SITE ASSESSMENT REPORT
FOR
BUFFUM MKE SITE
MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN

Prepared for:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Emergency Response Branch
Region V
77 West Jackson Boulevard
Chicago, IL 60604-3507

Prepared by:

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February 27, 2014

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LIST OF ABBREVIATIONS AND ACRONYMS

ACM	Asbestos-containing material
AHERA	Asbestos Hazardous Emergency Response Act
ATSDR	Agency for Toxic Substances and Disease Registry
CFR	*Code of Federal Regulations*
cm	Centimeter
cm^2	Square centimeter
COC	Chain-of-custody
DRO	Diesel-range organics
EMSL	EMSL Analytical, Inc.
ERO	Extended-range organics
ft^2	Square foot
HQ	Hazard quotient
MDNS	Milwaukee Department of Neighborhood Services
MFD	Milwaukee Fire Department
mg/100 cm^2	Milligram per 100 square centimeters
mg/kg	Milligram per kilogram
mg/L	Milligram per liter
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NESHAP	National Emission Standard for Hazardous Air Pollutants
ng/100 cm^2	Nanogram per 100 square centimeters
NIST	National Institute of Standards and Technologies
NVLAP	National Voluntary Laboratory Accreditation Program
ORO	Oil-range organics
OSC	On-Scene Coordinator
PAH	Polycyclic aromatic hydrocarbon
PCB	Polychlorinated biphenyl
PLM	Polarized light microscopy
PPE	Personal protective equipment
RACM	Redevelopment Authority of the City of Milwaukee
RCRA	Resource Conservation and Recovery Act
RCL	Residual Contaminant Level
RML	Removal Management Level
Sigma	Sigma Group, Inc.
START	Superfund Technical Assessment and Response Team
str/cm^2	Structure per square centimeter
SU	Standard unit

LIST OF ABBREVIATIONS AND ACRONYM (CONTINUED)

SVOC	Semivolatile organic compound
TAL	Target Analyte List
TCL	Target Compound List
TCLP	Toxicity Characteristic Leaching Procedure
TPH	Total petroleum hydrocarbons
TSCA	Toxic Substances Control Act
VOC	Volatile organic compound
WDHS	Wisconsin Department of Health Services
WDNR	Wisconsin Department of Natural Resources
WESTON	Weston Solutions, Inc.

1. INTRODUCTION

The United States Environmental Protection Agency tasked the Weston Solutions, Inc. (WESTON®), Superfund Technical Assessment and Response Team (START) to assist the EPA in performing a site assessment at the Buffum MKE site located at 3456 North Buffum Street in Milwaukee, Milwaukee County, Wisconsin (the Site) (**Figure 1-1**). Specifically, under Technical Direction Document No. S05-0001-1310-003, EPA requested that WESTON START document current Site conditions; collect liquid waste, solid waste, wipe, paint chip, and building material samples; obtain photographic documentation of Site conditions; and evaluate the potential for imminent and substantial threats to the public health or welfare of the United States or the environment posed by Site-related conditions. WESTON START conducted the site assessment under the direction of the EPA On-Scene Coordinator (OSC), Ms. Kathy Halbur. Activities performed included an interior reconnaissance on October 31, 2013 and sampling activities on both December 12, 2013 and January 23, 2014. START and the OSC walked the outside of the property on additional days as part of planning activities for implementation of the interior reconnaissance and site assessment sampling.

This site assessment report is organized into the following sections:

- **Section 1, Introduction** – Provides a brief description of the scope of site assessment activities
- **Section 2, Site Background** – Details the Site description and its known history
- **Section 3, Site Assessment Activities** – Discusses methods and procedures used during the site assessment
- **Section 4, Analytical Results** – Discusses analytical results for samples collected during the site assessment
- **Section 5, Threats to Human Health and the Environment** – Identifies Site conditions that may warrant a removal action under the National Oil and Hazardous Substances Pollution Contingency Plan (NCP)
- **Section 6, Summary and Conclusions** – Summarizes the site assessment and presents conclusions based on the findings
- **Section 7, References** - Provides a list of references used to prepare this site assessment report

Figures and tables are presented after Section 7. In addition, this site assessment report contains three appendices. **Appendix A** provides photographic documentation of Site conditions and activities at the time of the reconnaissance and site assessment. **Appendix B** provides documents used to create the chronology for the Site presented in **Table 2-1**. **Appendix C** provides the laboratory analytical and data validation reports for samples collected during the site assessment.

2. SITE BACKGROUND

This section discusses the Site description and history.

2.1 SITE DESCRIPTION

The Site is located at 3456 North Buffum Street in Milwaukee, Milwaukee County, Wisconsin. **Figure 1-1** shows the Site location. The Site's approximate geographical coordinates are 43°4'53.0" North latitude and 87°54'21.0" West longitude. The Site occupies approximately 0.42 acre and contains a three-story building occupying approximately 27,500 square feet (ft^2) and an asphalt lot. **Figure 2-1** shows the Site features. **Appendix A** provides photographic documentation of Site conditions and site assessment activities.

The Site is located in a mixed industrial, commercial, and residential area. The Site is bordered to the north by an alley with residential properties, with East Keefe Avenue and the Compo Steel Products manufacturing facility beyond; to the east by an alley and commercial and residential properties, with North Holton Street beyond; to the south by the Beerline Recreation Trail, a 4,000-foot-long recreational trail, with residential properties and East Townsend Street beyond; and to the west by the Beerline Recreation Trail and North Buffum Street, with the Wenniger Compressor Company beyond. In 2010, approximately 24,761 people lived within in a 1-mile radius of the Site (EPA 2014).

2.2 SITE HISTORY

Table 2-1 summarizes the Site chronology. Documents used to develop the site chronology are included in **Appendix B**. The Site building originally was constructed in 1911, with an addition added in 1914. Over the history of the Site, many different business processes have operated at the property, most notably the following:

- 1910: A furniture factory
- 1940 through 1965: A yeast manufacturer
- 1955 through 1960: A feed and fertilizer supplier
- 1958 through 1970: An animal research laboratory and chemical processor
- 1967: A soap manufacturer
- 1971 through 2003: A reclaimer and processor of metals including scrap, electronic scrap, and photographic wastes
- 1975: Manufacturer of industrial wheels
- 1976 through 1988: Plastics manufacturing
- 1980 through 1985: A fiberglass fabricator
- 1982 through 2000: Wood working
- 2008: Knippel Brothers Designing

The current property owners are listed as Simon and Ida Barbier of Northbrook, Illinois. The City of Milwaukee maintains building security and recently placed boarding on the building's first floor doors, all of the first floor windows and some second and third floor windows. After an attempted break-in, the eastern overhead door had to be reinforced by the City of Milwaukee.

In February 2007, the Sigma Group, Inc. (Sigma), a contractor for the City of Milwaukee, collected samples from floor drains, floor debris, and incinerator ash. Results indicated the following at concentrations exceeding Wisconsin Department of Natural Resources (WDNR) Groundwater Residual Contaminant Levels (RCL) or Direct Contact RCLs: lead, mercury, polychlorinated biphenyls (PCB), and volatile organic compounds (VOC).

In March, April, and May 2010, Sigma installed 10 exterior and 6 interior monitoring wells at the Site and collected groundwater and soil samples for laboratory analysis. The soil samples contained metals and polycyclic aromatic hydrocarbons (PAH) at concentrations exceeding WDNR Chapter NR 720 Direct Contact RCLs for non-industrial soil. Exterior well groundwater samples contained metals and VOCs at concentrations exceeding WDNR Chapter NR 140 standards. Interior well groundwater samples contained metals, PAHs, and VOCs at concentrations exceeding WDNR Chapter NR 140 standards.

On September 27, 2013, Mr. David Misky of the Redevelopment Authority of the City of Milwaukee (RACM) sent a letter to OSC Kathy Halbur formally requesting assistance from the EPA Removal Program with assessment of the Site and eventual demolition and cleanup activities at the Site. According to the RACM, trespassers regularly break into the Site building and debris regularly is dumped onto the Site's asphalt lot despite measures by the City of Milwaukee to secure the Site. Broken windows and continued dilapidation of the Site building have created many entrance points, rendering the building a neighborhood safety hazard. In addition, a number of drums and containers were left in the Site building when it was abandoned that remain in need of characterization and disposal.

3. SITE ASSESSMENT ACTIVITIES

This section discusses the site reconnaissance and observations and sampling activities performed during the site assessment.

3.1 SITE RECONNAISSANCE AND OBSERVATIONS

On October 31, 2013, representatives from WESTON START, EPA, WDNR, RACM, the Milwaukee Department of Neighborhood Services (MDNS), and the Milwaukee Fire Department (MFD) conducted a site reconnaissance to document Site conditions and plan for the removal site assessment. During the site reconnaissance, EPA conducted air monitoring using a Ludlum 192 radiation detector. All ambient air monitoring readings were at or below background levels. Weather conditions prevented the use of the MultiRAE multi-gas air monitor to monitor air in the breathing zone for carbon monoxide, hydrogen sulfide, lower explosive limit, oxygen, and VOCs.

The Site building is abandoned. There is one operable entrance on the west side. The building façade is crumbling, and paint is peeling. Windows along the ground level are boarded; windows on the second and third floors along North Buffum Street are boarded, but the rest are broken and not boarded. A partially chain-linked and partially corrugated steel fence surrounds the Site's asphalt paved yard south of the Site building. In addition, the chain-linked section of fencing is damaged, allowing trespassers access to the Site's asphalt lot. Unauthorized access was observed as footprints in the snow and various personal items (shoes and an identification badge) in the

fenced asphalt yard. One drum is located in the fenced-in outside area south of the building. Suspected oil-stained concrete along the east side of the Site building was observed near an overhead door that had been compromised during a break-in. Inside the compromised overhead door there is a collection of drums. The City of Milwaukee has reinforced the door. Evidence of illegal dumping and habitation was observed inside the building and is suspected to have occurred before recent efforts by the City of Milwaukee to reinforce boarding on the first floor doors and windows. Food and drink containers, clothing, and cooking supplies were observed in various parts of the building.

Upon entering the first floor of the Site building through the one operable entrance, the group observed paint peeling from the walls and ceiling; ten to twelve 5-gallon buckets, some containing a red liquid and some spilled onto the floor; an overturned 55-gallon drum of ash spilled on the floor; two compressed gas cylinders near the entryway labeled “oxygen”; and two 2- to 3-foot-diameter floor drains. One floor drain is open and contains black sludge. **Figure 3-1** shows the locations of these floor drains.

In the boiler room on the first floor, a red-painted oven or ash cleanout structure was observed next to and south of a brick incinerator or oven containing a conveyor belt. Ash was observed inside and on the floor by the red-painted structure. Also in the boiler room, there are large totes and 55-gallon drums containing electrical components as well as numerous electrical components spilled on the floor.

South of the boiler room on the first floor, the large east room contains a large fume hood, an incinerator, and a large stack or tank structure. A pile of ash was observed in the bottom of the fume hood. A large area of standing water containing a tipped over 55-gallon drum in front of the large stack structure prevented further inspection. The roof in this area is damaged, and water enters the room through holes in the roof. Collapsed building material was also observed on the floor. South of the stack was a flooded office area that could not be inspected because of the standing water. Across from the fume hood is the compromised overhead door that was boarded up to prevent access by trespassers. Containers observed near this overhead door include twelve 55-gallon drums, three 40-gallon drums, four 5-gallon buckets, and six pill-shaped bushings. Several of these containers were damaged, open, or spilled onto the ground. Container contents

were largely unknown due to a lack of labels. An open tote containing electrical ballasts is located south of the compromised overhead door.

In the southern portion of the east room on the first floor are six to ten 55-gallon drums, two 5-gallon buckets, and one compressed gas cylinder. Drums mostly are unlabeled, although one drum is labeled "Oil-Water Mix." Several drums in this area are damaged, opened, or tipped over. One drum is distended, on its side, and appears to be leaking.

The second floor of the Site building contains offices and a large area with tile and peeling paint. Insulation was observed to be falling from overhead ductwork. Ceiling tiles were observed to be crumbling and on the floor.

The third floor of the Site building was formerly a woodworking shop. Numerous 55-gallon drums, 5-gallon buckets, and other containers, many labeled "Flammable" and "Varnish" were observed. Stacks of lumber and piles of sawdust remain in this area. One area on the third floor has mold or moss coating most of the floor, buckets, and drums. Broken windows and bird carcasses were observed on the third floor. The ceiling leaks, and icicles were observed along cracks in the ceiling. Cracked and loose floor tiles were observed in the hallway leading to the woodworking shop.

On the roof of the Site building, roofing material was observed to be in poor condition. Bird carcasses and an ash-like material were observed in the rooftop elevator access.

On December 12, 2013, Mr. Ryan Wozniak of the Wisconsin Department of Health Services (WDHS) and Mr. James Kasdorf, Jr. of the WDNR performed a site reconnaissance to assess health conditions associated with the abandoned waste and building conditions. The WDHS assessment occurred while WESTON START and EPA were performing site assessment sampling activities.

3.2 SAMPLING ACTIVITIES

On December 12, 2013, WESTON START and EPA collected liquid and solid waste samples from small containers, near incinerators, and spilled on the floor; wipe samples from surfaces of incinerator and fume hood structures; paint chip samples; and building material bulk samples

during a limited asbestos survey. All sampling activities were conducted in Level C personal protective equipment (PPE) and support activities in Level D PPE in accordance with the approved site-specific health and safety plan. Fresh sampling gloves were donned before sampling activities began at each new sampling location. **Table 3-1** summarizes all the samples collected at the Site. **Figures 3-1, 3-2**, and **3-3** show the sampling locations on the ground, second, and third floors, respectively.

3.2.1 Liquid and Solid Waste Sampling

WESTON START and EPA collected three liquid waste samples (including one duplicate sample) and seven solid waste samples (including one duplicate sample). Liquid waste samples were collected using disposable polyethylene scoops or by pouring small containers directly into sample jars. Solid waste samples were collected using disposable polyethylene scoops. The liquid and solid waste samples were submitted under chain-of-custody (COC) to ALS Environmental of Holland, Michigan, for analysis for one or more of the following: pH; flashpoint; Toxicity Characteristic Leaching Procedure (TCLP) metals; TCLP semivolatile organic compounds (SVOC); total cyanide/sulfide, reactive cyanide/sulfide; Target Compound List (TCL) VOCs; TCL SVOCs; Resource Conservation and Recovery Act (RCRA) metals; PCBs; total petroleum hydrocarbons (TPH) diesel-range organics (DRO), oil-range organics (ORO), and extended-range organics (ERO); and oil and grease. Each liquid and solid waste sample is described below.

Liquid Waste Samples

- BUF-LW01-121213 and BUF-LW01D-121213 (duplicate) consisted of red liquid collected from an open, approximately 5-gallon bucket on the first floor of the Site building. The bucket was unlabeled.
- BUF-LW02-121213 consisted of amber liquid collected from a 1-quart bottle on the third floor of the Site building labeled “Flammable.”

Solid Waste Samples

- BUF-SW01-121213 consisted of firm, ash-like material collected from outside a brick incinerator on the first floor of the Site building.

- BUF-SW02-121213 consisted of an ashy material collected from the cleanout on the south side of a brick incinerator on the first floor of the Site building.
- BUF-SW03-121213 and BUF-SW03D-121213 (duplicate) consisted of fine-grained, dust-like material collected from underneath a fume hood on the first floor of the Site building.
- BUF-SW04-121213 consisted of wet, frozen, muddy, sand-like material collected from the floor of the east room in front of an incinerator on the first floor of the Site building.
- BUF-SW05-121213 consisted of tan and grayish-black dust, ash-like material collected from the floor on the third floor of the Site building.
- BUF-SW06-121213 consisted of ash-like material collected near a 55-gallon drum on its side near the southwest incinerator in the west room on the first floor of the Site building.

3.2.2 Wipe Sampling

On December 12, 2013, WESTON START and EPA collected two wipe samples from surfaces in the Site building. Wipe sample BUF-WP01-121213 was collected from the wall of the brick incinerator arch on the first floor. Wipe sample BUF-WP02-121213 was collected from the south wall of the fume hood on the first floor. The sampling area for each wipe sample was 10 centimeters (cm) by 10 cm for each sample and each analyte. Wipe samples were collected by wiping the selected area with a gauze pad in an up-and-down then side-to-side motion. The gauze sample pad was then placed into a clean, laboratory-provided container. The wipe samples were submitted under COC to (1) ALS Environmental of Holland, Michigan, for analysis for PCBs and Target Analyte List (TAL) metals; (2) Pace Analytical Laboratories of Minneapolis, Minnesota, for analysis for dioxins; and (3) EMSL Analytical, Inc. (EMSL), in Indianapolis, Indiana, for analysis for asbestos.

3.2.3 Paint Chip Sampling

On December 12, 2013, WESTON START and EPA collected six paint chip samples (including one duplicate sample) from building surfaces with peeling paint. The paint chip samples were placed into glass jars. Each sample is described below.

- BUF-PC01-121213 was collected from gray paint on the north side of the incinerator in the east room on the first floor of the Site building.

- BUF-PC02-121213 was collected from mostly red and some gray and white paint from the walls along the stairway in the entryway on the first floor of the Site building.
- BUF-PC03-121213 was collected from green paint on a beam on the second floor.
- BUF-PC04-121213 and BUF-PC04D-121213 (duplicate) were collected from cream paint on the north exterior building wall across the alley from residences.
- BUF-PC05-121213 was collected from white paint on a beam in the west room on the first floor of the Site building.

On January 23, 2014, WESTON START and EPA collected six additional paint chip samples from peeling paint on the exterior building surface. Each sample is described below.

- BUF-PC06-012314 was collected from cream paint on the west exterior building wall approximately 1 foot from the ground at base of cinderblock.
- BUF-PC07-012314 was collected from white paint on the north exterior building wall across from the second house east of the intersection of the alley and North Buffum Street.
- BUF-PC08-012314 was collected from cream paint on the north exterior building wall near exposed brick across the alley from residences.
- BUF-PC09-012314 was collected from brown paint on the east exterior building wall on a metal door across the alley from residences.
- BUF-PC10-012314 was collected from black paint on the south exterior building wall near the Beerline Trail. Residences are located across the Beerline Trail to the south.
- BUF-PC11-012314 was collected from cream paint on the south exterior building wall near the Beerline Trail. Residences are located across the Beerline Trail to the south.

The paint chip samples were submitted under COC to ALS Environmental of Holland, Michigan, for analysis for PCBs and total lead.

3.2.4 Limited Asbestos Survey

On December 12, 2013, WESTON START conducted a limited asbestos survey to identify damaged regulated asbestos-containing material (ACM) which, for purposes of this project, is defined by the National Emission Standards for Hazardous Air Pollutants (NESHAP) as friable asbestos material or Category I non-friable ACM that has become friable. A total of 17 bulk

samples of suspected regulated ACM were collected for laboratory analysis for asbestos. Samples were collected from areas that were structurally sound for safe access.

The limited asbestos survey was performed by a WESTON Asbestos Inspector licensed to perform ACM building inspections and trained in accordance with the requirements of the EPA Model Accreditation Plans. Field sampling for ACM was conducted in accordance with the EPA's NESHAP regulation, which includes a method for collecting multiple samples from the same homogeneous material. Duplicate samples were not required for asbestos analysis based on the multiple sampling scheme employed.

Bulk samples of suspected regulated ACM were collected using wet sampling methods and disposable hand tools where necessary. In some cases, damaged samples were collected directly by hand. Sample collection tools were disposed of after the collection of each sample.

Bulk samples of suspected regulated ACM were placed into clean unused bags marked with a unique sample identification number. For each sample, the identification number, brief material description, location, and condition, and were recorded in the logbook. Representative bulk samples of each regulated ACM were randomly collected within the survey area. Condition assessments were performed by the inspector during the inspection. **Table 3-1** presents details for each sample collected including the location, sample description, and analytical method employed.

Bulk samples of suspected regulated ACM were submitted under COC to EMSL in Indianapolis, Indiana, which is accredited by the National Institute of Standards and Technologies (NIST) National Voluntary Laboratory Accreditation Program (NVLAP) to perform bulk asbestos analysis. The bulk samples were analyzed using polarized light microscopy (PLM) with dispersion staining. This method identifies the asbestos type present in a material and quantifies the percentage of asbestos by weight in the sample.

4. ANALYTICAL RESULTS

This section discusses the analytical results for the liquid and solid waste, wipe, paint chip, and bulk samples. **Appendix C** provides the laboratory analytical and data validation reports for samples collected during the site assessment.

4.1 LIQUID AND SOLID WASTE SAMPLE ANALYTICAL RESULTS

The liquid and solid waste sample analytical results were compared to the screening criteria discussed below.

- Liquid and solid waste sample analytical results for pH (corrosivity), flashpoint (ignitibility), TCLP metals, and TCLP SVOCs were compared to the hazardous waste criteria outlined in Title 40 of the *Code of Federal Regulations* (CFR), Part 261, Subpart C, to determine if the samples represent materials considered hazardous waste.
- Liquid and solid waste sample analytical results for total and reactive cyanide/sulfide (reactivity) were compared to the hazardous waste criteria outlined in Title 40 of the *Code of Federal Regulations* (CFR), Part 261, Subpart C, in conjunction with an evaluation of nearby corrosive hazardous wastes, to determine if the samples represent materials considered hazardous waste.
- Solid waste sample analytical results for PCBs were compared to the self-implementing cleanup level for a high-occupancy area without further conditions outlined in 40 CFR, Part 761.61, of the Toxic Substances Control Act (TSCA).
- Liquid waste sample analytical results for PCBs were compared to PCB bulk product waste as defined in 40 CFR Part 761.3.
- Solid waste sample analytical results for TCL VOCs, TCL SVOCs, and RCRA metals were compared to WDNR Chapter NR 720 Direct Contact RCLs for industrial and non-industrial land uses.
- Solid waste sample analytical results for total cyanide, TCL VOCs, TCL SVOCs, RCRA metals, and PCBs were compared to the EPA Removal Management Levels (RML) for residential and industrial soils, hazard quotient (HQ) 1. This is in addition to comparison of some of these analytical results to the WDNR criteria listed above.
- Liquid waste sample analytical results for TCL VOCs, TCL SVOCs, RCRA metals, TPH DRO/ORO/ERO, and oil and grease were used to identify specific compounds present in the liquid waste samples.

Table 4-1 and **Table 4-2**, respectively, summarize the liquid and solid waste sample analytical results discussed below.

pH (Corrosivity)

- Liquid waste sample BUF-LW02-121213 had a pH value of 0.5 standard unit (SU). According to 40 CFR 261.22, a pH value of greater than or equal to 12.5 SUs or less than or equal to 2 SUs exhibits the characteristic of corrosivity. Therefore, this sample represents a material that meets the definition of hazardous waste for the characteristic of corrosivity.

Flashpoint (Ignitability)

- Liquid waste sample BUF-LW02-121213 had a flashpoint of 84 °F. According to 40 CFR 261.21, a liquid with a flashpoint below 140 °F exhibits the characteristic of ignitability. Therefore, this sample represents a material that meets the definition of hazardous waste for the characteristic of ignitability.

TCLP Metals (Toxicity)

- Solid waste sample BUF-SW03-121213 contained TCLP lead at 75 milligrams per liter (mg/L), which exceeds the TCLP lead regulatory limit of 5 mg/L. Therefore, according to 40 CFR 261.24, solid waste BUF-SW03-121213 represents a material that meets the definition of hazardous waste for the characteristic of toxicity.

TCLP SVOCs (Toxicity)

- No solid waste samples contained TCLP SVOCs at concentrations above laboratory detection limits.

Total and Reactive Cyanide/Sulfide (Reactivity)

- Liquid waste samples BUF-LW01-121213 and BUF-LW01D-121213 (duplicate sample) contained total cyanide 0.0092 and 0.0086 mg/L, respectively. Reactive cyanide was not detected in these samples at concentrations above their respective laboratory detection limits.
- Liquid waste samples BUF-LW01-121213 and BUF-LW01D-121213 contained total sulfide at 86 and 210 mg/L. Reactive sulfide was not detected in these samples at concentrations above their respective laboratory detection limits.

TCL VOCs

- No liquid waste samples contained TCL VOCs at concentrations above laboratory detection limits.
- No solid waste samples contained TCL VOCs at concentrations above WDNR NR 720 direct contact RCLs or EPA RMLs.

