EMERGENCY CONTINGENCY PLAN
FLUORESCENT RECYCLING SITE
CLEVELAND, CUYAHOGA COUNTY, OHIO
(Revision 1)

Prepared for

U.S. Environmental Protection Agency
Emergency Response Branch Region 5
25063 Center Ridge Road
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Submitted by

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1.0 INTRODUCTION

The U.S. Environmental Protection Agency (EPA) has contracted Tetra Tech Inc. (Tetra Tech) to provide removal action support at the Fluorescent Recycling Site in Cleveland, Cuyahoga County, Ohio. As part of removal action support, Tetra Tech has prepared this emergency contingency plan for use during the removal action. This work was assigned under the Superfund Technical Assessment and Response Team (START) Contract EP-S5-13-01, Technical Direction Document (TDD) No. S05-0001-1802-009.

The emergency contingency plan outlines emergency contingency protocols. Specifically, this plan discusses site background information in Section 2.0; presents emergency contingency protocols in Section 3.0; and provides a list of emergency contacts in Section 4.0. Site figures are provided in Appendix A. The hospital route map is provided as Appendix B.

2.0 SITE BACKGROUND

This section describes the site location and presents a site and project description.

2.1 SITE LOCATION

Fluorescent Recycling is located at 7260 Neville Avenue in Cleveland, Cuyahoga County, Ohio. The Cuyahoga County property records also list the address as 7275 Wentworth Avenue. The geographic coordinates of the center of the site are 41°27'53.57" North, 81°44'12.27" West. The site covers approximately 1 acre and is bounded by Wentworth Avenue and a residential neighborhood to the north; a CSX railroad track to the east; a vacant lot to the south; and a residential area to the west (see Figures 1 and 2). The elevation at the site is approximately 709 feet above mean sea level.

2.2 SITE DESCRIPTION

In December 2016, the Ohio Environmental Protection Agency (Ohio EPA) requested that the EPA Emergency Response Branch address the accumulation of several million spent fluorescent lamps, polychlorinated biphenyl (PCB)-containing light ballasts, and other electronic waste stored on the ground floor of the site building. PCBs and mercury contained in fluorescent lamps are both considered Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) hazardous substances. The State of Ohio and the City of Cleveland Fire Department both expressed concerns regarding improper accumulation of waste on site and the potential for impacts to the public health and safety from mercury contamination.

On February 13, 2018, EPA was notified that a fire early that morning heavily damaged the loading dock portion of the building and affected waste stored in that area. Subsequently, two more fires were reported within a 1-week period at the site. After securing a signed access agreement from the owner on February 16, an emergency response and stabilization effort was initiated to determine, characterize, and address on- and off-site mercury migration and protect the site from future unauthorized entry.

Before the fires, EPA signed an Action Memorandum authorizing a time-critical removal action on October 12, 2017.

The warehouse building is four stories tall, encompasses a footprint of approximately 80,000 square feet, and is in poor and deteriorating condition. Ohio EPA estimated the amount of light bulbs located inside the building to total up to 3 million units. Breakage of fluorescent lamps and bulbs will release any mercury contained within the lamps and bulbs. Fire suppression and drainage can increase lamp breakage and disturb mercury released to the interior of the building. Air monitoring for mercury vapor after the fires indicated sustained exterior ambient air concentrations of mercury of 600 to 900 nanograms per cubic meter (ng/m^3) in the breathing zone, and peak concentrations of 11,000 ng/m^3 near broken bulbs on the floor. The mercury concentration in vapors from an opened sewer line (located north of the building) measured by the Northeast Ohio Regional Sewer District was over 11,000 ng/m^3. Observations on site indicated more than 500 drums of potential PCB-containing ballasts are present inside the building. A concern exists that water and air flow from within the building may be facilitating mercury migration from the building interior to off-site locations.

