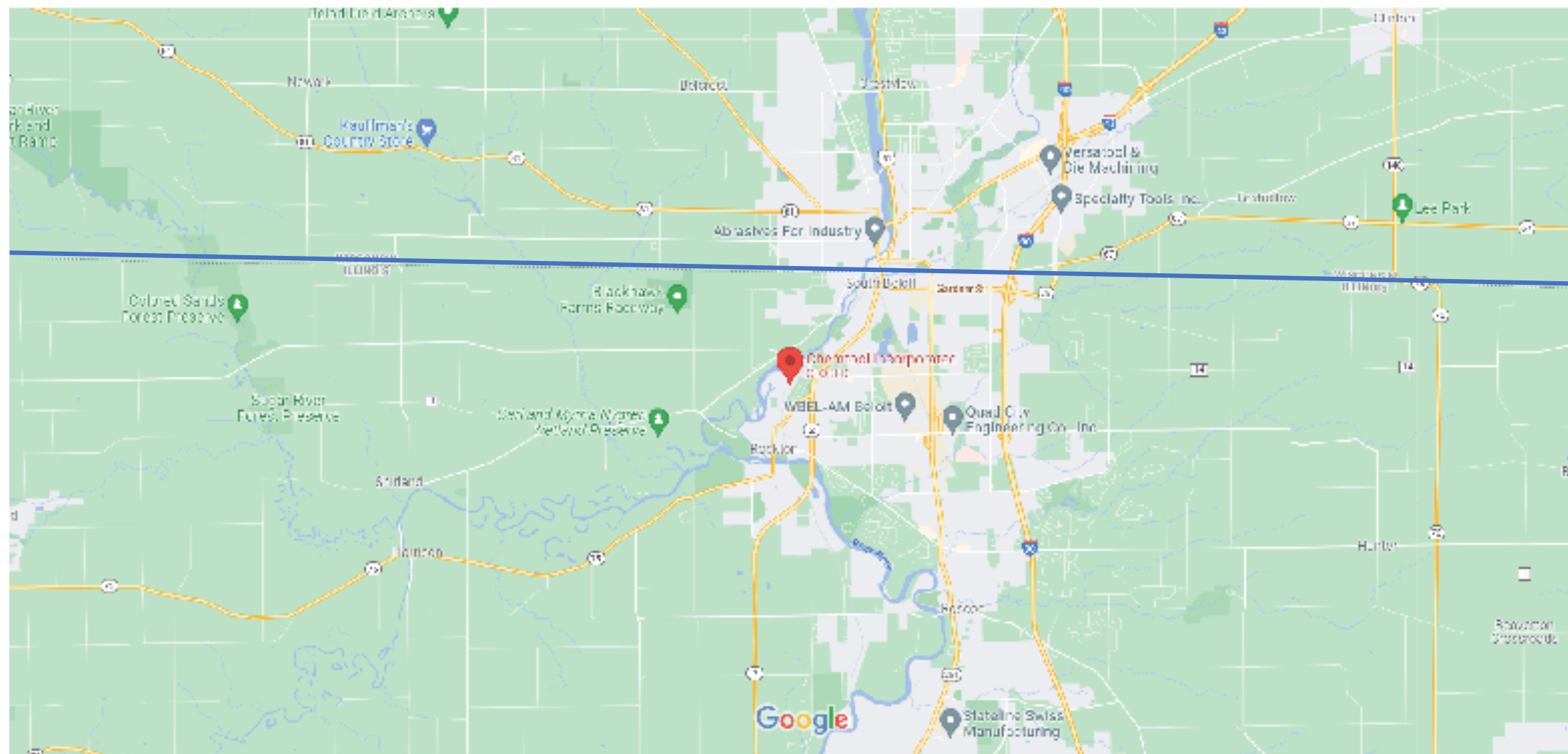


Chemtool Fire Response June 2021 Rockton, IL

Bobby Elzie, Chief,
Office of Emergency Response
Illinois EPA

Craig Thomas, Federal On-Scene Coordinator
U.S. EPA Region 5





IL/WI
State
Line

Illinois EPA was the lead environmental agency for the Chemtool Fire response. During the response, Illinois EPA collected the following:

- Illinois EPA Sampling

- Wipe Samples
- Public Water Supply Samples
- Wastewater Runoff and Rock River Samples
- PFAS Samples
- Groundwater Monitoring Well Samples
- Residential Private Well Samples



Preface

The details noted in the following slides are observations on procedures, policies, events that happened during a declared state of emergency. As such, the information given is done so for the purpose of enhancing response capabilities of all stakeholders and not as a critique of any one entity.

The men and women involved in the response of this catastrophic event displayed great courage and unwavering commitment towards protecting the life, safety, and property of those impacted. Experiencing zero fatalities in an event of this magnitude speaks volumes to the expertise exhibited by all of those involved.

Thank you.



Overview

- On 06/14/21, a fire erupted at the Chemtool manufacturing plant in Rockton, IL. The six-alarm fire elicited the combined response efforts from multiple local, state, and federal entities.
 - The facility is a 300,000 square foot facility that houses multiple ingredients in the manufacturing of specialty oils and lubricants.
 - The site of the plant is on the Beloit Superfund, the location of a former paper-making equipment manufacturing plant that caused extensive soil and groundwater contamination.
-





Detail of Events

- “On Monday, June 14, a project was underway at the Chemtool / Lubrizol facility to replace insulation on an elevated heat transfer piping network that was part of the site’s system for heating certain vessels used in the manufacturing of lubricating greases. This network of piping carried heated mineral oil.
- -Fire Chief Wilson

The Strike

- “That morning, an employee of an outside contractor performing the insulation replacement project was working in the area of origin. They were utilizing a scissor lift to access the elevated heat transfer piping network.



The Release

- “Shortly before 07:00 hours while the employee of the outside contractor was working in the area, a release occurred from the elevated piping. An unknown amount of mineral oil immediately began falling and pooling on the floor in the area of origin.



Ignition

- “Chemtool operators promptly detected the release and shut down the boiler. They were in the process of placing containment booms, as well as de-pressuring the heat transfer piping network, when the fire ignited.
- “At the present time, the most credible scenario is that the scissor lift struck a valve or other piece of piping with sufficient mechanical force to cause the release of mineral oil. The investigation has not yet determined the source of ignition.”