TCL SVOCs

- No liquid waste samples contained TCL SVOCs at concentrations above laboratory detection limits.
- Solid waste sample BUF-SW01-121213 contained the following:
  - Benzo(a)anthracene at 1.4 milligrams per kilogram (mg/kg), exceeding the WDNR NR 720 direct contact RCL for non-industrial land use of 0.148 mg/kg

  - Benzo(a)pyrene at 1.2 mg/kg, exceeding the WDNR NR 720 direct contact RCLs for non-industrial and industrial land uses of 0.015 and 0.211 mg/kg, respectively
  - Benzo(b)fluoranthene at 1.9 mg/kg, exceeding the WDNR NR 720 direct contact RCL for non-industrial land use of 0.148 mg/kg
  - Dibenzo(a,h)anthracene at 0.24 mg/kg, exceeding the WDNR NR 720 direct contact RCLs for non-industrial and industrial land uses of 0.015 and 0.211 mg/kg, respectively
  - Indeno(1,2,3-cd)pyrene at 0.73 mg/kg, exceeding the WDNR NR 720 direct contact RCL for non-industrial land use of 0.148 mg/kg

- Solid waste sample BUF-SW02-121213 contained the following:
  - Benzo(a)anthracene at 4.9 mg/kg, exceeding the WDNR NR 720 direct contact RCLs for non-industrial and industrial land uses of 0.148 and 2.11 mg/kg, respectively
  - Benzo(a)pyrene at 9.6 mg/kg, exceeding the WDNR NR 720 direct contact RCLs for non-industrial and industrial land uses of 0.015 and 0.211 mg/kg, respectively, and the EPA RML for residential soil of 1.5 mg/kg
  - Benzo(b)fluoranthene at 13 mg/kg, exceeding the WDNR NR 720 direct contact RCLs for non-industrial and industrial land uses of 0.148 and 2.11 mg/kg, respectively
  - Benzo(k)fluoranthene at 7.6 mg/kg, exceeding the WDNR NR 720 direct contact RCL for non-industrial land use of 1.48 mg/kg
  - Dibenzo(a,h)anthracene at 1.5 mg/kg, exceeding the WDNR NR 720 direct contact RCLs for non-industrial and industrial land uses of 0.015 and 0.211 mg/kg, respectively
  - Indeno(1,2,3-cd)pyrene at 5.4 mg/kg, exceeding the WDNR NR 720 direct contact RCLs for non-industrial and industrial land uses of 0.148 and 2.11 mg/kg, respectively
- Solid waste sample BUF-SW03-121213 contained bis(2-ethylhexyl)phthalate at 110 mg/kg, exceeding the WDNR NR 720 direct contact RCL for non-industrial land use of 34.7 mg/kg.
- Solid waste sample BUF-SW03D-121213 contained bis(2-ethylhexyl)phthalate at 58 mg/kg, exceeding the WDNR NR 720 direct contact RCL for non-industrial land use of 34.7 mg/kg.
- Solid waste sample BUF-SW04-121213 contained the following:
  - Benzo(a)anthracene at 120 mg/kg, exceeding the WDNR NR 720 direct contact RCLs for non-industrial and industrial land uses of 0.148 and 2.11 mg/kg, respectively, and the EPA RML for residential soil of 15 mg/kg
  - Benzo(a)pyrene at 84 mg/kg, exceeding the WDNR NR 720 direct contact RCLs for non-industrial and industrial land uses of 0.015 and 0.211 mg/kg, respectively,

and the EPA RMLs for residential and industrial soils of 1.5 and 21 mg/kg, respectively

  - Benzo(b)fluoranthene at 130 mg/kg, exceeding the WDNR NR 720 direct contact RCLs for non-industrial and industrial land uses of 0.148 and 2.11 mg/kg, respectively, and the EPA RML for residential soil of 15 mg/kg
  - Benzo(k)fluoranthene at 52 mg/kg, exceeding the WDNR NR 720 direct contact RCLs for non-industrial and industrial land uses of 1.48 and 21.1 mg/kg, respectively
  - Chrysene at 120 mg/kg, exceeding the WDNR NR 720 direct contact RCL for non-industrial land use of 14.8 mg/kg
  - Dibenzo(a,h)anthracene at 12 mg/kg, exceeding the WDNR NR 720 direct contact RCLs for non-industrial and industrial land uses of 0.015 and 0.211 mg/kg, respectively, and the EPA RML for residential soil of 1.5 mg/kg
  - Indeno(1,2,3-cd)pyrene at 33 mg/kg, exceeding the WDNR NR 720 direct contact RCLs for non-industrial and industrial land uses of 0.148 and 2.11 mg/kg, respectively, and the EPA RML for residential soil of 15 mg/kg

- Solid waste sample BUF-SW05-121213 contained benzo(a)pyrene at 0.031 mg/kg, exceeding the WDNR NR 720 direct contact RCL for non-industrial soil of 0.015 mg/kg, and bis(2-ethylhexyl)phthalate at 52 mg/kg, exceeding the WDNR NR 720 direct contact RCL for non-industrial land use of 34.7 mg/kg.

RCRA Metals

- Solid waste sample BUF-SW01-121213 contained arsenic at 4.1 mg/kg, which exceeds the WDNR NR 720 direct contact RCLs for non-industrial and industrial land uses of 0.614 and 2.39 mg/kg, respectively.
- Solid waste sample BUF-SW02-121213 contained the following:
  - Arsenic at 15 mg/kg, which exceeds the WDNR NR 720 direct contact RCLs for non-industrial and industrial land uses of 0.614 and 2.39 mg/kg, respectively
  - Lead at 3,100 mg/kg, which exceeds the WDNR NR 720 direct contact RCLs for non-industrial and industrial land uses of 400 and 800 mg/kg, respectively, and the EPA RMLs for residential and industrial soils of 400 and 800 mg/kg, respectively
  - Mercury at 13 mg/kg, which exceeds the NR 720 direct contact RCLs for non-industrial and industrial land uses of 3.13 mg/kg, and the EPA RML for residential soil of 10 mg/kg
- Solid waste sample BUF-SW03-121213 contained the following:
  - Arsenic at 15 mg/kg, which exceeds the WDNR NR 720 direct contact RCLs for non-industrial and industrial land uses of 0.614 and 2.39 mg/kg, respectively

  - Lead at 5,600 mg/kg, which exceeds the WDNR NR 720 direct contact RCLs for non-industrial and industrial land uses of 400 and 800 mg/kg, respectively, and the EPA RMLs for residential and industrial soils of 400 and 800 mg/kg, respectively
  - Mercury at 5.1 mg/kg, which exceeds the WDNR NR 720 direct contact RCLs for non-industrial and industrial land uses of 3.13 mg/kg
- Solid waste sample BUF-SW03D-121213 contained the following:
  - Arsenic at 12 mg/kg, which exceeds the WDNR NR 720 direct contact RCLs for non-industrial and industrial land uses of 0.614 and 2.39 mg/kg, respectively
  - Lead at 6,300 mg/kg, which exceeds the WDNR NR 720 direct contact RCLs for non-industrial and industrial land uses of 400 and 800 mg/kg, respectively, and EPA RMLs for residential and industrial soils of 400 and 800 mg/kg, respectively
  - Mercury at 5.5 mg/kg, which exceeds the WDNR NR 720 direct contact RCLs for non-industrial and industrial land uses of 3.13 mg/kg
- Solid waste sample BUF-SW05-121213 contained the following:
  - Arsenic at 220 mg/kg, which exceeds the WDNR NR 720 direct contact RCLs for non-industrial and industrial land uses of 0.614 and 2.39 mg/kg, respectively, and the EPA RML for residential soil of 34 mg/kg
  - Lead at 59,000 mg/kg, which exceeds the WDNR NR 720 direct contact RCLs for non-industrial and industrial land uses of 400 and 800 mg/kg, respectively, and the EPA RMLs for residential and industrial soils of 400 and 800 mg/kg, respectively
- Solid waste sample BUF-SW06-121213 contained the following:
  - Arsenic at 3.5 mg/kg, which exceeds the WDNR NR 720 direct contact RCLs for non-industrial and industrial land uses of 0.614 and 2.39 mg/kg, respectively
  - Lead at 1,300 mg/kg, which exceeds the WDNR NR 720 direct contact RCLs for non-industrial and industrial land uses of 400 and 800 mg/kg, respectively, and the EPA RMLs for residential and industrial soils of 400 and 800 mg/kg, respectively

PCBs

- No liquid waste samples contained PCBs at concentrations above laboratory detection limits.
- Solid waste sample BUF-SW01-121213 contained Aroclors 1254 and 1260 at 4.8 and 12 mg/kg, respectively, exceeding the WDNR NR 720 direct contact RCLs for non-industrial and industrial land uses of 0.222 and 0.774 mg/kg, respectively. The Aroclor 1254 concentration also exceeds the EPA RML for residential soil of 1.1 mg/kg. The sample also contained total PCBs (the sum of the positively detected Aroclors) at 16.8 mg/kg, which exceeds the 40 CFR Part 761.61 self-implementing cleanup level for a high-occupancy area of 1 mg/kg.

- Solid waste sample BUF-SW02-121213 contained Aroclors 1254 and 1260 at 11 and 5.8 mg/kg, respectively, exceeding the WDNR NR 720 direct contact RCLs for non-industrial and industrial land uses of 0.222 and 0.774 mg/kg, respectively. The Aroclor 1254 concentration also exceeds the EPA RML for residential soil of 1.1 mg/kg. The sample also contained total PCBs at 16.8 mg/kg, which exceeds the 40 CFR Part 761.61 self-implementing cleanup level for a high-occupancy area of 1 mg/kg.
- Solid waste sample BUF-SW03-121213 contained Aroclors 1254 and 1260 at estimated concentrations of 8.4 and 3.4 mg/kg, respectively, exceeding the WDNR NR 720 direct contact RCLs for non-industrial and industrial land uses of 0.222 and 0.774 mg/kg, respectively. The Aroclor 1254 concentration also exceeds the EPA RML for residential soil of 1.1 mg/kg. The sample also contained total PCBs at an estimated concentration of 11.8 mg/kg, which exceeds the 40 CFR Part 761.61 self-implementing cleanup level for a high-occupancy area of 1 mg/kg.
- Solid waste sample BUF-SW03D-121213 contained Aroclors 1254 and 1260 at 9.4 and 3.2 mg/kg, respectively, exceeding the WDNR NR 720 direct contact RCLs for non-industrial and industrial land uses of 0.222 and 0.774 mg/kg, respectively. The Aroclor 1254 concentration also exceeds the EPA RML for residential soil of 1.1 mg/kg. The sample also contained total PCBs at 12.6 mg/kg, which exceeds the 40 CFR Part 761.61 self-implementing cleanup level for a high-occupancy area of 1 mg/kg.
- Solid waste sample BUF-SW05-121213 contained Aroclors 1254 and 1260 at concentrations of 0.54 and 0.39 mg/kg, respectively, exceeding the WDNR NR 720 direct contact RCLs for non-industrial land use of 0.222 mg/kg.
- Solid waste sample BUF-SW06-121213 contained Aroclors 1254 and 1260 at 0.75 and an estimated concentration of 2.4 mg/kg, respectively, exceeding the WDNR NR 720 direct contact RCLs for non-industrial and industrial land uses of 0.222 and 0.774 mg/kg, respectively. The sample also contained total PCBs at an estimated concentration of 3.15 mg/kg, which exceeds the 40 CFR Part 761.61 self-implementing cleanup level for a high-occupancy area of 1 mg/kg.

TPHs

- Liquid waste sample BUF-LW01-121213 contained TPH DRO at 810,000 mg/L; TPH ORO at 400,000 mg/L; and ERO at 1,000,000 mg/L. These results indicate that the sample is pure oil.

Oil and Grease

- Liquid waste sample BUF-LW01-121213 contained oil and grease at 450,000 mg/L; non-polar material at 140,000 mg/L; and polar material at 310,000 mg/L.

4.2 WIPE SAMPLE ANALYTICAL RESULTS

Wipe sample analytical results for PCBs, TAL metals, and dioxins were compared to settled dust screening values established in Table A-3 the 2003 EPA document titled *World Trade Center Indoor Environment Assessment: Selecting Contaminants of Potential Concern and Setting Health-Based Benchmarks* (EPA 2003). Wipe sample analytical results for asbestos were compared to the Asbestos Hazard Emergency Response Act (AHERA) clearance criterion. **Table 4-3** summarizes the wipe sample analytical results discussed below.

PCBs

- No wipe samples contained PCB Aroclors at concentrations above laboratory detection limits.

Metals

- Wipe sample BUF-WP01-121213 contained lead at 0.0076 milligram per 100 square centimeters (mg/100 cm^2), exceeding the EPA settled dust screening value of 0.0027 mg/100 cm^2.
- Wipe sample BUF-WP02-121213 contained the following:
  - Antimony at 0.0074 mg/100 cm^2, exceeding the EPA settled dust screening value of 0.00627 mg/100 cm^2
  - Copper at 0.88 mg/100 cm^2, exceeding the EPA settled dust screening value of 0.62716 mg/100 cm^2
  - Iron at 12 mg/100 cm^2, exceeding the EPA settled dust screening value of 9.40733 mg/100 cm^2
  - Lead at 0.069 mg/100 cm^2, exceeding the EPA settled dust screening value of 0.0027 mg/100 cm^2

Dioxins

- Wipe sample BUF-WP01-121213 contained the following dioxins at concentrations exceeding the EPA settled dust screening value of 0.017 nanograms per 100 square centimeters (ng/100 cm^2): 1,2,3,4,6,7,8-HpCDD; 1,2,3,4,6,7,8-HpCDF; 1,2,3,4,7,8-HxCDF; 1,2,3,6,7,8-HxCDF; 1,2,3,7,8-PeCDF; 2,3,4,6,7,8-HxCDF; 2,3,4,7,8-PeCDF; OCDD; OCDF; total HpCDD; total HpCDF; total HxCDF; total PeCDF; total TCDD; and total TCDF.
- Wipe sample BUF-WP02-121213 contained the following dioxins at concentrations exceeding the EPA settled dust screening value of 0.017 ng/100 cm^2: 1,2,3,4,6,7,8-HpCDF; 1,2,3,4,7,8-HxCDF; 1,2,3,6,7,8-HxCDF; 1,2,3,7,8-PeCDF; 2,3,4,6,7,8-

HxCDF; 2,3,4,7,8-PeCDF; OCDF; total HpCDF; total HxCDD; total HxCDF; total PeCDD; total PeCDF; total TCDD; and total TCDF.

Asbestos

- Wipe samples BUF-WP01-121213 and BUF-WP02-121213 contained asbestos at 49,500 and 524,000 structures per square centimeter (str/cm^2), respectively, exceeding the AHERA clearance criterion of 7,000 str/cm^2.

4.3 PAINT CHIP SAMPLE ANALYTICAL RESULTS

Paint chip sample analytical results for PCBs were compared to PCB bulk product waste as defined in 40 CFR Part 761.3. Paint chip sample analytical results for total lead were used to determine if the paint chip samples represent materials that meet the definition of a "lead-based paint hazard" as defined in 40 CFR Part 745 or the definition of a "lead-bearing paint" as defined in the Wisconsin Statute, Chapter 254. **Table 4-4** summarizes the paint chip sample analytical results discussed below.

PCBs

- Paint chip sample BUF-PC04D-121213 contained Aroclors 1254 and 1260 at 13 and 47 mg/kg, respectively. The sum of the concentrations of these positively detected Aroclors is 60 mg/kg. According to 40 CFR Part 761.3, applied dried paints containing PCBs in a non-liquid state at a concentration greater than or equal to 50 mg/kg are considered PCB bulk product waste. Therefore, paint chip sample BUF-PC04D-121213 represents a material that meets the definition of a PCB bulk product waste.

Total Lead

- Paint chip sample BUF-PC02-121213 and BUF-PC09-012314 contained total lead at 50,000 and 2,100 mg/kg, respectively. Lead-based paint is defined in 40 CFR 745.223 as paint with lead levels equal to or exceeding 0.5 percent by weight (5,000 mg/kg). Lead-based paint hazards are defined in 40 CFR 745.65 as conditions of lead-based paint and lead-based contaminated dust and soil that would result in adverse health effects. According to 40 CFR 745.65, sample BUF-PC02-121213 represents a material that meets the definition of a lead-based paint hazard. Wisconsin Statute, Chapter 254.11, defines lead-bearing paint as any paint or other surface coating material containing more than 0.06 percent lead by weight (600 mg/kg). According to Wisconsin Statute, Chapter 254.11, both samples BUF-PC02-121213 and BUF-PC09-012314 represent materials that meet the definition of lead-bearing paint.

4.4 BULK SAMPLE ANALYTICAL RESULTS

Bulk samples of suspected ACM were used to identify damaged friable ACM and non-friable ACM that may have become friable as a result of extensive weathering or damage. Regulated ACM is defined in 40 CFR 1910.1001 as any material containing more than 1 % asbestos. According to 40 CFR 763, a solid waste is considered a regulated ACM if it contains more than 1 % asbestos. **Table 4-5** summarizes the bulk sample analytical results. Bulk samples BUF-ACM-05A-121213-Floor Tile and BUF-ACM-05A-121213-Mastic contained 3 and 2 % chrysotile asbestos, respectively. Therefore, these samples represent materials that meet the definition of a regulated ACM.

5. THREATS TO HUMAN HEALTH AND THE ENVIRONMENT

Factors to be considered when determining the appropriateness of a potential removal action at a site are delineated in the NCP at 40 CFR 300.415(b)(2). The factors applicable to the Site are summarized below.

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

The site assessment sampling results document hazardous substances, pollutants, and contaminants in liquid and solid wastes, surface deposits, paint, and bulk building materials as discussed below.

- Analytical results for samples collected during the site assessment indicate that ignitable, corrosive, and toxic hazardous wastes are present at the Site. Liquid waste sample BUF-LW02-121213 had a pH value of 0.5 SU, indicating that the liquid waste associated with this sample is hazardous for the characteristic of corrosivity. Liquid waste sample BUF-LW02-121213 had a flashpoint of 84 °F, indicating that the liquid waste associated with this sample is hazardous for the characteristic of ignitability. Solid waste sample BUF-SW03-121213 contained TCLP lead at a concentration of 75 mg/kg, indicating that the solid waste associated with this material is hazardous for the characteristic of toxicity.
- Analytical results indicate the presence of metals, SVOCs, and PCBs in solid waste samples at concentrations above WDNR NR 720 soil direct contact standards for industrial and non-industrial land uses and EPA RMLs for residential and industrial soils.
- Analytical results indicate the presence of PCBs above the 40 CFR Part 761.61 self-implementing cleanup level for a high-occupancy area and the presence of PCB bulk product waste at the Site. Solid waste samples BUF-SW01-121213,

BUF-SW02-121213, BUF-SW03-121213, BUF-SW03D-121213, and BUF-SW06-121213 contained PCB Aroclors at concentrations above 1 mg/kg, indicating that the solid wastes associated with these samples exceed the self - implementing cleanup level for a high-occupancy area. Paint chip sample BUF-PC04D-121213 contained total PCBs at concentrations above 50 mg/kg, indicating that the paint associated with this sample meets the definition of a PCB bulk product waste.

- Analytical results indicate the presence of lead-bearing paint and lead-based paint hazards at the Site. Paint chip sample BUF-PC02-121213 contained lead at 50,000 mg/kg, indicating that the paint associated with this sample meets the definition of a lead-bearing paint and a lead-based paint hazard. Paint chip sample BUF-PC09-012314 contained lead at 2,100 mg/kg, indicating that the paint associated with this sample meets the definition of a lead-bearing paint. Paint chip sample BUF-PC09-012314 was collected from peeling paint on the east exterior building wall from a metal door across the alley from residences.
- Analytical results for wipe samples indicate the presence of metals and dioxins above EPA settled dust screening values and chrysotile asbestos above the AHERA clearance criterion on surfaces in the Site building.
- Analytical results indicate regulated ACM inside the Site building. Bulk sample BUF-ACM-05A-121213-Floor Tile and BUF-ACM-05A-121213-Mastic contained 3 and 2 % chrysotile asbestos, respectively. Asbestos is a hazardous substance as defined by 40 CFR Section 302.4 of the NCP.

The Site is an industrial property located in a mixed industrial, commercial, and residential area. Residential properties are located adjacent to the Site to the north and east. The Beerline Trail, a 4,000-foot-long recreational trail, is located adjacent to the Site to the south and west. In 2010, approximately 24,761 people lived within in a 1-mile radius of the Site (EPA 2014). According to a letter to the EPA from RACM, despite measures by the City of Milwaukee to secure the Site, trespassers continue to regularly break into the Site building and debris regularly is dumped onto the Site's asphalt lot. Broken windows and continued dilapidation of the Site building have created many entrance points, rendering the building a neighborhood safety hazard. A large hole observed in the roof in the east room south of boiler room has resulted in flooded areas on the first floor, where numerous waste containers are present. Stormwater entering through holes in the roof may become contaminated before entering the storm sewer system.

An intentional or accidental release or migration of hazardous substances, pollutants, and contaminants could occur based on the structural condition of the Site building and the Site's history, evidence of trespassing, close proximity to residential properties, and presence of containers either in poor condition, open, or spilled. Potential migration pathways and exposure mechanisms include human and animal activities, surface drainage, and wind dispersion. Potential receptors include nearby residents, trespassers, and potential Site workers. Direct contact with hazardous substances is possible, and the close proximity of residential areas to the Site greatly increases the likelihood of exposure of human populations. Exposure could cause imminent endangerment of human

health and the environment. The following paragraphs discuss health effects associated with exposure to Site-related hazardous substances.

Lead: According to the Agency for Toxic Substances and Disease Registry's (ATSDR) "ToxFAQ for Lead" (ATSDR 2011b), lead can affect almost every bodily organ and system. The main target of lead toxicity is the nervous system in both adults and children. Long-term exposure of adults can result in decreased performance in some tests that measure nervous system functions and cause weakness in fingers, wrists, and ankles. Lead exposure can also cause small increases in blood pressure, especially in middle-aged and older people, and anemia. Exposure to high lead levels can severely damage the brain and kidneys in adults and children and ultimately cause death. In pregnant women, high levels of exposure to lead may cause miscarriage. High-level lead exposure in men can damage the organs responsible for sperm production.

PCBs: According to ATSDR's "ToxFAQs for PCBs" (ATSDR 2011c), the most commonly observed health effects in people exposed to large amounts of PCBs are skin conditions such as acne and rashes. Studies of exposed workers have shown changes in blood and urine that may indicate liver damage. Animals that ate smaller amounts of PCBs in food over several weeks or months developed various health effects, including anemia; acne-like skin conditions; and liver, stomach, and thyroid gland injuries. Other effects of PCBs in animals include changes in the immune system, behavioral alterations, and impaired reproduction. The EPA and the International Agency for Research on Cancer have determined that PCBs are probably carcinogenic to humans.

Asbestos: According to ATSDR's "ToxFAQs for Asbestos" (ATSDR 2011a), asbestos mainly affects the lungs and the membrane that surrounds the lungs. Inhalation of high levels of asbestos fibers for a long time may result in scar-like tissue in the lungs and pleural membrane (lining) that surrounds the lung. This disease is called "asbestosis" and usually is found in workers exposed to asbestos but not in the general public. People with asbestosis have difficulty breathing, cough often, and in severe cases, have enlarged hearts. Asbestosis is a serious disease that can eventually lead to disability and death. Inhalation of lower levels of asbestos may result in "plaques" in the pleural membranes. Pleural plaques can occur in workers and people living in areas with high environmental levels of asbestos. Effects on breathing from pleural plaques alone usually are not serious, but higher exposure can lead to a thickening of the pleural membrane that may restrict breathing. The U.S. Department of Health and Human Services, the World Health Organization, and EPA have determined that asbestos is a human carcinogen.

Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers that may pose a threat of release

Upon entering the first floor of the Site building through the one operable entrance, the following is observable: ten to twelve 5-gallon buckets, some containing a red liquid and some spilled onto the floor; an overturned 55-gallon drum of ash spilled on the floor; two compressed gas cylinders near the entryway labeled "oxygen;" and two 2- to 3-foot-diameter floor drains. One floor drain is open and contains black sludge. In the boiler room on the first floor, a red-painted oven or ash cleanout structure is next to and south of a brick incinerator or oven containing a conveyor belt. Ash is inside and on the floor by

the red-painted structure. Also in the boiler room, there are large totes and 55-gallon drums containing electrical components as well as electrical components spilled on the floor. South of the boiler room on the first floor, the large east room contains a large fume hood, an incinerator, and a large stack or tank structure. A pile of ash is in the bottom of the fume hood. A large area of standing water containing a tipped over 55-gallon drum in front of the large stack structure prevents further inspection of the area. Across from the fume hood is the compromised overhead door that had been boarded up to prevent access by trespassers. Containers near this overhead door include twelve 55-gallon drums, three 40-gallon drums, four 5-gallon buckets, and six pill-shaped bushings. Several of these containers are damaged, open, or spilled onto the ground. Container contents are largely unknown due to a lack of labels. An open tote containing electrical ballasts is located south of the compromised overhead door.

On the south side of the east room on the first floor are six to ten 55-gallon drums, two 5-gallon buckets, and one compressed gas cylinder. Drums mostly are unlabeled, although one drum is labeled "Oil-Water Mix." Several drums in this area are damaged, opened, or tipped over. One drum is distended, on its side, and appears to be leaking.

The third floor of the Site building was a woodworking shop. Waste remaining includes 55-gallon drums, 5-gallon buckets, and numerous other containers, many labeled "Flammable" and "Varnish." Abundant lumber and sawdust piles remain in this area. One area on the third floor has mold or moss coating most of the floor, buckets, and drums. Also, there are broken windows and bird carcasses throughout the third floor. The ceiling is leaking, and there are icicles along cracks in the ceiling. Cracked and loose asbestos floor tiles are in the hallway leading to the woodworking shop. Liquid waste sample BUF-LW02-121213 collected from a small container on this floor had a pH value of 0.5 SU and a flashpoint of 84 °F, indicating that the liquid waste associated with this sample is hazardous for the characteristics of corrosivity and ignitability.

An intentional or accidental release or migration of hazardous material could occur based on the structural condition of the Site building and the Site's history, evidence of trespassing, and presence of containers either in poor condition, open, or spilled.

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

According to the Wisconsin State Climatology Office (2013), Milwaukee County, Wisconsin, receives a substantial amount of precipitation, and temperatures are normally below freezing during the winter, with regular snowfall. In the winter months, the average temperature is approximately 24 °F. In the summer months, the average temperature is 70 °F degrees. From 1971 through 2000, the average total annual precipitation was 34.81 inches and the average seasonal snowfall was 52.6 inches.

Based on the structural condition of the building and the presence of peeling paint and containers either in poor condition, open, or spilled, a weather-related release or migration of hazardous materials could occur. A large hole in the roof in the area south of the boiler room has resulted in flooded areas on the first floor where numerous containers of waste are present. The third floor ceiling was leaking, and icicles were observed along cracks in the ceiling. Stormwater emanating from holes in the roof may become

contaminated before entering the storm sewer system. In addition, weather conditions causing freezing and thawing could increase the risk of currently intact containers developing leaks and therefore increase the risk of additional migration of hazardous substances or pollutants from the Site.