2.3 PROJECT DESCRIPTION

The removal action consists of the EPA Emergency and Rapid Response Services (ERRS) contractor securing the exterior of the warehouse building for safety, preparing the interior of the building for work by installing a lighting system, and creating aisle ways in each of the work zones so work can be initiated. Once work zones are set up, ERRS will begin separating, stabilizing, and removing the light bulb and ballast containers from the building. Light bulbs will be crushed on site and transferred to appropriate storage containers. The containers will be taken off site and recycled or properly disposed of at a designated treatment storage and disposal facility (to be identified). Cleaning of the building interior may be required where broken bulbs, potential elemental mercury spills, or other mercury-contaminated surfaces exist. The emergency response portion of site activities commenced on February 21, 2018. The time-critical removal action phase of the project commenced on February 26, 2018. The project duration is to be determined.

3.0 EMERGENCY CONTINGENCY PROTOCOLS

In the event a response is required by local emergency authorities during site removal activities, the following protocols provide necessary guidance for potential response events:

- Vandalism/Trespass
- Medical Emergencies
- Fire/Explosion
- Spill Control and Containment
- Evacuation Procedures

3.1 VANDALISM/TRESPASS

EPA crews will be on site Monday through Friday (0700 to 1730 hours). An EPA Command Post will be established on the site. Site security will be provided by Royce Security Services during non-working hours, including weekends. A copy of this Emergency Contingency Plan will be available on site at the EPA Command Post.

The On-Scene Coordinator (OSC) and ERRS Response Manager (RM) will be notified in the event of vandalism or trespass at the site. The OSC or RM will identify the appropriate course of action. If police or other law enforcement need to enter the building to apprehend the offender, they will be made aware of the air quality inside the building and don the appropriate personal protective equipment (PPE) that will be made available in the EPA Command Post.

3.2 MEDICAL EMERGENCIES

Rescue operations, if necessary inside the building, should be conducted by trained personnel wearing PPE equivalent to the entry team working in the exclusion zone. Air monitoring of work zones will be conducted to establish the level of PPE required; however, Level C PPE is anticipated for site activities inside the warehouse building if mercury levels exceed 12,500 ng/m^3 on the Lumex mercury vapor analyzer. PPE will be upgraded to Level B if mercury levels exceed 50,000 ng/m^3 on the Lumex mercury vapor analyzer or exceed 500,000 ng/m^3 on the Jerome mercury vapor analyzer. Rescue personnel will don the proper PPE before they enter the exclusion zone.

The victim should be decontaminated to the maximum extent possible, paying particular attention to the areas of the body or clothing that were in contact with contaminants or the ground. If the injury is minor, mercury vapor monitoring will be conducted on the clothing of the person, and full decontamination should be completed and first aid administered before transport. If the victim's condition is serious, emergency

screening and decontamination should be completed at a minimum to prevent potential cross contamination. If possible, injured personnel will be decontaminated and removed from the exclusion zone before emergency medical services (EMS) arrives. EMS will pick up injured personnel at the EPA Command Post office trailer. A site-specific health and safety plan will be available in the Command Post office trailer.

911 will be called for emergencies requiring transport to a hospital. The victim should be transported to MetroHealth Emergency Department, located 4 miles from the site (approximately 10-minute drive time) or Cleveland Clinic Lutheran Hospital, located 2.8 miles from the site (approximately 10-minute drive time). A map and turn-by-turn directions to each hospital from the site are included in Appendix B. Pertinent hospital information is below:

MetroHealth Emergency Department
2500 Metrohealth Drive
Cleveland, Ohio
(216) 778-7800

or

Cleveland Clinic – Lutheran Hospital
1730 West 25th Street
Cleveland, Ohio
(216) 696-4300

3.3 FIRE/EXPLOSION

The Cleveland Fire Department will be notified of a site emergency by calling 911. In addition, EPA OSC Eric Pohl and ERRS RM John Mullane will be contacted by mobile phone at the numbers in the contact list in Section 4.

Law enforcement will control perimeter access during a mercury release or hazardous materials incident. Typically, law enforcement officers are not equipped with protective clothing, and their main functions will be site control and preventing unauthorized persons from entering the hazardous area. Law enforcement should not enter the exclusion zone unless they are properly trained and wearing appropriate PPE.

The fire department, when called out to the scene of a hazardous materials emergency, has the duty and responsibility to save lives, prevent injuries, reduce property loss, and restore vital services. Command of the emergency will be established by the officer of the fire company that arrives first. The command will

be transferred using fire department staff, under the Incident Command System. The Fire Chief will be in charge of the incident until he or she relinquishes that authority.