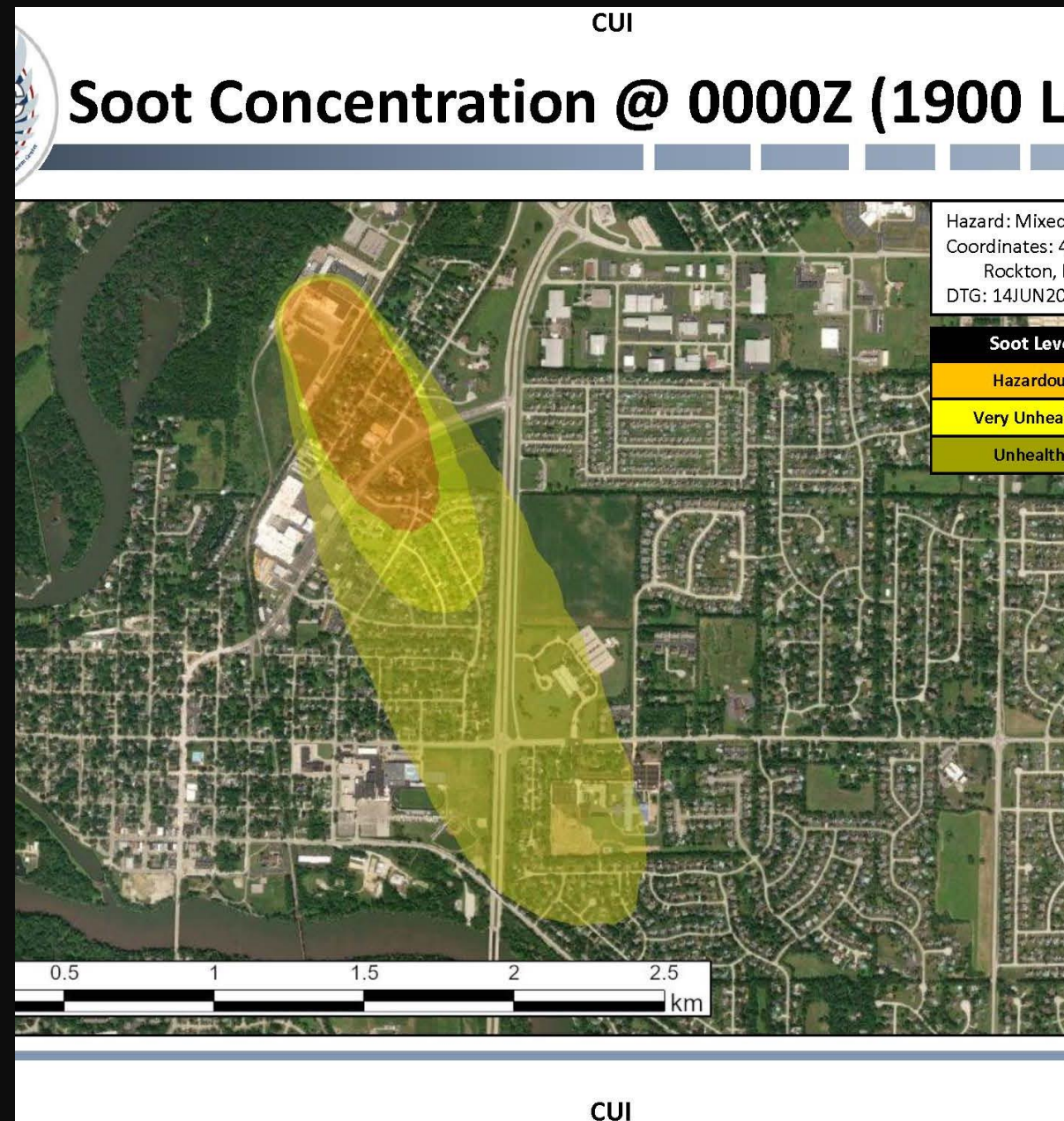




The Response

06/14/2021

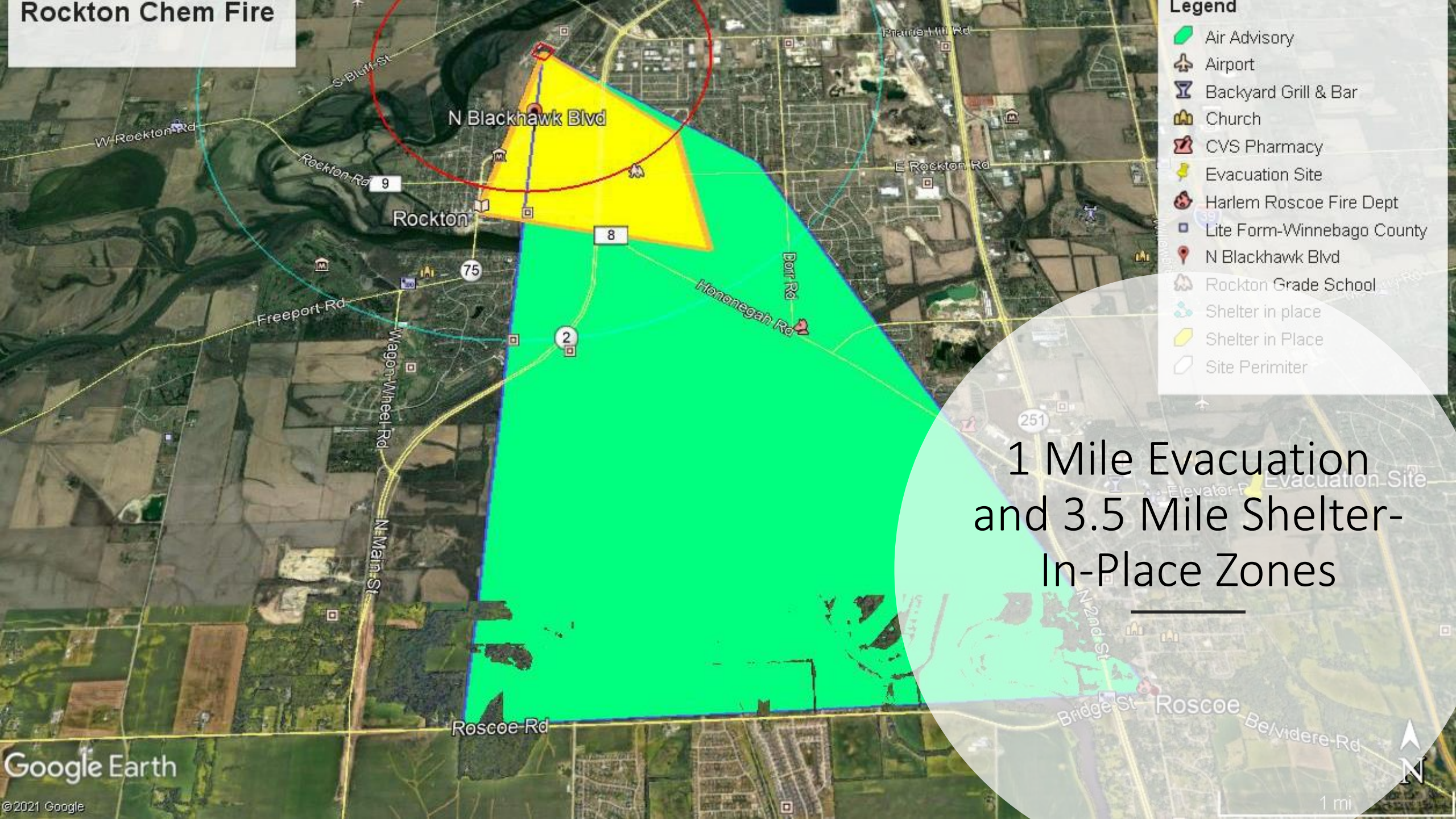
- OER was notified of a four-alarm fire occurring at ChemTool Industrial Plant in Rockton, IL.
- OER Manager called and notified USEPA of a potential large-scale incident forming and requested assistance.
- OER deployed Des Plaines regional office personnel and manager to incident site.
- IEMA activates the SEOC in response to incident and IEPA liaison is deployed to Springfield SEOC.
- Arriving on scene, OER response staff performed a perimeter site evaluation to determine the extent of any potential release of contaminants on scene.
- OER response staff on incident site meet with USEPA OSC and START contractors to organize an emergency air monitoring plan.




06/14/2021

- 1 mile exclusion zone evacuation is enacted.
- OER Manager recommends a 3.5-mile shelter in place order downwind of smoke plume, IC implements.
- Debris is reported in locations upwards of 12 miles from incident epicenter.
- IEPA OER is notified that fire suppression operations are not containing the fire and discussion is made with Rockton & Rockford Fire Department on letting the fire consume all materials on site. IEPA manager advises against this firmly due to B.L.E.V.E. concerns.
- OER Field staff break away from USEPA staff to start overseeing contractor operations with trenching and berm construction.

