EGLE-RRD-UpperPeninsulaEDM

From: Jeff Binkley <JBinkley@manniksmithgroup.com>
Sent: Wednesday, November 10, 2021 2:49 PM
To: Keranen, Amy (EGLE)
Subject: Calumet Fire Site Assessment Report
Attachments: Calumet Fire Site Assessment Report - Rev 1.pdf

TETRA TECH

JEFFREY S. BINKLEY
PROJECT MANAGER

July 21, 2021

Mr. Brian Kelly
On-Scene Coordinator
U.S. Environmental Protection Agency
Region 5, Emergency Response Branch
2565 Plymouth Road
Ann Arbor, Michigan 48138

Subject: **Site Assessment Report – Revision 1**
5th St. Calumet Fire Site – RS
Calumet, Houghton County, Michigan
EPA Contract No.: 68-HE-0519-D0005 (START V, Region 5)
Task Order-Task Order Line Item No.: F0032-0001CF101
Document Tracking No.: 0767A

Dear Mr. Kelly:

The Tetra Tech, Inc. (Tetra Tech) Superfund Technical Assessment and Response Team (START) is submitting the Site Assessment Report for the 5th St. Calumet Fire Site - RS. The report summarizes (1) the findings of a review of existing information and (2) sampling of building material completed by START per the Sampling and Analysis Plan.

Please call me at (906) 281-3404, if you have any questions or comments regarding this report.

Sincerely,

Jeffrey S. Binkley
The Mannik & Smith Group (Subcontractor of Tetra Tech) Project Manager

Enclosure

cc: TDD File
Chris Burns, Tetra Tech Program Manager

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SITE ASSESSMENT REPORT
5th ST. CALUMET FIRE SITE – RS
CALUMET, HOUGHTON COUNTY, MICHIGAN
Revision 0

Prepared for

U.S. Environmental Protection Agency
Emergency Response Branch
Region 5
2565 Plymouth Road
Ann Arbor, Michigan 48138

Submitted by

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Chicago, Illinois 60606

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July 21, 2021

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Approved by:
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1.0 INTRODUCTION

Under the Superfund Technical Assessment and Response Team (START) Contract No.: 68-HE-0519-D0005, U.S. Environmental Protection Agency (EPA) Region 5 tasked Tetra Tech, Inc. (Tetra Tech) to prepare a Site Assessment Report for the 5th St. Calumet Fire Site – RS (site) in Calumet, Houghton County, Michigan. The purpose of the site assessment was to evaluate the potential for threats to human health and/or the environment to assess the necessity for a removal action. This assessment is considered a removal assessment.

Under Task Order-Task Order Line Item No.: F0032-0001CF101, Tetra Tech START performed the following activities during this assessment:

- Prepared a Sampling and Analysis Plan (SAP) (Tetra Tech 2021a).
- Prepared a Site Health and Safety Plan.
- Conducted written logbook documentation activities in accordance with Tetra Tech Standard Operating Procedure (SOP) No. 024-3, "Recording Notes in Field Logbooks" (Tetra Tech 2020a).
- Collected samples of building material in accordance with the site-specific SAP (Tetra Tech 2021a).
- Reviewed existing analytical data and background information.
- Compared existing and START analytical data to applicable screening levels.

Section 2.0 of this Site Assessment Report discusses the site location and site history; Section 3.0 discusses the field investigation; Section 4.0 discusses the screening levels and evaluates the existing Michigan Department of Environment, Great Lakes, and Energy Remediation and Redevelopment Division (EGLE RRD) and START data; and, Section 5.0 presents conclusions and a conceptual removal action. All references cited in this report are listed in Section 6.0. Site tables are attached following the reference list, and **Appendix A** contains figures. **Appendix B** provides the EGLE request for EPA assistance. A photographic documentation log is provided in **Appendix C**.

2.0 SITE BACKGROUND

This section describes the site location and summarizes its history.

2.1 SITE LOCATION

The site is on the 100 block of 5th Street, between 108 and 120 5th Street in Calumet, Houghton County, Michigan **(Figures 1 and 2 in Appendix A)**. The site consists of five commercial/residential parcels including:

Parcel ID	Lot	Property Address	Property Owner
041-420-145-00	145	Fourth St., Calumet, MI 49913	Josephine Brey
041-108-001-00	1	120 Fifth St., Calumet, MI 49913	Josephine Brey
041-108-002-00	2	112 Fifth St., Calumet, MI 49913	Josephine Brey
041-420-146-00	146	Fourth St., Calumet, MI 49913	Vianis Realty
041-108-003-00	3	108 Fifth St., Calumet, MI 49913	Vianis Realty

The site is bordered to the north by Portland Street, to the east by 4th St., to the west by 5th St., and to the south by a contiguous parcel with a commercial structure. The site consists of fire damaged structures and debris. Surrounding land use includes: commercial (shops, indoor/outdoor dining establishments), residential (apartments in the upper level of the commercial structures), recreational (Agassiz Park), and public housing (Calumet Housing Commission) **(Figure 2 in Appendix A)**.

2.2 SITE HISTORY

Three structures on the parcels were destroyed in a fire that ignited on May 21, 2021. Prior to the fire, land use included a laundromat/dry cleaners with approximately 15 apartments above, a former restaurant (Evergreen Restaurant), and a former tattoo company (Calumet Tattoo Company) as cited in an article from WLUC (local news station) on May 22, 2021 (WLUC 2021). On June 8, 2021, EGLE RRD and Air Quality Division (AQD) personnel performed a visual inspection of the site. Given concerns over potential asbestos-containing materials (ACM) at the site, EGLE AQD collected building material samples from within the fire debris on June 8, 2021. EGLE reported that transite, plaster, vermiculite, flooring, and roofing materials were ACM.

Given the presence of ACM, EGLE concluded that the fire debris posed potential human health risks from inhalation of asbestos. EGLE also indicated trespassers were entering the site to recover salvageable materials. Based on their findings in a June 16, 2021, letter, EGLE requested assistance from the EPA to address the risks posed by the site. The request for assistance letter and EGLE analytical results are included in **Appendix B**.

3.0 FIELD INVESTIGATION

This section summarizes the scope of work and describes the sampling activities conducted during the EPA site assessment.

3.1 SCOPE OF WORK

Fieldwork was conducted in accordance with the START SAP (Tetra Tech 2021a) for the site and the contract Quality Assurance Project Plan (QAPP) (Tetra Tech 2020b).

3.2 SAMPLING ACTIVITIES

START collected 36 bulk suspect ACM samples during the June 28, 2021 sampling event per the site-specific SAP (Tetra Tech 2021a). Sample locations were selected by START personnel familiar with ACM and were biased toward locations that were previously identified by EGLE to contain ACM.

In accordance with the SAP (Tetra Tech 2021a), START used disposable sampling equipment for each sample to prevent potential cross contamination. Samples were placed in individual sealable plastic bags. Each sample bag was labeled with the unique sample identifier, date, and time of sampling. Sampling data—including analyses, collection times, and collection dates—were recorded on laboratory chain-of-custody forms. The samples were submitted under chain-of-custody to Eurofins EMLab P&K Laboratory for analysis of asbestos content by polarized light microscopy (PLM).

All laboratory data were validated and reviewed by START to assist in verification of the existing site information and characterizing the on-site contamination (Tetra Tech 2021b).

4.0 DATA EVALUATION

EGLE and START sample analysis detected friable chrysotile and actinolite asbestos in 20 samples. All samples collected were from the fire debris pile outside in the environment and included transite, flooring, roofing, and plaster. In addition, the observed vermiculite is presumed to be ACM. On-site friable ACM contains up to 30 percent (%) asbestos. START analytical results are depicted on **Figure 3 in Appendix A.** START and EGLE analytical results are presented in **Table 1**.