Telephone numbers of personnel who should be contacted in the event of an incident are listed on the contact list in Section 4. At a minimum, the following personnel will be notified of any incident:

- EPA OSC Eric Pohl
- ERRS RM John Mullane

In the event of heavy smoke or toxic gas emissions, the fire department may initiate "shelter-in-place" of the neighboring areas. EPA's START contractor (Tetra Tech) will also be available to assist with perimeter air monitoring.

3.4 SPILL CONTROL AND CONTAINMENT

In the event of a spill or release, personnel should ensure safety, assess the situation, and implement containment and control measures, as appropriate. If the event is on site, operations will cease and a designated suppression team will assemble upwind of the event. All non-essential personnel in the area will meet at the designated assembly area, depending on the alarm given. If a reportable quantity spill occurs, the Cuyahoga County spill hotline and the National Response Center will be notified.

The Site Safety Officer (designated in the field) will attempt to identify the nature and extent of the release based on the safety data sheets, waste profiles, or available site data, as well through direct-reading instruments. The Site Safety Officer or Response Manager will direct the suppression crew in the necessary attempts to stop the release and initiate cleanup operations. Operations will remain suspended until the incident is stabilized and no longer poses a threat to personnel.

Hazardous materials brought on site may include fuels and other petroleum liquids associated with the heavy equipment to be used during site activities. Any fuel containers utilized on site will be stored in secondary plastic containers or on visqueen and bermed to contain any spill. Spill containment materials (sorbent booms and pads) will be stored on site and readily available to contain any spill that may occur.

The following equipment will be located on the job site:

- First aid kits
- Emergency eyewash/shower stations
- ABC fire extinguishers

- Chemical sorbent pads
- Portable air horns
- Portable communication radios or cell phones

Used materials will be properly contained, characterized, and disposed of. Fire suppression equipment will be staged near flammable materials in the prevailing upwind direction. Equipment will also be staged and readily available in the work areas as activities progress across the site. This equipment is intended only for use on any small, contained fire or to allow for a safe egress from the area. Emergency responders will be notified to address any significant incidents.

3.5 EVACUATION PROCEDURES

The designated assembly area and emergency evacuation routes will be posted in the Command Post and other strategic locations as necessary. All personnel on site will be briefed on these and all emergency procedures as part of the initial safety briefing.

In the event of an emergency that necessitates evacuation of the site, the procedures listed below will be followed:

- Hand signals, audible communication, or an evacuation alarm of three blasts on an air horn will notify personnel to evacuate the site immediately.
- All personnel will evacuate with their field partners to the closest exit upwind of on-site activities. If feasible, personnel will then assemble to the vacant property adjacent to the north in the pre-designated safe area/muster point shown in Appendix A. Personnel will mobilize to Muster Point #1 (as indicated in Figure 2) near the intersection of 73rd Street and Wentworth Avenue. If Muster Point #1 is determined not to be safe based on site conditions, personnel will mobilize to Muster Point #2, located at the intersection of 73rd Street and Neville Avenue.
- Personnel will remain in that area until an all-clear signal (single, long air horn blast) is sounded or an authorized individual provides further instructions.