Rockton Chem Fire

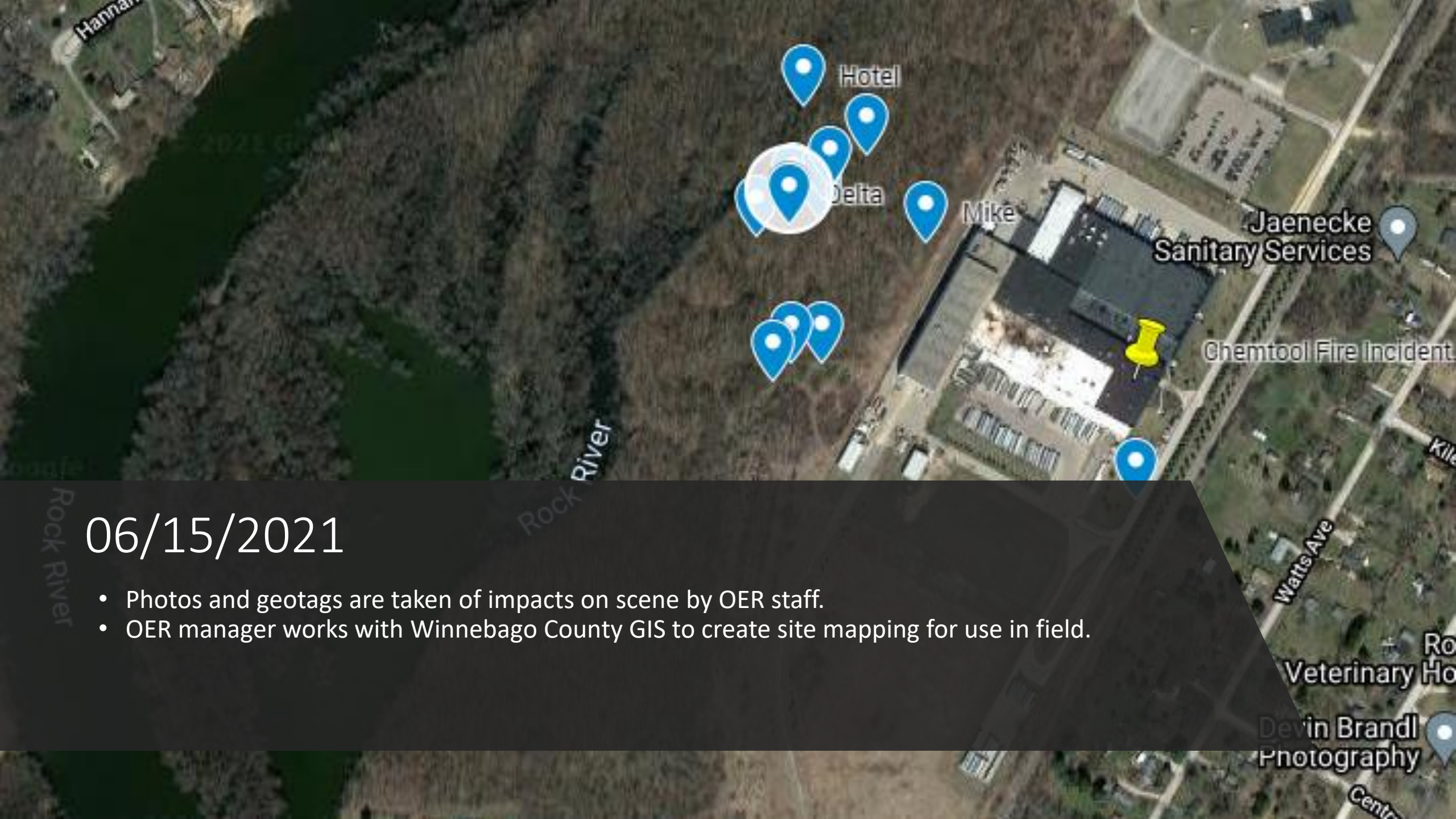




06/15/2021

- OER on scene staff perform river SCAT operations to identify any impacts.
- OER manager participates in multiple operations, tactics, and environmental meetings throughout the day.
- OER manager works with USEPA to establish air monitoring zones in plume path.
- OER manager works with National Weather Service to create future forecasts and plume modeling.
- OER manager has CST create plume modeling data.





06/15/2021

- Photos and geotags are taken of impacts on scene by OER staff.
- OER manager works with Winnebago County GIS to create site mapping for use in field.



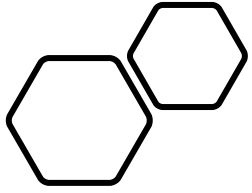
OER on scene staff continue to oversee contractor construction of trenches and berms. American Fire Pump (AFP) request permission to use potential PFAS containing AFFF. USEPA and IEPA strongly advise against it but indicate if there is no other option then the Incident Commander can make that decision. OER Staff notified OSC and AFP that water can be drawn from Rock River without a permit to aid in fire suppression. OER Manager directs BOW/FOS to collect water samples from Rock River upstream and multiple downstream, and to plot sample locations with geotags.



06/16/2021

06/16/2021

- AFP contractors state that the foam they will be using is non-fluorinated and that they have the chemist who created it on site.
- OER staff is notified of AFP use of AFFF during early morning operations and again requested confirmation that the foam was non-fluorinated.
- OER Staff on scene noted that a semi-truck shipment of AFFF arrived on site and there was no one to take custody of it; this was after foam operations began in the day.
- OER Manager called the Incident Commander to inform him of the shipment and requested to speak to AFP.
- AFP stated they were placing booms around the incident site to collect all AFFF that was being used and stated that it was a non-PFAS containing foam.
- OER Manager receives word from OSFM that the initial foam used in operations was fluorinated.
- OER Manager coordinates with Winnebago County Public Health on determining any potential health effects from smoke plume and alternative plans if the winds were to shift.



06/17/2021

- BOL/FOS works with OER manager to determine soil and run-off locations for sampling.
- BOW/FOS is directed to take samples of Rock River, on-scene frac tanks, WWTP, standing trench water, sanitary drains, and storm water drains within and around the incident site.
- OER field staff performs SCAT of Rock River.
- AFFF is discovered by OER staff emanating from 12 inch water intake hose on Rock River.
- OER Staff mobilized contractors to contain AFFF foam in river and to begin immediately vacuuming operations.
- OER Staff oversees the construction of a 3rd trench west of incident site.
- OER Manager speaks with AFP to determine the amount water, fluorinated AFF, and non-fluorinated AFFF used on site to date.
- OER Manager speaks with fire marshal and relays information.
- OER works with USEPA to perform continued site evaluations and review mobile air monitoring data.
- IEPA and IEMA work on constructing mapping locations of all samples taken.
- OER staff oversee construction of sump pits for water run-off.
- OER Manager directs BOW/FOS to take samples of AFFF impacted portion of Rock River.
- OER Manager requests CST mobile laboratory to incident site.
- CST mobilizes more personnel and assets to being with sampling in the area.
- Soil, water, and air sampling plans are created by IEPA, CST, USEPA, CTEH, Emergency Response, and Hepaco.
- OER aids in developing wipe sampling locations for BOL and CST.
- OER Manager coordinates emergency delivery of samples from incident site to labs in Springfield.
- Overnight sample coordination by OER manager.





06/18/2021

- Discussion with Winnebago County Department of Public Health.
- Relay of sample results from OER Manager to IEMA, executive leadership and other stakeholders.
- OER on scene staff continue to monitor de-watering operations and site integrity.
- SEOC stands down operations and hands over state authority to IEPA.
- Continued water and soil samples are taken by IEPA FOS.

06/19/2021
&
06/20/2021

- OER on scene staff indicates that scene has been given control to AFP.
- OER on scene staff states that there is a lack of communication with contractors on remediation operations.
- OER Manager speak with USEPA on additional assistance, if needed, and proposed future operations.
- Oversight of de-watering operations continue amid fire flare-ups.
- OER Manager has discussion with DLC, OER field staff, and AGO on current operations and lack of consultation from contractors.

Noted Areas of Concern

- Lack of communication and coordination between incident commander and SEOC.
- Damage to sampling wells and pump-and-treat system causes extended period where ground water is not treated.
- Mixed public messaging between local, county, and state entities in the early hours of incident.
- RP hired remediation contractors exhibited conflicting priorities when dealing with IEPA.
- Imprecise air/soot/debris sampling plan was executed causing a delay in the publication of data to the public.

U.S. EPA mobilized to the incident to perform air monitoring at the request of Illinois EPA. Air monitoring was U.S. EPA's primary focus. However, throughout the incident, U.S. EPA conducted the following:

- ★ Air monitoring
- ★ Air Sampling
- ★ Surface Water Sampling
- ★ Identified a substantial threat of release of oil from compromised storage tanks to the Rock River.
- ★ Free Product sampling/fingerprint analysis.
- ★ Frac Tank sampling
- ★ Suspected Asbestos-containing material sampling
- ★ Submerged oil assessment.



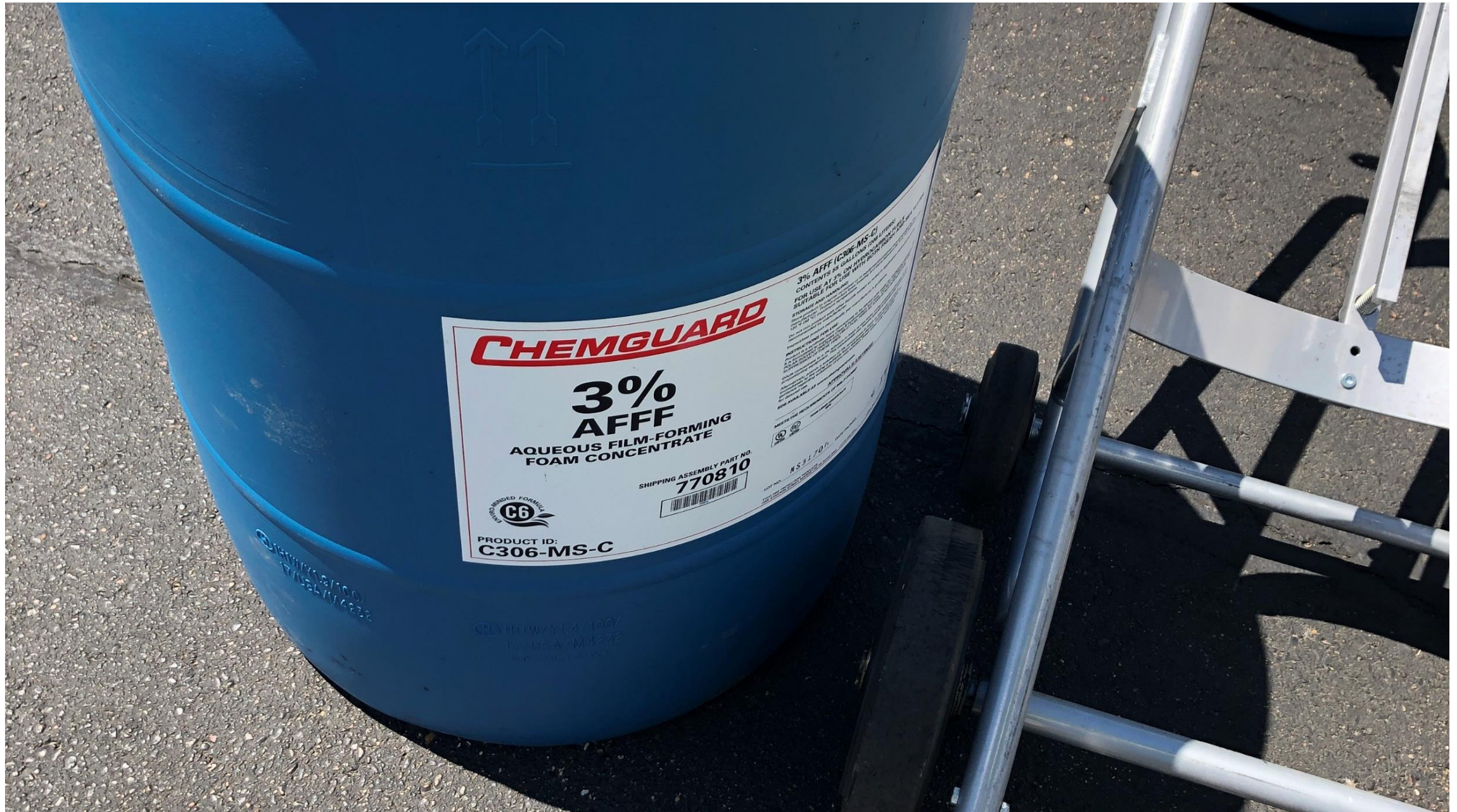








Closeup of Label of one of three drums of AFFF used on site.