Photographic documentation of the site highlighting: the presence of ACM proximal to the surrounding commercial, residential, and recreational areas; signs of trespass and salvaging of material from the fire debris; and the presence of open residential windows adjacent to the ACM fire debris is provided in **Appendix C**.

5.0 CONCLUSIONS AND CONCEPTUAL REMOVAL ACTION

5.1 CONCLUSIONS

Removal assessment activities consisted of reviewing EGLE information and START collection of verification building material samples to evaluate the potential for threats to human health and/or the environment.

Based on the site assessment observations and analytical results friable asbestos contamination is present and may pose a threat to the public. This assessment includes:

- Friable asbestos (as high as 30% asbestos) mixed within the fire debris.
- Wind deposition of asbestos into the environment.
- Trespass and salvaging of materials from the asbestos-contaminated fire debris pile.
- Potential underground storage tanks; aboveground storage tanks; drums; compressed gas cylinders; fuel tanks; fire extinguishers; and batteries within the fire debris.

Located immediately around the site are shops, indoor/outdoor dining establishments, residential apartments above those commercial businesses, Agassiz Park, and the Calumet Housing Commission public housing. Although temporarily fenced and signed, the site is accessible to trespassers.

The damaged and friable ACM and ACM with the potential to become friable pose a potential risk to human health related to the inhalation pathway at the site. Given the potential for wind deposition there is also potential exposure of human receptors at adjacent residences and commercial businesses through inhalation of asbestos. Trespass into the fire debris greatly increases the likelihood of human health impacts.

Potential exposure could occur through each of these migration pathways and cause imminent danger to human health. The conditions at the site may present a threat to the public health or welfare, and the environment, and may meet the criteria for a time-critical removal action as provided for in the NCP as outlined in 40 CFR § 300.415(b) and/or 300.317. These criteria include, but are not limited to, the following:

Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants;

Analytical data and background information reviewed during development of this Site Assessment Report documented ACM in fire debris at the site. The asbestos poses an actual or potential exposure to human health including adjacent land users and trespassers.

The toxicological effects of asbestos have been studied by the Agency for Toxic Substances and Disease Registry (ATSDR). According to ATSDR, asbestos is the name given to a group of six different fibrous minerals (amosite, chrysotile, crocidolite, and the fibrous varieties of tremolite, actinolite, and anthophyllite) that occur naturally in the environment. Asbestos minerals have separable long fibers that are strong and flexible enough to be spun and woven and are heat resistant. Because of these characteristics, asbestos has been used for a wide range of manufactured goods, mostly in building materials (roofing shingles, ceiling and floor tiles, paper products, and asbestos cement products), friction products (automobile clutch, brake, and transmission parts), heat-resistant fabrics, packaging, gaskets, and coatings (ATSDR 2001). Asbestos mainly affects the lungs and the membrane that surrounds the lungs. Breathing high levels of asbestos fibers for a long time may result in scar-like tissue in the lungs and in the pleural membrane (lining) that surrounds the lung (ATSDR 2001).

Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released; and,

Asbestos at the site is outdoors in the environment and exposed to the elements. Houghton County averages 32 inches of rain and 200 inches of snow per year. It is expected that weather conditions could further spread the asbestos. Residences and commercial business are located immediately adjacent to the site. The site is located on 5th Street, the man downtown street in the City of Calumet.

The availability of other appropriate federal or state response mechanisms to respond to the release;

EGLE referred the site to EPA Region 5. Neither the property owners nor the State are known to have funding available to address the issues associated with the site. In a June 16, 2021, letter, EGLE requested assistance from the EPA to address the risks posed by the site. **Appendix B** includes a copy of the request letter.

5.2 CONCEPTUAL REMOVAL ACTION

The following provides a conceptualized removal plan to address the primary inhalation concerns associated with the ACM within the fire debris.

The conceptualized removal plan entails addressing a number of hazards at the site through controlled removal and disposal of the fire debris and remaining above ground structure components. **Figure 3 in Appendix A** depicts the estimated horizontal area of debris to be addressed by the conceptual removal action, **Table 2** provides the estimated debris volume, and **Table 3** provides the removal cost estimate.

In support of the removal activities, temporary facilities will be prepared, the perimeter fencing will be maintained, and perimeter air monitoring will be implemented. All debris at the site will be treated, handled, and disposed as ACM as it is not practicable to separate known ACM and suspect ACM, and clean the remaining debris.

An appropriately trained and certified crew will load the debris into haul trucks for transport to the Waste Management landfill in Ontonagon, Michigan, subject to waste disposal acceptance. For cost estimating purposes, it was assumed that 35 cubic yards of debris would be hauled per load, such as in the lead trailer of a gravel train. It was assumed that the debris has an average density of 1,000 pounds per cubic yard following guidance for construction and demolition debris in the Federal Emergency Management Agency's (FEMA's) September 2010 *Debris Estimating Field Guide* (FEMA 2010). The assumption has also been made that no waste will be sent for disposal as hazardous waste.

Before loading, each truck will be lined with plastic sheeting to allow the load to be wrapped to prevent dust generation during transport and unloading. All debris will be wetted prior to and during handling and loading to minimize dust generation. Debris removal will proceed in this manner until all debris has been removed and disposed from the site, including surface piles, remnants of buildings still standing, and from basements.

As debris is removed from the site, remaining concrete surfaces such as slabs and basements will be cleaned to remove debris residuals and asbestos fibers, which may include high efficiency particulate air (HEPA) vacuuming. Ground surfaces will be scraped to remove residuals. Utility disconnection and/or capping as appropriate will be conducted for services to the three buildings. To complete the removal activities, the basements will be backfilled to the ground surface with sand or other appropriate clean, inert material. At the completion of the removal activities, the temporary facilities and perimeter fencing will be removed. The level of expected risk reduction achieved by the conceptualized remedy, expressed as the Removal Action Objectives, is the following:

- Address ACM present at the site to mitigate the potential for wind and water erosion and dispersion of asbestos into the surrounding public residential and commercial area.
- Mitigate physical hazards posed by fire debris and open basement areas.

The condition to be achieved is removal of ACM from the site. Maintenance of backfilled areas and restoration/reuse of the parcels comprising the site will be the responsibility of the respective parcel owner(s).

6.0 REFERENCES

Agency for Toxic Substances & Disease Registry (ATSDR). 2001. Toxic Substances Portal. "ToxFAQs for Asbestos." September. https://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=29&tid=4.

Federal Emergency Management Agency (FEMA). 2010. Debris Estimating Field Guide. September.

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Tetra Tech. 2020b. Quality Assurance Project Plan, Superfund Technical Assessment and Response Team (START V), Revision 2, U.S. Environmental Protection Agency Region 5, Solicitation No. 68-HE-0519-D0005. August.

Tetra Tech. 2021a. Sampling and Analysis Plan (SAP) Revision 0 (Document Tracking Number 0738). June.

Tetra Tech. 2021b. Data Validation Report (Document Tracking Number 0761). July.