4.0 LIST OF CONTACTS

LIST OF CONTACTS
FLUORESCENT RECYCLING SITE
CLEVELAND, CUYAHOGA COUNTY, OHIO

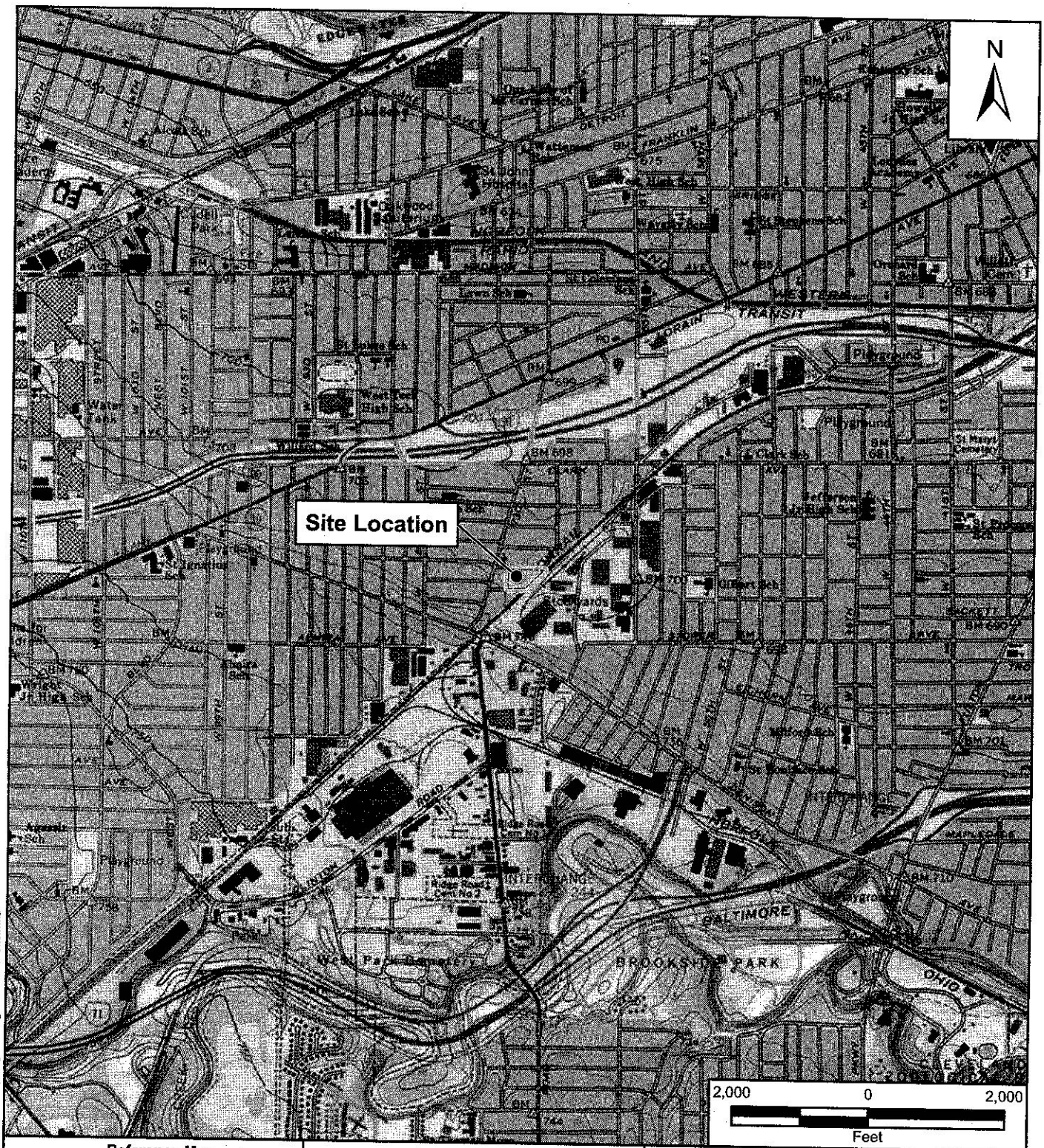
Agency	Name	Number
LOCAL		
Cuyahoga County Health Department	Public Health Sanitarian	[redacted]
City of Cleveland Fire Department	Dispatch	[redacted] or 911
City of Cleveland Police Department	District 1 Dispatch	[redacted] or 911
Cuyahoga County Emergency Management	General number	[redacted]
Cleveland Clinic – Lutheran Hospital	Operator	(216) 696-4300
MetroHealth Emergency Department	Operator	(216) 778-7800
National Poison Control Center	General number	(800) 222-1222
STATE		
Ohio Department of Health Services	General number	(614) 466-3543 (Office)
Ohio Environmental Protection Agency	Paul Dolensky – DERR	[redacted]
Ohio Department of Natural Resources	General number	(614) 265-6565 (Office)
Cuyahoga County Spill Reporting Hotline	Ohio EPA	(216) 771-1365
Ohio EPA 24-hour Spill Reporting Line	Ohio EPA	(800) 282-9378
FEDERAL		
U.S. Environmental Protection Agency OSC	Eric Pohl	[redacted]
U.S Environmental Protection Agency OSC	Jason Cashmere	[redacted]
U.S. Environmental Protection Agency	Region 5 Spill Line	(312) 353-2318
National Response Center	General number	(800) 424-8802
ERRS Contractor (Environmental Restoration)	John Mullane	[redacted]
EPA START Contractor (Tetra Tech, Inc.)	Don Newton Jackie Cole Andrew Little	[redacted]