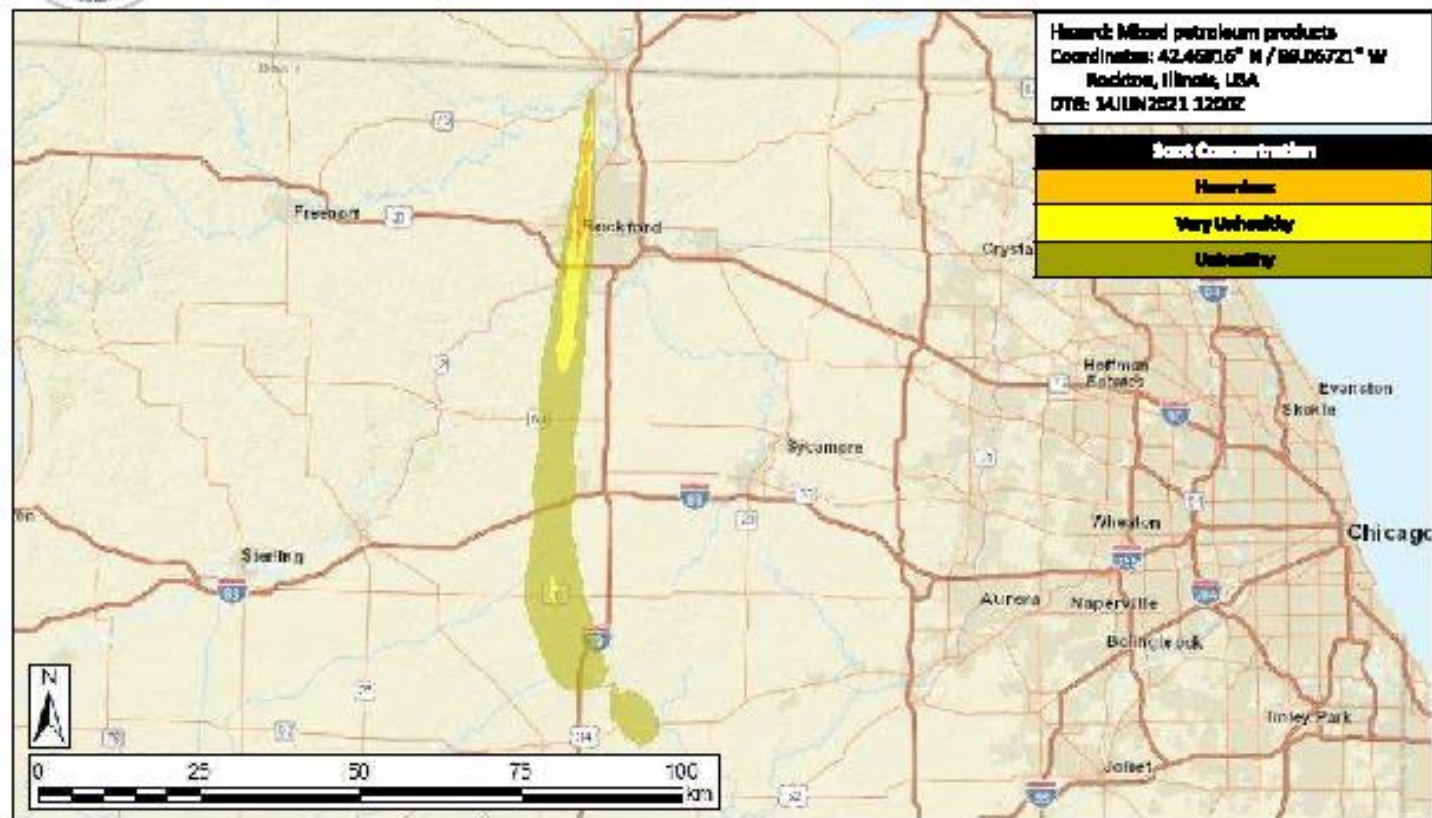




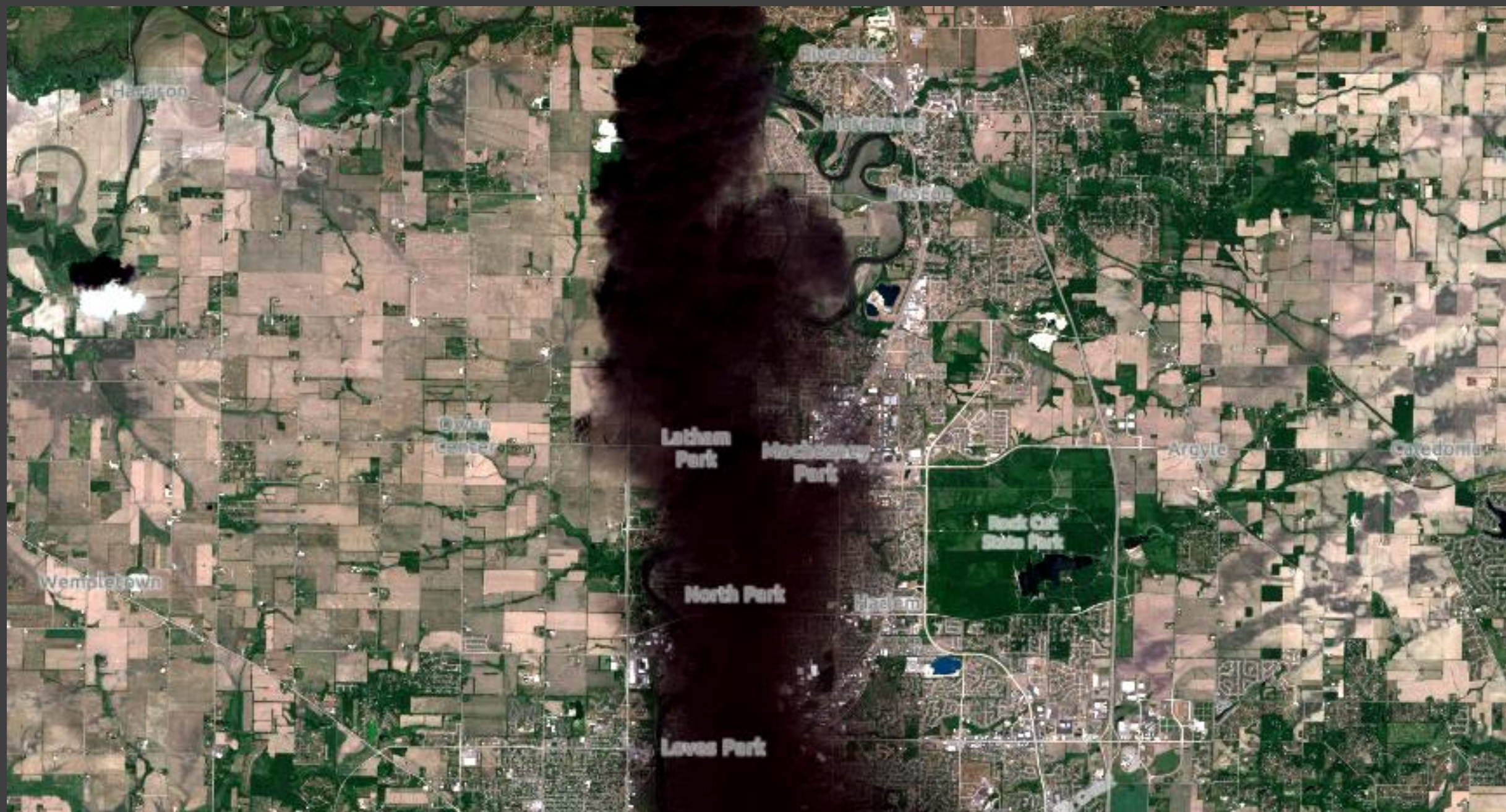
CUI

RII 20-0524

Soot Concentration @ 0900 local

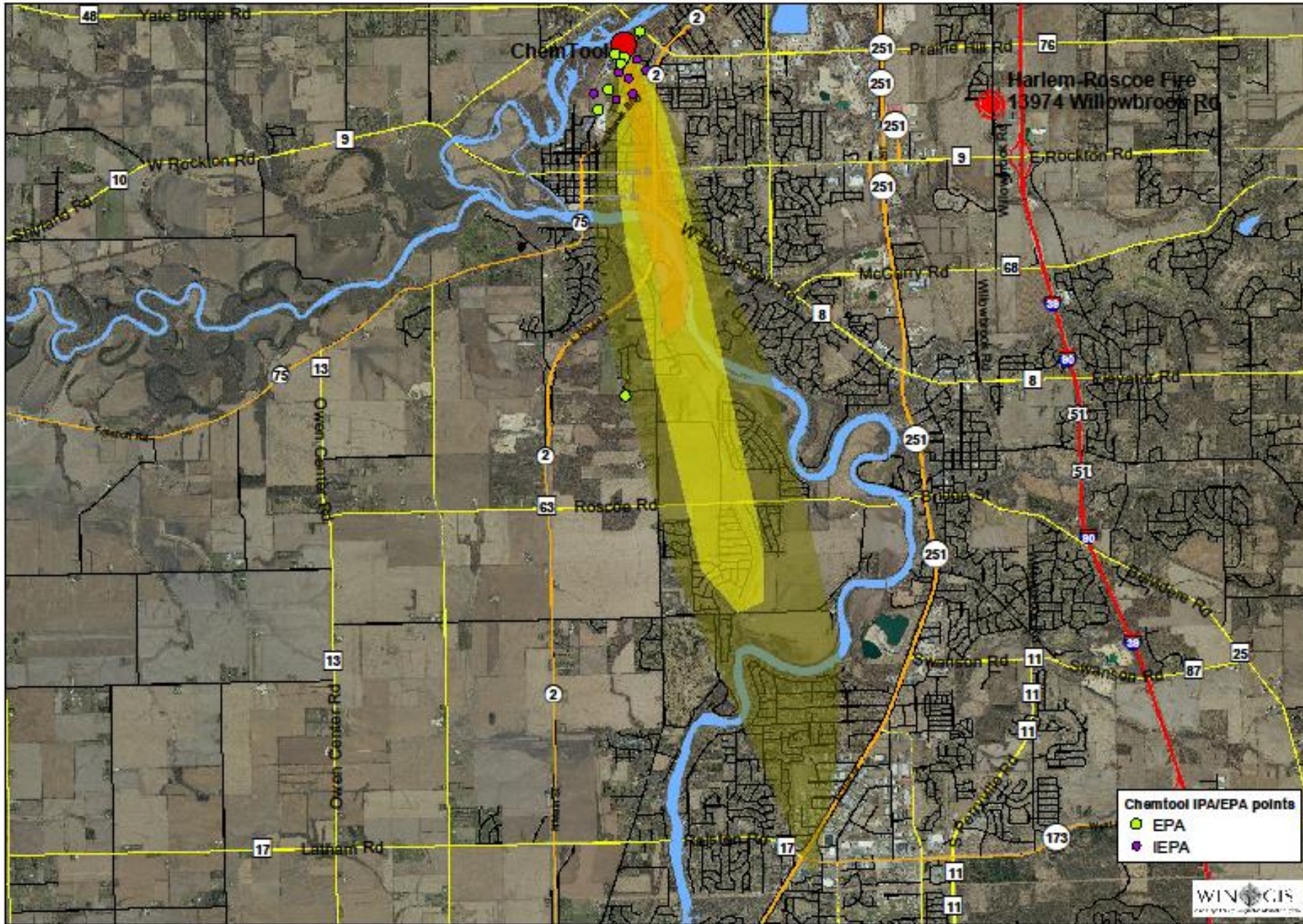


Initial IMAAC model showed Unhealthy levels of soot for approximately 100 km from the facility.





Soot Concentration 6/14/2021






























Revised IMAAC model showed Unhealthy levels of soot for about 50 km from the facility.







U.S. EPA contractors, the Illinois Civil Support Team, and the Illinois State Police deployed DustTraks and AreaRAE monitors to conduct real-time air monitoring.



AreaRAE Pro(s):

~	Instrument ID	Connection	Location	LEL	O2	H2S	CO	GAMMA	SPEED	DIR	Temp	R.H	VOC	HCN	CL2	1Hr H2S TWA	1Hr VOC TWA	Received
	(.3002) AreaRAE Pro * PRG2CAP - AreaRAE Pro - S/NW01A00001429	 OK	42.4703600, -89.0647600	0 %LEL	21.9 %	0.0 ppm	0 ppm	2 urem/h	0.6 m/sec	134 °	83 °F	38 %	434 ppb			0.000000 ppm	431.769863 ppb	6/15/2021 1:42 PM
	(.3003) AreaRAE Pro * PRG2CAP - AreaRAE Pro - S/NW01A00001431	 OK	42.4708700, -89.0662200	0 %LEL	21.3 %	0.0 ppm	0 ppm	1 urem/h	4.7 MPH	314 °	83 °F	37 %	0 ppb			0.000000 ppm	0.000000 ppb	6/15/2021 1:42 PM
	(.3004) AreaRAE Pro * PRG2CAP - AreaRAE Pro - S/NW01A00001432	 OK	42.4707800, -89.0654500	0 %LEL	20.5 %	0.0 ppm	0 ppm	2 urem/h	0.8 m/sec	316 °	89 °F	31 %	158 ppb			0.000000 ppm	67.410089 ppb	6/15/2021 1:41 PM
	(.3001) AreaRAE Pro * PRG2CAP - AreaRAE Pro - S/NW01A00001434	 OK	42.4737100, -89.0617800	0 %LEL	22.2 %	0.0 ppm	0 ppm	2 urem/h					1658 ppb			0.000000 ppm	1,619.513741 ppb	6/15/2021 1:41 PM