Threat of fire or explosion

Liquid waste sample BUF-LW02-121213 had a flashpoint of 84 °F, indicating that the liquid waste associated with this sample is hazardous for the characteristic of ignitability. In addition, numerous containers in the third floor woodworking shop were labeled "Flammable" and "Varnish." In addition, abundant fuel materials, including lumber and sawdust, were present in the immediate vicinity of the sampling location for BUF-LW02-121213 and containers labeled "Flammable." Therefore, the potential for a fire or explosion exists. If such an event occurs, contaminants could become airborne and may affect the nearby population.

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

The WDNR does not have the resources to respond to conditions at the Site. In a letter dated September 27, 2013, RACM formally requested assistance from the EPA Removal Program with assessment of the Site and eventual demolition and cleanup activities at the Site.

On February 12, 2014, Mr. Ryan Wozniak of the WDHS sent a letter to OSC Halbur requesting time-critical removal assistance to address human health hazards at the Site. According to the letter, this request was based on the City of Milwaukee's inability to permanently secure the building, the presence of numerous toxic waste materials and physical hazards, and its location in the midst of a residential area.

On February 17, 2014, Mr. Paul Biedrzycki of the City of Milwaukee Health Department sent a letter to OSC Halbur concluding that the Site poses a human health hazard to nearby residents, and requesting immediate action by the EPA to remove all hazardous material from the building.

6. SUMMARY CONCLUSIONS

The Site consists of a 0.42-acre lot with a three-story building occupying approximately 27,500 ft^2. The Site is an industrial property located in a mixed industrial, commercial, and residential area. Residential properties are located adjacent to the Site to the north and east. The Beerline Trail, a 4,000-foot-long recreational trail, is located adjacent to the Site to the south and west. Across the Beerline Trail are more residential properties. In 2010, approximately 24,761 people lived within in a 1-mile radius of the Site (EPA 2013).

On September 27, 2013, RACM sent a letter to the EPA requesting assistance from the EPA Removal Program with assessment of the Site and eventual demolition and cleanup activities at the Site. According to the RACM, despite measures by the City of Milwaukee to secure the Site, trespassers continue to regularly break into the Site building and debris regularly is dumped onto the Site's asphalt lot. Broken windows and continued dilapidation of the Site building have created many entrance points, rendering the building a neighborhood safety hazard.

On October 31, 2013, representatives from WESTON START, EPA, WDNR, RACM, MDNS, and MFD conducted a site reconnaissance to document Site conditions and plan for a removal site assessment. Numerous drums and containers were observed that were open or in poor condition, with visible evidence of spills. On December 12, 2013 WDHS and WDNR conducted a site reconnaissance to assess health conditions associated with the abandoned waste and building conditions. On December 12, 2013, WESTON START and EPA collected liquid and solid waste samples from small containers, near incinerators, and spilled on the floor; wipe samples from surfaces of incinerator and fume hood structures; paint chip samples; and building material bulk samples during a limited asbestos survey. On January 23, 2014 additional paint chip samples were collected from the building exterior.

Containers noted during site assessment activities included ten to twelve 5-gallon buckets, some containing a red liquid and some spilled onto the floor; an overturned 55-gallon drum of ash spilled on the floor; and two compressed gas cylinders near the entryway labeled "oxygen" in the west room. In the boiler room, WESTON START observed large totes and 55-gallon drums containing electrical components and electrical components spilled on the floor. In the east room, WESTON START observed a tipped over 55-gallon drum in front of the large stack structure; twelve 55-gallon drums, three 40-gallon drums, four 5-gallon buckets, and one tote containing electrical ballasts near the compromised overhead door; and six to ten 55-gallon drums, two 5-gallon buckets, and one compressed gas cylinder in the southern portion. WESTON START observed two 5-gallon buckets containing ash on the second floor. Containers noted on the third floor included 55-gallon drums, 5-gallon buckets, and numerous other containers, many labeled "Flammable" and "Varnish." A number of other fiberboard drums and 5-gallon buckets containing trash were noted throughout the facility.

Analytical results for samples collected during the site assessment indicate that ignitable, corrosive, and toxic hazardous wastes are present in liquid and solid wastes present at the Site. The site assessment also documents metals, SVOCs, and PCBs in solid waste samples at concentrations above WDNR NR 720 soil direct contact RCLs for industrial and non-industrial land uses and EPA RMLs for residential and industrial soils. The solid waste samples also contained PCBs at concentrations above 1 mg/kg, the 40 CFR Part 761.61 self-implementing cleanup level for a high-occupancy area of 1 mg/kg. Paint chip sampling results document the presence of PCB bulk product waste. Lead-based paint hazards and regulated ACM also were identified during the site assessment.

An intentional or accidental release or migration of hazardous substances, pollutants, and contaminants could occur based on the structural condition of the Site building and the Site's history, evidence of trespassing, and presence of containers either in poor condition, open, or spilled. Exposure to these materials could cause imminent endangerment of human health and the environment.

7. REFERENCES

Agency for Toxic Substances & Disease Registry (ATSDR). 2011a. "ToxFAQ for Asbestos." Accessed on January 10, 2014. On-line Address: http://www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=4

ATSDR. 2011b. "ToxFAQ for Lead." Accessed on January 10, 2014. On-line Address: http://www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=22

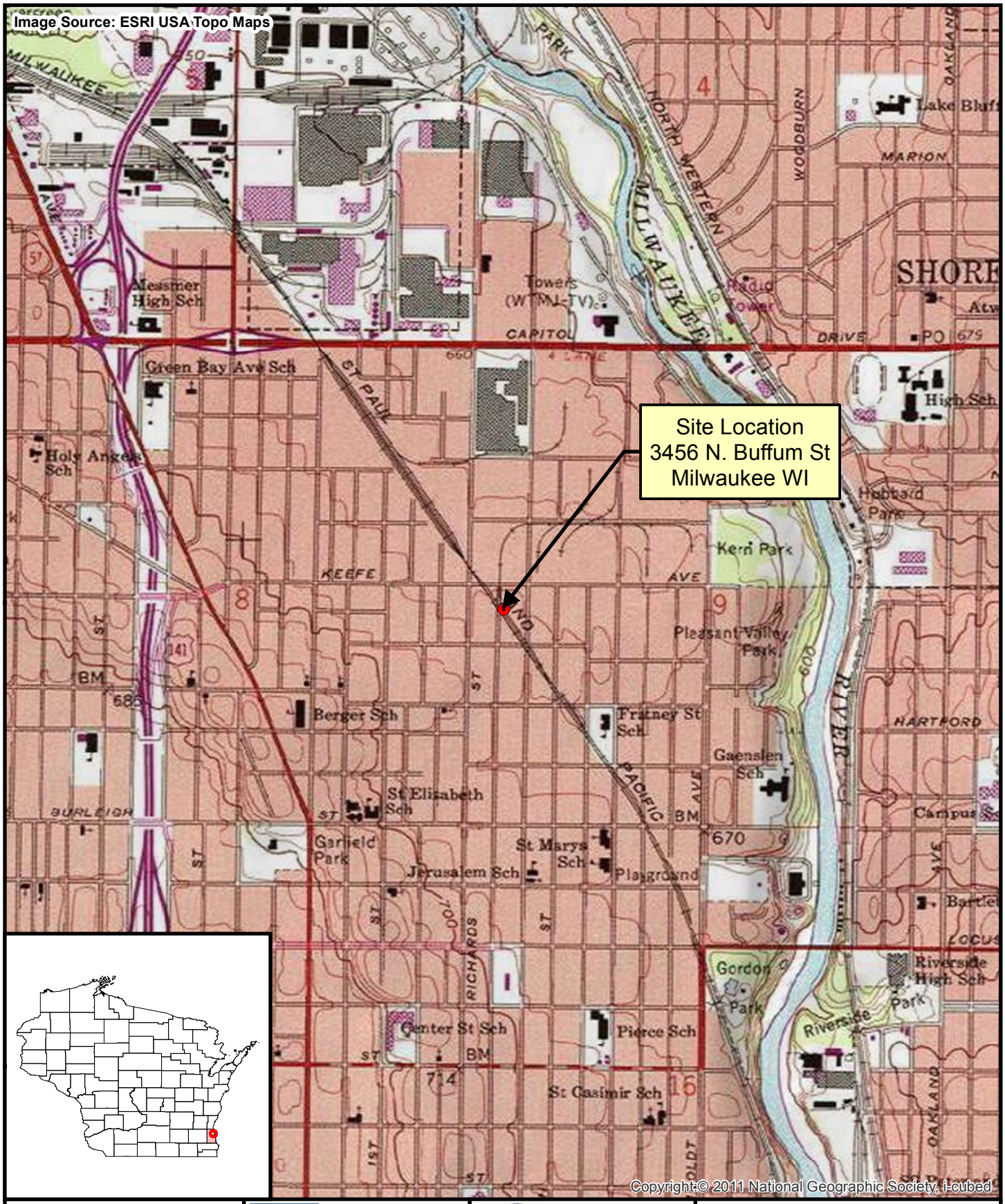
ATSDR. 2011c. "ToxFAQ for PCBs." Accessed on January 10, 2014. On-line Address: http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=140&tid=26

U. S. Environmental Protection Agency (EPA). 2003. *World Trade Center Indoor Environment Assessment: Selecting Contaminants of Potential Concern and Setting Health-Based Benchmarks*.

EPA, 2014. "EJView." Accessed on January 7, 2014. On-line Address: http://www.epa.gov/environmentaljustice/mapping.html

Wisconsin State Climatology Office. 2013. "Milwaukee Climate." Accessed on January 7, 2014. On-line Address: http://www.aos.wisc.edu/~sco/clim-history/7cities/milwaukee.html

FIGURES



Legend

Site Location

0 2,000 Feet

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Prepared for:
EPA REGION V

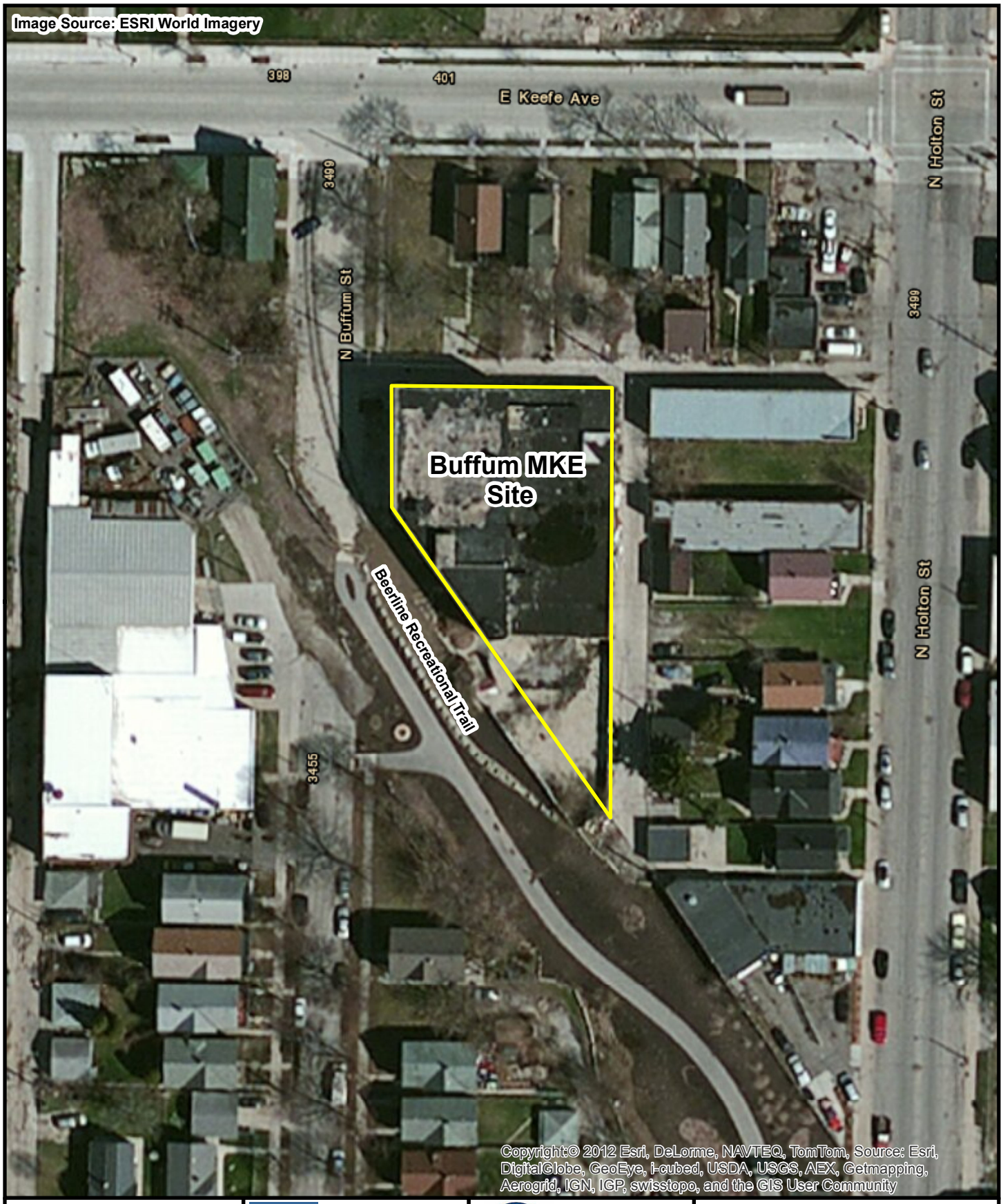
Contract No.: EP-S5-06-04
TDD: S05-0001-1310-003
DCN: 2252-2A-BLET

Prepared By:
WESTON SOLUTIONS, INC

750 E. Bunker Court
Suite 500
Vernon Hills, Illinois 60061

Figure 1-1
Site Location Map
Buffum MKE Site
Milwaukee, Milwaukee County, WI

File: D:\Buffum_St\mxd\SAR\F1-1_Site_Location.mxd, 2/24/2014 2:03:41 PM, wojdakon



Legend

Site Boundary

0 100 Feet

N

Prepared for:
EPA REGION V

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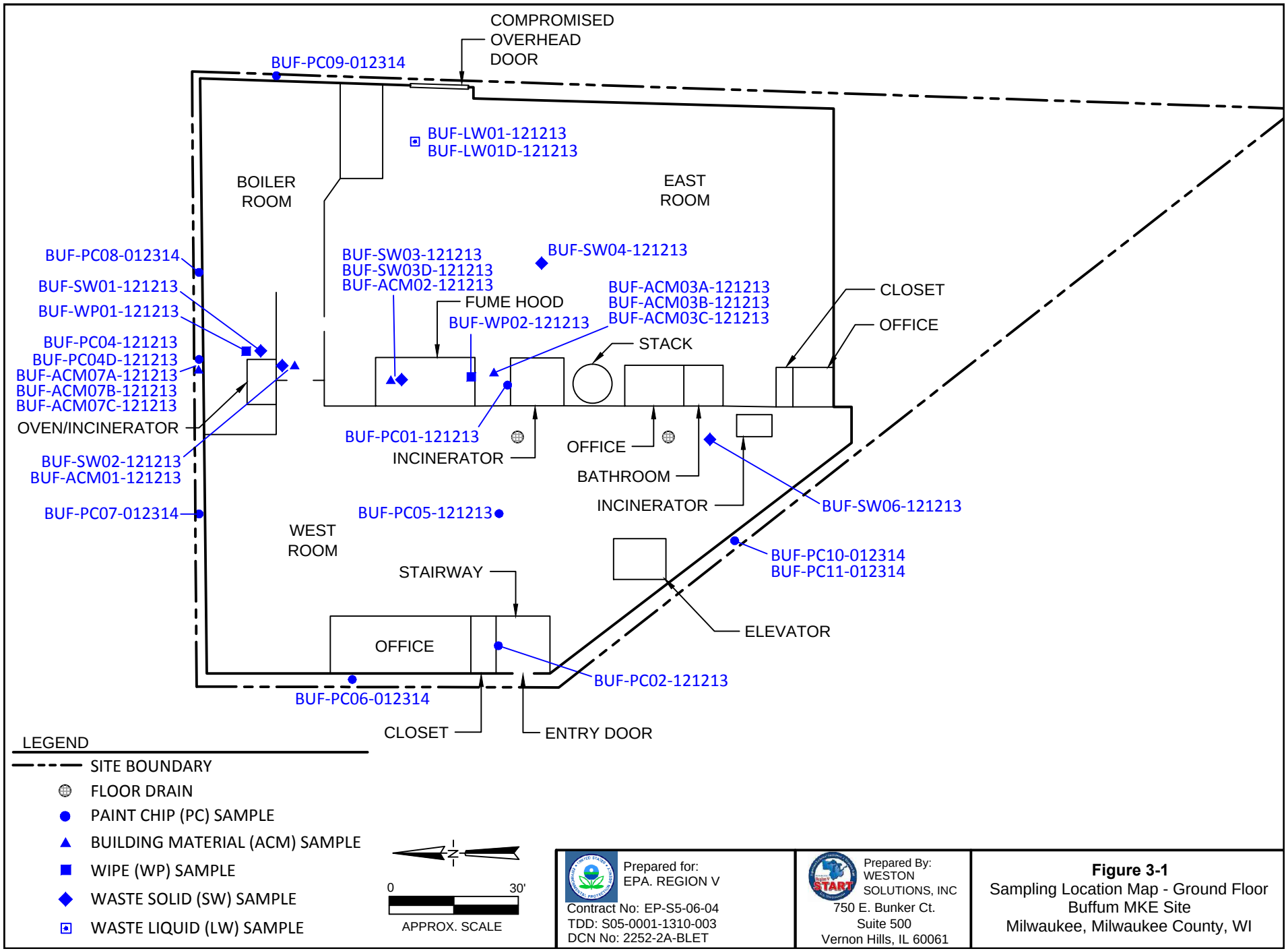
Prepared By:
WESTON SOLUTIONS, INC
750 E. Bunker Court
Suite 500
Vernon Hills, Illinois 60061

Figure 2-1
Site Features Map
Buffum MKE Site
Milwaukee, Milwaukee County, WI

File: D:\Buffum_Stmxd\SARIF2-1_SiteFeatures.mxd, 2/24/2014 2:05:16 PM, wojdakon



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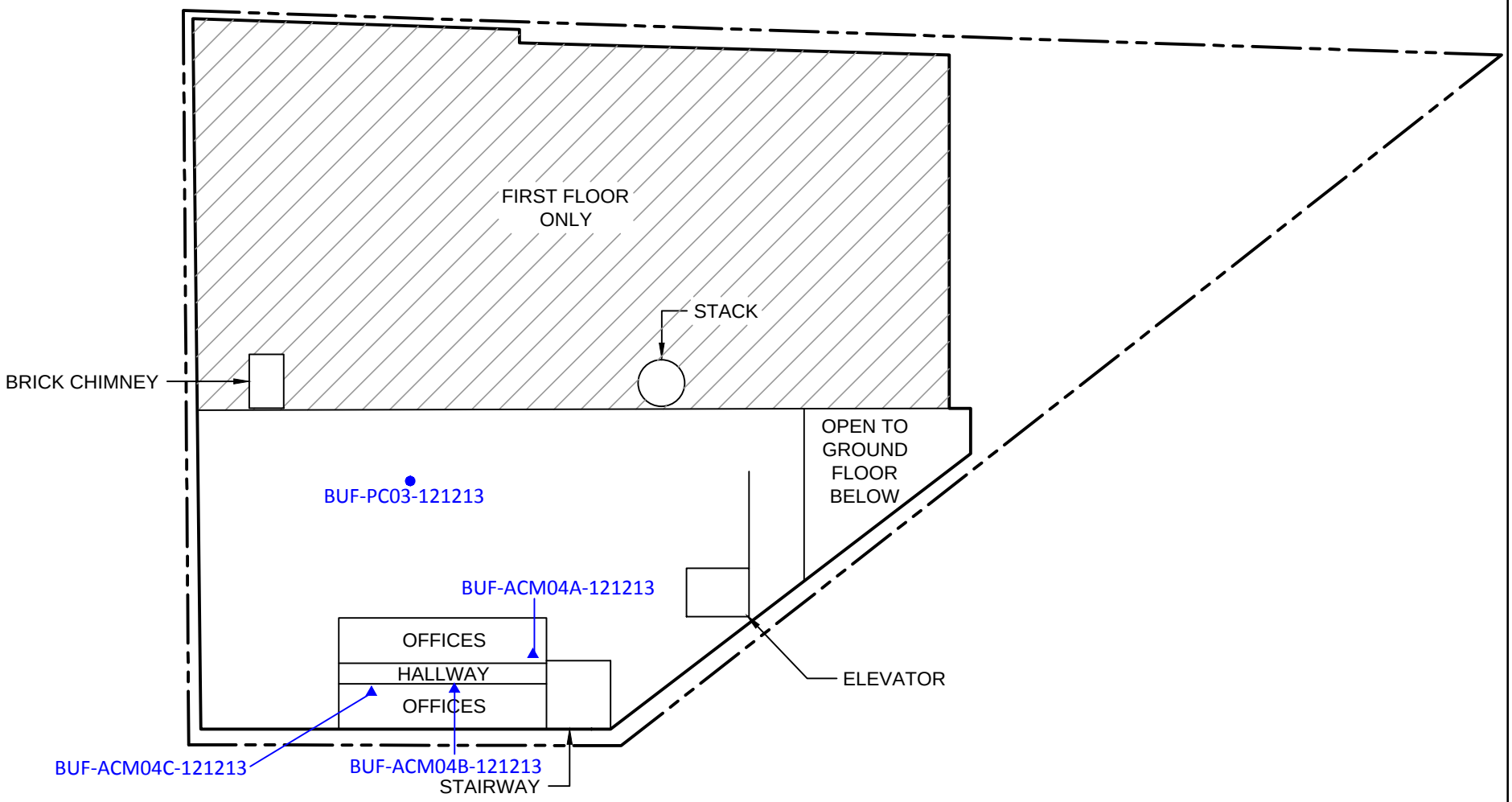
DCN No: 2252-2A-BLET

Prepared By:
WESTON
SOLUTIONS, INC
750 E. Bunker Ct.
Suite 500
Vernon Hills, IL 60061

Figure 3-1
Sampling Location Map - Ground Floor
Buffum MKE Site
Milwaukee, Milwaukee County, WI

C:\09813.dwg, 2/24/2014 9:34:37 AM



LEGEND

- SITE BOUNDARY
- PAINT CHIP (PC) SAMPLE
- BUILDING MATERIAL (ACM) SAMPLE

0 30'

APPROX. SCALE

Prepared for:
EPA. REGION V

Contract No: EP-S5-06-04
TDD: S05-0001-1310-003
DCN No: 2252-2A-BLET

Prepared By:
WESTON
SOLUTIONS, INC
750 E. Bunker Ct.
Suite 500
Vernon Hills, IL 60061

Figure 3-2
Sampling Location Map - Second Floor
Buffum MKE Site
Milwaukee, Milwaukee County, WI

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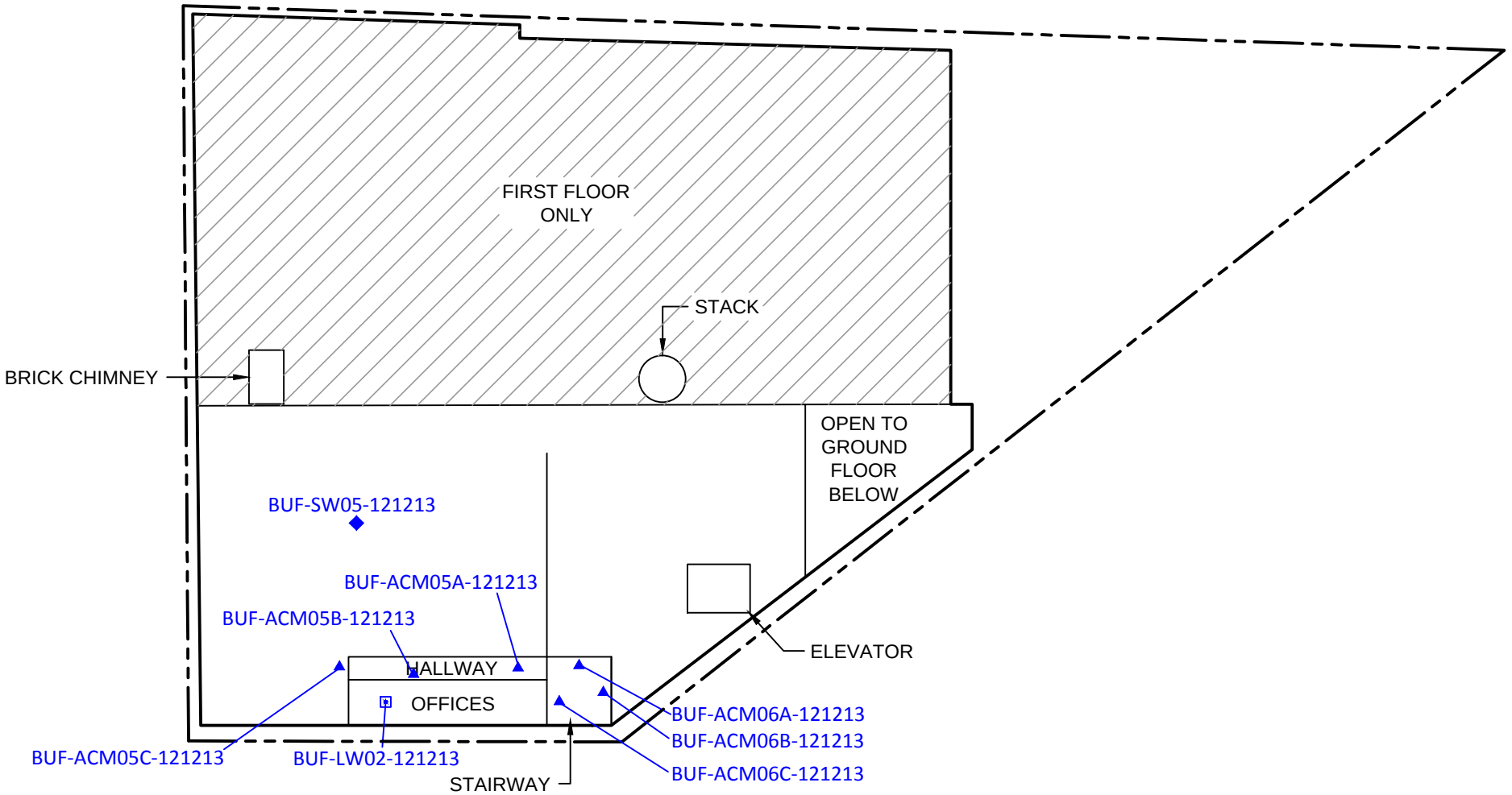