WLUC. 2021. "Large fire destroys most of downtown Calumet block." May 22. https://www.uppermichiganssource.com/2021/05/22/large-fire-in-downtown-calumet/

TABLES

1 SUMMARY OF BULK ASBESTOS ANALYTICAL RESULTS
2 FIRE DEBRIS VOLUME ESTIMATE
3 CONCEPTUAL FIRE DEBRIS REMOVAL COST ESTIMATE

TABLE 1
SUMMARY OF BULK ASBESTOS ANALYTICAL RESULTS
5th ST. CALUMET FIRE SITE - RS
CALUMET, MICHIGAN

Sample Location	Field Sample ID	Sample Date	Asbestos	Note	Sample Description
C1	C1	6/8/2021	ND		White, nonfibrous, homogenous, plaster, finish coat
C1	C1	6/8/2021	2 %	CHRYSOTILE	Grey fibrous, homogenous, base coat
C2	C2	6/8/2021	30 %	CHRYSOTILE	Beige, fibrous, homogenous, vinyl floor tile
C3	C3	6/8/2021	ND		Grey, fibrous, homogenous, insulation board
C4	C4	6/8/2021	ND		White, nonfibrous, homogenous, plaster, finish coat
C4	C4	6/8/2021	2 %	CHRYSOTILE	Grey, fibrous, homogenous, base coat
C5	C5	6/8/2021	2 %	CHRYSOTILE	Black, fibrous, nonhomogenous, roofing material
C6	C6	6/8/2021	ND		Beige, nonfibrous, homogenous, cement 1
C6	C6	6/8/2021	ND		Grey, nonfibrous, homogenous, cement 2
C7	C7	6/8/2021	ND		Beige, fibrous, homogenous, plaster
C8	C8	6/8/2021	ND		Black, fibrous, homogenous, asphalt felt roofing
C9	C9	6/8/2021	ND		Beige, nonfibrous, homogenous, unknown material
C20	C10	6/8/2021	ND		Black, fibrous, homogenous, asphalt siding
C11	C11	6/8/2021	ND		Grey, fibrous, nonhomogenous, wallboard
C12	C12	6/8/2021	ND		White, nonfibrous, homogenous, plaster, finish coat
C12	C12	6/8/2021	ND		Beige, fibrous, homogenous, base coat
C13	C13	6/8/2021	ND		White, nonfibrous, homogenous, cement/plaster
C13	C13	6/8/2021	ND		Beige, nonfibrous, homogenous, cement/plaster
C14	C14	6/8/2021	2 %	ACTINOLITE	Brown, fibrous, homogenous, vermiculite
C15	C15	6/8/2021	ND		White, nonfibrous, homogenous, plaster, finish coat
C15	C15	6/8/2021	2 %	CHRYSOTILE	Grey, fibrous, homogenous, base coat
C16	C16	6/8/2021	ND		Beige, fibrous, homogenous, unknown material
C17	C17	6/8/2021	2 %	CHRYSOTILE	Beige, fibrous, homogenous, plaster F, metal mesh
C18	C18	6/8/2021	ND		Beige, fibrous, homogenous, plaster
C19	C19	6/8/2021	15 %	CHRYSOTILE	Grey, fibrous, homogenous, transite
C20	C20	6/8/2021	ND		Brown, fibrous, homogenous, juke
C21	C21	6/8/2021	ND		Beige, fibrous, nonhomogenous, drywall
C22	C22	6/8/2021	ND		Beige, fibrous, homogenous, unknown
C23	C23	6/8/2021	ND		Black, fibrous, homogenous, felt
C24	C24	6/8/2021	5 %	CHRYSOTILE	Brown, fibrous, homogenous, vinyl tile, FT
C24	C24	6/8/2021	ND		Black, nonfibrous, homogenous, mastic
C25	C25	6/8/2021	ND		Brown, fibrous, homogenous, roofing material
C26	C26	6/8/2021	15 %	CHRYSOTILE	Grey, fibrous, homogenous, transite
C27	C27	6/8/2021	ND		Beige, fibrous, homogenous, vermiculite
CF-ACM-01	CF-ACM-01A-062821	6/28/2021	ND		Black roofing shingle, grey, pebbles
	CF-ACM-01B-062821	6/28/2021	ND		Black roofing shingle, grey, pebbles
CF-ACM-02	CF-ACM-02A-062821	6/28/2021	4 %	CHRYSOTILE	Brown floor tile
	CF-ACM-02A-062821	6/28/2021	ND		Black mastic
	CF-ACM-02A-062821	6/28/2021	ND		Black felt
	CF-ACM-02A-062821	6/28/2021	ND		Brown mastic
	CF-ACM-02A-062821	6/28/2021	ND		Black fiberboard
	CF-ACM-02B-062821	6/28/2021	NA		Not analyzed due to prior positive series
CF-ACM-03	CF-ACM-03A-062821	6/28/2021	<1 %	CHRYSOTILE	Light gray plaster, silver metal mesh
	CF-ACM-03B-062821	6/28/2021	<1 %	CHRYSOTILE	Light gray plaster
CF-ACM-04	CF-ACM-04A-062821	6/28/2021	ND		Black roofing shingle, black pebbles
	CF-ACM-04B-062821	6/28/2021	ND		Black roofing shingle, black pebbles

TABLE 1
SUMMARY OF BULK ASBESTOS ANALYTICAL RESULTS
5th ST. CALUMET FIRE SITE - RS
CALUMET, MICHIGAN

Sample Location	Field Sample ID	Sample Date	Asbestos	Note	Sample Description
CF-ACM-05	CF-ACM-05A-062821	6/28/2021	ND		Black felt
	CF-ACM-05B-062821	6/28/2021	ND		Black felt
CF-ACM-06	CF-ACM-06A-062821	6/28/2021	**12 %**	CHRYSOTILE	Light brown sheet flooring with fibrous backing, yellow mastic (trace)
	CF-ACM-06B-062821	6/28/2021	NA		Not analyzed due to prior positive series
CF-ACM-07	CF-ACM-07A-062821	6/28/2021	<1 %	ACTINOLITE	Brown vermiculite insulation
	CF-ACM-07B-062821	6/28/2021	<1 %	ACTINOLITE	Brown vermiculite insulation
CF-ACM-08	CF-ACM-08A-062821	6/28/2021	ND		Black felt
	CF-ACM-08A-062821	6/28/2021	ND		Black tar
	CF-ACM-08A-062821	6/28/2021	ND		Black felt
	CF-ACM-08B-062821	6/28/2021	ND		Black felt
	CF-ACM-08B-062821	6/28/2021	ND		Black tar
	CF-ACM-08B-062821	6/28/2021	ND		Black felt
CF-ACM-09	CF-ACM-09A-062821	6/28/2021	**15 %**	CHRYSOTILE	Gray transite, brown paint
	CF-ACM-09B-062821	6/28/2021	NA		Not analyzed due to prior positive series
CF-ACM-10	CF-ACM-10A-062821	6/28/2021	**15 %**	CHRYSOTILE	Gray transite
	CF-ACM-10B-062821	6/28/2021	NA		Not analyzed due to prior positive series
CF-ACM-11	CF-ACM-11A-062821	6/28/2021	ND		Black roofing shingle, red pebbles
	CF-ACM-11B-062821	6/28/2021	ND		Black roofing shingle, red pebbles
CF-ACM-12	CF-ACM-12A-062821	6/28/2021	ND		Red sheet flooring with fibrous backing
	CF-ACM-12B-062821	6/28/2021	ND		Red sheet flooring with fibrous backing
CF-ACM-13	CF-ACM-13A-062821	6/28/2021	ND		Black tar, green pebbles
	CF-ACM-13A-062821	6/28/2021	ND		Black felt
	CF-ACM-13B-062821	6/28/2021	ND		Black tar, green pebbles
	CF-ACM-13B-062821	6/28/2021	ND		Black felt
CF-ACM-14	CF-ACM-14A-062821	6/28/2021	ND		Gray plaster, white fibrous material mesh
	CF-ACM-14B-062821	6/28/2021	ND		Gray plaster, white fibrous material mesh
CF-ACM-15	CF-ACM-15A-062821	6/28/2021	ND		White drywall with brown paper
	CF-ACM-15B-062821	6/28/2021	ND		White drywall with brown paper
CF-ACM-16	CF-ACM-16A-062821	6/28/2021	ND		Light brown fiberboard
	CF-ACM-16B-062821	6/28/2021	ND		Light brown fiberboard
CF-ACM-17	CF-ACM-17A-062821	6/28/2021	ND		Black roofing shingle, red pebbles
	CF-ACM-17B-062821	6/28/2021	ND		Black roofing shingle, red pebbles
CF-ACM-18	CF-ACM-18A-062821	6/28/2021	<1 %	CHRYSOTILE	White plaster with paint
	CF-ACM-18A-062821	6/28/2021	ND		Black felt
	CF-ACM-18B-062821	6/28/2021	<1 %	CHRYSOTILE	White plaster with paint
	CF-ACM-18B-062821	6/28/2021	ND		Black felt

ND = Not detected
NA = Not analyzed
Asbestos Detected.