 1Hr VOC TWA >1ppm		WARNING - High Alarm: 1000; Low Alarm: n/a (from 126 readings)							Reading ID: 42944				1Hr VOC TWA: 1619.513741 ppb			6/15/2021 1:41 PM		
	(.3001) AreaRAE Pro PRG2CAP - AreaRAE Pro - S/NW01A00000640	 Unknown	0.0000000, 0.0000000															
	(.3002) AreaRAE Pro * PRG2CAP - AreaRAE Pro - S/NW01A00000641	 OK	42.4263900, -88.9982800		21.5 %	0.0 ppm	0 ppm	3 urem/h					492 ppb			0.000000 ppm	496.034862 ppb	6/15/2021 1:40 PM
	(.3001) AreaRAE Pro * PRG2CAP - AreaRAE Pro - S/NW01A00000642	 OK	42.4694495, -89.0651271	0 %LEL	20.2 %	0.0 ppm	0 ppm	2 urem/h					43 ppb			0.000000 ppm	13.917771 ppb	6/15/2021 1:42 PM
	(.3004) AreaRAE Pro * PRG2CAP - AreaRAE Pro - S/NW01A00000820	 Down	 42.4661800, -89.0675000	0 %LEL	22.7 %		0 ppm	1 urem/h					0 ppb	0.6 ppm	0.0 ppm		0.177111 ppb	6/15/2021 11:02 AM
	(.3003) AreaRAE Pro * PRG2CAP - AreaRAE Pro - S/NW01A00000821	 Down	 42.4657300, -89.0699700	0 %LEL	22.1 %	0.0 ppm	0 ppm	2 urem/h	0.0 m/sec	248 °	30 °C	39 %	41 ppb	0.5 ppm		0.000000 ppm	35.153977 ppb	6/15/2021 11:02 AM
	(.3001) AreaRAE Pro * PRG2CAP - AreaRAE Pro - S/NW01A00000822	 Down	 42.4636300, -89.0692400	0 %LEL	21.4 %	0.0 ppm	0 ppm	2 urem/h	1.4 MPH	145 °	82 °F	40 %	0 ppb	0.3 ppm	0.0 ppm	0.000000 ppm	0.028741 ppb	6/15/2021 11:02 AM
	(.3002) AreaRAE Pro * PRG2CAP - AreaRAE Pro - S/NW01A00000825	 Down	 42.4685000, -89.0655500	0 %LEL	22.2 %	0.0 ppm	0 ppm	1 urem/h	0.7 m/sec	300 °	84 °F	42 %	161 ppb	0.6 ppm	0.0 ppm	0.000000 ppm	171.649537 ppb	6/15/2021 11:01 AM

DustTrak(s):