LEGEND

- SITE BOUNDARY
- BUILDING MATERIAL (ACM) SAMPLE
- WASTE SOLID (SW) SAMPLE
- WASTE LIQUID (LW) SAMPLE

0 30'

APPROX. SCALE

Prepared for:
EPA. REGION V

Contract No: EP-S5-06-04
TDD: S05-0001-1310-003
DCN No: 2252-2A-BLET

Prepared By:
WESTON
SOLUTIONS, INC
750 E. Bunker Ct.
Suite 500
Vernon Hills, IL 60061

Figure 3-3
Sampling Location Map - Third Floor
Buffum MKE Site
Milwaukee, Milwaukee County, WI

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TABLES

Table 2-1
Site Chronology
Buffum MKE Site
Milwaukee, Milwaukee County, Wisconsin

Date	Activity or Business	Source
1910	Jager Lumber & Mfg Co. - furniture factory: 1st floor wood-working machinery, 2nd floor cabinet, 3rd floor storage; 15-horsepower engine; lumber shed on east side of property, with 75-horsepower engine; one dwelling south of factory	2013 EDR Sanborn Map Report
5/9/1911	Permit to build 68- by 97-foot factory	2006 Historical Land Use Investigation - MDNS Records
1/23/1914	Permit to build 900-foot addition	2006 Historical Land Use Investigation - MDNS Records
1935	Luedke Storage	2006 Historical Land Use Investigation - Wright's City Directory
1940-1965	MilBrew Inc. - yeast manufacturing	2013 EDR City Directory Search - Wright's City Directory; 2006 Historical Land Use Investigation - Wright's City Directory
	1941: Milwaukee Brew Co. plant	2013 EDR City Directory Search - Wright's City Directory
	1947: Milbrew Inc. - poultry feed	2013 EDR City Directory Search - Wright's City Directory
	1950: Milbrew Inc. - brewer's yeast manufacturing: factory contains a boiler room, engine room, coal storage, loading room, warehouse, and elevator; noted as "Fire Proof" construction; a rail spur located along southern property line immediately adjacent to the property	2013 EDR Sanborn Map Report
	1952-Milbrew Co.	2013 EDR City Directory Search - Wright's City Directory
1955-1960	Standard Feed & Fertilizer Inc.	2006 Historical Land Use Investigation - Wright's City Directory
1958-1970	Amber Laboratory Inc. - chemical manufacturing and animal laboratory	2013 EDR City Directory Search - Wright's City Directory; 2006 Historical Land Use Investigation - Wright's City Directory; Journal of Users of Laboratory Animals, Dated January 1970
11/8/1967	Purdy Products Inc. - soap and detergent manufacturing	2006 Historical Land Use Investigation - MDNS Records
1968	Factory noted as "Fire Proof" (1942), with a boiler room, loading room, and two ASTs noted on the southern property line; AST constructed of concrete block wall and concrete floor built in 1955	2013 EDR Sanborn Map Report
9/3/1969	Permit to install incinerator	2006 Historical Land Use Investigation - MDNS Records
2/2/1970	M.R.C. Corp. - reclamation of precious metals from photographic waste and electronic scrap	2006 Historical Land Use Investigation - MDNS Records

Table 2-1
Site Chronology
Buffum MKE Site
Milwaukee, Milwaukee County, Wisconsin

Date	Activity or Business	Source
1971-1980	1971: E.C. Stiedemann Co. - metal processing	2006 Historical Land Use Investigation - MDNS Records
	1980: Stiedemann Co. - mechanical power transmission equipment	2006 Historical Land Use Investigation - Wright's City Directory
1971-2000	(Joe) Dombek Metals, Inc. - MDH collected samples of wire and cable typical of material "pyrolyzed to collect metal (copper) contents; no analysis performed	MDH, 1971
	Dombek Metals Inc. -scrap metals and metal processing	2013 EDR City Directory - Wright's Polk, and Bressers City Directory
	7/19/2006 - Spill reported of 110 gallons of engine waste oil that affected the storm sewer; MDNR certified cleanup of spill	2013 EDR Radius Search Report - WI SPILLS, WI SHWIMS
12/2/1975	S.A. Mfrs. - manufacturing of industrial wheels	2006 Historical Land Use Investigation - MDNS Records
1976 - 1978	3/10/76: Sophisticated Images Associates, Thermoset Division - MDH collected wipe samples, and 4,4-methylene bis (2-chloroaniline) detected; recommended implementation of rules outlined in OSHA 1910-93(e)	MDH, 1976
	11/29/78: SAI Thermoset Plastics Co.	2006 Historical Land Use Investigation - MDNS Records
1980-1985	Shape Tec Inc. - fiberglass manufacturing	2013 EDR City Directory Search - Wright's City Directory; 2006 Historical Land Use Investigation - MDNS Records, Wright's City Directory
	8/28/1980: Permit to install spray booth at Shape Tec Inc.	2006 Historical Land Use Investigation - MDNS Records
	12/12/1985: Shape Tec Manufacturing - MDH inspection to sample for styrene and methyl ethyl ketone in spray booth area and adjacent office; styrene detected at the threshold limit value in spray booth, and trace amounts of methyl ethyl ketone detected in spray booth; neither sample from office had detected concentrations	MDH, 1985
1982	Industrial Manufacturing Systems - manufacturers of fiberglass equipment and	2013 EDR City Directory Search - Wright's City Directory
1982-2000	KBD Co. - wood working	2013 EDR City Directory Search - Wright's, Polk, and Bressers City Directory; 2006 Historical Land Use Investigation - Wright's City Directory
1985	Ultra Inc. fiberglass design and sales	2006 Historical Land Use Investigation - Wright's City Directory
1988	Creativeform Plastics	2013 EDR City Directory
4/21/1993	Permit to install incinerator	2006 Historical Land Use Investigation - MDNS Records

Table 2-1
Site Chronology
Buffum MKE Site
Milwaukee, Milwaukee County, Wisconsin

Date	Activity or Business	Source
11/6/1997	BOZA variance McEnglish Dismantling Inc. - scrap metal, expires 11/6/02	2006 Historical Land Use Investigation - MDNS Records
2001-2003	North Side Scrap Metal Inc. - recycling centers	2013 EDR City Directory Search - Polk City Directory; 2006 Historical Land Use Investigation - MDNS Records
	Potential uncontrolled emissions of less than 100 tons per year of chlorofluorocarbons (CFC)	2013 EDR Radius Search Report - US AIRS
2008	Knippel Brothers Designing	2013 EDR City Directory Search - Cole Information Services
2013	Simon and Ida Barbier Current Owners - 225 Elm Court, Northbrook, IL 60062	City of Milwaukee Property Tax Search

Notes:

AST = Aboveground storage tank

EDR = Environmental Data Resources Inc.

MDH = Milwaukee Department of Health

MDNR = Milwaukee Department of Natural Resources

MDNS = Milwaukee Department of Neighborhood Services

OSHA = Occupational Safety and Health Administration

Table 3-1
Sampling Summary
Buffum MKE Site
Milwaukee, Milwaukee County, Wisconsin

Sample ID	Sampling Date	Sampling Location	Sample Description	Analytical Parameters																		
				pH	Flash Point	TCLP Metals	TCLP SVOCs	Total Cyanide/ Sulfide	Reactive Cyanide/Sulfide	TCL VOCs	TCL SVOCs	RCRA Metals	PCBs	TAL Metals	TPH DRO/ORO/ ERO	Oil and Grease	Dioxins	Total Lead	Asbestos ASTM 6480	Asbestos EPA 600/R-93/116	Asbestos CARB-435
Waste Liquid Grab Samples																						
BUF-LW01-121213 & BUF-LW01D-121213	12/12/2013	1st Floor, next to compromised overhead door, unlabeled 5-gal. bucket	Red liquid	X	X			X	X	X	X	X	X		X	X					
BUF-LW02-121213	12/12/2013	3rd floor, 1-quart bottle labeled "Flammable"	Amber liquid	X	X																
Waste Solid Grab Samples																						
BUF-SW01-121213	12/12/2013	1st Floor, outside brick incinerator	Ash-like, firm							X	X	X	X								
BUF-SW02-121213	12/12/2013	1st Floor, cleanout on south side of brick incinerator	Ashy							X	X	X	X								
BUF-SW03-121213 & BUF-SW03D-121213	12/12/2013	1st Floor, underneath fume hood	Fine-grained, dust-like	X	X	X		X	X	X	X	X	X								
BUF-SW04-121213	12/12/2013	1st Floor, floor east of east room incinerator	Wet, frozen, muddy, sand-like	X	X		X	X	X	X	X	X	X								
BUF-SW05-121213	12/12/2013	3rd Floor, floor	Tan, grayish-black dust, ash-like	X	X	X		X	X	X	X	X	X								
BUF-SW06-121213	12/12/2013	1st Floor, near 55-gal. drum on its side near southwest incinerator in west room	Ash-like							X	X	X	X								
Wipe Grab Samples																						
BUF-WP01-121213	12/12/2013	1st Floor, wall of brick incinerator	NA										X	X			X		X		
BUF-WP02-121213	12/12/2013	1st Floor, south wall of fume hood	NA										X	X			X		X		
Paint Chip Grab Samples																						
BUF-PC01-121213	12/12/2013	1st Floor, north side of incinerator in east room	Gray										X					X			
BUF-PC02-121213	12/12/2013	1st Floor walls along stairway at entryway	Mostly red, some gray and white										X					X			
BUF-PC03-121213	12/12/2013	2nd Floor beam	Green										X					X			
BUF-PC04-121213 & BUF-PC04D-121213	12/12/2013	Building exterior, north side	Cream										X					X			

Table 3-1
Sampling Summary
Buffum MKE Site
Milwaukee, Milwaukee County, Wisconsin

Sample ID	Sampling Date	Sampling Location	Sample Description	Analytical Parameters																	
				pH	Flash Point	TCLP Metals	TCLP SVOCs	Total Cyanide/ Sulfide	Reactive Cyanide/Sulfide	TCL VOCs	TCL SVOCs	RCRA Metals	PCBs	TAL Metals	TPH DRO/ORO/ ERO	Oil and Grease	Dioxins	Total Lead	Asbestos ASTM 6480	Asbestos EPA 600/R-93/116	Asbestos CARB-435
BUF-PC05-121213	12/12/2013	1st Floor, beam in west room	White										X					X			
BUF-PC06-012314	1/23/2014	Building exterior, west side approximately 1 foot from ground at base of cinderblock	Cream										X					X			
BUF-PC07-012314	1/23/2014	Building exterior, north side across from 2nd house east of alley/Buffum St. intersection	White										X					X			
BUF-PC08-012314	1/23/2014	Building exterior, north side near exposed brick	Cream										X					X			
BUF-PC09-012314	1/23/2014	Building exterior, east side metal door	Brown										X					X			
BUF-PC10-012314	1/23/2014	Building exterior, south side near Beerline Trail	Black										X					X			
BUF-PC11-012314	1/23/2014	Building exterior, south side near Beerline Trail	Cream										X					X			
Building Material Grab Samples																					
BUF-ACM01-121213	12/12/2013	Cleanout on south side of brick	Ashy																	X	X
BUF-ACM02-121213	12/12/2013	Underneath fume hood	Fine-grained, dusty																	X	X
BUF-ACM03A-121213	12/12/2013	Adjacent to east room incinerator	Roofing material																	X	
BUF-ACM03B-121213	12/12/2013																			X	
BUF-ACM03C-121213	12/12/2013																			X	
BUF-ACM04A-121213	12/12/2013	2nd Floor offices and hallway	Ceiling tile																	X	
BUF-ACM04B-121213	12/12/2013																			X	
BUF-ACM04C-121213	12/12/2013																			X	
BUF-ACM05A-121213	12/12/2013	3rd Floor hallway, offices, and stairway	Floor tile																	X	
BUF-ACM05B-121213	12/12/2013																			X	
BUF-ACM05C-121213	12/12/2013																			X	
BUF-ACM06A-121213	12/12/2013		Stairwell plaster																	X	
BUF-ACM06B-121213	12/12/2013																			X	
BUF-ACM06C-121213	12/12/2013																			X	

Table 3-1
Sampling Summary
Buffum MKE Site
Milwaukee, Milwaukee County, Wisconsin

Sample ID	Sampling Date	Sampling Location	Sample Description	Analytical Parameters																	
				pH	Flash Point	TCLP Metals	TCLP SVOCs	Total Cyanide/ Sulfide	Reactive Cyanide/Sulfide	TCL VOCs	TCL SVOCs	RCRA Metals	PCBs	TAL Metals	TPH DRO/ORO/ ERO	Oil and Grease	Dioxins	Total Lead	Asbestos ASTM 6480	Asbestos EPA 600/R-93/116	Asbestos CARB-435
BUF-ACM07A-121213	12/12/2013	North side of building	Cream plaster																	X	
BUF-ACM07B-121213	12/12/2013																			X	
BUF-ACM07C-121213	12/12/2013																			X	

Notes:

ASTM = American Societ for Testing and Measuring
DRO = Diesel-range organics
ERO = Extended-range organics
gal. = Gallon
ID = Identification
NA = Not applicable
ORO = Oil-range organics
PCB = Polychlorinated biphenyl
RCRA = Resource Conservation and Recovery Act
SVOC = Semivolatile organic compound
TCL = Target Compound List
TCLP = Toxicity Ccharacteristic Leaching Procedure
TPH = Total petroleum hydrocarbons
VOC = Volatile organic compound

Table 4-1
Liquid Waste Sample Analytical Results
Buffum MKE Site
Milwaukee, Milwaukee County, Wisconsin

Chemical Name[1]	40 CFR 261	Location ID	BUF-LW01	BUF-LW01	BUF-LW02
		Field Sample ID	BUF-LW01-121213	BUF-LW01D-121213	BUF-LW02-121213
		Sampling Date	12/12/2013	12/12/2013	12/12/2013
		Unit	Result		
pH	≤2 or ≥ 12.5	SU	4.83 H	6.5 H	0.5 H
Flashpoint	< 140	°F	>200	>200	84
Total Cyanide/Sulfide					
Cyanide, Total	NL	mg/L	0.0092	0.0086	-
Sulfide, Total	NL	mg/L	86	210	-
Reactive Cyanide/Sulfide					
No reactive cyanide/sulfide was detected in the samples at concentrations above laboratory detection limits.					
TCL VOCs					
No TCL VOCs were detected in the samples at concentrations above laboratory detection limits.					
TCL SVOCs					
No TCL SVOCs were detected in the samples at concentrations above laboratory detection limits.					
RCRA Metals					
Cadmium	NL	mg/kg	0.65	0.68	-
Lead	NL	mg/kg	0.23 U	0.24	-
PCBs					
No PCB Aroclors were detected in the samples at concentrations above laboratory detection limits.					
TPHs					
DRO (C10-C28)	NL	mg/L	810000	-	
ORO (C28-C40)	NL	mg/L	400000	-	-
ERO (C8-C40)	NL	mg/L	1000000	-	-
Oil and Grease					
Oil and Grease	NL	mg/L	450000 H	-	-
Non-Polar Material	NL	mg/L	140000 H	-	
Polar Material	NL	mg/L	310000 H	-	-

Notes:

[1]Only postively detected chemicals are listed.

Shaded values exceed 40 CFR 261 regulatory limits.

- = Not analyzed

CFR = *Code of Federal Regulations*

DRO = Diesel-range organics

ERO = Extended-range organics

ID = Identification

H = Analyzed outside of laboratory holding time

mg/kg = Milligram per kilogram

mg/L = Milligram per liter

NL = Not listed

ORO = Oil-range organics

PCB = Polychlorinated biphenyl

RCRA = Resource Conservation and Recovery Act

SU = Standard unit

SVOC = Semivolatile organic compound

TCL = Target Compound List

TPH = Total petroleum hydrocarbon

U = Constituent not detected at listed reporting limit

VOC = Volatile organic compound

Table 4-2
Solid Waste Sample Analytical Results
Buffum MKE Site
Milwaukee, Milwaukee County, Wisconsin

Chemical Name[1]	40 CFR, Part 261	40 CFR Part 761	WDNR NR 720 Soil Direct Contact RCL, Non-Industrial	WDNR NR 720 Soil Direct Contact RCL, Industrial	EPA RML (HQ 1) Residential Soil	EPA RML (HQ 1) Industrial Soil	Location ID	BUF-SW01	BUF-SW02	BUF-SW03	BUF-SW03	BUF-SW04	BUF-SW05	BUF-SW06
							Field Sample ID	BUF-SW01-121213	BUF-SW02-121213	BUF-SW03-121213	BUF-SW03D-121213	BUF-SW04-121213	BUF-SW05-121213	BUF-SW06-121213
							Sampling Date	12/12/2013	12/12/2013	12/12/2013	12/12/2013	12/12/2013	12/12/2013	12/12/2013
							Unit	Result					Result	
pH	<=2 or >=12.5	NL	NL	NL	NL	NL	SU	-	-	7.5 J	-	7.6 J	10.4 J	-
Flashpoint	< 140	NL	NL	NL	NL	NL	°F	-	-	>200 J	-	>200 J	>200 J	-
TCLP Metals														
Arsenic, TCLP	5	NL	NL	NL	NL	NL	mg/L	-	-	0.01 U	-	-	0.35	-
Barium, TCLP	100	NL	NL	NL	NL	NL	mg/L	-	-	0.8	-	-	1.6	-
Cadmium, TCLP	1	NL	NL	NL	NL	NL	mg/L	-	-	0.52	-	-	0.002 U	-
Chromium, TCLP	5	NL	NL	NL	NL	NL	mg/L	-	-	0.02 U	-	-	0.066	-
Lead, TCLP	5	NL	NL	NL	NL	NL	mg/L	-	-	75	-	-	4	-
Silver, TCLP	5	NL	NL	NL	NL	NL	mg/L	-	-	0.005 U	-	-	0.0081	-
TCLP SVOCs														
No TCLP SVOCs were detected in the samples at concentrations above laboratory detection limits.														
Total Cyanide/Sulfide														
No total cyanide/sulfide was detected in the samples at concentrations above laboratory detection limits.														
Reactive Cyanide/Sulfide														
No reactive cyanide/sulfide was detected in the samples at concentrations above laboratory detection limits.														
TCL VOCs														
Styrene	NL	NL	867	867	6300	36000	mg/kg	0.031 U	0.19	0.41	1.3	0.047 U	0.29	0.074 U
Toluene	NL	NL	818	818	5000	45000	mg/kg	0.031 U	0.13 U	0.11	0.16	0.047 U	0.11	0.074 U
Trichlorofluoromethane	NL	NL	1120	1230	790	3400	mg/kg	0.031 U	0.33	0.11	0.13 U	0.047 U	0.064 U	0.074 U
Xylenes, Total	NL	NL	258	258	630	2700	mg/kg	0.093 U	0.38 U	0.41	0.39 U	0.14 U	0.19 U	0.22 U
TCL SVOCs														
2-Methylnaphthalene	NL	NL	229	2200	230	2200	mg/kg	0.069 U	1.4 U	1.1 U	0.98 U	3.2 U	0.3	0.0082 U
Acenaphthene	NL	NL	3440	33000	3400	33000	mg/kg	0.069 U	1.4 U	1.1 U	0.98 U	3.6	0.021 U	0.0082 U
Acenaphthylene	NL	NL	NL	NL	NL	NL	mg/kg	0.069 U	1.4 U	1.1 U	0.98 U	6	0.055	0.0082 U
Anthracene	NL	NL	17200	100000	17000	170000	mg/kg	0.23	2.4	1.1 U	0.98 U	23	0.026	0.0082 U
Benzo(a)anthracene	NL	NL	0.148	2.11	15	210	mg/kg	1.4	4.9	1.1 U	0.98 U	120	0.21 U	0.0082 U
Benzo(a)pyrene	NL	NL	0.015	0.211	1.5	21	mg/kg	1.2	9.6	3.2 U	2.9 U	84	0.031	0.025 U
Benzo(b)fluoranthene	NL	NL	0.148	2.11	15	210	mg/kg	1.9	13	4.7 U	4.4 U	130	0.078	0.037 U
Benzo(g,h,i)perylene	NL	NL	NL	NL	NL	NL	mg/kg	0.76	5.8	3.2 U	2.9 U	28	0.021 U	0.025 U
Benzo(k)fluoranthene	NL	NL	1.48	21.1	150	2100	mg/kg	0.72	7.6	3.2 U	2.9 U	52	0.035	0.025 U
Bis(2-ethylhexyl)phthalate	NL	NL	34.7	123	1200	12000	mg/kg	3.4 U	69 U	110	58	160 U	52	0.41 U
Butyl benzyl phthalate	NL	NL	256	907	12000	91000	mg/kg	1.6 U	78	25 U	24 U	78 U	4.9 U	0.2 U
Chrysene	NL	NL	14.8	211	1500	21000	mg/kg	1.6	13	4.7 U	4.4 U	120	0.21 U	0.037 U
Dibenzo(a,h)anthracene	NL	NL	0.015	0.211	1.5	21	mg/kg	0.24	1.5	1.1 U	0.98 U	12	0.021 U	0.0082 U
Fluoranthene	NL	NL	2290	22000	2300	22000	mg/kg	2.6	28	7.9 U	7.3 U	260	0.15	0.061 U
Indeno(1,2,3-cd)pyrene	NL	NL	0.148	2.11	15	210	mg/kg	0.73	5.4	3.2 U	2.9 U	33	0.021 U	0.025 U
Naphthalene	NL	NL	5.15	26	140	620	mg/kg	0.069 U	1.4 U	1.1 U	0.98 U	3.2 U	0.73	0.0082 U
Phenanthrene	NL	NL	NL	NL	NL	NL	mg/kg	1.2	15	4.7 U	4.4 U	100	0.36	0.051
Pyrene	NL	NL	1720	16500	1700	17000	mg/kg	1.9	20	6.3 U	5.9 U	190	0.21 U	0.049 U
RCRA Metals														
Arsenic	NL	NL	0.614	2.39	34	240	mg/kg	4.1	15	15	12	2.9 U	220	3.5
Barium	NL	NL	15300	100000	15000	190000	mg/kg	57	520	660	540	100	3600	350
Cadmium	NL	NL	70	799	70	800	mg/kg	1.5 U	43	39	37	2.8	22	61
Chromium	NL	NL	16000	NL	NL	NL	mg/kg	20	310	91	680	48	380	230
Lead	NL	NL	400	800	400	800	mg/kg	96	3100	5600	6300	170	59000	1300
Selenium	NL	NL	391	5110	390	5100	mg/kg	3.8 U	7	4.7	4.7	2.9 U	2.1 U	2.2 U
Silver	NL	NL	391	5110	390	5100	mg/kg	3.8 U	18	97	77	12	13	33
Mercury	NL	NL	3.13	3.13	10	43	mg/kg	0.32	13	5.1	5.5	0.39	0.18	2.2

Table 4-2
Solid Waste Sample Analytical Results
Buffum MKE Site
Milwaukee, Milwaukee County, Wisconsin

Chemical Name[1]	40 CFR, Part 261	40 CFR Part 761	WDNR NR 720 Soil Direct Contact RCL, Non-Industrial	WDNR NR 720 Soil Direct Contact RCL, Industrial	EPA RML (HQ 1) Residential Soil	EPA RML (HQ 1) Industrial Soil	Location ID	BUF-SW01	BUF-SW02	BUF-SW03	BUF-SW03	BUF-SW04	BUF-SW05	BUF-SW06
							Field Sample ID	BUF-SW01-121213	BUF-SW02-121213	BUF-SW03-121213	BUF-SW03D-121213	BUF-SW04-121213	BUF-SW05-121213	BUF-SW06-121213
							Sampling Date	12/12/2013	12/12/2013	12/12/2013	12/12/2013	12/12/2013	12/12/2013	12/12/2013
							Unit	Result					Result	
PCBs														
Aroclor 1254	NL	NL	0.222	0.744	1.1	11	mg/kg	4.8	11	8.4 J	9.4	3.8 U	0.54	0.75
Aroclor 1260	NL	NL	0.222	0.744	22	74	mg/kg	12	5.8	3.4 J	3.2	3.8 U	0.39	2.4 J
Total PCBs[2]	NL	1	NL	NL	NL	NL	mg/kg	16.8	16.8	11.8 J	12.6	3.8 U	0.93	3.15 J
Miscellaneous Analyses														
Moisture	NL	NL	NL	NL	NL	NL	%	3.2	4	8.1	7.9	37	14	19 H
Moisture[3]	NL	NL	NL	NL	NL	NL	%	-	-	8.1	-	37	6.2	-

Notes:

[1]Only postively detected chemicals are listed.

[2] Total PCBs is the sum of all positively detected Aroclors.

