instruments.

Project Name: Morris Industrial Fire ER
Date/Time: 07/22/21 09:55 to 07/22/21 15:58

Weather

Temperature: 83°F, low of 64°F
Wind Speed: 2 to 5 miles per hour
Wind Direction: South
Conditions: Partially Cloudy

Fixed Discrete Air Monitoring Location 010 - Downwind					
Instrument	**Analyte**	**Morris Industrial Fire Public Health Screening Level[1]**	**Public Health Screening Level Exceeded?**	**Number of Measurements**	**Concentration Range**
MultiRAE Pro	H_2S (ppm)	0.1 ppm	No	3	0.000 to 0.000
	CO (ppm)	--	No	3	0.00 to 0.00
	O_2 (%)	--	No	3	20.9 to 20.9
	LEL (%)	--	No	3	0.000 to 0.000
	VOC (ppm)	1 ppm	No	3	0.000 to 0.000
SPM Flex	HF	1 ppm	No	9	0.000 to 0.000
Handheld DustTrak	$PM_{2.5}$ (mg/m^3)	0.025 mg/m^3	No	3	0.008 to 0.016
	PM_{10} (mg/m^3)	0.05 mg/m^3	No	3	0.009 to 0.017

Fixed Discrete Air Monitoring Location 011 - Downwind					
Instrument	**Analyte**	**Morris Industrial Fire Public Health Screening Level[1]**	**Public Health Screening Level Exceeded?**	**Number of Measurements**	**Concentration Range**
MultiRAE Pro	H_2S (ppm)	0.1 ppm	No	3	0.000 to 0.000
	CO (ppm)	--	No	3	0.00 to 0.00
	O_2 (%)	--	No	3	20.9 to 20.9
	LEL (%)	--	No	3	0.000 to 0.000
	VOC (ppm)	1 ppm	No	3	0.000 to 0.000
SPM Flex	HF	1 ppm	No	9	0.000 to 0.000
Handheld DustTrak	$PM_{2.5}$ (mg/m^3)	0.025 mg/m^3	No	3	0.006 to 0.021
	PM_{10} (mg/m^3)	0.05 mg/m^3	No	3	0.007 to 0.022

Fixed Discrete Air Monitoring Location 012 - Upwind					
Instrument	**Analyte**	**Morris Industrial Fire Public Health Screening Level[1]**	**Public Health Screening Level Exceeded?**	**Number of Measurements**	**Concentration Range**
MultiRAE Pro	H_2S (ppm)	0.1 ppm	No	3	0.000 to 0.000
	CO (ppm)	--	No	3	0.00 to 0.00
	O_2 (%)	--	No	3	20.9 to 20.9
	LEL (%)	--	No	3	0.000 to 0.000
	VOC (ppm)	1 ppm	No	3	0.000 to 0.000
SPM Flex	HF	1 ppm	No	9	0.000 to 0.000
Handheld DustTrak	$PM_{2.5}$ (mg/m^3)	0.025 mg/m^3	No	3	0.005 to 0.019
	PM_{10} (mg/m^3)	0.05 mg/m^3	No	3	0.005 to 0.020

Notes: See last page.

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Weather

Temperature: 83°F, low of 64°F
Wind Speed: 2 to 5 miles per hour
Wind Direction: South
Conditions: Partially Cloudy

Fixed Discrete Air Monitoring Location 013 - Upwind					
Instrument	**Analyte**	**Morris Industrial Fire Public Health Screening Level[1]**	**Public Health Screening Level Exceeded?**	**Number of Measurements**	**Concentration Range**
MultiRAE Pro	H_2S (ppm)	0.1 ppm	No	3	0.000 to 0.000
	CO (ppm)	--	No	3	0.00 to 0.00
	O_2 (%)	--	No	3	20.9 to 20.9
	LEL (%)	--	No	3	0.000 to 0.000
	VOC (ppm)	1 ppm	No	3	0.000 to 0.000
SPM Flex	HF	1 ppm	No	9	0.000 to 0.000
Handheld DustTrak	$PM_{2.5}$ (mg/m^3)	0.025 mg/m^3	No	3	0.018 to 0.020
	PM_{10} (mg/m^3)	0.05 mg/m^3	No	3	0.019 to 0.021