~	Instrument ID	Connection	Location	PM1	PM2.5	RESP	PM10	Total	PM1 TWA	PM2.5 TWA	RESP TWA	PM10 TWA	total TWA	Model	Firm	SN	stel	flow	laser	filter	bat	batteryLevel	1Hr PM2.5 TWA	1Hr PM10 TWA
	(.203) DustTrak * Replaces Linc 200	 OK	42.4695480, -89.0652030	0.006 mg/m3	0.006 mg/m3	0.006 mg/m3	0.006 mg/m3	0.006 mg/m3	0.014 twa	0.015 twa	0.015 twa	0.015 twa	0.015 twa	8533EP string	3.9 string	8533153913 string	False bool	False bool	False bool	False bool	0 %	0 %	0.007872 mg/m3	0.008917 mg/m3
	(.206) DustTrak *	 OK	42.4264330, -88.9984770	0.013 mg/m3	0.013 mg/m3	0.013 mg/m3	0.014 mg/m3	0.014 mg/m3	0.018 twa	0.018 twa	0.018 twa	0.019 twa	0.019 twa	8533EP string	3.10 string	8533194207 string	False bool	False bool	False bool	False bool	79 %	100 %	0.013973 mg/m3	0.015352 mg/m3
	(.212) DustTrak *	 OK	42.1014520, -89.0771800	0.008 mg/m3	0.008 mg/m3	0.008 mg/m3	0.008 mg/m3	0.008 mg/m3	0.001 twa	0.001 twa	0.001 twa	0.001 twa	0.001 twa	8533EP string	3.9 string	8533153911 string	False bool	False bool	False bool	False bool	0 %	0 %	0.007351 mg/m3	0.007609 mg/m3



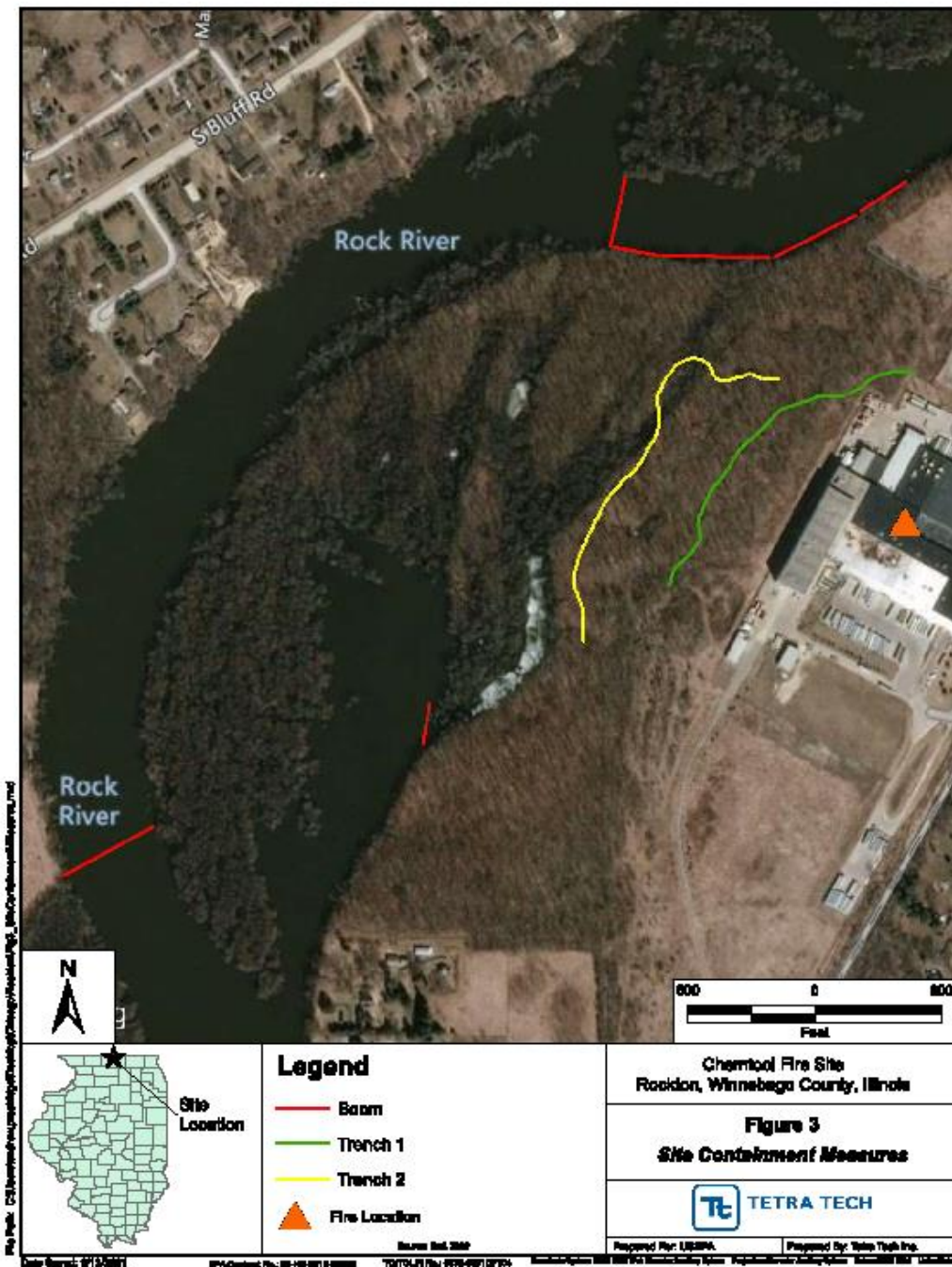






















Interceptor trenches seemed
Effective in catching fire-
Fighting foam.

R05 Rockton Chemtool Fire Deployment

All Times Central, DST Observed

5931-4: R05 Rockton Chemtool ER - CST 20210615B

Start: 6/15/2021 2:43:54 PM

Description: CST up to 18 AreaRAEs via PRG2CAP

Location: Rockton, IL



(.3005) AreaRAE Pro - PRG2CAP - AreaRAE Pro - S/NW01A00000825

Connection: OK

Intermittent after 45 minute(s)

Down after 90 minute(s)

Lat/Lng: 42.4684800 / -89.0654900

Last Update: 6/15/2021 4:49:28 PM

Latest Readings:

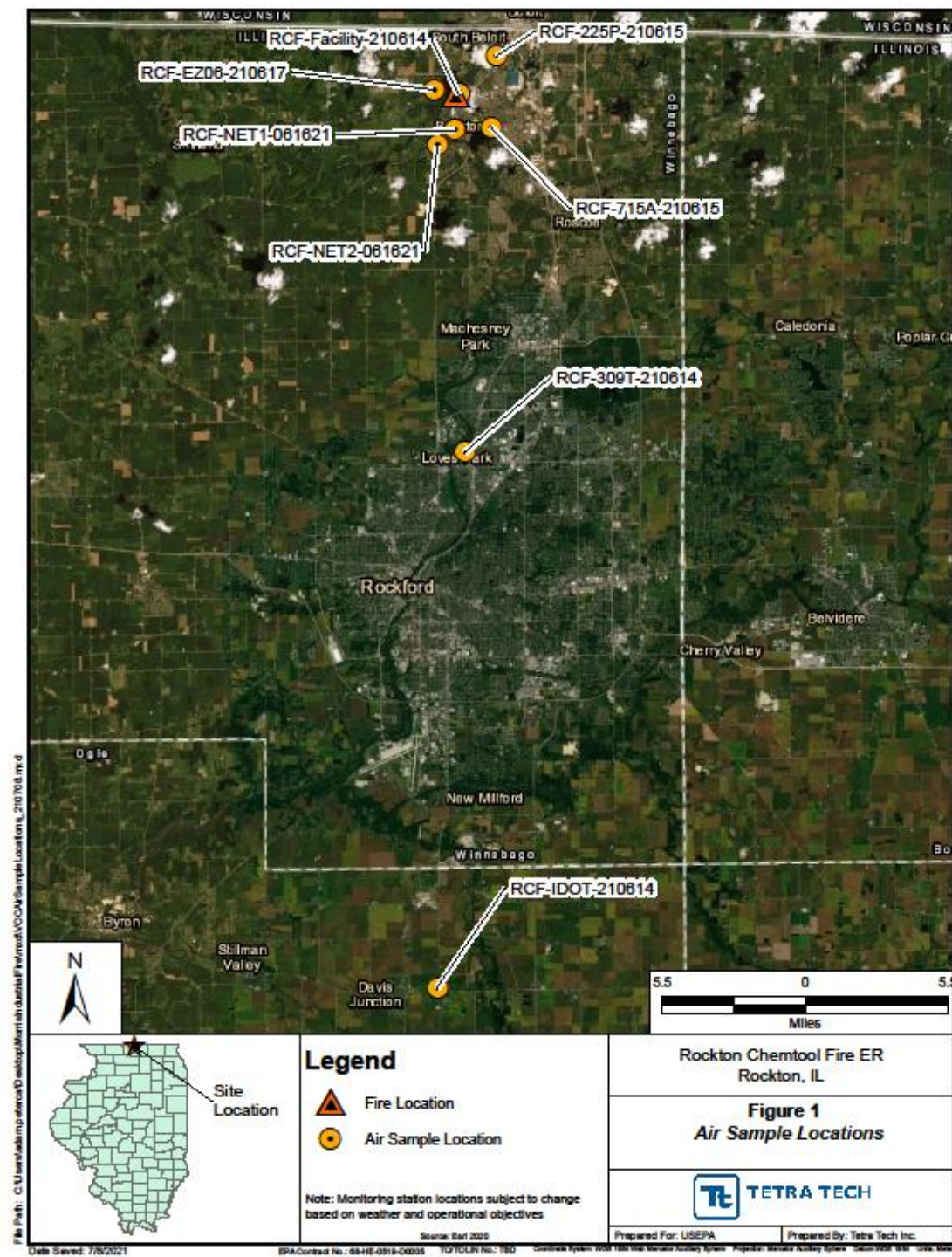
~	Alarm Name	Description	Reading	Received
	1Hr H2S TWA >0,1ppm	WARNING - High Alarm: 0.1; Low Alarm: n/a (from 82 readings)	1Hr H2S TWA: 0.338601 ppm	6/15/2021 4:49:28 PM

H2S: 0.0 ppm **1Hr H2S TWA:** 0.3386013 ppm **LEL:** 0 %LEL **O2:** 20.9 % **HCN:** 1.0 ppm **CO:** 0 ppm **GAMMA:** 2 urem/h **SPEED:** 0.6 m/sec **DIR:** 137 °
Temp: 86 °F **R.H:** 34 % **VOC:** 168 ppb **1Hr VOC TWA:** 427.9520747 ppb





Air Sampler (Summa Canister) being deployed by U.S. EPA contractor.