Phone #s redacted

APPENDIX A

SITE FIGURES

Figure 1 - Site Location Map
Figure 2 - Site Layout



Reference Map

Legend

Approximate Site Boundary

Source: USGS 7.5-Minute Topographic Quadrangle Map Cleveland, OH 1994

Fluorescent Recycling
7260 Neville Avenue
Cleveland, Cuyahoga County, Ohio

Figure 1
Site Location Map

TETRA TECH

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

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Date Saved: 3/1/2018 | EPA Contract No.: EP-S5-13-01 | TDD No.: S05-0001-1802-009

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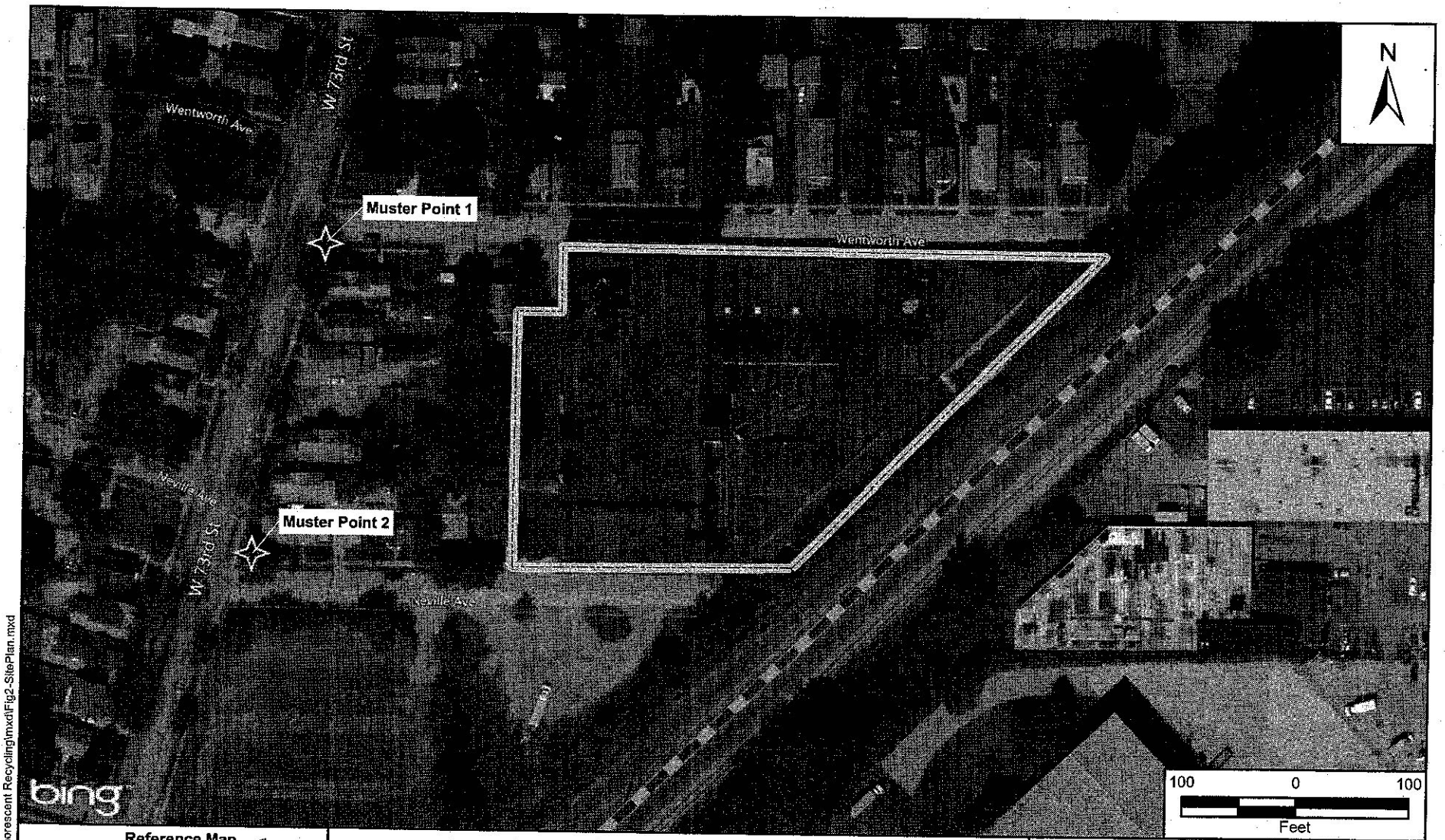
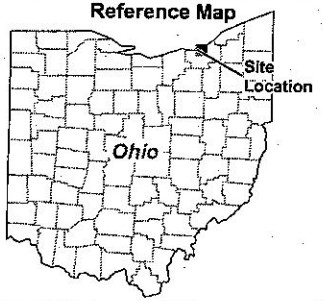