TABLE 2
FIRE DEBRIS VOLUME ESTIMATE
5th ST. CALUMET FIRE SITE - RS
CALUMET, MICHIGAN

Area	Quantity	Units	Notes
Estimated area of basements =	15,500	sqft	Assumes all buildings had basements, measured from aerial imagery
Estimated depth of basements =	10	ft	Assumed 10-foot deep basement depths
Estimated volume of basements =	155,000	cuft	
Estimated area of main rubble pile =	9,700	sqft	Pile around perimeter of rubble area. Center appeared to mainly be in the basements, or would be once the floors collapse.
Estimated average height of main rubble pile =	6	ft	Height visually estimated to range from 4 to 10 feet
Estimated volume of main rubble pile =	58200	cuft	Assumed no sloping of pile sides
Estimated area of pile in SE corner =	1600	sqft	Visual estimate of diameter
Estimated height of pile in SE corner =	8	ft	Visual estimate of height
Estimated volume of pile in SE corner	4240	cuft	
Total estimated volume =	**217,440**	**cuft**	
	8,053	**CY**	

Cross check using FEMA *Debris Estimating Field Guide* (Sept. 2010):

Volume of three buildings =	465,000	cuft	Estimated cuft of buildings before fire, 3 stories tall (15,500 sqft x 30 ft tall)
	5,683	CY	Estimated volume of debris from the FEMA General Building Formula (building volume x 0.33)
	9,300	CY	Estimated volume of debris from the FEMA Single Family Residence Formula (area x number stories x 0.2)

Notes:
cuft = cubic feet
CY = cubic yards
sqft = square feet

TABLE 3
CONCEPTUAL FIRE DEBRIS REMOVAL COST ESTIMATE
5th ST. CALUMET FIRE SITE - RS
CALUMET, MICHIGAN

Item	Unit	Unit Rate	Quantity	Cost	Description/Assumptions
Mobilization/Demobilization/Admin/Fixed Expenses	Each	$ 26,000	1	$ 26,000	Assumes regional contractors
Transportation and Disposal	Ton	$ 170	4000	$ 680,000	Assumes friable asbestos disposal, 1/2 ton per cubic yard
Asbestos Abatement Crew Support	Day	$ 4,000	20	$ 80,000	Crew to line trucks and clean surfaces to remain, and an equipment operator
Contractor Support	Day	$ 2,300	20	$ 46,000	Wetting, loading, management
Equipment and Materials	Day	$ 2,500	20	$ 50,000	Excavator, loader, truck lining materials, water
1% LARA Asbestos Project Fee	Percent	1%	882,000	$ 8,820	
Utility disconnection/capping	Lump Sum	$ 10,000	1	$ 10,000	Assumed value
Backfill Basements	Ton	$ 13	8,610	$ 111,930	5,740 cubic yards of backfill sand, assumed 1.5 tons per cubic yard
		Total estimated cost =		**$1,012,750**	

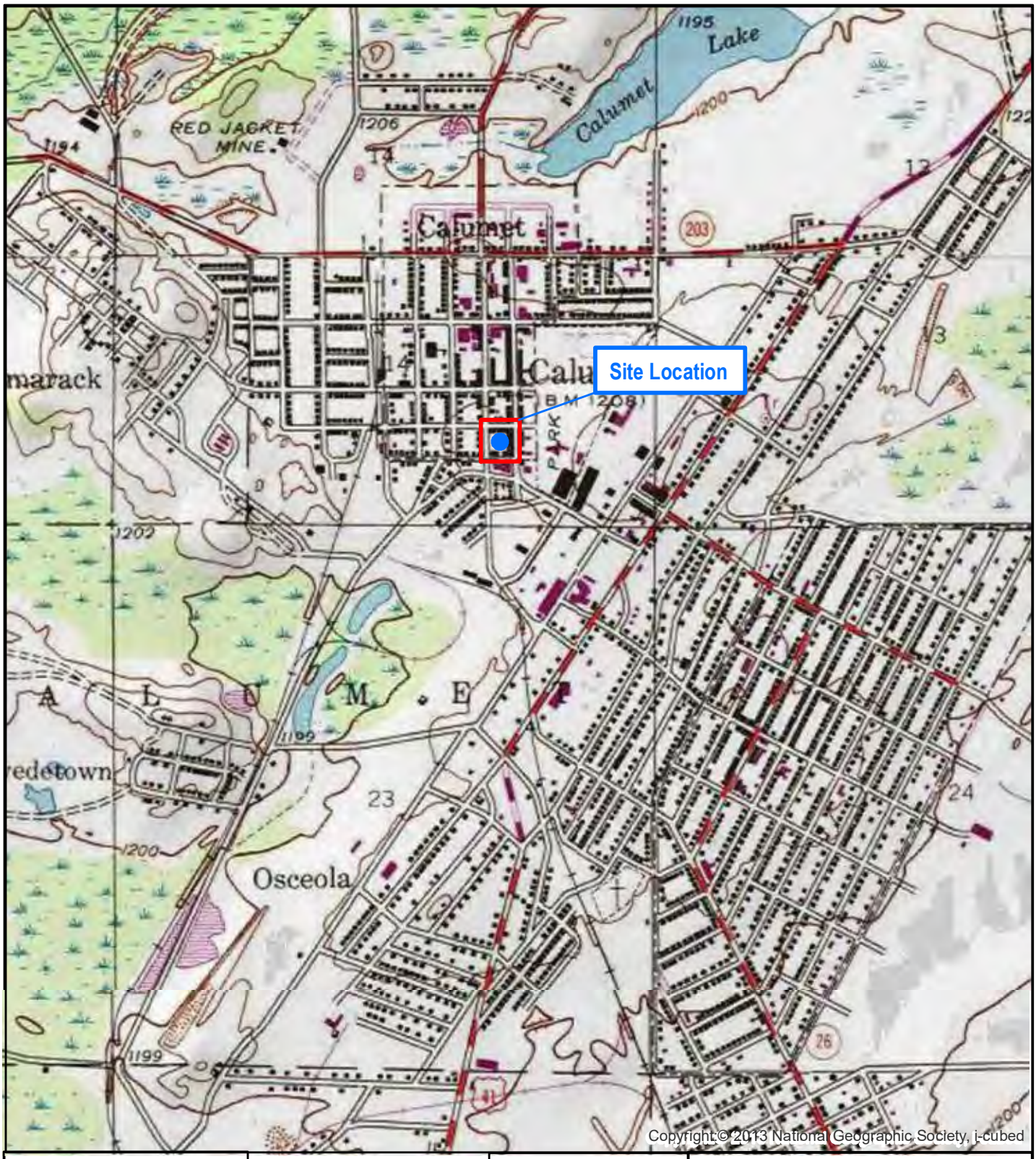
General Assumptions:

- 10 hour work days, landfill is open 8 hours/day
- 5 day work weeks due to landfill hours
- Air monitoring is not included in the above contractor cost estimate