[3]Remeasured during TCLP analysis

Shaded values exceed 40 CFR 261 regulatory limits.

Shaded values exceed 40 CFR 761.61 regulatory limits.

Shaded values exceed WDNR NR 720 direct contact RCLs for non-industrial land uses.

Shaded values exceed WDNR NR 720 direct contact RCLs for industrial and non-industrial land uses.

Shaded values exceed EPA RMLs (HQ 1) for residential soil.

Shaded and underlined values exceed EPA RMLs (HQ 1) for residential soil and WDNR NR 720 Direct Contact RCLs for industrial and non-industrial land uses.

Shaded values exceed EPA RMLs (HQ 1) for industrial and residential soil.

Shaded and underlined values exceed EPA RMLs (HQ 1) for industrial and residential soil and WDNR NR 720 Direct Contact RCLs for industrial and non-industrial land uses.

- = Not analyzed
CFR = *Code of Federal Regulations*
ID = Identification
H = Analyzed outside of laboratory holding time
HQ = Hazard quotient
J = Result considered estimated
mg/kg = Milligram per kilogram
mg/L = Milligram per liter
NL = Not listed
PCB = Polychlorinated biphenyl
RCL = Residual Contaminant Level
RCRA = Resource Conservation and Recovery Act
RML = Removal Management Level
SU = Standard unit
SVOC = Semivolatile organic compound
TCL = Target Compound List
TCLP = Toxicity Characteristic Leaching Procedure
U = Constituent not detected at listed reporting limit
VOC = Volatile organic compound
WDNR = Wisconsin Department of Natural Resources

Table 4-3
Wipe Sample Analytical Results
Buffum MKE Site
Milwaukee, Milwaukee County, Wisconsin

Chemical Name	EPA Settled Dust Screening Value	AHERA Clearance Criterion	Location ID	BUF-WP01	BUF-WP02
			Field Sample ID	BUF-WP01-121213	BUF-WP02-121213
			Sampling Date	12/12/2013	12/12/2013
			Unit	Result	
PCBs					
No PCB Aroclors were detected in the samples at concentrations above laboratory detection limits.					
TAL Metals					
Aluminum	15.67888	NL	mg/100 cm^2	0.13	0.14
Antimony	0.00627	NL	mg/100 cm^2	0.00025 U	0.0074
Arsenic	0.00387	NL	mg/100 cm^2	0.00032	0.0029
Barium	1.09752	NL	mg/100 cm^2	0.0016	0.018
Cadmium	0.01557	NL	mg/100 cm^2	0.0001	0.0026
Calcium	NL	NL	mg/100 cm^2	1.3	0.62
Chromium	0.04704	NL	mg/100 cm^2	0.00062	0.0031
Cobalt	0.31358	NL	mg/100 cm^2	0.00025 U	0.0017
Copper	0.62716	NL	mg/100 cm^2	0.0084	0.88
Iron	9.40733	NL	mg/100 cm^2	0.084	12
Lead	0.0027	NL	mg/100 cm^2	0.0076	0.069
Magnesium	NL	NL	mg/100 cm^2	0.38	0.29
Manganese	0.31358	NL	mg/100 cm^2	0.0023	0.052
Mercury	0.00157	NL	mg/100 cm^2	0.00002 U	0.00005
Nickel	0.31358	NL	mg/100 cm^2	0.00044	0.0055
Potassium	NL	NL	mg/100 cm^2	0.097	0.076
Selenium	0.07839	NL	mg/100 cm^2	0.00025 U	0.00053
Silver	0.07839	NL	mg/100 cm^2	0.00025 U	0.0014
Sodium	NL	NL	mg/100 cm^2	0.59	0.64
Vanadium	0.10975	NL	mg/100 cm^2	0.002	0.00033
Zinc	4.70366	NL	mg/100 cm^2	0.059	0.1
Dioxins					
1,2,3,4,6,7,8-HpCDD	0.017	NL	ng/100 cm^2	0.06	0.05 U
1,2,3,4,6,7,8-HpCDF	0.017	NL	ng/100 cm^2	0.19	0.2
1,2,3,4,7,8-HxCDF	0.017	NL	ng/100 cm^2	0.099	0.25
1,2,3,6,7,8-HxCDF	0.017	NL	ng/100 cm^2	0.067	0.14
1,2,3,7,8-PeCDF	0.017	NL	ng/100 cm^2	0.085	0.39
2,3,4,6,7,8-HxCDF	0.017	NL	ng/100 cm^2	0.074	0.098
2,3,4,7,8-PeCDF	0.017	NL	ng/100 cm^2	0.092	0.36
OCDD	0.017	NL	ng/100 cm^2	0.16	0.1 U
OCDF	0.017	NL	ng/100 cm^2	0.13	0.1
Total HpCDD	0.017	NL	ng/100 cm^2	0.12	0.05 U
Total HpCDF	0.017	NL	ng/100 cm^2	0.19	0.2
Total HxCDD	0.017	NL	ng/100 cm^2	0.05 U	0.14
Total HxCDF	0.017	NL	ng/100 cm^2	0.53	1.3
Total PeCDD	0.017	NL	ng/100 cm^2	0.05 U	0.22

Table 4-3
Wipe Sample Analytical Results
Buffum MKE Site
Milwaukee, Milwaukee County, Wisconsin

Chemical Name	EPA Settled Dust Screening Value	AHERA Clearance Criterion	Location ID	BUF-WP01	BUF-WP02
			Field Sample ID	BUF-WP01-121213	BUF-WP02-121213
			Sampling Date	12/12/2013	12/12/2013
			Unit	Result	
Total PeCDF	0.017	NL	ng/100 cm^2	0.79	3.9
Total TCDD	0.017	NL	ng/100 cm^2	0.044	0.28
Total TCDF	0.017	NL	ng/100 cm^2	1.2	4.1
Asbestos					
Asbestos-Chrysotile	NL	7000	str/cm²	49500	524000

Notes:

[1]Only postively detected chemicals are listed.

Shaded values exceed EPA settled dust screening values derived from Table A-3 of the *World Trade Center Indoor Environment Assessment: Selecting Contaminants of Potential Concern and Setting Health-Based Benchmarks.*

Shaded values exceed AHERA clearance criteria.

AHERA = Asbestos Hazard Emergency Response Act
ID = Identification
mg/100 cm^2 = Milligram per 100 square centimeters
ng/100 cm^2 = Nanogram per 100 square centimeters
NL = Not listed
PCB = Polychlorinated biphenyl
str/cm^2 = Structure per square centimeter
TAL = Target Analyte List
U = Constituent not detected at listed reporting limit

Table 4-4
Paint Chip Sample Analytical Results
Buffum MKE Site
Milwaukee, Milwaukee County, Wisconsin

Chemical Name[1]	40 CFR Part 745	Wisconsin Statute Chapter 254	40 CFR Part 761	Location ID	BUF-PC01	BUF-PC02	BUF-PC03	BUF-PC04	BUF-PC04	BUF-PC05
				Field Sample ID	BUF-PC01-121213	BUF-PC02-121213	BUF-PC03-121213	BUF-PC04-121213	BUF-PC04D-121213	BUF-PC05-121213
				Sampling Date	12/12/2013	12/12/2013	12/12/2013	12/12/2013	12/12/2013	12/12/2013
				Unit	Result					
PCBs										
Aroclor 1254	NL	NL	50	mg/kg	2.2	40	24	0.72	13	18
Aroclor 1260	NL	NL	50	mg/kg	3	0.23 U	0.62 U	0.88	47	5.9
Total PCBs[2]	NL	NL	50	mg/kg	5.2	40	24	1.6	60	23.9
Total Lead										
Lead	5000	600	NL	mg/kg	42	50000	480	79	46	550

Chemical Name[1]	40 CFR Part 745	Wisconsin Statute Chapter 254	40 CFR Part 761	Location ID	BUF-PC06	BUF-PC07	BUF-PC08	BUF-PC09	BUF-PC10	BUF-PC11
				Field Sample ID	UF-PC06-0123	UF-PC07-0123	UF-PC08-0123	UF-PC09-0123	UF-PC10-0123	UF-PC11-0123
				Sampling Date	1/23/2014	1/23/2014	1/23/2014	1/23/2014	1/23/2014	1/23/2014
				Unit						
PCBs					0.73 U	0.33 U	0.26 U	1.3 U	0.63 U	0.25 U
Aroclor 1254	NL	NL	50	mg/kg	0.73 U	0.33 U	0.3	1.3 U	0.86	0.32
Aroclor 1260	NL	NL	50	mg/kg	0.73 U	0.33 U	0.26 U	1.3 U	0.85	0.34
Total PCBs[2]	NL	NL	50	mg/kg	0.73 U	0.33 U	0.3	1.3 U	1.71	0.66
Total Lead										
Lead	5000	600	NL	mg/kg	100	30	49	2100	29	43

[1]Only postively detected chemicals are listed.

[2] Total PCBs is the sum of all positively detected Aroclors.

Shaded values represent materials meeting the definition of a lead-bearing paint as defined in the Wisconsin Statute, Chapter 254.

Shaded values represent materials meeting the definition of a lead-based paint hazard as defined in 40 CFR Part 745 and the definition of a lead-bearing paint as defined in the Wisconsin Statute, Chapter 254.

Shaded values represent materials meeting the definition of PCB bulk product waste as defined in 40 CF

CFR = *Code of Federal Regulations*
ID = Identification
mg/kg = Milligram per kilogram
NL = Not listed
PCB = Polychlorinated biphenyl
U = Constituent not detected at listed reporting limit

Table 4-5
Bulk Sample Analytical Results
Buffum MKE Site
Milwaukee, Milwaukee County, Wisconsin

Field Sample ID	Chemical Name	Asbestos	Asbestos Chrysotile	Non-Asbestos Components	
	Analytical Method	PLM	PLM CARB 435	% Fibrous	% Non-Fibrous
	Sampling Date	Result			
BUF-ACM01-121213	12/12/2013	-	< 0.25 %	ND	100% Non-fibrous (other)
BUF-ACM02-121213	12/12/2013	-	< 0.25 %	ND	100% Non-fibrous (other)
BUF-ACM-03A-121213	12/12/2013	ND	-	60% Cellulose	40% Non-fibrous (other)
BUF-ACM-03B-121213	12/12/2013	ND	-	60% Cellulose	40% Non-fibrous (other)
BUF-ACM-03C-121213	12/12/2013	ND	-	20% Cellulose	80% Non-fibrous (other)
BUF-ACM-04A-121213	12/12/2013	ND	-	20% Cellulose, 60% Min. Wool	15% Perlite, 5% Non-fibrous (other)
BUF-ACM-04B-121213	12/12/2013	ND	-	20% Cellulose, 60% Min. Wool	15% Perlite, 5% Non-fibrous (other)
BUF-ACM-04C-121213	12/12/2013	ND	-	20% Cellulose, 60% Min. Wool	15% Perlite, 5% Non-fibrous (other)
BUF-ACM-05A-121213-Floor Tile	12/12/2013	3% Chrysotile	-	ND	97% Non-fibrous (other)
BUF-ACM-05A-121213-Mastic	12/12/2013	2 % Chrysotile	-	ND	98% Non-fibrous (other)
BUF-ACM-06A-121213	12/12/2013	ND	-	ND	20% Quartz, 80% Non-fibrous (other)
BUF-ACM-06B-121213	12/12/2013	ND	-	ND	20% Quartz, 80% Non-fibrous (other)
BUF-ACM-06C-121213	12/12/2013	ND	-	ND	20% Quartz, 80% Non-fibrous (other)
BUF-ACM-07A-121213	12/12/2013	ND	-	ND	20% Quartz, 80% Non-fibrous (other)
BUF-ACM-07B-121213	12/12/2013	ND	-	ND	20% Quartz, 80% Non-fibrous (other)
BUF-ACM-07C-121213	12/12/2013	ND	-	2% Glass	15% Quartz, 83% Non-fibrous (other)

Notes

Shaded values indicate that asbestos was detected.

- Not analyzed
ND = Not detected
CARB = California Air Resources Board
PLM = Polarized light microscopy
ID = Identification

APPENDIX A
PHOTOGRAPHIC DOCUMENTATION

Site: Buffum MKE Site
Photograph No.: 1 **Date:** 9/23/13
Direction: West **Photographer:** Karen Dettmer
Subject: South side of building with boarded up windows, crumbling paint and façade, and chain-link fence at courtyard allowing trespassing

Site: Buffum MKE Site
Photograph No.: 2 **Date:** 9/23/13
Direction: East **Photographer:** Karen Dettmer
Subject: South side of Site building in fenced paved area; note 55-gallon steel drum on side at far southeastern corner of building and graffiti indicating trespassing; pair of women's shoes present near drum

Site: Buffum MKE Site
Photograph No.: 3 **Date:** 10/22/13
Direction: South-southwest **Photographer:** Marita Stollenwerk
Subject: Outside view of repaired compromised overhead door and stained pavement adjacent to drums near door inside Site building

Site: Buffum MKE Site
Photograph No.: 4 **Date:** 9/23/13
Direction: West **Photographer:** Karen Dettmer
Subject: Closeup of stained area at compromised overhead door

Site: Buffum MKE Site
Photograph No.: 5 **Date:** 01/23/14
Direction: North **Photographer:** Marita Stollenwerk
Subject: Peeling paint on Site building; adjacent residences visible; location of sample BUF-PC09-012314

Site: Buffum MKE Site
Photograph No.: 6 **Date:** 10/31/13
Direction: Down **Photographer:** Marita Stollenwerk
Subject: Cooking supplies and food containers amongst other debris inside Site building

Site: Buffum MKE Site
Photograph No.: 7 **Date:** 10/31/13
Direction: Northeast **Photographer:** Marita Stollenwerk
Subject: Approximately 12 buckets of red liquid located on north side of west room; note crushed soda cans, spilled red liquid, and large chunks of peeling paint on ground

Site: Buffum MKE Site
Photograph No.: 8 **Date:** 10/31/13
Direction: Up **Photographer:** Marita Stollenwerk
Subject: Peeling paint on ceiling of west room

Site: Buffum MKE Site
Photograph No.: 9 **Date:** 10/31/13
Direction: South **Photographer:** Marita Stollenwerk
Subject: South incinerator in west room; open 55-gallon drum and 5-gallon bucket with ash spilling onto floor in foreground; sample BUF-SW06-121213 collected from drum

Site: Buffum MKE Site
Photograph No.: 10 **Date:** 10/31/13
Direction: Down **Photographer:** Marita Stollenwerk
Subject: Northern floor drain in west room with black sludge at bottom

Site: Buffum MKE Site
Photograph No.: 11 **Date:** 10/31/13
Direction: North **Photographer:** Marita Stollenwerk
Subject: Red-painted ash cleanout structure south of brick incinerator in boiler room; locations of samples BUF-SW02-121213 and BUF-ACM01-121213

Site: Buffum MKE Site
Photograph No.: 12 **Date:** 10/31/13
Direction: Southwest **Photographer:** Marita Stollenwerk
Subject: Brick incinerator and conveyor in boiler room; open drum at bottom left containing circuit boards and other electrical components; electrical bushings on floor; locations of samples BUF-SW01-121213 and BUF-WP01-121213

Site: Buffum MKE
Photograph No.: 13 **Date:** 09/23/13
Direction: South **Photographer:** Karen Dettmer
Subject: Ash pile under fume hood in east room; locations of samples BUF-SW03-121213, BUF-SW03D-121213, and BUF-ACM02-121213

Site: Buffum MKE Site
Photograph No.: 14 **Date:** 12/12/13
Direction: Southeast **Photographer:** Marita Stollenwerk
Subject: Side of fume hood in foreground and incinerator in background in east room; roof near incinerator has collapsed, allowing snow to enter; locations of samples BUF-WP02-121213 (south wall of fume hood), BUF-ACM03(A, B, and C)-121213 (collapsed roofing material), and BUF-PC01-121213 (gray paint from wall of incinerator) visible in this photograph

Site: Buffum MKE Site
Photograph No.: 15 **Date:** 09/23/13
Direction: Southwest **Photographer:** Karen Dettmer
Subject: East room incinerator on right, stack in middle, and submerged bucket and red 55-gallon drum; sample BUF-SW04-121213 collected from sediment at edge of standing water

Site: Buffum MKE Site
Photograph No.: 16 **Date:** 10/31/13
Direction: North **Photographer:** Marita Stollenwerk
Subject: Compromised overhead door with repairs visible; note drums next to door; samples BUF-LW01-121213 and BUF-LW01D-121213 collected from 5-gallon bucket on left side of photograph

Site: Buffum MKE Site
Photograph No.: 17 **Date:** 10/31/13
Direction: North **Photographer:** Marita Stollenwerk
Subject: Tote containing electrical ballasts south of compromised overhead door

Site: Buffum MKE Site
Photograph No.: 18 **Date:** 10/31/13
Direction: Southeast **Photographer:** Marita Stollenwerk
Subject: 55-Gallon drums, 5-gallon buckets, and electrical pieces and light bulbs on south end of the east room; leaking distended drum lying on its side on left side of photograph

Site: Buffum MKE Site
Photograph No.: 19 **Date:** 12/12/13
Direction: West **Photographer:** Marita Stollenwerk
Subject: Example of flammable material observed on third floor; note sawdust under container; location of sample BUF-LW02-121213

Site: Buffum MKE Site
Photograph No.: 20 **Date:** 12/12/13
Direction: South **Photographer:** Marita Stollenwerk
Subject: Third floor woodworking area; note abundant combustible materials; sample BUF-SW05-121213 collected from material on floor in foreground

Site: Buffum MKE Site
Photograph No.: 21 **Date:** 12/12/13
Direction: East **Photographer:** Marita Stollenwerk
Subject: Third floor woodworking area; note 55-gallon drums, 5-gallon buckets, and moss on floor and over containers

Site: Buffum MKE Site
Photograph No.: 22 **Date:** 12/12/13
Direction: East **Photographer:** Marita Stollenwerk
Subject: Ceiling of third floor woodworking area; note icicles along ceiling cracks

Site: Buffum MKE Site
Photograph No.: 23 **Date:** 10/31/13
Direction: Down **Photographer:** Kathy Halbur
Subject: East room roof viewed from third floor roof; note holes in roof above east room and abundant roofing material debris in gutter of third floor roof

Site: Buffum MKE Site
Photograph No.: 24 **Date: 1**0/31/13
Direction: East **Photographer:** Kathy Halbur
Subject: Ash in elevator shaft on the roof

Site: Buffum MKE Site
Photograph No.: 25 **Date:** 02/20/14
Direction: East **Photographer:** Marita Stollenwerk
Subject: Department of Neighborhood Services (DNS) notification of hazards in building for life safety personnel; sticker located on only operable entrance

APPENDIX B
INFORMATION FOR SITE CHRONOLOGY

MILWAUKEE HEALTH DEPARTMENT

Lab. No. _____ Sample No. 600

Bureau of Consumer Protection and Environmental Health
Samples Submitted for Laboratory Analysis

Date Collected 3-11-71 By R. BENISH #49 Title IND. HYG. TECH I

Section: Technical Services ☒ Food & Measures ☐ Dairy ☐ Training & Special Services ☐

Investigation Reports to be Sent by Bur. of C.P. & E.H. to: (JOE) DOMBEK METALS, INC. 3456 N. BUFFUM ST.

SAMPLE IDENTIFICATION

Sample of SINGLE-WIRE, THICK (9/16") BLACK CABLE

Address Where Collected 3456 N. BUFFUM ST.

Exact Location on Premises Where Collected SAMPLE OF TYPICAL MATERIAL PYRO-LYZED TO (RECLAIM) COLLECT METAL (COPPER) CONTENTS.

Submitted to MILW. HEALTH (name of laboratory) Date 3-12-71

Type of Analysis: Chemistry ☒ Bacteriology ☐ Virology ☐

Analyze for TOXIC PYROLYSIS PRODUCTS THAT MAY BECOME AIR-BORNE AFTER BEING REMOVED FROM FURNACE WHILE STILL HOT. FURNACE TEMP. IS MAINTAINED AT APPROX. 800°F.

~~Special Instructions, Remarks~~

Patient's Name _____ (if applicable) Hospital Case No. _____

Return Examination Report to: Tech. Serv. ☒ Food & Meas. ☐ Dairy ☐ Trng. & Spec. Serv. ☐

LABORATORY EXAMINATION REPORT

MAR 28 1972

Date Received March 12, 1971 Date Reported March 27, 1972

Analyst Ronald C. Backer, Ph.D. Title Chemist IV

RESULT OF EXAMINATION:

NOT EQUIPPED FOR THIS TYPE OF ANALYSIS.

Henry J. Wisniewski

Approved By: Henry J. Wisniewski, Ph.D 600
Title: Director
Laboratory: Bureau of Laboratories

HJW:ct

Form H-312

MILWAUKEE HEALTH DEPARTMENT

Lab. No. _____

Bureau of Consumer Protection and Environmental Health
Samples Submitted for Laboratory Analysis

Sample No. 601

Date Collected 3-11-71 By R. BENISH #49 Title IND. HYG. TECH. I

Section: Technical Services ☒ Food & Measures ☐ Dairy ☐ Training & Special Services ☐

Investigation Reports to be Sent by Bur. of C.P. & E.H. to: J. DOMBEK METALS, INC. 3456 N. BUFFUM ST.

SAMPLE IDENTIFICATION

Sample of SEVEN-WIRED, 5/16" THICK, CLOTH-COVERED BLACK CABLE

Address Where Collected 3456 N. BUFFUM ST.

Exact Location on Premises Where Collected SAMPLE OF TYPICAL MATERIAL PYRO-LYZED TO (RECLAIM) COLLECT METAL (COPPER) CONTENTS

Submitted to MILW. HEALTH (name of laboratory) Date 3-12-71

Type of Analysis: Chemistry ☒ Bacteriology ☐ Virology ☐

Analyze for TOXIC PYROLYSIS PRODUCTS THAT MAY BECOME AIR-BORNE AFTER BEING REMOVED FROM FURNACE WHILE STILL HOT. FURNACE TEMP. IS MAINTAINED AT APPROX. 800°F.

~~Special Instructions--Remarks~~

Patient's Name _____ (if applicable) Hospital Case No. _____

Return Examination Report to: Tech. Serv. ☒ Food & Meas. ☐ Dairy ☐ Trng. & Spec. Serv. ☐

LABORATORY EXAMINATION REPORT

MAR 28 1972

Date Received March 12, 1971 Date Reported March 27, 1972

Analyst Ronald C. Backer, Ph.D. Title Chemist IV

RESULT OF EXAMINATION:

NOT EQUIPPED FOR THIS TYPE OF ANALYSIS.

Henry J. Wisniewski

Approved By: Henry J. Wisniewski, Ph.D.
Title: Director
Laboratory: Bureau of Laboratories

601

HJW:ct

Form H-312

MILWAUKEE HEALTH DEPARTMENT

Lab. No. _____ Sample No. 602

Bureau of Consumer Protection and Environmental Health
Samples Submitted for Laboratory Analysis

Date Collected 3-11-71 By R. BENISH #49 Title IND. HYG. TECH. I

Section: Technical Services ☒ Food & Measures ☐ Dairy ☐ Training & Special Services ☐

Investigation Reports to be Sent by Bur. of C.P. & E.H. to: J. DOMBEK METALS, INC. 3456 N. BUFFUM ST.

SAMPLE IDENTIFICATION

Sample of SEVEN-WIRED, 1/2" THICK, WHITE PLASTIC CABLE

Address Where Collected 3456 N. BUFFUM ST.

Exact Location on Premises Where Collected SAMPLE OF TYPICAL MATERIAL PYROLYZED TO (RECLAIM) COLLECT METAL (COPPER) CONTENTS

Submitted to MILW. HEALTH (name of laboratory) Date 3-12-71

Type of Analysis: Chemistry ☒ Bacteriology ☐ Virology ☐

Analyze for TOXIC PYROLYSIS PRODUCTS THAT MAY BECOME AIR-BORNE AFTER BEING REMOVED FROM FURNACE WHILE STILL HOT. FURNACE TEMP. IS MAINTAINED AT APPROX. 800°F.

~~Special Instructions--Remarks~~

Patient's Name _____ (if applicable) Hospital Case No. _____

Return Examination Report to: Tech. Serv. ☒ Food & Meas. ☐ Dairy ☐ Trng. & Spec. Serv. ☐

LABORATORY EXAMINATION REPORT

MAR 28 1972

Date Received March 12, 1971 Date Reported March 27, 1972

Analyst Ronald C. Backer, Ph.D. Title Chemist IV

RESULT OF EXAMINATION:

NOT EQUIPPED FOR THIS TYPE OF ANALYSIS.

Henry J. Wisniewski

Approved By: Henry J. Wisniewski, Ph.D. 602
Title: Director
Laboratory: Bureau of Laboratories

HJW:ct

Form H-312

MILWAUKEE HEALTH DEPARTMENT

Sample No. 603

Lab. No. _____

Bureau of Consumer Protection and Environmental Health
Samples Submitted for Laboratory Analysis

Date Collected 3-11-71 By R. BENISH #49 Title IND. HYG. TECH. I

Section: Technical Services ☒ Food & Measures ☐ Dairy ☐ Training & Special Services ☐

Investigation Reports to be Sent by Bur. of C.P. & E.H. to: J. DOMBEK METALS, INC. 3456 N. BUFFUM ST.

SAMPLE IDENTIFICATION

Sample of PAIRED STRANDS OF SEVEN-WIRED, FLAT-SIDED 5/8" x 3/8", GRAY-PAINTED CLOTH-TAR CABLE

Address Where Collected 3456 N. BUFFUM ST.