Fixed Discrete Air Monitoring Location 014 - Upwind					
Instrument	**Analyte**	**Morris Industrial Fire Public Health Screening Level[1]**	**Public Health Screening Level Exceeded?**	**Number of Measurements**	**Concentration Range**
MultiRAE Pro	H_2S (ppm)	0.1 ppm	No	3	0.000 to 0.000
	CO (ppm)	--	No	3	0.00 to 0.00
	O_2 (%)	--	No	3	20.9 to 20.9
	LEL (%)	--	No	3	0.000 to 0.000
	VOC (ppm)	1 ppm	No	3	0.000 to 0.000
SPM Flex	HF	1 ppm	No	9	0.000 to 0.000
Handheld DustTrak	$PM_{2.5}$ (mg/m^3)	0.025 mg/m^3	No	3	0.010 to 0.025
	PM_{10} (mg/m^3)	0.05 mg/m^3	No	3	0.013 to 0.026

Fixed Discrete Air Monitoring Location 015 - Upwind / Crosswind					
Instrument	**Analyte**	**Morris Industrial Fire Public Health Screening Level[1]**	**Public Health Screening Level Exceeded?**	**Number of Measurements**	**Concentration Range**
MultiRAE Pro	H_2S (ppm)	0.1 ppm	No	3	0.000 to 0.000
	CO (ppm)	--	No	3	0.00 to 0.00
	O_2 (%)	--	No	3	20.9 to 20.9
	LEL (%)	--	No	3	0.000 to 0.000
	VOC (ppm)	1 ppm	No	3	0.000 to 0.000
SPM Flex	HF	1 ppm	No	9	0.000 to 0.000
Handheld DustTrak	$PM_{2.5}$ (mg/m^3)	0.025 mg/m^3	No	3	0.014 to 0.020
	PM_{10} (mg/m^3)	0.05 mg/m^3	No	3	0.015 to 0.020

Notes: See last page.

Air Monitoring Summary Tables

The tables below summarize preliminary air monitoring data collected using Handheld DustTrak, SPM Flex, and MultiRAE Pro instruments.

Project Name: Morris Industrial Fire ER
Date/Time: 07/22/21 09:55 to 07/22/21 15:58

Weather

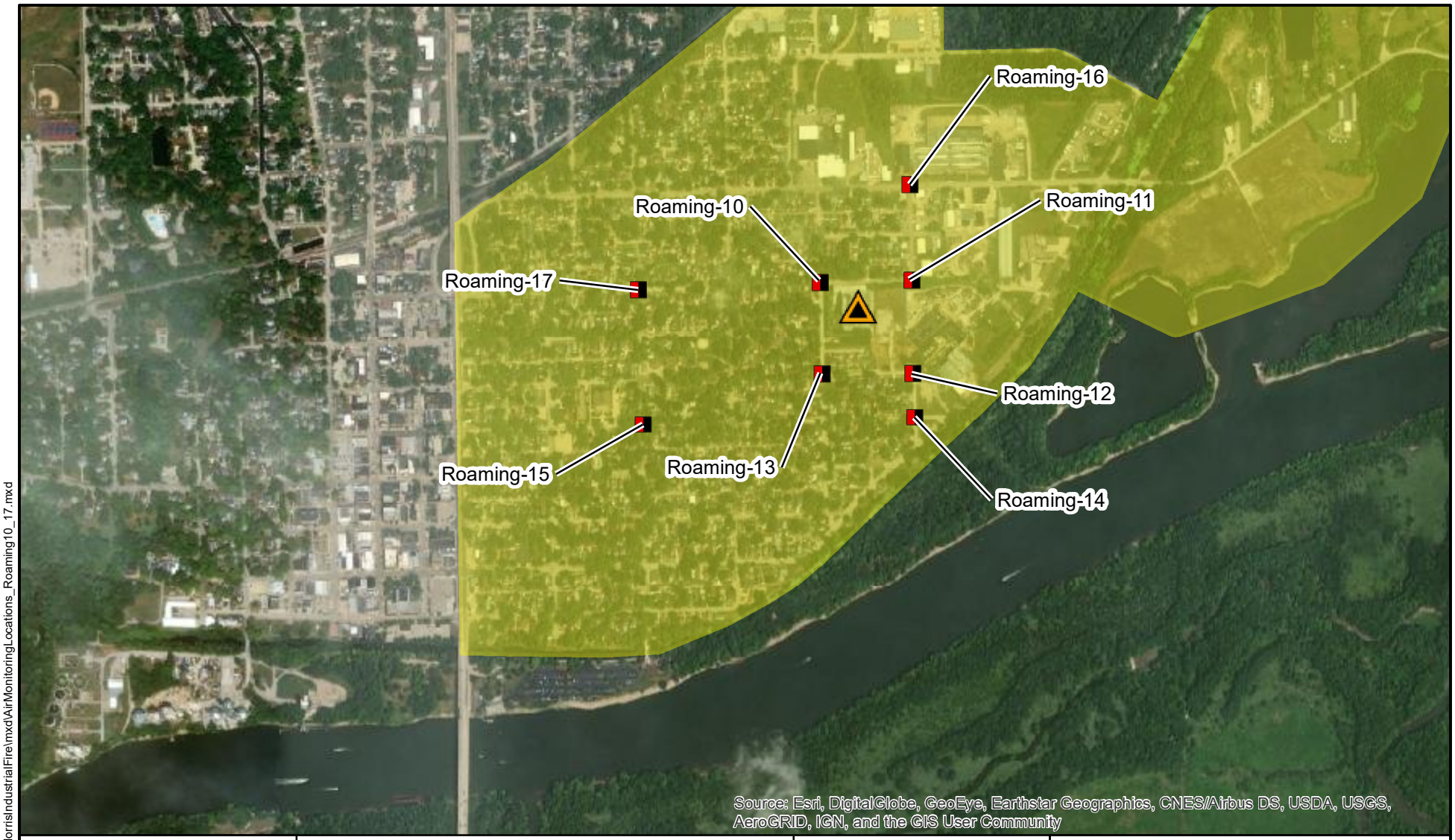
Temperature: 83°F, low of 64°F
Wind Speed: 2 to 5 miles per hour
Wind Direction: South
Conditions: Partially Cloudy