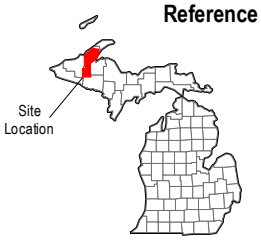
APPENDIX A

FIGURES

1 – PROJECT LOCATION
2 – SITE LAYOUT MAP
3 – SAMPLE LOCATION MAP



Reference Map



Legend

Approximate Site Boundary

Source: USGS 7.5 Minute Topographic Quadrangle Map: Laurium, MI 2020

N

0 2,000

Feet

5th St. Calumet Fire Site - RS
Calumet, Michigan

Figure 1

Project Location

TETRA TECH

Prepared For: US EPA

Prepared By: Tetra Tech

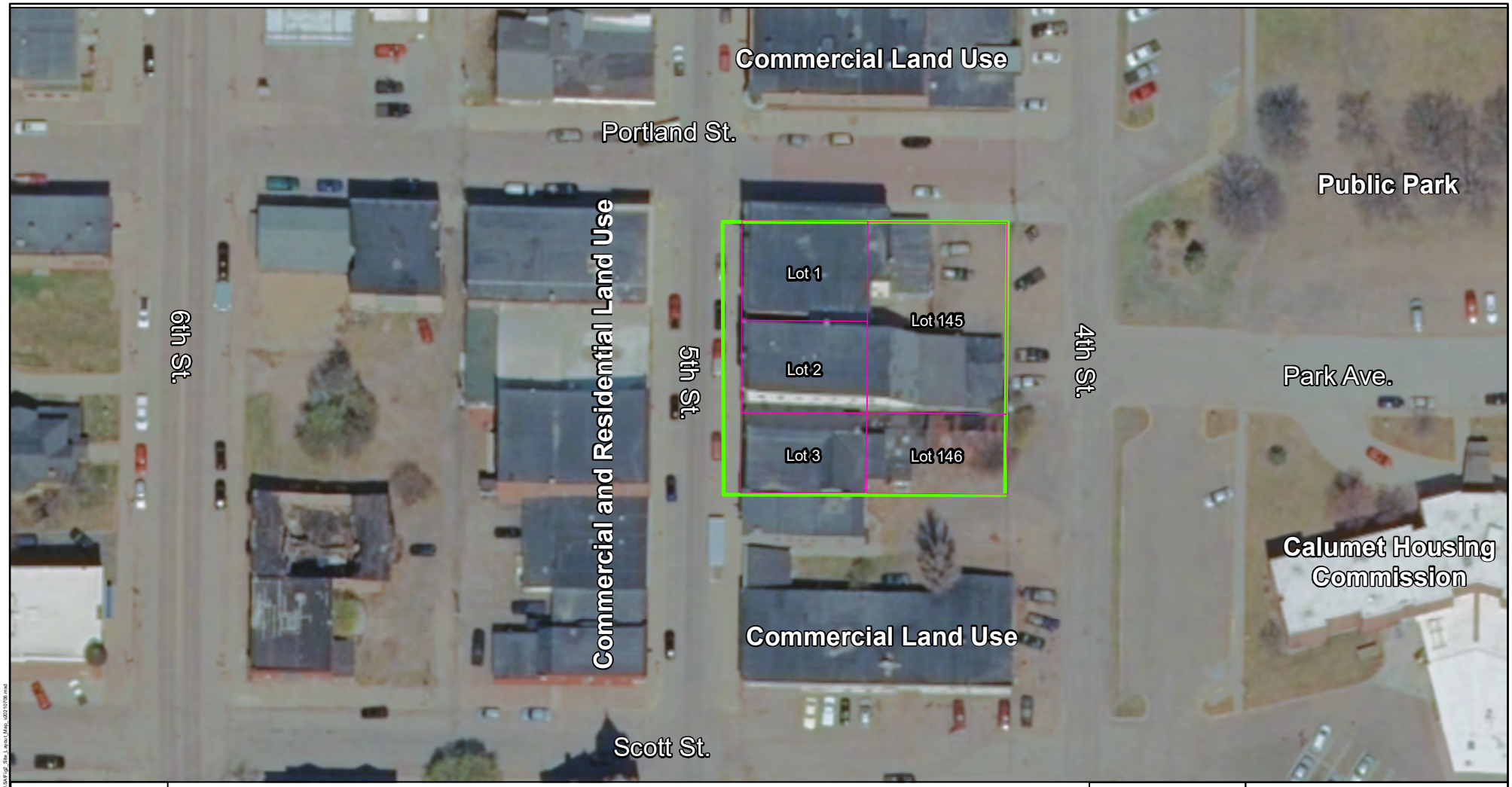
Path: W:\Projects\Projects P-T\T1130150\ENGAPPS\GIS\mxds\SAP\T1130150_Figure1_Project_Location_v20210623.mxd

Date Saved: 6/23/2021 3:31:41 PM

EPA Contract No.: 68HE0519D0005

TO/TOLIN: F0032-0001CF101

Coordinate System: GCS WGS 1984
Datum: WGS 1984
Units: Degree



Reference Map

Legend

Approximate Lot Boundary

Approximate Site Boundary

Notes:
Historic land use and/or operations refer to noted years on available Sanborn Maps.

Source: Michigan Imagery Solution (Houghton - 2018)