Exact Location on Premises Where Collected SAMPLE OF TYPICAL MATERIAL PYRO-LYZED TO COLLECT (RECLAIM) METAL (COPPER) CONTENTS

Submitted to MILW. HEALTH (name of laboratory) Date 3-12-71

Type of Analysis: Chemistry ☒ Bacteriology ☐ Virology ☐

Analyze for TOXIC PYROLYSIS PRODUCTS THAT MAY BECOME AIR-BORNE AFTER BEING REMOVED FROM FURNACE WHILE STILL HOT. FURNACE TEMP. IS MAINTAINED AT APPROX. 800°F.

~~Special Instructions - Remarks~~

Patient's Name _____ (if applicable) Hospital Case No. _____

Return Examination Report to: Tech. Serv. ☒ Food & Meas. ☐ Dairy ☐ Trng. & Spec. Serv. ☐

LABORATORY EXAMINATION REPORT

MAR 28 1972

Date Received March 12, 1971 Date Reported March 27, 1972

Analyst Ronald C. Backer, Ph.D. Title Chemist IV

RESULT OF EXAMINATION:

NOT EQUIPPED FOR THIS TYPE OF ANALYSIS.

Henry J. Wisniewski

Approved By: Henry J. Wisniewski, Ph. 603
Title: Director
Laboratory: Bureau of Laboratories

HJW:ct

Form H-312

MILWAUKEE HEALTH DEPARTMENT

Lab. No. _____ Sample No. 604

Bureau of Consumer Protection and Environmental Health
Samples Submitted for Laboratory Analysis

Date Collected 3-11-71 By R. BENISH #49 Title IND. HYG. TECH I

Section: Technical Services ☒ Food & Measures ☐ Dairy ☐ Training & Special Services ☐

Investigation Reports to be Sent by Bur. of C.P. & E.H. to: J. DOMBEK METALS, INC. 3456 N. BUFFUM ST.

SAMPLE IDENTIFICATION

Sample of SIX-(RED, ORANGE, BLUE, GREEN, BLACK & WHITE) (SEVEN WIRED) STRANDED ~~BB~~ BLACK PLASTIC CABLE

Address Where Collected 3456 N. BUFFUM ST.

Exact Location on Premises Where Collected SAMPLE OF TYPICAL MATERIAL PYRO-LYZED TO (RECLAIM) COLLECT METAL (COPPER) CONTENTS

Submitted to MILW. HEALTH (name of laboratory) Date 3-12-71

Type of Analysis: Chemistry ☒ Bacteriology ☐ Virology ☐

Analyze for TOXIC PYROLYSIS PRODUCTS THAT MAY BECOME AIR-BORNE AFTER BEING REMOVED FROM FURNACE WHILE STILL HOT. FURNACE TEMP. IS MAINTAINED AT APPROX. 800° F.

~~Special Instructions--Remarks~~

Patient's Name _____ (if applicable) Hospital Case No. _____

Return Examination Report to: Tech. Serv. ☒ Food & Meas. ☐ Dairy ☐ Trng. & Spec. Serv. ☐

MAR 28 1972

LABORATORY EXAMINATION REPORT

Date Received March 12, 1971 Date Reported March 27, 1972

Analyst Ronald Backer, Ph.D. Title Chemist IV

RESULT OF EXAMINATION:

NOT EQUIPPED FOR THIS TYPE OF ANALYSIS.

Henry J. Wisniewski

Approved By: Henry J. Wisniewski, Ph. 604
Title: Director
Laboratory: Bureau of Laboratories

HJW:ct

Form H-312

MILWAUKEE HEALTH DEPARTMENT

Lab. No. _____ Sample No. 605

Bureau of Consumer Protection and Environmental Health
Samples Submitted for Laboratory Analysis

Date Collected 3-11-71 By R. BENISH #49 Title IND. HYG. TECH. I.

Section: Technical Services ☒ Food & Measures ☐ Dairy ☐ Training & Special Services ☐

Investigation Reports to be Sent by Bur. of C.P. & E.H. to: J. DOMBEK METALS, INC. 3456 N. BUFFUM ST.

SAMPLE IDENTIFICATION

Sample of MANY-WIRED, CLOTH & PAPER-COVERED, 3/8" THICK, CABLE

Address Where Collected 3456 N. BUFFUM ST.

Exact Location on Premises Where Collected SAMPLE OF TYPICAL MATERIAL PYRO-LYZED TO COLLECT (RECLAIM) METAL (COPPER) CONTENTS

Submitted to MILW. HEALTH (name of laboratory) Date 3-12-71

Type of Analysis: Chemistry ☒ Bacteriology ☐ Virology ☐

Analyze for TOXIC PYROLYSIS PRODUCTS THAT MAY BECOME AIR-BORNE AFTER BEING REMOVED FROM FURNACE WHILE STILL HOT. FURNACE TEMP. IS MAINTAINED AT APPROX. 800°F.

~~Special Instructions--Remarks~~

Patient's Name _____ (if applicable) Hospital Case No. _____

Return Examination Report to: Tech. Serv. ☒ Food & Meas. ☐ Dairy ☐ Trng. & Spec. Serv. ☐

LABORATORY EXAMINATION REPORT

MAR 29 1972

Date Received March 12, 1971 Date Reported March 27, 1972

Analyst Ronald C. Backer, Ph.D. Title Chemist IV

RESULT OF EXAMINATION:

NOT EQUIPPED FOR THIS TYPE OF ANALYSIS.

Henry J. Wisniewski

Approved By: Henry J. Wisniewski, Ph. 605
Title: Director
Laboratory: Bureau of Laboratories

HJW:ct

Form H-312

MILWAUKEE HEALTH DEPARTMENT

Lab. No. _____ Sample No. 606

Bureau of Consumer Protection and Environmental Health
Samples Submitted for Laboratory Analysis

Date Collected 3-11-71 By R. BENISH #49 Title IND. HYG. TECH. I.

Section: Technical Services ☒ Food & Measures ☐ Dairy ☐ Training & Special Services ☐

Investigation Reports to be Sent by Bur. of C.P. & E.H. to: DOMBEK METALS, INC. 3456 N. BUFFUM ST.

SAMPLE IDENTIFICATION

Sample of 7 - WIRED "TW OIL RESISTANT - 60 C" BLACK (WHITE INTERIOR) 5/16" CABLE

Address Where Collected 3456 N. BUFFUM ST.

Exact Location on Premises Where Collected SAMPLE OF TYPICAL MATERIAL PYROLYZED TO (RECLAIM) COLLECT METAL (COPPER) CONTENTS

Submitted to MILW. HEALTH (name of laboratory) Date 3-12-71

Type of Analysis: Chemistry ☒ Bacteriology ☐ Virology ☐

Analyze for TOXIC PYROLYSIS PRODUCTS THAT MAY BECOME AIR-BORNE AFTER BEING REMOVED FROM FURNACE WHILE STILL HOT. FURNACE TEMP. IS MAINTAINED AT APPROX. 800°F.

~~Special Instructions - Remarks~~

Patient's Name _____ (if applicable) Hospital Case No. _____

Return Examination Report to: Tech. Serv. ☒ Food & Meas. ☐ Dairy ☐ Trng. & Spec. Serv. ☐

MAR 28 1972

LABORATORY EXAMINATION REPORT

Date Received March 12, 1971 Date Reported March 27, 1972

Analyst Ronald C. Backer, Ph.D. Title Chemist IV

RESULT OF EXAMINATION:

NOT EQUIPPED FOR THIS TYPE OF ANALYSIS.

Approved By: Henry J. Wisniewski, Ph.D.
Title: Director
Laboratory: Bureau of Laboratories

606

HJW:ct

Form H-312

MILWAUKEE HEALTH DEPARTMENT

Lab. No. _____ Sample No. 607

Bureau of Consumer Protection and Environmental Health
Samples Submitted for Laboratory Analysis

Date Collected 3-11-71 By R. BENISH #49 Title IND. HYG. TECH. I

Section: Technical Services ☒ Food & Measures ☐ Dairy ☐ Training & Special Services ☐

Investigation Reports to be Sent by Bur. of C.P. & E.H. to: J. POMBEK METALS, INC. 345½ N. BUFFUM ST.

SAMPLE IDENTIFICATION

Sample of MANY-WIRED, BLACK CLOTH INSULATED, BROWN TAPE-WRAPPED "TRANSFORMER WIRE

Address Where Collected 345½ N. BUFFUM ST.

Exact Location on Premises Where Collected SAMPLE OF TYPICAL MATERIAL PYRO-LYZED TO (RECLAIM) COLLECT METAL (COPPER) CONTENTS

Submitted to MILW. HEALTH (name of laboratory) Date 3-12-71

Type of Analysis: Chemistry ☒ Bacteriology ☐ Virology ☐

Analyze for TOXIC PYROLYSIS PRODUCTS THAT MAY BECOME AIR-BORNE AFTER BEING REMOVED FROM FURNACE WHILE STILL HOT. FURNACE TEMP. IS MAINTAINED AT APPROX. 800°F.

~~Special Instructions—Remarks~~

Patient's Name _____ (if applicable) Hospital Case No. _____

Return Examination Report to: Tech. Serv. ☒ Food & Meas. ☐ Dairy ☐ Trng. & Spec. Serv. ☐

MAR 28 1972

LABORATORY EXAMINATION REPORT

Date Received March 12, 1971 Date Reported March 27, 1972

Analyst Ronald C. Backer, Ph.D. Title Chemist IV

RESULT OF EXAMINATION:

NOT EQUIPPED FOR THIS TYPE OF ANALYSIS.

Approved By: Henry J. Wisniewski, Ph.D. 607
Title: Director
Laboratory: Bureau of Laboratories

HJW:ct

Form H-312

MILWAUKEE HEALTH DEPARTMENT

Lab. No. _____ Sample No. 608

Bureau of Consumer Protection and Environmental Health
Samples Submitted for Laboratory Analysis

Date Collected 3-11-71 By R. BENISH #49 Title IND. HYG. TECH. I.

Section: Technical Services ☒ Food & Measures ☐ Dairy ☐ Training & Special Services ☐

Investigation Reports to be Sent by Bur. of C.P. & E.H. to: J. POMBERT METALS, INC. 3456 N. BUFFUM ST.

SAMPLE IDENTIFICATION

Sample of BLACK 3/8" PLASTIC-INSULATED COVERED WIRE 3/16" METAL CONDUCTOR DIAMETER

Address Where Collected 3456 N. BUFFUM ST.

Exact Location on Premises Where Collected SAMPLE OF TYPICAL MATERIAL PYROLYZED TO (RECLAIM) COLLECT METAL (COPPER) CONTENTS

Submitted to MILW. HEALTH (name of laboratory) Date 3-12-71

Type of Analysis: Chemistry ☒ Bacteriology ☐ Virology ☐

Analyze for TOXIC PYROLYSIS PRODUCTS THAT MAY BECOME AIR-BORNE AFTER BEING REMOVED FROM FURNACE WHILE STILL HOT. FURNACE TEMP. IS MAINTAINED AT APPROX. 800° F.

Special Instructions--Remarks

Patient's Name _____ (if applicable) Hospital Case No. _____

Return Examination Report to: Tech. Serv. ☒ Food & Meas. ☐ Dairy ☐ Trng. & Spec. Serv. ☐

LABORATORY EXAMINATION REPORT

MAR 28 1972

Date Received March 12, 1971 Date Reported March 27, 1972

Analyst Ronald C. Backer, Ph.D. Title Chemist IV

RESULT OF EXAMINATION:

NOT EQUIPPED FOR THIS TYPE OF ANALYSIS

Approved By: Henry J. Wisniewski, Ph.D.
Title: Director
Laboratory: Bureau of Laboratories

608

HJW:ct

Form H-312

MILWAUKEE HEALTH DEPARTMENT

Lab. No. _____ Sample No. 609

Bureau of Consumer Protection and Environmental Health
Samples Submitted for Laboratory Analysis

Date Collected 3-11-71 By R. BENISH #49 Title IND. HYG. TECH. I

Section: Technical Services [X] Food & Measures [ ] Dairy [ ] Training & Special Services [ ]

Investigation Reports to be Sent by Bur. of C.P. & E.H. to: J. DOMBEK METALS, INC. 3456 N. BUFFUM ST.

SAMPLE IDENTIFICATION

Sample of BLACK PLASTIC, 7/32" THICK, 5/32" CONDUCTOR, INSULATED WIRE

Address Where Collected 3456 N. BUFFUM ST.

Exact Location on Premises Where Collected SAMPLE OF TYPICAL MATERIAL PYRO-LYZED TO (RECLAIM) COLLECT METAL (COPPER) CONTENTS

Submitted to MILW. HEALTH (name of laboratory) Date 3-12-71

Type of Analysis: Chemistry [X] Bacteriology [ ] Virology [ ]

Analyze for TOXIC PYROLYSIS PRODUCTS THAT MAY BECOME AIR-BORNE AFTER BEING REMOVED FROM FURNACE WHILE STILL HOT. FURNACE TEMP. IS MAINTAINED AT APPROX. 800° F.

Special ~~Instructions—Remarks~~

Patient's Name _____ (if applicable) Hospital Case No. _____

Return Examination Report to: Tech. Serv. [X] Food & Meas. [ ] Dairy [ ] Trng. & Spec. Serv. [ ]

LABORATORY EXAMINATION REPORT

MAR 28 1972

Date Received March 12, 1971 Date Reported March 27, 1972

Analyst Ronald C. Backer, Ph.D. Title Chemist IV

RESULT OF EXAMINATION:

NOT EQUIPPED FOR THIS TYPE OF ANALYSIS.

Approved By: Henry J. Wisniewski, Ph.D. 609
Title: Director
Laboratory: Bureau of Laboratories

HJW:ct

Form H-312

MILWAUKEE HEALTH DEPARTMENT

Lab. No. _____ Sample No. 610

Bureau of Consumer Protection and Environmental Health

Samples Submitted for Laboratory Analysis

Date Collected 3-11-71 By R. BENISH #49 Title IND. HYG. TECH. I

Section: Technical Services ☒ Food & Measures ☐ Dairy ☐ Training & Special Services ☐

Investigation Reports to be Sent by Bur. of C.P. & E.H. to: J. DOMBEK METALS, INC. 3456 N. BUFFUM ST.

SAMPLE IDENTIFICATION

Sample of "HATVINOL 10 AWG TYPE TW 600V OIL RESISTANT (UL) HATFIELD" WHITE PLASTIC INSULATED, SEVEN ~~WIRED~~ STRANDED WIRE 3/16TH

Address Where Collected 3456 N. BUFFUM ST.

Exact Location on Premises Where Collected SAMPLE OF TYPICAL MATERIAL PYROLYZED TO (RECLAIM) COLLECT METAL (COPPER) CONTENTS

Submitted to MILW. HEALTH (name of laboratory) Date 3-12-71

Type of Analysis: Chemistry ☒ Bacteriology ☐ Virology ☐

Analyze for TOXIC PYROLYSIS PRODUCTS THAT MAY BECOME AIR-BORNE AFTER BEING REMOVED FROM FURNACE WHILE STILL HOT. FURNACE TEMP. IS MAINTAINED AT APPROX. 800°F.

~~Special Instructions/Remarks~~

Patient's Name _____ (if applicable) Hospital Case No. _____

Return Examination Report to: Tech. Serv. ☒ Food & Meas. ☐ Dairy ☐ Trng. & Spec. Serv. ☐

LABORATORY EXAMINATION REPORT

MAR 28 1972

Date Received March 12, 1971 Date Reported March 27, 1972

Analyst Ronald C. Backer, Ph.D. Title Chemist IV

RESULT OF EXAMINATION:

NOT EQUIPPED FOR THIS TYPE OF ANALYSIS.

Approved By: Henry J. Wisniewski, Ph.D. 610
Title: Director
Laboratory: Bureau of Laboratories

HJW:ct

Form H-312

City of Milwaukee

HEALTH DEPARTMENT
Bureau of Consumer Protection and Environmental Health

Constantine Panagis, M.D.
Commissioner of Health

December 12, 1985

278-3538

Mr. Dean Chapman, President
Shape Tec Manufacturing
3456 North Buffum Street
Milwaukee, WI 53212

Re: Air Sampling for Styrene and Methyl Ethyl Ketone

Dear Mr. Chapman:

On October 7, 1985, air samples were taken in the office and in the spray booth area to determine the airborne concentrations of styrene and methyl ethyl ketone vapors. These samples were taken due to strong odors being emitted into the office area. The ventilation system in the office was not working at the time of inspection. No styrene or methyl ethyl ketone was detected in the samples taken in your office.

During spraying operations, 50 parts per million of styrene was detected in the spray booth using colorimeter detector tubes and a Kitagawa sampling pump. Trace amounts of methyl ethyl ketone were also detected. The threshold limit value for styrene is 50 ppm, with methyl ethyl ketone being 200 ppm. The spray booth exhausts an average of 95 to 100 lfm. Please see technical report for details.

If you have any further questions, please call at 223-5789.

Sincerely,

Jean Melvin
Industrial Hygiene Technologist
Technical Services Division

JM:pb

Enc.

MILWAUKEE HEALTH DEPARTMENT
Bureau of Consumer Protection and Environmental Health
Municipal Building, Room 105

TECHNICAL SERVICES DIVISION

INDUSTRIAL HYGIENE SERVICE REPORT

PLANT NAME:	Shape Tec Manufacturing
ADDRESS:	3456 North Buffum Street
LOCATION IN PLANT:	Dean Chapman's Office; Fiberglass Spray Booth
OPERATION:	Spraying resin on fiberglass.
DATE:	October 7, 1985
TIME:	1:00 p.m.
BY:	Jean Melvin
TITLE:	Industrial Hygiene Technologist
TYPE OF STUDY:	Evaluation of exposure to airborne styrene and methyl ethyl ketone vapors in Dean Chapman's office and in the spray booth.
DESCRIPTION OF OPERATION:	Employee mixes component parts of epoxy resins and sprays various forms of fiberglass to create a hardened product.
ENVIRONMENTAL CONTROLS PRESENT:	The sprayer wore dual cartridge face mask with organic vapor cartridges, gloves, face mask, goggles and an apron during spraying. The spray booth exhausts an average of 100 lfm to remove vapors.
METHOD OF EVALUATION:	Styrene and methyl ethyl ketone detector tubes were used to detect vapor concentrations in the spray booth. Charcoal tubes were used to collect the vapors in Dean Chapman's office.
RESULTS:	Fifty ppm of styrene and trace amounts of methyl ethyl ketone were detected on the spray booth. No styrene or methyl ethyl ketone was detected in Dean Chapman's office.
DISCUSSION:	The Threshold Limit Value for styrene recommended by the American Conference of Governmental Industrial Hygienists is 50 ppm. Exposure to levels of 200 to 700 ppm of styrene can result in "styrene sickness" consisting of drowsiness, nausea, headache, fatigue and dizzyness. The Threshold Limit Value for methyl ethyl ketone is 200 ppm. Methyl ethyl ketone in excessive concentrations can be very irritating to nose, throat and the respiratory system.

CONCLUSION: Exposure to styrene and methyl ethyl ketone could at times be over the Threshold Limit Value due to the ergonomics of the spray operation. There is no overexposure to styrene and methyl ethyl ketone vapors in the office area.

RECOMMENDATIONS: Encourage employees to keep face mask and other personal protective clothing in good condition. Keep the spray booth operating at optimum performance by changing filters and maintaining the fan regularly. All chemicals in the plant should be labeled and stored properly.

REFERENCES: Threshold Limit Value for Chemical Substances in the Work Environment Adopted by American Conference of Governmental Industrial Hygienists 1985-86.

Documentation of Threshold Limit Values by American Conference of Governmental Industrial Hygienists.

JM:pb

Lab. No. 12089

MILWAUKEE HEALTH DEPARTMENT
Bureau of Consumer Protection and Environmental Health
Samples Submitted for Laboratory Analysis

Sample No. 2415

Date Collected 10-7-85 By Jean Malvin Title Env Hyg Tech

Section: Technical Services [X] Food & Measures [ ] Dairy [ ] Training & Special Services [ ]

Investigation Reports to be Sent by Bur. of C.P. & E.H. to: Dean Chapman SHAPE Fac

SAMPLE IDENTIFICATION

Sample of charcoal sock

Address Where Collected 3465 N Buffum Shape Fac

Exact Location on Premises Where Collected tube + pump placed on gray filing cabinet in Dean Chapmans office.

Submitted to Milwaukee Health Dept Chem Lab (name of laboratory) Date 10-9-85

Type of Analysis: Chemistry [X] Bacteriology [ ] Virology [ ]

Analyze for Styrene monomer and Methyl Ethyl Ketone

Special Instructions--Remarks .09 l/min x 135 min = 12.2 liters

Patient's Name _____ (if applicable) Hospital Case No. _____

Return Examination Report to: Tech. Serv. [X] Food & Meas. [ ] Dairy [ ] Trng. & Spec. Serv. [ ]

LABORATORY EXAMINATION REPORT

Date Received October 9, 1985 Date Reported October 25, 1985 OCT 25 1985

Analyst William N. Jensen Title Chief Chemist

RESULT OF EXAMINATION: AGB

styrene -- not detected

methyl ethyl ketone (MEK) -- not detected

HJW:cs

1/3

Approved By: Henry J. Wisniewski, Ph.D.
Title: Director
Laboratory: Bureau of Laboratories

2415

H-312

38662 3-30-76

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
MAR 26 1976

March 25, 1976 278-3538

Cathero Brown, President
Sophisticated Images Associates
3461 North Holton Street
Milwaukee WI 53212

Re: MOCA [4,4' Methylene bis (2-chloroaniline)]

Dear Sir:

On March 10, 1976, the Technical Services Division made a survey of your operations in the basement of 3456 North Buffum Street. We found the presence of MOCA dust on horizontal surfaces. (See laboratory report).

The standard published by The Occupational Safety and Health Administration in June, 1974, is CFR 29 Part 1910-93(e). It has been temporarily voided because not enough time was allowed for public hearings. The unofficial limit of exposure is zero tolerance.

An unofficial checklist is included in this letter. It was derived from 1910-93(e).

Although these rules have been temporarily voided because of a legal technicality, it does not make the substance any more or less a health hazard. A committee of the most prominent occupational health authorities feel that there is not any minute level of exposure to MOCA that they can guarantee the safety of your workers. We recommend that you proceed with the assumption that these rules of handling are for a good reason and may soon become valid.

Sincerely,

Richard Brandt
Industrial Hygiene Technologist I
Technical Services Division

RB:km

Enclosures

cc: Paul Bublitz, Plant Manager

Plant Name: Sophisticated Images Associates, Thermoset Division

Plant Address: 3456 North Buffum Street

Date of Survey: March 10, 1976

Checklist*

1. Are all operations and transfers contained within the ventilation booth? No, weighing of MOCA and other operations are conducted outside the booth.

2. Is the face velocity of the booth an average of 150 lineal feet per minute (l.f.m.), minimum of 125 l.f.m.? No, 20 l.f.m. was measured.

3. Is the exhausted air decontaminated before it is released into the outside air? No.

4. Is the area "regulated" and restricted to authorized persons only? No.

5. Do employes wear clean, full body protective clothing, shoe covers and gloves prior to entering the area that should be "regulated"? No.

6. Do employes engage in MOCA handling wear a half-face, filter type respirator for dusts, mists and fumes? No.

7. Upon exiting the area of operations, do employes remove and leave protective clothing and equipment at the point of exit and at the last exit of the day, place used clothing and equipment in impervious containers for purposes of decontamination and disposal? No.

8. Do employes wash hands, face, neck and forearms on each exit of the area of operations? No.

9. Do employes shower on the premises after the last exit of the day? No.

10. Are drinking fountains prohibited in the area of operations? Yes..

11. Is a daily roster established and maintained listing employes entering the regulated area? No.

12. Is the storage or consumption of food or tobacco prohibited in the area of operations? Yes.

13. Are toilets in a separate room? Yes.

14. Is the area of operations under a negative air pressure? No.

15. Is an equal amount of clean make-up air provided? Yes.

16. Is dry-mopping or dry-sweeping prohibited? No.

17. Is the entrance to the area of operations posted in two inch letters with correct wording? No.

18. Is the container of 4, 4' Methylene bis (2-chloroaniline) labeled adequately? Yes.

19. Are the employes adequately trained? No.

20. Is there medical surveillance? No.

*Derived from OSHA Publication 2206.
Safety and Health Regulations Part 1910-93(e).
Questions are worded so that the right answer is affirmative.

MILWAUKEE HEALTH DEPARTMENT

Lab. No. 17341 Sample No. 798

Bureau of Consumer Protection and Environmental Health
Samples Submitted for Laboratory Analysis

Date Collected 3/10/76 By Brandt/Fryda Title Ind. Hyg. Tech. I & II

Section: Technical Services [X] Food & Measures [ ] Dairy [ ] Training & Special Services [ ]

Investigation Reports to be Sent by Bur. of C.P. & E.H. to: 3456 N. Buttum St

SAMPLE IDENTIFICATION

Sample of "MOCA" [4,4'-Methylene bis (2-chloroaniline)] (Wipe)

Address Where Collected 3456 N. Buttum St.

Exact Location on Premises Where Collected North end basement

Submitted to Milw. Health Dept. Chemistry (name of laboratory) Date 3/10/76

Type of Analysis: Chemistry [X] Bacteriology [ ] Virology [ ]

Analyze for Qualitatively for "MOCA" Note: Possible Carcinogen

Special Instructions--Remarks Four Samples Taken in duplicate (8).
(1) Wipe Sample of Plane surface preceeding oven. (2) Top Surface of Control panel. (3) Weighing Table (MOCA) (4) Floor of hood area.

Patient's Name (if applicable) Hospital Case No.

Return Examination Report to: Tech. Serv. [X] Food & Meas. [ ] Dairy [ ] Trng. & Spec. Serv. [ ]

LABORATORY EXAMINATION REPORT

MAR 18 1976

Date Received March 10, 1976 Date Reported March 16, 1976

Analyst William N. Jensen AGB Title Chief Chemist

RESULT OF EXAMINATION:

Samples #2, #3, and #4 contained 4,4' Methylene bis(2-chloroaniline) "MOCA".