Fixed Discrete Air Monitoring Location 016 - Downwind					
Instrument	**Analyte**	**Morris Industrial Fire Public Health Screening Level[1]**	**Public Health Screening Level Exceeded?**	**Number of Measurements**	**Concentration Range**
MultiRAE Pro	H_2S (ppm)	0.1 ppm	No	3	0.000 to 0.000
	CO (ppm)	--	No	3	0.00 to 0.00
	O_2 (%)	--	No	3	20.9 to 20.9
	LEL (%)	--	No	3	0.000 to 0.000
	VOC (ppm)	1 ppm	No	3	0.000 to 0.000
SPM Flex	HF	1 ppm	No	9	0.000 to 0.000
Handheld DustTrak	$PM_{2.5}$ (mg/m^3)	0.025 mg/m^3	No	3	0.014 to 0.020
	PM_{10} (mg/m^3)	0.05 mg/m^3	No	3	0.018 to 0.021

Fixed Discrete Air Monitoring Location 017 - Downwind / Crosswind					
Instrument	**Analyte**	**Morris Industrial Fire Public Health Screening Level[1]**	**Public Health Screening Level Exceeded?**	**Number of Measurements**	**Concentration Range**
MultiRAE Pro	H_2S (ppm)	0.1 ppm	No	3	0.000 to 0.000
	CO (ppm)	--	No	3	0.00 to 0.00
	O_2 (%)	--	No	3	20.9 to 20.9
	LEL (%)	--	No	3	0.000 to 0.000
	VOC (ppm)	1 ppm	No	3	0.000 to 0.000
SPM Flex	HF	1 ppm	No	9	0.000 to 0.000
Handheld DustTrak	$PM_{2.5}$ (mg/m^3)	0.025 mg/m^3	No	3	0.005 to 0.023
	PM_{10} (mg/m^3)	0.05 mg/m^3	No	3	0.008 to 0.026

Comments
Start and stop times for each air monitoring instrument varies. The monitoring period is based on the earliest start time and latest stop time out of all units.
1 - Site-Specific Public Health Screening Levels are based on 1-hour time-weighted averages and were established by ATSDR. Fixed discrete monitoring readings are discrete readings, and so do not represent conditions over a full 1-hour period.

Notes:
CO - Carbon Monoxide
H_2S - Hydrogen Sulfide
LEL - Lower Explosive Limit
HF - Hydogren Fluoride
mg/m^3 - milligrams per cubic meter
O_2 - Oxygen
$PM_{2.5}$ - particles that are 2.5 micrometers and smaller
PM_{10} - particles that are 10 micrometers and smaller
ppb - Parts per billion
ppm - Parts per million
VOC - Volatile organic compounds





Legend

- Fire Location
- Fixed Discrete Air Monitoring Locations
- Former Approximate Evacuation Zone

Source: Esri 2020

Note: Air monitoring locations subject to change based on site conditions and response objectives

N

1,000 0 1,000

Feet

Morris Industrial Fire ER
Morris, Illinois

Figure 1
Air Monitoring Stations
06/29/2021 23:00 - 06/30/2021 04:00

TETRA TECH

Prepared For: USEPA | Prepared By: Tetra Tech Inc.

File Path: C:\Users\adam.peterca\Desktop\MorrisIndustrialFire\mxd\AirMonitoringLocations_Roaming10_17.mxd

Date Saved: 7/15/2021 | EPA Contract No.: 68-HE-0519-D0005 | TO-TOLIN No.: TBD

Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere Projection: Mercator Auxiliary Sphere Datum:WGS 1984 Units: Meter