N

0 50

Feet

1 inch = 50 feet

5th St. Calumet Fire Site - RS
Calumet, Michigan

Figure 2
Site Layout Map

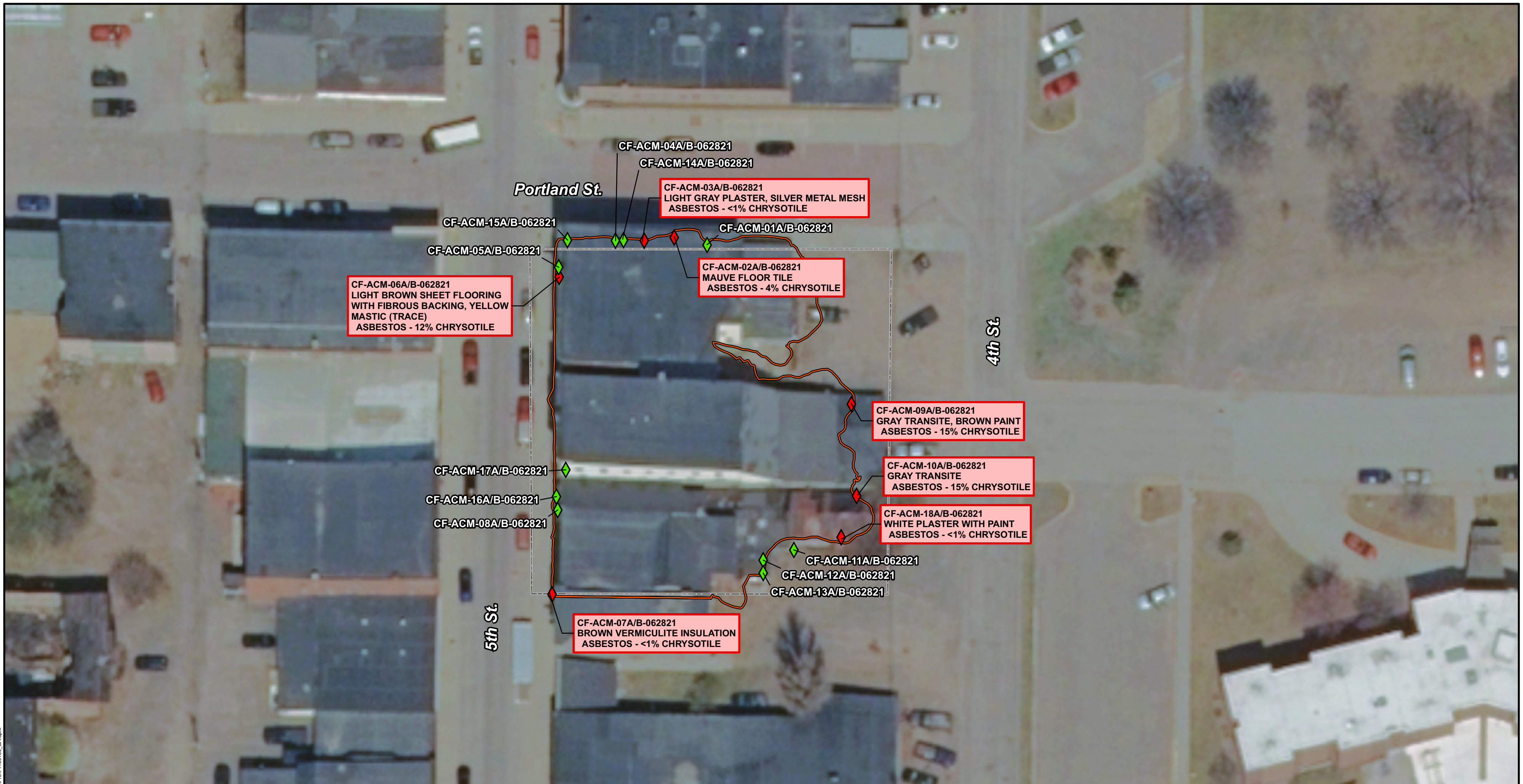
TETRA TECH

Prepared For: USEPA | Prepared By: Tetra Tech

Date Saved: 7/6/2021

EPA Contract No.: 68-HE-0519-D0005

TOLIN No.: 0001CF101



- Sample with Asbestos Detected
- Sample with Asbestos Not Detected
- Approximate Site Boundary
- Approximate Extent of Debris Pile

N

0 40

Feet

5th St. Calumet Fire Site - RS
Calumet, Michigan

Figure 3

Sample Location Map

TETRA TECH

Prepared For: USEPA | Prepared By: Tetra Tech

Corrdinate System: NAD 1983 StatePlane Michigan North FIPS 2111 Feet Intl

Source: Michigan Imagery Solution (Houghton - 2018)

File Path: W:\Projects\Projects P-T\T1130150\ENGAPPS\GIS\mxds\SA\Pro\T1130150_SA.aprx

Date Saved: 07/21/21

EPA Contract No.: 68-HE-0519-D0005

TOLIN No.: 0001CF101

APPENDIX B

EGLE REQUEST FOR EPA ASSISTANCE AT THE 5th ST. CALUMET FIRE SITE - RS

GRETCHEN WHITMER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
MARQUETTE DISTRICT OFFICE

LIESL EICHLER CLARK
DIRECTOR

June 16, 2021

Mr. Brian Kelly
U.S. Environmental Protection Agency Region V
Emergency Response Branch
2565 Plymouth Road
Ann Arbor, Michigan 48105

Dear Mr. Kelly:

SUBJECT: 5th Street Calumet Fire Site
Request for Assistance
Calumet, Houghton County

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) Remediation and Redevelopment Division (RRD) is seeking the U.S. Environmental Protection Agency (EPA) Emergency Response Branch (ERB) assistance to address waste piles with friable asbestos containing building materials (ACM) resulting from a large fire of three historic structures on the main street of Calumet on May 21, 2021.

The 5th St. Calumet Fire Site (Site) is located at 108-120 5th Street in the Village of Calumet in Houghton County. The three structures were constructed in the early 1900s and used for commercial and residential purposes including a bakery, restaurant, laundromat, defunct dry cleaners and apartment complexes. The area affected by the fire comprises over half of the first city block of the historic downtown commercial and residential district of Calumet. The Site is located adjacent to shopping and indoor/outdoor dining establishments, a public park, various businesses with apartments in the upper levels, and Park Avenue low income and senior housing complex. Additionally, seasonal tourism greatly increases the population residing in or visiting the area, increasing the potential incidence of exposure. It has been reported by Village personnel that despite the fencing installed along the perimeter to restrict access, the Site is subject to nightly trespassing by scavengers who are scrapping metals and collecting other belongings and valuables.

The EGLE RRD and Air Quality Division (AQD) performed a visual inspection of the Site on June 8, 2021 and AQD collected samples of suspected ACM for laboratory analysis. The laboratory analytical report dated 6/14/2021 confirms the presence of friable ACM (Attachment A). The Fire Department is currently mitigating the potential risk of asbestos release to ambient air by watering the debris piles periodically, taking into account weather conditions (i.e. high temperatures, rainfall and wind), however this effort is not sustainable in the long run. The local units of government are making every effort within their means to

keep the debris hydrated, prevent direct public access to the Site, and are moving to condemn the properties.

The three buildings were owned by two private property owners, neither of which had the structures insured at the time of the fire. This has been verified by talking with the insurance agent.

EGLE RRD does not have the resources necessary to address the ACM fire debris at the 5th St. Calumet Fire Site. Due to the imminent threat to public health from exposure to the wastes, including friable asbestos, in burned debris piles in the heart of the historic downtown commercial and residential district of Calumet, EGLE is requesting assistance from the EPA ERB.

Please let us know if the EPA ERB can be of help. If you have any questions, please contact Ms. Amy Keranen, Project Manager, at EGLE RRD, 55195 U.S. 41, Calumet, Michigan 49913, at keranena@michigan.gov, or 906-337-0389.

Sincerely,

Christopher Austin, Acting District Supervisor
Remediation and Redevelopment Division
Upper Peninsula District Office
906-235-8039

Attachments
Analytical Report

cc: Mr. James Gamble, EGLE
Ms. Amy Keranen, EGLE

Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)

Project : Calumet Fire

Report To:
Mr. Joseph Scanlan
EGLE
1504 West Washington St.
Marquette, MI 49855

ARI Report # 21-94687
Date Collected: 06/08/21
Date Received: 06/14/21
Date Analyzed: 06/14/21
Date Reported: 06/14/21

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 94687 - 01 Cust. #: C1 Material: Plaster/Finish Coat Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 94687 - 01a Cust. #: C1 Material: Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **YES** Chrysotile - 2%	Other - 98%
Lab ID #: 94687 - 02 Cust. #: C2 Material: Vinyl Floor Tile Location: Appearance: beige,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **YES** Chrysotile - 30%	Cellulose - 5% Other - 65%

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)

Project : Calumet Fire

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Date Reported: 06/14/21

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 94687 - 03 Cust. #: C3 Material: Insulation Board Location: Appearance: grey,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 40% Mineral Wool - 5% Fiberglass - 25% Other - 30%
Lab ID #: 94687 - 04 Cust. #: C4 Material: Plaster/Finish Coat Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 94687 - 04a Cust. #: C4 Material: Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **YES** Chrysotile - 2%	Other - 98%

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Date Reported: 06/14/21

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 94687 - 05 Cust. #: C5 Material: Roofing Material Location: Appearance: black,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **YES** Chrysotile - 2%	Cellulose - 25% Other - 73%
Lab ID #: 94687 - 06 Cust. #: C6 Material: Cement 1 Location: Appearance: beige,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 94687 - 06a Cust. #: C6 Material: Cement 2 Location: Appearance: grey,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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Date Analyzed: 06/14/21
Date Reported: 06/14/21

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 94687 - 07 Cust. #: C7 Material: Plaster Location: Appearance: beige,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 5% Other - 95%
Lab ID #: 94687 - 08 Cust. #: C8 Material: Asphalt Felt Roofing Location: Appearance: black,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 50% Other - 50%
Lab ID #: 94687 - 09 Cust. #: C9 Material: Unknown Material Location: Appearance: beige,nonfibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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Date Reported: 06/14/21