Henry J. Wisniewski

Approved By: Henry J. Wisniewski, Ph.D.
Title: Director
Laboratory: Bureau of Laboratories

0798

HJWEcd

8/20

Form H-312

CHRONOLOGICAL RECORD

ADDRESS: 3456 North Buffum

DATE	INSPECTOR	TYPE OF SERVICES RENDERED
5-1-76	ROB	5/5/76: Mr. Brown is experimenting with a substitute for MOCA. They are also moving machinery around TO Comply. Ventilation is in service. He wants Two months. Rules have not been put back in force by OSHA as of this date
7/13/76	R.O.B.	Mr. Brown out. Going on Vacation. Nothing new on MOCA from NIOSH or OSHA
8/16/76	R O B	Told Mr. Brown the rules are not yet legalized. Nothing new on MOCA except it is hard on animals, fish.
[illegible]	[illegible]	Announced TO Mr. Brown That I was told on MOCA have been deleted

3456 ? 3462 N Buffum Street

3456 ? 3462 N Buffum Street

Milwaukee, WI 53212

Inquiry Number: 3765786.5

October 24, 2013

The EDR Aerial Photo Decade Package

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Date EDR Searched Historical Sources:

Aerial Photography October 24, 2013

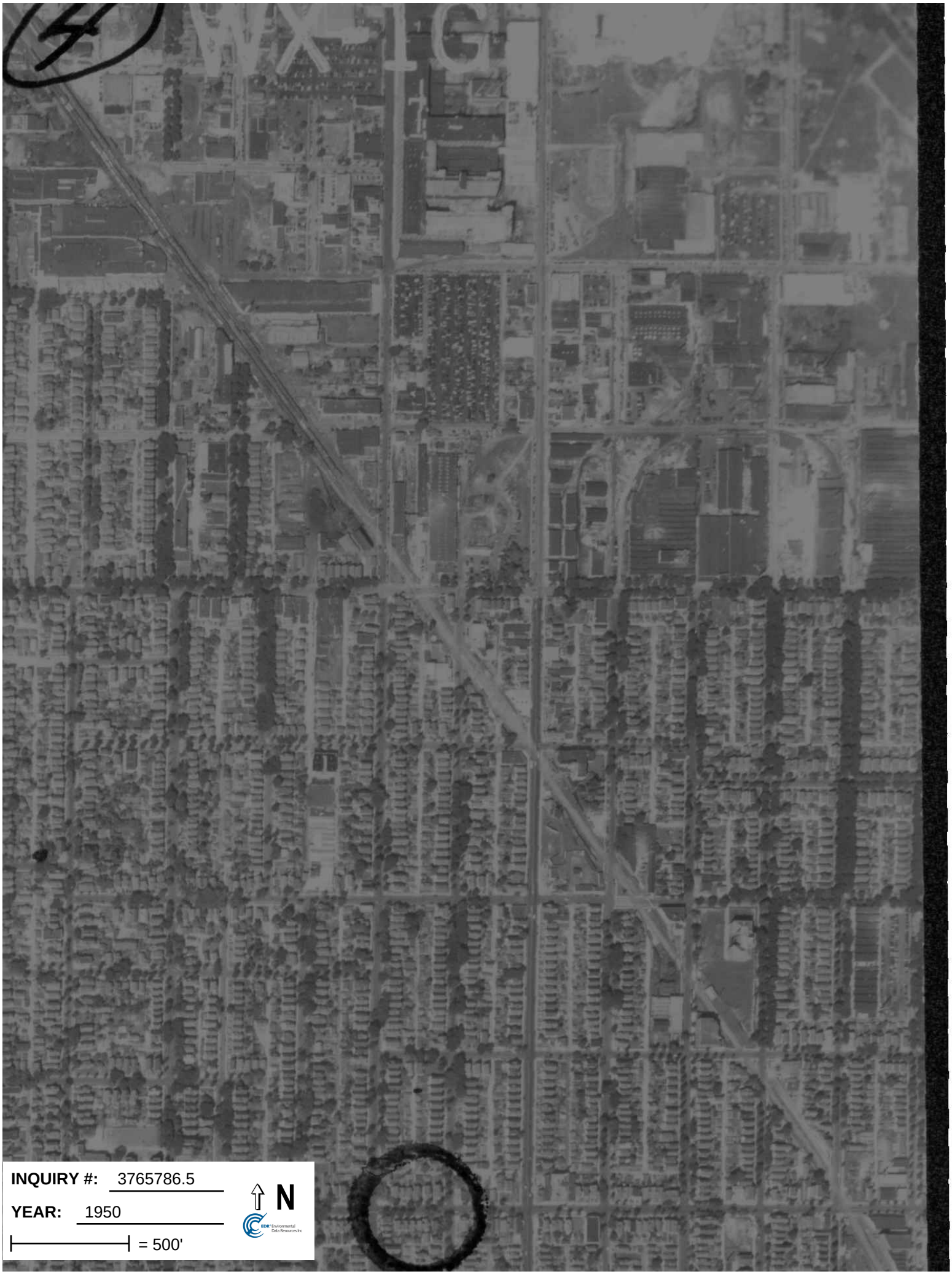
Target Property:

3456 ? 3462 N Buffum Street

Milwaukee, WI 53212

Year	***Scale***	***Details***	***Source***
1937	Aerial Photograph. Scale: 1"=500'	Panel #: 43087-A8, Milwaukee, WI;/Flight Date: August 04, 1937	EDR
1950	Aerial Photograph. Scale: 1"=500'	Panel #: 43087-A8, Milwaukee, WI;/Flight Date: September 06, 1950	EDR
1956	Aerial Photograph. Scale: 1"=500'	Panel #: 43087-A8, Milwaukee, WI;/Flight Date: June 10, 1956	EDR
1963	Aerial Photograph. Scale: 1"=500'	Panel #: 43087-A8, Milwaukee, WI;/Flight Date: July 29, 1963	EDR
1969	Aerial Photograph. Scale: 1"=500'	Panel #: 43087-A8, Milwaukee, WI;/Flight Date: June 13, 1969	EDR
1979	Aerial Photograph. Scale: 1"=500'	Panel #: 43087-A8, Milwaukee, WI;/Flight Date: January 01, 1979	EDR
1981	Aerial Photograph. Scale: 1"=500'	Panel #: 43087-A8, Milwaukee, WI;/Flight Date: January 01, 1981	EDR
1992	Aerial Photograph. Scale: 1"=500'	Panel #: 43087-A8, Milwaukee, WI;/Flight Date: April 12, 1992	EDR
2000	Aerial Photograph. Scale: 1"=500'	Panel #: 43087-A8, Milwaukee, WI;/DOQQ - acquisition dates: March 31, 2000	EDR
2005	Aerial Photograph. Scale: 1"=500'	Panel #: 43087-A8, Milwaukee, WI;/Flight Year: 2005	EDR
2008	Aerial Photograph. Scale: 1"=500'	Panel #: 43087-A8, Milwaukee, WI;/Flight Year: 2008	EDR
2010	Aerial Photograph. Scale: 1"=500'	Panel #: 43087-A8, Milwaukee, WI;/Flight Year: 2010	EDR


INQUIRY #: 3765786.5
YEAR: 1937
= 500'
N



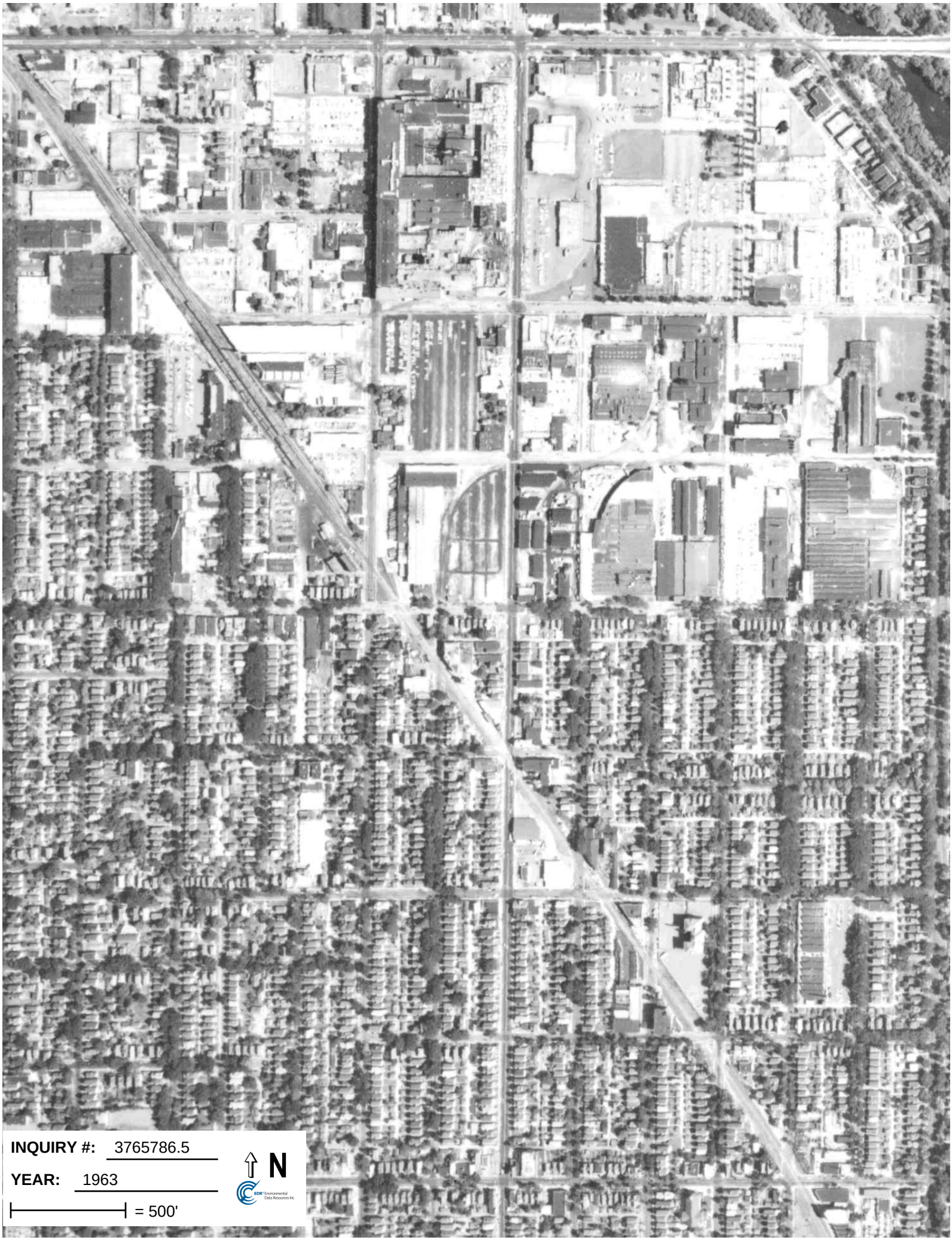
INQUIRY #: 3765786.5

YEAR: 1950

= 500'

N


INQUIRY #: 3765786.5
YEAR: 1956
= 500'
N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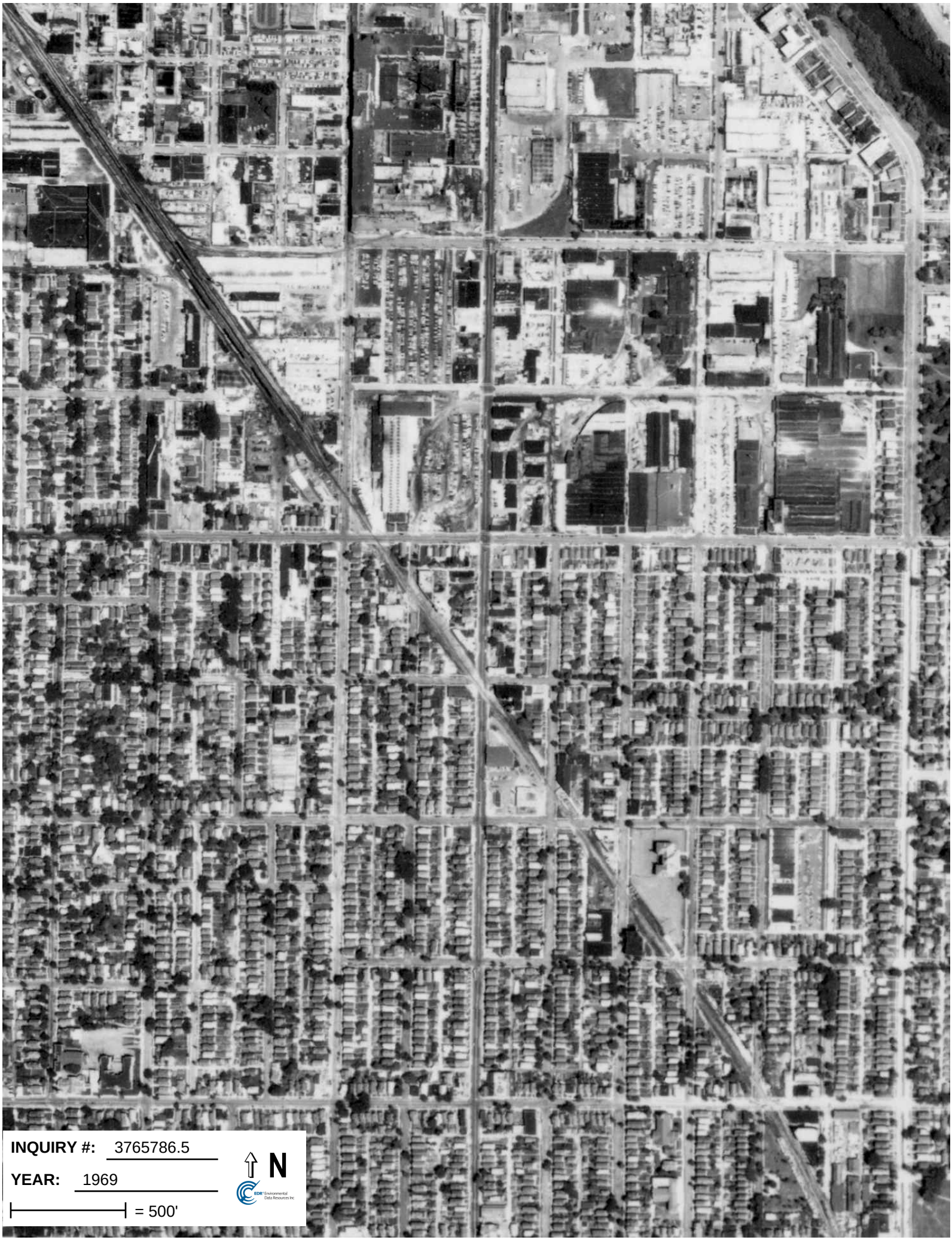
YEAR: 1963
= 500'
N


INQUIRY #: 3765786.5
YEAR: 1969
= 500'
N


INQUIRY #: 3765786.5
YEAR: 1979
= 500'
N
EDR Environmental Data Resources Inc


INQUIRY #: 3765786.5
YEAR: 1981
= 500'
N
EDR Environmental Data Resources Inc


INQUIRY #: 3765786.5
YEAR: 1992
= 500'
N


INQUIRY #: 3765786.5
YEAR: 2000
= 500'
N
EDR Environmental Data Resources Inc


INQUIRY #: 3765786.5
YEAR: 2005
= 500'
N
EDR Environmental Data Resources Inc


INQUIRY #: 3765786.5
YEAR: 2008
= 500'
N


INQUIRY #: 3765786.5
YEAR: 2010
= 500'
N

Historical Land Use Investigation of
3456-3462 North Buffum Street
Milwaukee, Wisconsin

File: 281-25

Prepared by:

City of Milwaukee

Department of City Development

July 18, 2006

David P. Misky, CHMM
Environmental Scientist

Matt Pittman
Environmental Intern

A. Purpose

This Historical Land Use Investigation (HLUI) of 3456-3462 North Buffum Street, Milwaukee, Wisconsin, was requested by Patrick Walsh, President, Milwaukee Economic Development Corporation, City of Milwaukee. This HLUI will identify potential environmental concerns associated with this property. For the sake of brevity and convenience, this property will be referred to as the "project site," unless noted otherwise.

B. Brief Description

The project site is located on a block bound by East Keefe Street to the north, East Townsend Street to the south, North Holton Street to the east, and North Richards Street to the west and is currently a vacant industrial building. The general area around the project site is shown on Figure 1, and project site dimensions are presented on Figure 2.

The following table presents relevant information for the project site:

Address	Tax Key #	Bldg. Size	Lot Size	Zoning	Owner
3456-62 N. Buffum St.	2812678000	27,554-sq. ft.	18,121-sq. ft.	IO2	Simon Barbier

*IO2= Industrial-Office

C. Historical References

1. The Wright's City Directories (1935-1990) and the Polk's City Directories (1993-2000) contained the following information regarding the project site. Land uses that raise potential environmental concern are listed in bold letters.

Address	Occupancy	Year(s)	Potential Concerns
3456-62 N. Buffum St.	Luedke Storage	1935	
	MilBrew Inc.-yeast	1940-1965	
	Standard Feed & Fertilizer Inc.	1955-1960	**Pesticides, Herbicides, Nitrates, Metals**
	Amber Laboratory Inc.-chem. mfrs.	1960-1965	**VOC, Acids, Bases, Metals**
	Not Listed	1970-1975	
	Stiedemann Co.-mech. pwr. transmission equipment	1980	**PAH, VOC, Metals**
	Dombek Metals Inc.-scrap metals	1980-1993	**PAH, DRO, PCBs, VOC, Metals**
	Ultra Inc.-fiberglass design & sales	1985	
	KBD Co.-wood working	1985-1993	
	Shape Tech Inc.-fiberglass fabrication	1985	**PAH, DRO, PCBs, VOC, Metals**

PAHs= Polynuclear Aromatic Hydrocarbons, DROs=Diesel Range Organics, PCBs= Polychlorinated Biphenyls, VOCs= Volatile Organic Compounds

2. Select Department of Neighborhood Services (DNS) records for the project site indicate the following information. Selected comments that raise potential environmental concerns are listed in bold letters.

Address	Date	Comment
3456-62 N. Buffum St.	5/9/1911	Permit to build factory -68'x97'
	1/23/1914	Permit to build 900' addition
	11/8/1967	**Occupancy: Purdy Products Inc.-mfr. soap & detergents**
	9/3/1969	Permit to install incinerator
	2/2/1970	**Occupancy: M.R.C. Corp.-reclaim precious metals from photographic waste & electronic scrap**
	1/20/1971	**Occupancy: E.C. Stiedemann Co.-metal processing**
	12/2/1975	**Occupancy: S.A. Mfrs.-mfr. industrial wheels**
	11/29/1978	**Former Occupancy: SIA Thermoset Plastics Co.**
	8/13/1980	**Occupancy: Shape Tec Inc.-fiberglass mfr.**
	8/28/1980	**Permit to install spray booth-Shape Tec**
	4/21/1993	**Permit to install incinerator**
	11/6/1997	**BOZA variance McEnglish Dismantling Inc.-scrap metal, expires 11/6/02**
	1/19/2001	**Occupancy: North Side Scrap Metal Inc.**

3. Sanborn Fire Insurance Maps

   a. A 1910 *(with updates through 1937)* Sanborn Fire Insurance Map shows the project site occupied by a three-story furniture warehouse, a one-story lumber shed, a one-story engine room and a single-story dwelling. The southern portion of the property is undeveloped. Uses for the warehouse include wood working machinery, cabinetry and storage. Adjacent land uses include residential dwellings and undeveloped land in all directions. A rail line defines the southwestern edge of the project site (Figure 3).

   b. A 1910 *(with updates through 1951)* Sanborn Fire Insurance Map shows the project site occupied by a three-story warehouse, a two-story boiler room, a one-story loading room, a one-story engine room and three smaller buildings of undeterminable use. The southern portion of the property is undeveloped. The warehouse is labeled Milbrew Inc., manufacturers of brewers yeast. Adjacent land uses include residential dwellings and undeveloped land to the north and south; residential dwellings, a **filling station** and a **metal stamping** facility to the east; and an "**Air Reduction Sales Co.**" facility with a **5,000 cu. ft. AST** (Above Ground Storage Tank) to the west. A rail line defines the southwestern edge of the project site (Figure 4).

   c. A 1969 Sanborn Fire Insurance Map shows the project site occupied by a three-story warehouse, a two-story boiler room, a one-story loading room, a one-story engine room and three smaller buildings of undeterminable use. Two above ground storage tanks (ASTs) of undeterminable use were located on the southwestern portion of the project site. Adjacent land uses include residential dwellings and undeveloped land to the north and south; residential dwellings, a **filling station** and a **zinc plating** facility to the east; and the vacant "**Air Reduction Sales Co.**" with a **5,000 cu. ft. AST** (Above Ground Storage Tank) to the west. A rail line defines the southwestern edge of the project site (Figure 5).

D. Environmental Records

1. According to the Wisconsin Department of Natural Resources (WDNR) Bureau of Remediation and Redevelopment Tracking System (BRRTS), there are no listings for the project site or for any properties immediately adjacent to the project site.

2. According to the Department of Commerce (DCOMM), there are no listings for the project site or for any properties immediately adjacent to the project site.

3. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), Panel Number 4, the project site is not located in a floodplain.

4. According to the Southeastern Wisconsin Regional Planning Commission's (SEWRPC) Wisconsin Wetlands Inventory, there are no wetlands identified within the project site. Also, according to SEWRPC, the project site is not located within an environmental corridor.

E. Project Site Inspection

On May 10, 2006, City staff conducted an inspection of the project site. A photograph log of the project site is included as Attachment A. The project site is currently occupied by a vacant industrial building. The illegal dumping of tires, automobile parts and other refuse in the rear of the building are present. The area surrounding the project site is a mix of light-industrial and residential dwellings.

F. Conclusions and Recommendations

This HLUI of 3456-62 North Buffum Street raised potential environmental concerns as former metal processing, fiberglass fabrication and manufacturing facilities, and illegal dumping.

Based on the available historical land use information, we recommend a Phase II Environmental Site Assessment (ESA) at this time.

As a precaution, we recommend a systematic search for underground storage tanks and utility mains and/or fixtures at 3456-62 North Buffum Street. Confirmation efforts (e.g. additional record searches, and/or backhoe excavations) should be conducted to investigate suspected tanks.

a. If found, the contents of the underground storage tank should be sampled and tested for potential reuse, recycling, or disposal according to State regulations.

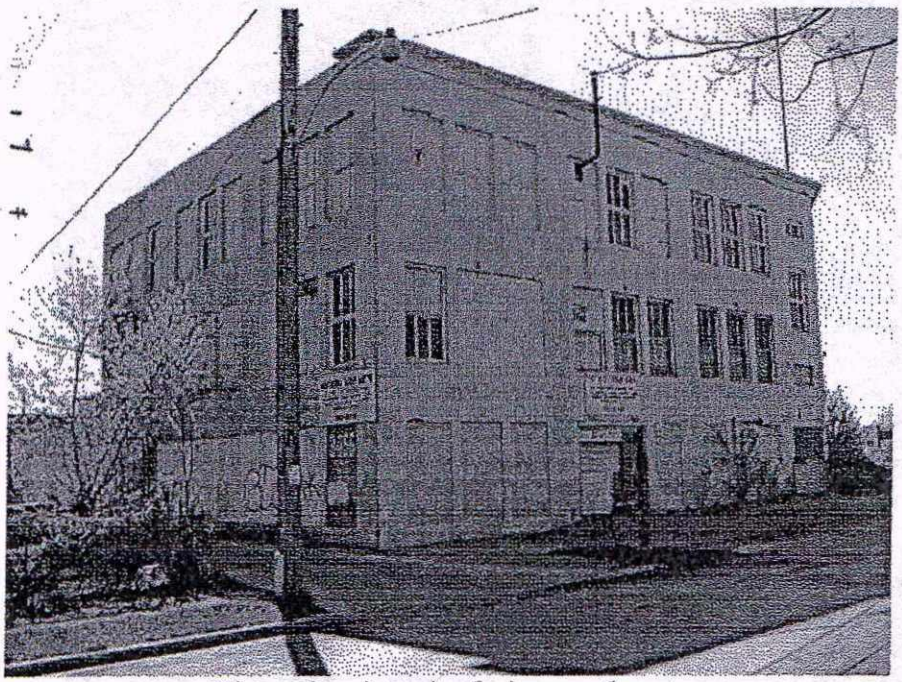
b. If found, all abandoned tanks should be properly removed, and a site assessment conducted, according to existing WDNR regulations. The tanks should also be registered with the Wisconsin Department of Commerce.