Air monitoring at Rockton, IL Old Settlers Days.
Air monitoring continued throughout the duration
Of the festival, except when severe weather made
It impossible to collect air monitoring data.



U.S. EPA Air Monitoring continued at and around the Facility until the fire was completely extinguished.



Air sampling results for VOCs showed acrolein above U.S. EPA's Removal Management Level.

Preliminary Analytical Results for VOC Samples
Rockton Chemical Fire
Rockton, Winnebago County, Illinois

Analyte	Cas No.	EPA Remedial Air RML (TCR-1E-4, ISO-2)	RCF-209T-210614	RCF-Facility-210614	RCF-IDOT-210614	RCF-325P-210615	RCF-7154-210615	RCF-NET1-061621	RCF-NET2-061621
1,1,1-Trichloroethane	71-45-6	16000	<0.0077	<0.0087	<0.0071	<0.0096	<0.0097	<0.01	<0.01
1,1,2,2-Tetrachloroethane	79-34-5	4.8	<0.0094	<0.011	<0.0087	<0.012	<0.012	<0.013	<0.013
1,1,2-Trichloroethane	79-06-5	0.63	<0.01	<0.012	<0.0096	<0.013	<0.013	<0.014	<0.014
1,1,2-Trichlorotrifluoroethane	76-13-1	16000	0.47	0.47	0.47	0.46	0.48	0.42	0.42
1,1-Dichloroethane	75-34-3	180	<0.0079	<0.009	<0.0074	<0.0099	<0.01	<0.011	<0.011
1,1-Dichlorobenzene	75-35-4	630	<0.011	<0.013	<0.01	<0.014	<0.014	<0.015	<0.015
1,2,4-Trichlorobenzene	120-82-1	6.3	<0.017	<0.019	<0.016	<0.021	<0.021	<0.023	<0.023
1,2,4-Trinitrobenzene	95-23-6	190	0.2	0.23	0.14	0.18	<0.014	0.32	0.33
1,2-Dibromo-3-Chloropropane	96-12-8	0.017	<0.012	<0.014	<0.011	<0.015	<0.016	<0.017	<0.017
1,2-Dibromobenzene	106-93-4	0.47	<0.01	<0.012	<0.0096	<0.013	<0.013	<0.014	<0.014
1,2-Dichlorobenzene	95-50-1	630	<0.011	<0.012	<0.01	<0.013	<0.014	<0.014	<0.014
1,2-Dichloroethane	107-06-2	11	0.067	0.063	0.063	0.065	0.062	0.45	0.32
1,2-Dichloropropane	78-87-5	13	<0.0095	<0.011	<0.0088	<0.012	<0.012	<0.013	<0.013
1,3,5-Trinitrobenzene	108-67-8	190	<0.0095	<0.011	<0.0088	<0.012	<0.012	<0.013	<0.013
1,3-Dibutylene	106-99-0	6.3	<0.018	0.43	<0.017	<0.023	<0.023	0.41	0.37
1,3-Dichlorobenzene	541-73-1	NE	<0.011	<0.013	<0.01	<0.014	<0.014	<0.015	<0.015
1,4-Dichlorobenzene	106-46-7	26	<0.011	<0.012	<0.0098	<0.013	<0.013	0.045	<0.014
1,4-Dioxane	123-91-1	36	<0.011	<0.013	<0.01	<0.014	<0.014	<0.015	<0.015
Acetone	67-64-1	97000	0.1	0.5	7.9	8.1	7.6	6.3	5.3
Acrolein	107-02-8	0.063	0.33	0.42	0.39	<0.063	<0.064	0.42	<0.068
Benzene	71-43-2	36	0.32	1.4	0.25	0.32	0.45	1.6	1.4
Bromodichloromethane	75-27-4	7.8	<0.009	<0.01	<0.0083	<0.011	<0.011	<0.012	<0.012
Bromobenzene	75-25-2	16	<0.012	<0.014	<0.011	<0.015	<0.015	<0.016	<0.016
Carbon Tetrachloride	56-23-5	47	0.41	0.4	0.48	0.4	0.39	0.35	0.34
Chlorobenzene	108-90-7	160	<0.012	<0.014	<0.011	<0.015	<0.015	<0.016	<0.016
Chloroethane	75-00-3	30000	<0.011	<0.013	<0.01	<0.014	<0.014	<0.015	<0.015
Chloroform	67-66-3	12	0.18	<0.027	<0.022	<0.029	<0.03	<0.031	<0.030
Chloromethane	74-87-3	280	0.096	0.086	0.087	0.086	0.087	0.32	0.33
cis-1,2-Dichloroethane	156-59-2	—	<0.012	<0.014	<0.011	<0.015	<0.015	<0.016	<0.016
cis-1,3-Dichloropropene	10061-01-5	NE	<0.0081	<0.0092	<0.0075	<0.01	<0.01	<0.011	<0.011
Dibromochloromethane	124-48-1	—	<0.011	<0.013	<0.011	<0.014	<0.015	<0.015	<0.015
Dichlorodifluoromethane (CFC 12)	75-71-8	310	1.9	1.8	2	2	1.9	1.9	1.8
Dichloromethane (Methylene Chloride)	75-29-2	1900	0.5	0.31	0.52	0.32	0.33	0.46	0.39
Ethylbenzene	100-41-4	110	0.17	0.34	<0.012	0.17	<0.016	2.5	2
Hexachlorobenzene	87-68-3	13	<0.012	<0.014	<0.011	<0.015	<0.015	<0.016	<0.016
m,p-Xylene	108-38-3	NE	0.58	0.73	0.35	0.54	0.36	10	8.9
Methyl tert-Butyl Ether	1634-04-4	1100	<0.012	<0.014	<0.011	<0.015	<0.015	<0.016	<0.016
Naphthalene	91-20-3	8.3	0.17	0.25	0.16	<0.026	<0.026	0.3	0.38
o-Xylene	95-47-6	310	0.22	0.27	0.13	0.21	<0.015	2.9	2.5
Styrene	100-42-5	3100	<0.0096	<0.011	<0.009	<0.012	<0.012	0.18	0.18
Tetrachloroethane	127-18-4	130	0.05	0.065	0.034	0.058	0.052	0.06	0.044
Toluene	108-88-3	16000	0.99	1.5	0.66	1.2	0.78	1.4	1.2
trans-1,2-Dichloroethane	156-58-5	130	<0.0095	<0.011	<0.0088	<0.012	<0.012	<0.013	<0.013
trans-1,3-Dichloropropene	10061-02-6	NE	<0.0072	<0.0081	<0.0067	<0.0089	<0.0091	<0.0096	<0.0096
Trichlorobenzene	79-01-6	6.3	<0.011	<0.013	<0.01	<0.014	<0.014	<0.015	<0.015
Trichloroethanol	75-69-4	—	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Vinyl Chloride	75-01-4	17	<0.0096	<0.011	<0.0092	<0.012	<0.013	<0.013	<0.013

Notes:

All units are micrograms per cubic meter (ug/m³)

— No screening level

< This result is less than the numerical value.

CAS Chemical Abstract Service

EPA U.S. Environmental Protection Agency

HQ Hazard Quotient

NE Not Evaluated

RCF Rockton Chemical Facility

RML Removal Management Level

TCR Target Cancer Risk

VOC Volatile Organic Compounds

Bolded results were detected in the sample

Result exceeds the EPA RML.

Results have not been validated, and should be considered preliminary

Air sampling results for TICs showed 2-ethyl-1-Hexanol above U.S. EPA's Removal Management Level.