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 94687 - 10 Cust. #: C10 Material: Asphalt Siding Location: Appearance: black,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 20% Other - 80%
Lab ID #: 94687 - 11 Cust. #: C11 Material: Wallboard Location: Appearance: grey,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Fiberglass - 15% Other - 85%
Lab ID #: 94687 - 12 Cust. #: C12 Material: Plaster/Finish Coat Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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Date Reported: 06/14/21

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 94687 - 12a Cust. #: C12 Material: Base Coat Location: Appearance: beige,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Hair - 2% Other - 98%
Lab ID #: 94687 - 13 Cust. #: C13 Material: Cement/Plaster-White Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 94687 - 13a Cust. #: C13 Material: Cement/Plaster-Beige Location: Appearance: beige,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%

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Date Received: 06/14/21
Date Analyzed: 06/14/21
Date Reported: 06/14/21

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 94687 - 14 Cust. #: C14 Material: Vermiculite Location: Appearance: brown,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **YES** Actinolite - 2%	Fiberglass - 5% Vermiculite - 88% Other - 5%
Lab ID #: 94687 - 15 Cust. #: C15 Material: Plaster/Finish Coat Location: Appearance: white,nonfibrous,homogenous Layer: 1 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 94687 - 15a Cust. #: C15 Material: Base Coat Location: Appearance: grey,fibrous,homogenous Layer: 2 of 2	Asbestos Present: **YES** Chrysotile - 2%	Hair - 2% Other - 96%

For Layered Samples, each component will be analyzed and reported separately.

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Date Reported: 06/14/21

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 94687 - 16 Cust. #: C16 Material: Unknown Material Location: Appearance: beige,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Mineral Wool - 90% Other - 10%
Lab ID #: 94687 - 17 Cust. #: C17 Material: Plaster F/Metal Mesh Location: Appearance: beige,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **YES** Chrysotile - 2%	Other - 98%
Lab ID #: 94687 - 18 Cust. #: C18 Material: Plaster Location: Appearance: beige,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 5% Other - 95%

For Layered Samples, each component will be analyzed and reported separately.

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Date Analyzed: 06/14/21
Date Reported: 06/14/21

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 94687 - 19 Cust. #: C19 Material: Transite Location: Appearance: grey,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **YES** Chrysotile - 15%	Other - 85%
Lab ID #: 94687 - 20 Cust. #: C20 Material: Juke Location: Appearance: brown,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 90% Other - 10%
Lab ID #: 94687 - 21 Cust. #: C21 Material: Drywall Location: Appearance: beige,fibrous,nonhomogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 20% Other - 80%

For Layered Samples, each component will be analyzed and reported separately.

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Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 94687 - 22 Cust. #: C22 Material: Unknown Location: Appearance: beige,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 90% Other - 10%
Lab ID #: 94687 - 23 Cust. #: C23 Material: Felt Location: Appearance: black,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 50% Other - 50%
Lab ID #: 94687 - 24 Cust. #: C24 Material: Vinyl Tile/FT Location: Appearance: brown,fibrous,homogenous Layer: 1 of 2	Asbestos Present: **YES** Chrysotile - 5%	Other - 95%

For Layered Samples, each component will be analyzed and reported separately.

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Date Reported: 06/14/21

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 94687 - 24a Cust. #: C24 Material: Mastic Location: Appearance: black,nonfibrous,homogenous Layer: 2 of 2	Asbestos Present: **NO** No Asbestos Observed	Other - 100%
Lab ID #: 94687 - 25 Cust. #: C25 Material: Roofing Material Location: Appearance: brown,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Cellulose - 90% Other - 10%
Lab ID #: 94687 - 26 Cust. #: C26 Material: Transite Location: Appearance: grey,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **YES** Chrysotile - 15%	Other - 85%

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Date Analyzed: 06/14/21
Date Reported: 06/14/21

Sample Information	Asbestos Type/Percent	Non-Asbestos Material
Lab ID #: 94687 - 27 Cust. #: C27 Material: Vermiculite Location: Appearance: beige,fibrous,homogenous Layer: 1 of 1	Asbestos Present: **NO** No Asbestos Observed	Hair - 2% Other - 98%
Lab ID #: Cust. #: Material: Location: Appearance: Layer: of	Asbestos Present:	
Lab ID #: Cust. #: Material: Location: Appearance: Layer: of	Asbestos Present:	

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Apex # **94687**

APEX Research, Inc.

Hi Tech Drive, Whitmore Lake, MI 48189. Phone: (734) 449 - 9990, Fax (734) 449 - 9991 www.ApexMI.com

Customer Name: EGLE Asbestos Program
Address: 1504 West Washington Street
City, St., Zip: Marquette, MI 49855
Phone: 906-458-6405 Fax: _____
Turn Around Time: (*circle one*) ***Terms and conditions on the other side.

Date of Survey: 6/8/2021
Project: Calumet Fire
Project # _____
Contact Person: Joseph Scanlan
Email: scanlanj@michigan.gov
Circle analyses required, indicate type and quantity

Lab Use Only
Log-In: ____
Report: ____
Fax: ____
Verbal: ____
Email: ____

Rush 24 hour **Asbestos:** Bulk All Wipe _____ [redacted] PCM _____
48 hour 72 hour **Lead / Cad / Chrome:** Wipe **ASTM E1792?** circle YES or NO____ Air _____ Paint _____ Bulk____
Other:_____ TTP yes / no **Mold:** Bulk _____ Air/Zefon/AlergencoD _____ BioSIS _____ Tape _____
Samples received after 3pm logged in next morning (Test Till Positive) **TEM:** Bulk/NOB _____ NIOSH 7402____ EPA Level II _____ Other ___

Lab ID	Customer ID #	Material/Location	Volume	Area	Results
	C1	Plaster			
	C2	Vinyl floor tile			
	C3	Insulation board			
	C4	Plaster			
	C5	Roofing material			
	C6	cement			
	C7	Plaster			
	C8	Asphalt felt Roofing			
	C9	unknown material			
	C10	Asphalt siding			
	C11	wallboard			
	C12	plaster 2 layers			

Relinquished By: J. Scanlan
Date: 6/9/2021
Revision R5 Date: Nov/2017

Received By: [signature]
Time/Date: _____

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JUN 14 2021
APEX RESEARCH

Relinquished By: _____
Date: _____

Received By: _____
Time/Date: _____

Apex # **94687** Page **2**

APEX Research, Inc.

)54 Hi Tech Drive, Whitmore Lake, MI 48189. Phone: (734) 449 - 9990, Fax (734) 449 - 9991 www.ApexMI.com

Customer Name: EGLE Asbestos Program
Address: 1504 West Washington St
City, St., Zip: Marquette, MI 49855
Phone: 906-458-6405 Fax: _____
Turn Around Time: (*circle one*) ***Terms and conditions on the other side.

Date of Survey: 6/8/2021
Project: Calumet Fire
Project # _____
Contact Person: Joseph Scanlan
Email: scanlanj@michigan.gov
Circle analyses required, indicate type and quantity

Lab Use Only
Log-In: ____
Report: ____
Fax: ____
Verbal: ____
Email: ____

(Rush) 24 hour **Asbestos:** (Bulk) All Wipe ____ Point Count ____ PCM ____
48 hour 72 hour **Lead / Cad / Chrome:** Wipe **ASTM E1792?** circle YES or NO____ Air ____ Paint ____ Bulk____
Other:____ TTP yes / no **Mold:** Bulk ____ Air/Zefon/AlergencoD ____ BioSIS ____ Tape ____
Samples received after 3pm logged in next morning (Test Till Positive) **TEM:** Bulk/NOB ____ NIOSH 7402____ EPA Level II ____ Other ___

Lab ID	Customer ID #	Material/Location	Volume	Area	Results
	C13	cement/plaster			
	C14	vermiculite			
	C15	plaster			
	C16	unknown material			
	C17	plaster f/metal mesh			
	C18	plaster			
	C19	transite			
	C20	juke			
	C21	drywall			
	C22	unknown			
	C23	felt			
	C24	vinyl tile			

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JUN 14 2021
APEX RESEARCH

Relinquished By: J. Scanlan
Date: 6/9/2021
Received By: _____
Time/Date: _____
Relinquished By: _____
Date: _____
Received By: _____
Time/Date: _____

Apex # **94687** Page **3**

APEX Research, Inc.