Reference Map



Legend

- Muster Point Location
- Approximate Site Boundary

Source: Bing Maps Hybrid 2013

Fluorescent Recycling
7260 Neville Avenue
Cleveland, Cuyahoga County, Ohio

Figure 2
Site Plan

TETRA TECH

Prepared For: EPA	Prepared By: Tetra Tech Inc.

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EPA Contract No.: EP-S5-13-01

TDD No.: S05-0001-1802-009

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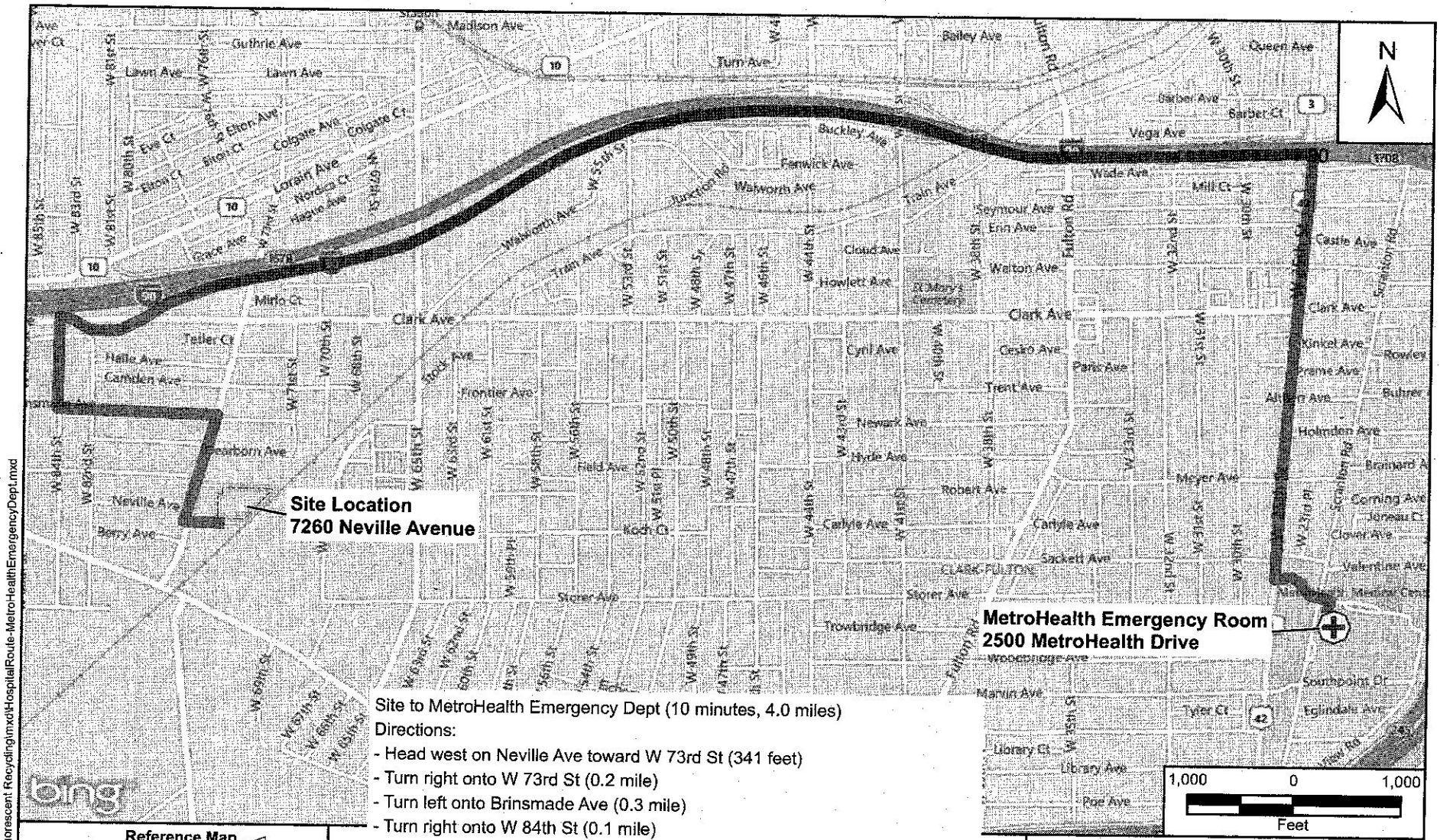
APPENDIX B