Preliminary Analytical Results - Tentatively Identified Compounds
Rockton Chemtool Fire
Rockton, Winnebago County, Illinois

Tentatively Identified Compound	CAS Number	EPA Residential Air RML (TCR=1E-4, HQ=3)	Result
RCF-309T-210614			
2-Ethyl-1-hexanol	104-76-7	1.3	4
Acetic Acid	64-19-7	NE	5.6
n-Butane	106-97-8	NE	2.7
n-Nonaldehyde	124-19-6	NE	14
RCF-Facility-210614			
n-Nonaldehyde	124-19-6	NE	8.8
n-Pentane	109-66-0	3100	2.8
RCF-IDOT-210614			
Acetaldehyde	75-07-0	28	2.3
n-Nonaldehyde	124-19-6	NE	12
Tridecane	629-50-5	NE	2.7
Unknown	NA	NE	3.5
Unknown Siloxane	NA	NE	2.9
RCF-225P-210615			
n-Butane	106-97-8	NE	3.5
n-Nonaldehyde	124-19-6	NE	11
Propane	74-98-6	NE	16
RCF-715A-210615			
2-Ethyl-1-hexanol	104-76-7	1.3	6.1
n-Nonaldehyde	124-19-6	NE	12
RCF-NET2-061621			
C11 Alkane	NA	NE	3.7
n-Nonaldehyde	124-19-6	NE	4.2

Notes:

All units are micrograms per cubic meter (ug/m³)

CAS Chemical Abstract Service

EPA U.S. Environmental Protection Agency

HQ Hazard Quotient

NE Not Evaluated

RCF Rockton Chemtool Facility

RML Removal Management Level

TCR Target Cancer Risk

Result exceeds the EPA RML

Results have not been validated, and should be considered preliminary

Air sampling results for metals did not show any results above U.S. EPA's Removal Management Level.

Validated Analytical Results for Metals Samples
Rockton Chemtool Fire
Rockton, Winnebago County, Illinois

Analyte	Cas No.	EPA Residential Air RML (TCR=1E-4, HQ=3)	RCF-Facility-210615	RCF-225P-210615	RCF-715A-210615	RCF-NET1-210615	RCF-NET2-210615	RCF-6121E-210615
Aluminum	7429-90-5	0.0016	0.0043088 U	0.0042822 U	0.0046044 U	0.0046675 U	0.0042874 U	0.0047446 U
Arsenic	7440-38-2	0.000047	0.0021544 U	0.0021411 U	0.0023022 U	0.0023337 U	0.0021437 U	0.0023723 U
Barium	7440-39-3	0.0016	0.0021544 U	0.0021411 U	0.0023022 U	0.0023337 U	0.0021437 U	0.0023723 U
Beryllium	7440-41-7	0.000063	0.00010772 U	0.00010705 U	0.00011511 U	0.00011669 U	0.00010719 U	0.00011861 U
Boron*	7440-42-8	0.063	0.0021544 U	0.0021411 U	0.0023022 U	0.0023337 U	0.0021437 U	0.0023723 U
Cadmium	7440-43-8	0.000031	0.000064632 U	0.000064233 U	0.000069066 U	0.000070012 U	0.000064311 U	0.000071168 U
Calcium	7440-43-9	NE	0.012926 U	0.012847 U	0.013813 U	0.014002 U	0.012862 U	0.014234 U
Chromium	7440-70-2	NE	0.0010772 U	0.0010705 U	0.0011511 U	0.0011669 U	0.0010719 U	0.0011861 U
Cobalt	7440-47-3	0.000019	0.000064632 U	0.000064233 U	0.000069066 U	0.000070012 U	0.000064311 U	0.000071168 U
Copper	7440-48-4	NE	0.0043088 U	0.0042822 U	0.0046044 U	0.0046675 U	0.0042874 U	0.0047446 U
Iron	7440-50-8	NE	0.0043088 U	0.0042822 U	0.0046044 U	0.0046675 U	0.0042874 U	0.0047446 U
Lead	7439-89-6	0.00015	0.00043088 U	0.00042822 U	0.00046044 U	0.00046675 U	0.00042874 U	0.00047446 U
Lithium	7439-92-1	NE	0.00086176 U	0.00085644 U	0.00092088 U	0.00093349 U	0.00085749 U	0.00094891 U
Magnesium	7439-95-4	NE	0.0033222 J+	0.0011385 J+	0.0011511 U	0.0011669 U	0.0010719 U	0.0011861 U
Manganese	7439-96-5	0.00016	0.00010772 U	0.00010705 U	0.00011511 U	0.00011669 U	0.00010719 U	0.00011861 U
Molybdenum	7439-98-7	0.0063	0.00032316 U	0.00032116 U	0.00034533 U	0.00035006 U	0.00032156 U	0.00035584 U
Nickel	7440-02-0	0.00028	0.00010772 U	0.00010705 U	0.00011511 U	0.00011669 U	0.00010719 U	0.00011861 U
Phosphorus	7723-14-0	NE	0.0043088 U	0.0042822 U	0.0046044 U	0.0046675 U	0.0042874 U	0.0047446 U
Selenium	7782-49-2	0.063	0.0021544 U	0.0021411 U	0.0023022 U	0.0023337 U	0.0021437 U	0.0023723 U
Silver	7440-22-4	NE	0.00021544 U	0.00021411 U	0.00023022 U	0.00023337 U	0.00021437 U	0.00023723 U
Sodium	7440-23-5	NE	0.0032316 U	0.0032116 U	0.0034533 U	0.0035006 U	0.0032156 U	0.0035584 U
Tellurium	13494-80-9	NE	0.0010772 U	0.0010705 U	0.0011511 U	0.0011669 U	0.0010719 U	0.0011861 U
Thallium	7440-28-0	NE	0.0010772 U	0.0010705 U	0.0011511 U	0.0011669 U	0.0010719 U	0.0011861 U
Titanium	7440-32-6	NE	0.000064632 U	0.000064233 U	0.000069066 U	0.000070012 U	0.000064311 U	0.000071168 U
Vanadium	7440-62-2	0.00031	0.000064632 U	0.000064233 U	0.000069066 U	0.000070012 U	0.000064311 U	0.000071168 U
Yttrium	7440-65-5	NE	0.000064632 U	0.000064233 U	0.000069066 U	0.000070012 U	0.000064311 U	0.000071168 U
Zinc	7440-66-6	NE	0.0043088 U	0.0042822 U	0.0046044 U	0.0046675 U	0.0042874 U	0.0047446 U
Zirconium	7440-67-7	NE	0.0043088 U	0.0042822 U	0.0046044 U	0.0046675 U	0.0042874 U	0.0047446 U

Notes:

All units are milligrams per cubic meter (mg/m³)

+ LCS and/or LCSD is outside acceptance limits, high biased.

CAS Chemical Abstract Service

EPA U.S. Environmental Protection Agency

HQ Hazard Quotient

J Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit and the concentration is an approximate value.

RCF Rockton Chemtool Facility

RML Removal Management Level

TCR Target Cancer Risk

U Analyte was not detected

The analyte was not detected, but the reporting limit exceeds the Residential Air RML.



An Illinois licensed asbestos inspector was used to look at fire debris and submit any suspected ACM to a lab for analysis. No asbestos was identified by the lab.



U.S. EPA conducted limited surface water sampling on site and in the Rock River. Although some detections were identified from on-site Trench samples, the liquids in the trenches were vacuumed out and placed in frac tanks.







IA/Y/ /USA/
491/3855/1724/
104/57kg/100kpa/

POTASSIUM HYDROXIDE 48% NEW 1-WAY

CORROSIVE

UN1814

Transport
1800 KG MAX

IA/Y/ /USA/
491/3855/1724/
104/57kg/100kpa/

POTASSIUM HYDROXIDE 48% NEW 1-WAY

CORROSIVE

UN1814

CC

POTASSIUM HYDROXIDE 48% NEW 1-WAY

CORROSIVE

UN1814



Beloit Corporation Superfund Site

For more information, contact the Beloit Corporation
Illinois EPA Project manager at (217) 524-3300

Caution - No Entry



TRACHTL





Oil Sample Analysis Report

**US EPA Region 5
Case / Activity Number E21510**

**Marine Safety Laboratory
Case Number 21-043**





- 5 Frac Tanks were identified as being
- Filled during and immediately after
- the application of AFFF. Given the
- High level of concern about the use
- Of AFFF, U.S.EPA sampled these tanks
- For disposal parameters including PFAS.






Submerged oil investigation



Investigation did
not reveal
submerged oil
from the incident.

Construction of berm to contain any potential releases of oil from damaged tanks near the Rock River. The berm was 6 feet high, 50 feet wide and 250 feet long. With the completion of the berm, U.S. EPA determined that the threat of discharge of oil to the river was mitigated.





Chemtool Fire Response

June 2021

Rockton, IL

- Issues:
 - Lack of functional Unified Command at incident location.
-
- Former Beloit Corporation Superfund Site
 - PFAS
 - U.S. EPA Website bottleneck through OSC




Chemtool Fire Response

June 2021

Rockton, IL

- Questions?





Chemtool Fire Response June 2021 Rockton, IL

Thank you to Illinois EPA OSCs
Charles Curtis
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Corey Peaslee
Matt Villicana

And Virtual Environmental Unit members from various agencies.