1054 Hi Tech Drive, Whitmore Lake, MI 48189. Phone: (734) 449 - 9990, Fax (734) 449 - 9991 www.ApexMI.com

Customer Name: FGLF Asbestos Program
Address: 1504 West Washington St
City, St., Zip: Marquette, MI 49855
Phone: 906-458-6405 Fax: _____
Turn Around Time: (*circle one*) ***Terms and conditions on the other side.

Date of Survey: 6/8/2021
Project: Calumet Fire
Project # _____
Contact Person: Joseph Scanlan
Email: scanlanj@michigan.gov
Circle analyses required, indicate type and quantity

Lab Use Only
Log-In: ____
Report: ____
Fax: ____
Verbal: ____
Email: ____

(Rush) 24 hour 48 hour 72 hour Other: _____
TTP yes / no (Test Till Positive)
Samples received after 3pm logged in next morning

Asbestos: (Bulk) All Wipe ____ Point Count ____ PCM ____
Lead / Cad / Chrome: Wipe **ASTM E1792?** circle YES or NO____ Air ____ Paint ____ Bulk____
Mold: Bulk ____ Air/Zefon/AlergencoD ____ BioSIS ____ Tape ____
TEM: Bulk/NOB ____ NIOSH 7402____ EPA Level II ____ Other ___

Lab ID	Customer ID #	Material/Location	Volume	Area	Results
	C25	Roofing material			
	C26	transite			

RECEIVED
JUN 14 2021
APEX RESEARCH

Relinquished By: J. Scanlan
Date: 6/9/2021
Received By: _____
Time/Date: _____
Relinquished By: _____
Date: _____
Received By: _____
Time/Date: _____

Revision R5 Date: Nov/2017

APPENDIX C

PHOTOGRAPHIC DOCUMENTATION LOG

Photographic Documentation

Client: U.S. Environmental Protection Agency, Emergency Response Branch, Region 5
Site Name: 5th St. Calumet Fire Site - RS Site
Location: Calumet, Houghton County, Michigan

Prepared by: Danielle Pilarski
TO-TOLIN Number: F0032-0001CF101
Dates: 6/28/2021

Photograph No. 1 **Date:** 6/28/2021 **Description:** View looking north-northeast along 5th Street at the location of the 5th St. Calumet Fire Site - RS (red arrow) adjacent to a busy commercial district that includes restaurants, a coffee shop, gift shops, and residential apartments.	
Photograph No. 2 **Date:** 6/28/2021 **Description:** View looking southeast from the intersection of 4th Street and Portland Street at the senior citizen housing facility located southeast of the 5th St. Calumet Fire Site - RS.	

Photographic Documentation

Client: U.S. Environmental Protection Agency, Emergency Response Branch, Region 5
Site Name: 5th St. Calumet Fire Site - RS Site
Location: Calumet, Houghton County, Michigan

Prepared by: Danielle Pilarski
TO-TOLIN Number: F0032-0001CF101
Dates: 6/28/2021

Photograph No. 3 **Date:** 6/28/2021 **Description:** View looking east from the intersection of 4th Street and Portland Street to the public park, located east of the 5th St. Calumet Fire Site - RS.	
Photograph No. 4 **Date:** 6/28/2021 **Description:** View looking west across the debris piles toward residential apartments located above commercial businesses. Note the air conditioning unit and box fan (red arrows) in open windows of residential apartments.	

Photographic Documentation

Client: U.S. Environmental Protection Agency, Emergency Response Branch, Region 5
Site Name: 5th St. Calumet Fire Site - RS Site
Location: Calumet, Houghton County, Michigan

Prepared by: Danielle Pilarski
TO-TOLIN Number: F0032-0001CF101
Dates: 6/28/2021

Photograph No. 5 **Date:** 6/28/2021 **Description:** View looking northwest across the debris piles at the 5th St. Calumet Fire Site - RS.	
Photograph No. 6 **Date:** 6/28/2021 **Description:** View looking southeast at a collapsing structure located within the debris piles at the 5th St. Calumet Fire Site - RS.	

Photographic Documentation

Client: U.S. Environmental Protection Agency, Emergency Response Branch, Region 5
Site Name: 5th St. Calumet Fire Site - RS Site
Location: Calumet, Houghton County, Michigan

Prepared by: Danielle Pilarski
TO-TOLIN Number: F0032-0001CF101
Dates: 6/28/2021

Photograph No. 7 **Date:** 6/28/2021 **Description:** View looking north at piles of vermiculite insulation (red arrows) along the sidewalk at the 5th St. Calumet Fire Site - RS.	
Photograph No. 8 **Date:** 6/28/2021 **Description:** View of asbestos-containing mauve colored floor tiles (red arrow) within the fire debris, sampled as CF-ACM-02A/B-062821 at the 5th St. Calumet Fire Site - RS.	

Photographic Documentation

Client: U.S. Environmental Protection Agency, Emergency Response Branch, Region 5
Site Name: 5th St. Calumet Fire Site - RS Site
Location: Calumet, Houghton County, Michigan

Prepared by: Danielle Pilarski
TO-TOLIN Number: F0032-0001CF101
Dates: 6/28/2021

Photograph No. 9 **Date:** 6/28/2021 **Description:** View of asbestos-containing stone patterned floor tile (red arrow) within the fire debris, sampled as CF-ACM-06A/B-062821 at the 5th St. Calumet Fire Site - RS.	
Photograph No. 10 **Date:** 6/28/2021 **Description:** View of asbestos-containing white transite (red arrows) within the fire debris, sampled as CF-ACM-10A/B-062821 at the 5th St. Calumet Fire Site - RS.	

Photographic Documentation

Client: U.S. Environmental Protection Agency, Emergency Response Branch, Region 5
Site Name: 5th St. Calumet Fire Site - RS Site
Location: Calumet, Houghton County, Michigan

Prepared by: Danielle Pilarski
TO-TOLIN Number: F0032-0001CF101
Dates: 6/28/2021

Photograph No. 11 **Date:** 6/28/2021 **Description:** View of a propane cylinder that appears to be intact, located within the fire debris at the 5th St. Calumet Fire Site - RS.	
Photograph No. 12 **Date:** 6/28/2021 **Description:** View of the open basement of a former structure partially covered by the fire debris at the 5th St. Calumet Fire Site - RS.	

Photographic Documentation

Client: U.S. Environmental Protection Agency, Emergency Response Branch, Region 5
Site Name: 5th St. Calumet Fire Site - RS Site
Location: Calumet, Houghton County, Michigan

Prepared by: Danielle Pilarski
TO-TOLIN Number: F0032-0001CF101
Dates: 6/28/2021

Photograph No. 13 **Date:** 6/28/2021 **Description:** View of sorted piles of debris, which appear to have been created by trespassers along the eastern side of the 5th St. Calumet Fire Site - RS. Piles appear to be sorted into scrap metal, tools, glassware, and rock piles found in the refrigerator in the right of the photograph. Note items staged within and along the site barriers (red arrow).