EMERGENCY HOSPITAL ROUTE MAPS

MetroHealth Emergency Department

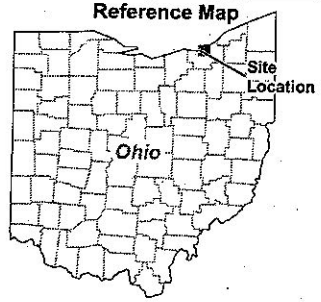
Cleveland Clinic - Lutheran Hospital



Site to MetroHealth Emergency Dept (10 minutes, 4.0 miles)

Directions:

- Head west on Neville Ave toward W 73rd St (341 feet)
- Turn right onto W 73rd St (0.2 mile)
- Turn left onto Brinsmade Ave (0.3 mile)
- Turn right onto W 84th St (0.1 mile)
- Turn right onto Clark Ave (56 feet)
- Slight right to merge onto I-90 E toward Cleveland (0.4 mile)
- Continue on I-90 E. Take W 25th St to W 23rd Pl/Metrohealth Dr (2.6 miles)
- Merge onto I-90 E (1.6 miles)
- Take exit 170A for US-42/W 25th St (0.2 mile)
- Turn right onto W 25th St (0.7 mile)
- Turn left onto W 23rd Pl/Metrohealth Dr (0.1 mile)
- Turn right onto Scranton Rd (395 feet)
- Turn left



Source: Bing Maps Road 2013

Fluorescent Recycling
7260 Neville Avenue
Cleveland, Cuyahoga County, Ohio

Emergency Hospital Route Map

TETRA TECH

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

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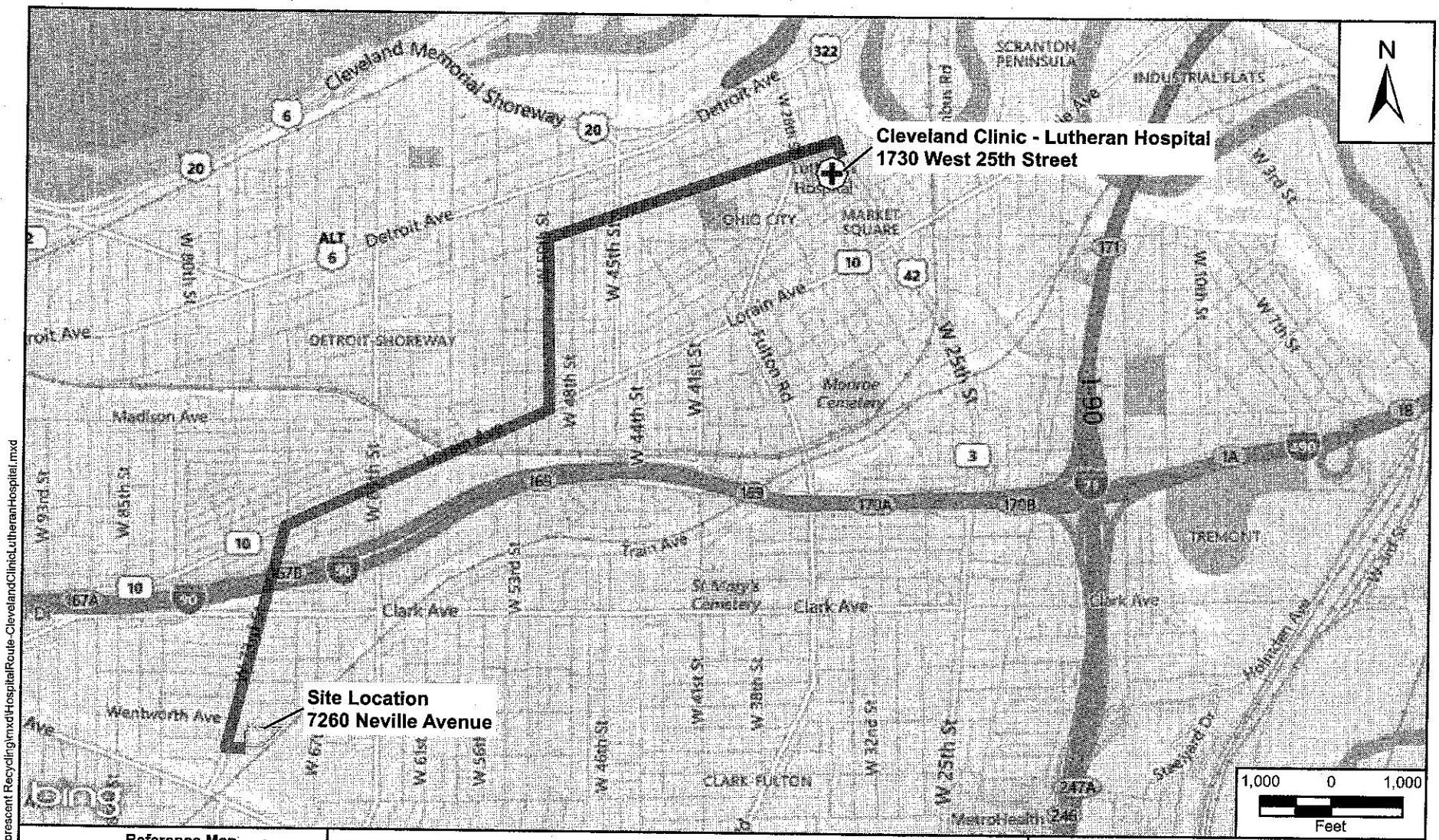

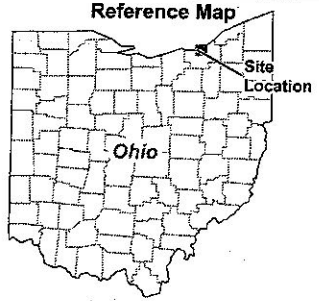

Site to Cleveland Clinic Lutheran Hospital (10 minutes, 2.8 miles)

Directions:

- Head west on Neville Ave toward W 73rd Street (341 feet)
- Turn right onto W 73rd Street (0.6 mile)
- Turn right onto Lorain Avenue (0.8 mile)
- Turn left onto W 50th Street (0.5 mile)
- Turn right onto Franklin Blvd (0.8 mile)
- Turn right onto W 25th Street (312 feet)

Source: Bing Maps Road 2013

Fluorescent Recycling
7260 Neville Avenue
Cleveland, Cuyahoga County, Ohio

Emergency Hospital Route Map

TETRA TECH

Prepared For: EPA

Prepared By: Tetra Tech Inc.

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TDD No.: S05-0001-1802-009

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