DPM/MPP
City of Milwaukee
7/18/2006

Attachment A

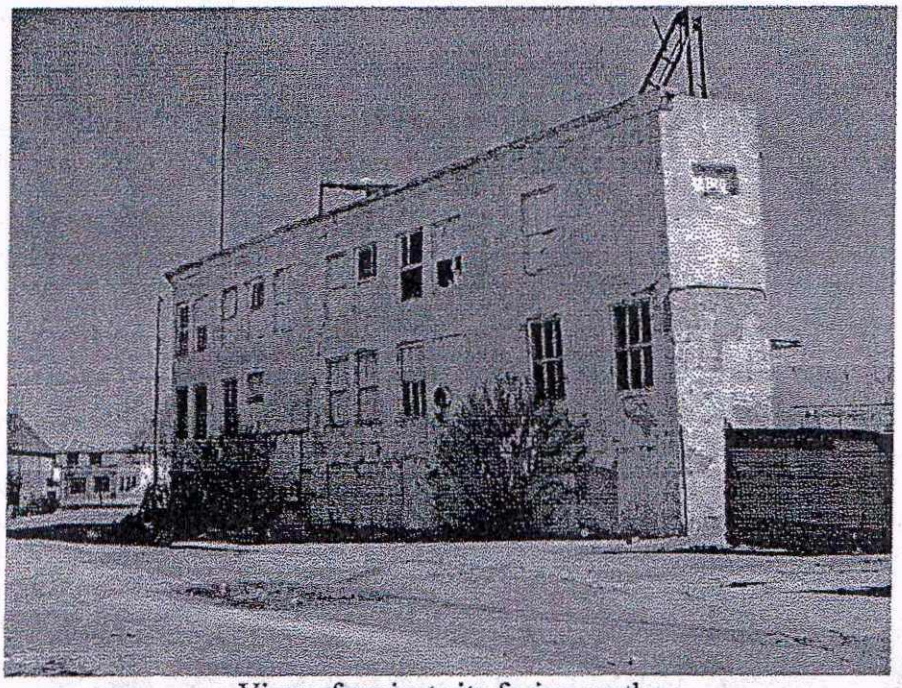
3456-62 North Buffum Street

Photographs taken 5/10/2006



View of project site facing southeast.

View of project site facing north.



View of project site facing north.

View of project site facing east.

FIGURE 1
QUARTER SECTION LAND USE MAP
3456-62 N. Buffum St., Milwaukee, WI

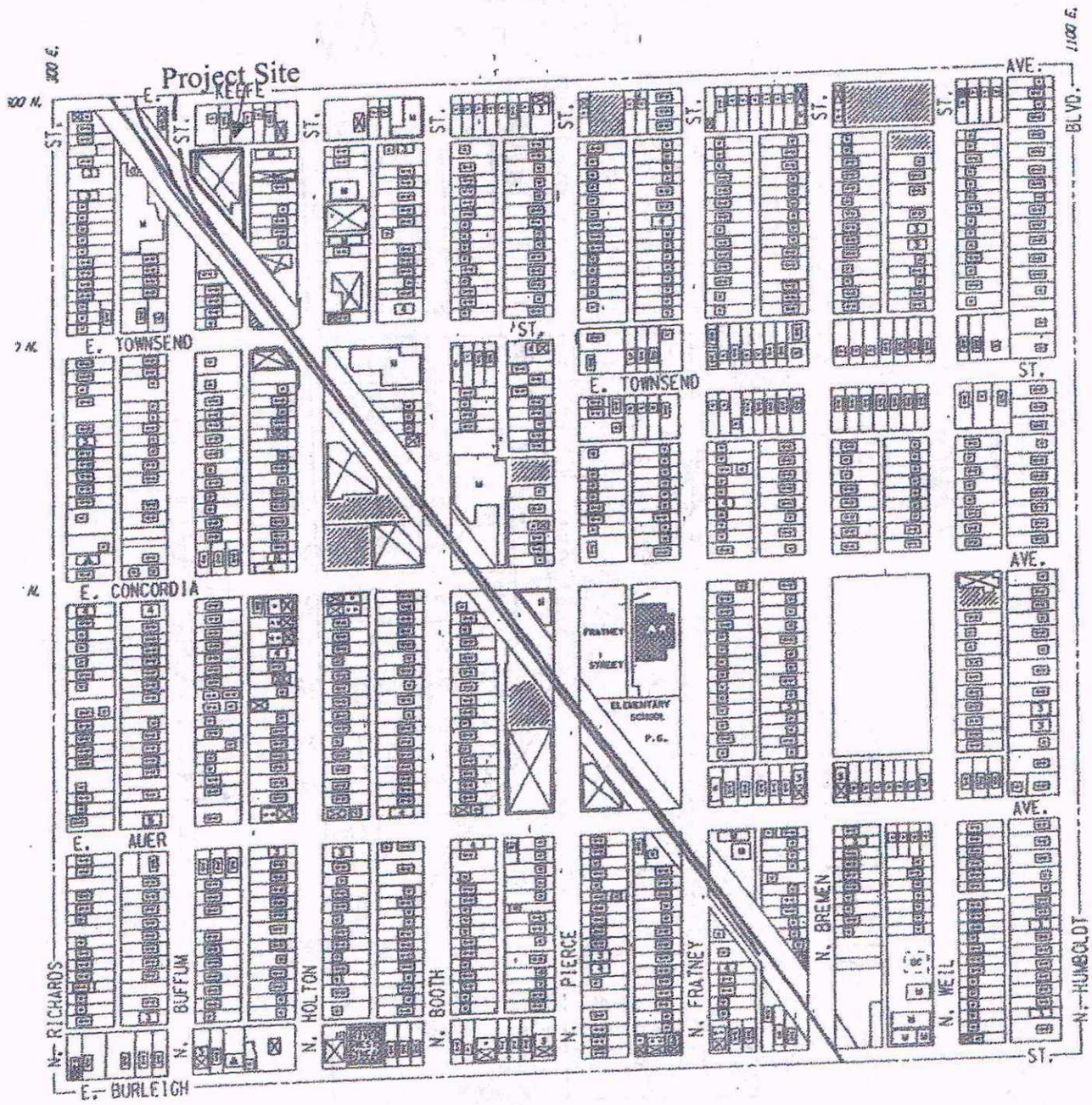


FIGURE 2
PLAT MAP
3456-62 N. Buffum St., Milwaukee, WI

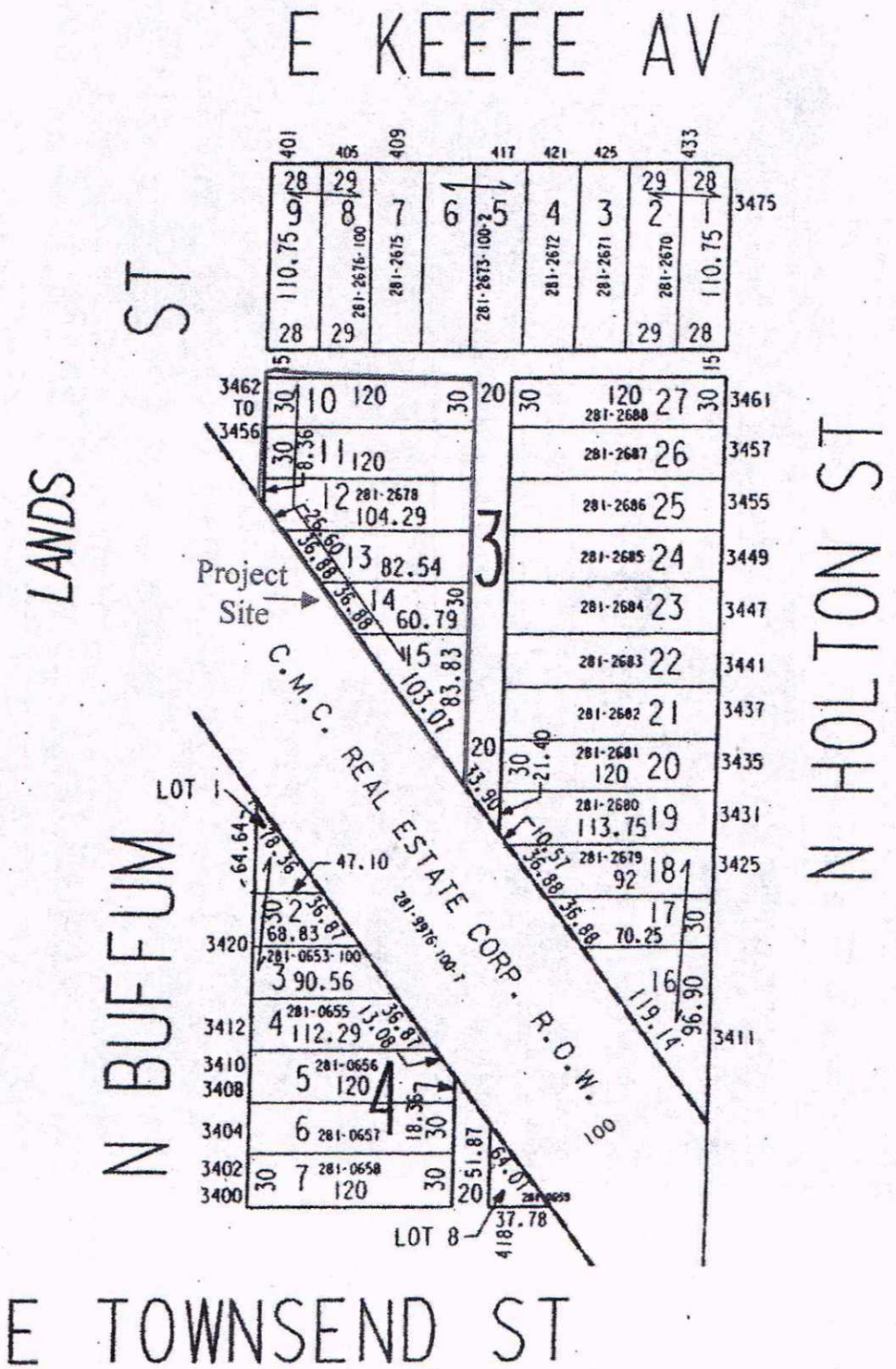


FIGURE 3
1910 SANBORN FIRE INSURANCE MAP
(with updates through 1937)
3456-62 N. Buffum St., Milwaukee, WI

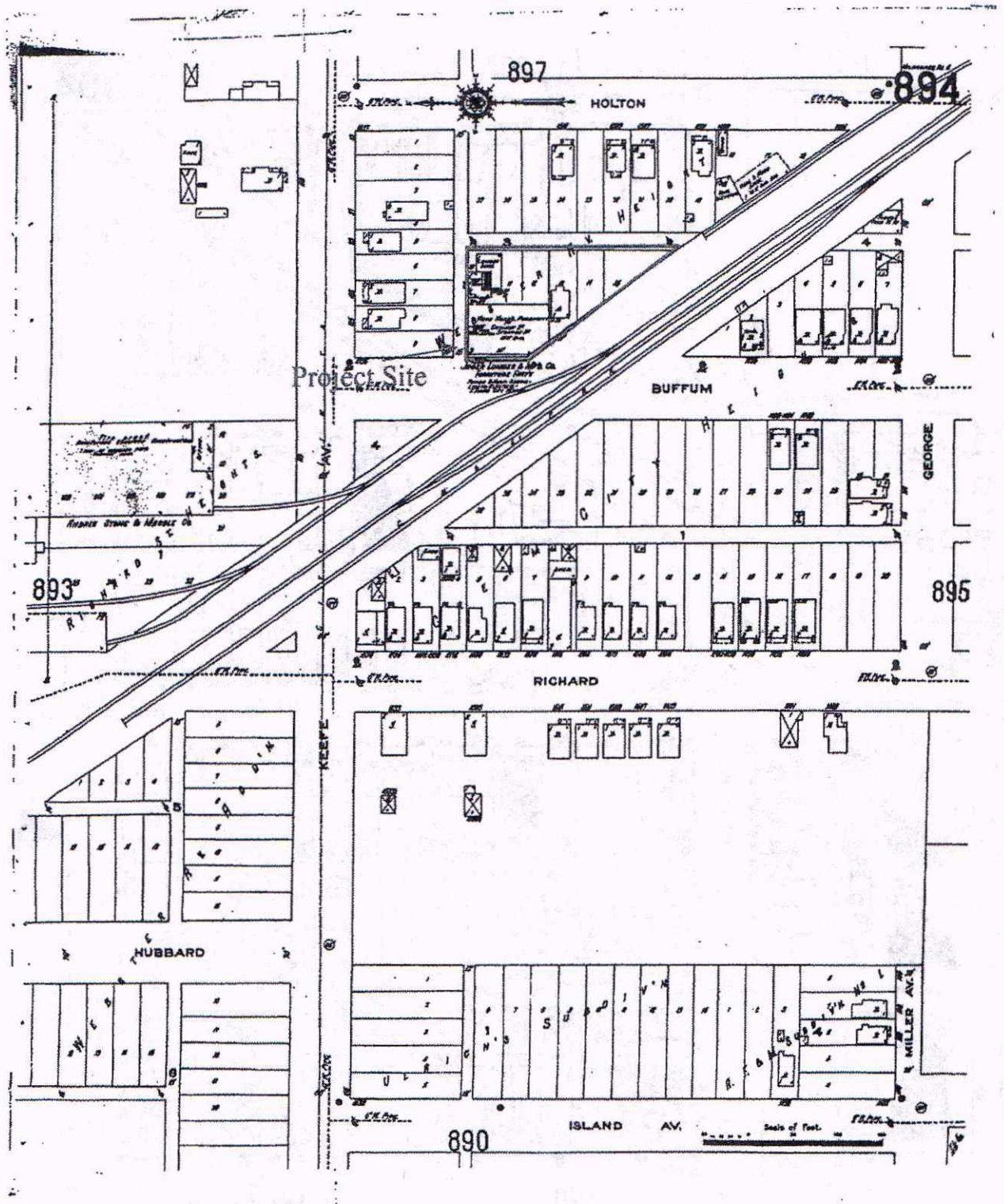


FIGURE 4
1910 Sanborn Fire Insurance Map
(with updates through 1951)
3456-62 N. Buffum St., Milwaukee, WI

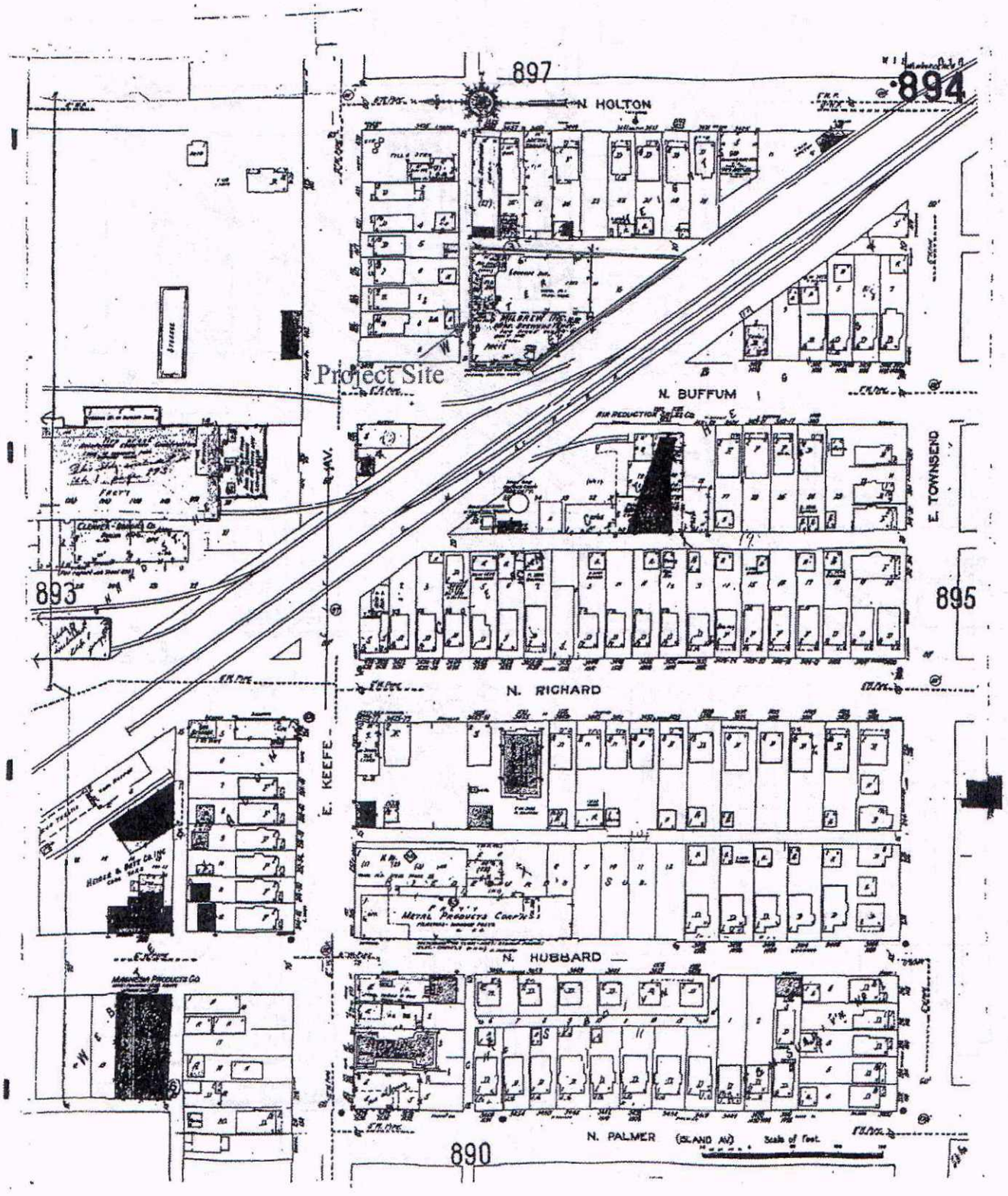
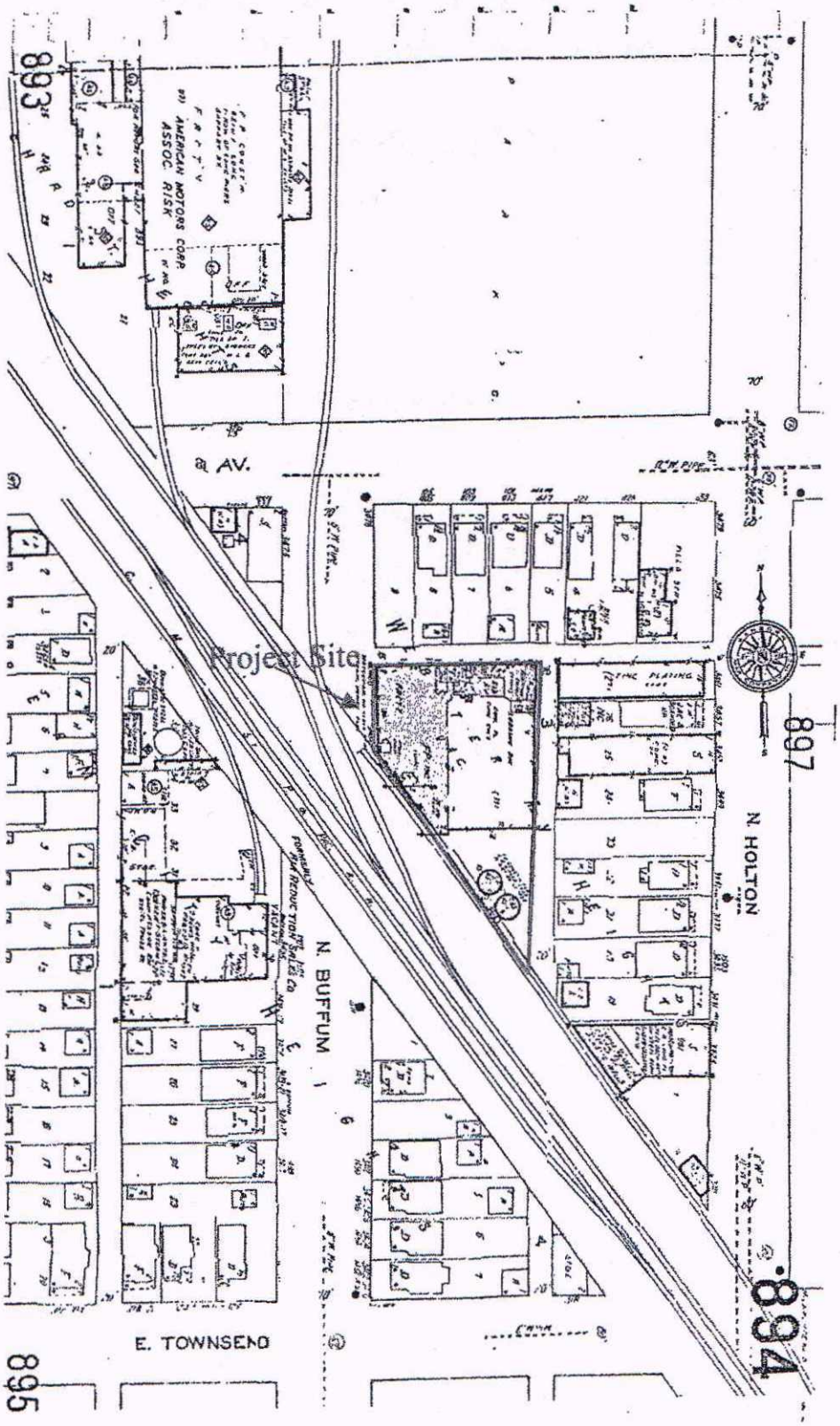


FIGURE 5
1969 SANBORN FIRE INSURANCE MAP
3456-62 N. Buffum St., Milwaukee, WI



Assessment Detail and Listing Characteristics

Taxkey	Premise Address	Nbhd	Plat	Assessment County	Class
2812678000	3456-3462 N BUFFUM ST	6238	28125	Milwaukee	Local Mercantile

Ownership Information

SIMON BARBIER
IDA BARBIER
225 ELM CT
NORTHBROOK IL 60062

Conveyance

Deed Type	WD
Date	2001-03-07
Fee	270.00

Name Change: 2013-12-02

Assessment Information

Year	Current	Previous
Land	45300	45300
Imprv	490700	490700
Total	536000	536000

Org Year	Drop Year	Zoning	Ald. District	Census
		IO2	6	???-???

Legal Description

WEBSTER AVE HEIGHTS IN SW 1/4 SEC 9-7-22 BLOCK 3 LOTS 10 TO 15 INCL

Lot Sqft	Lot Acres	Lot Frontage	Lot Depth	Excess Land	Total Sqft
0	.4160	0	0	0.0000	18121

Building	Stories	Description	Gross Area	Units	Exterior Wall	Year Built
1	0.0	Multi Story Warehouse	27554	4	Concrete Block	1912

Building	Unit Nr	Use Description	Area	Floor	Similar Units	Mkt Rent SqFt
1	N/A	Warehouse - Classic	10022	M	1	2.73
1	BLDG 1	Warehouse - Classic	6529	3	1	3.53
1	N/A	Warehouse - Classic	4474	1	1	3.56
1	N/A	Warehouse - Classic	6529	2	1	3.53

Recent Permits Sale History Assessment History Tax Balance About Site

Data Provided By Assessor Query From: 174.103.185.232

3456 - 3462 N Buffum Street
3456 - 3462 N Buffum Street
Milwaukee, WI 53212

Inquiry Number: 3765786.2s
October 24, 2013

The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

3456 - 3462 N BUFFUM STREET
MILWAUKEE, WI 53212

COORDINATES

Latitude (North):	43.0814000 - 43° 4' 53.04''
Longitude (West):	87.9059000 - 87° 54' 21.24''
Universal Tranverse Mercator:	Zone 16
UTM X (Meters):	426256.8
UTM Y (Meters):	4770037.5
Elevation:	680 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	43087-A8 MILWAUKEE, WI
Most Recent Revision:	1971

AERIAL PHOTOGRAPHY IN THIS REPORT

Photo Year:	2010
Source:	USDA

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
NORTH SIDE SCRAP METAL 3456 N. BUFFUM STREET MILWAUKEE, WI	FINDS	N/A
NORTH SIDE SCRAP METAL 3456 N. BUFFUM STREET MILWAUKEE, WI 53212	US AIRS	N/A
3456 3462 N BUFFUM ST 3456 3462 N BUFFUM ST MILWAUKEE, WI	WI BROWNFIELDS	N/A
DOMBECK METALS INC 3456 N BUFFUM ST MILWAUKEE, WI 53212	WI SPILLS WI SHWIMS	N/A

EXECUTIVE SUMMARY

3456-62 N BUFFUM ST 3456-62 N BUFFUM ST MILWAUKEE, WI 53212	WI BRRTS WI BROWNFIELDS	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

CERCLIS ---------- Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY ---------- Federal Facility Site Information listing

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal institutional controls / engineering controls registries

US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls
LUCIS ---------- Land Use Control Information System

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State and tribal landfill and/or solid waste disposal site lists

WI SWF/LF ---------- List of Licensed Landfills

State and tribal leaking storage tank lists

INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

INDIAN UST ---------- Underground Storage Tanks on Indian Land

FEMA UST ---- Underground Storage Tank Listing

State and tribal voluntary cleanup sites

INDIAN VCP ---- Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

WI BEAP ---- Brownfields Environmental Assessment Program

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9 ---- Torres Martinez Reservation Illegal Dump Site Locations
ODI ---- Open Dump Inventory
WI SWRCY ---- Recycling Center Listing
INDIAN ODI ---- Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL ---- Clandestine Drug Labs
WI CDL ---- Clandestine Drug Lab Listing
US HIST CDL ---- National Clandestine Laboratory Register

Local Land Records

LIENS 2 ---- CERCLA Lien Information
WI LIENS ---- Environmental Liens Listing

Records of Emergency Release Reports

HMIRS ---- Hazardous Materials Information Reporting System
WI AGSPILLS ---- Agricultural Spill Cases
WI SPILLS 80 ---- SPILLS 80 data from FirstSearch
WI SPILLS 90 ---- SPILLS 90 data from FirstSearch

Other Ascertainable Records

DOT OPS ---- Incident and Accident Data
DOD ---- Department of Defense Sites
FUDS ---- Formerly Used Defense Sites
CONSENT ---- Superfund (CERCLA) Consent Decrees
ROD ---- Records Of Decision
UMTRA ---- Uranium Mill Tailings Sites
US MINES ---- Mines Master Index File
TRIS ---- Toxic Chemical Release Inventory System
TSCA ---- Toxic Substances Control Act
FTTS ---- FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS ---- FIFRA/TSCA Tracking System Administrative Case Listing
SSTS ---- Section 7 Tracking Systems
ICIS ---- Integrated Compliance Information System
PADS ---- PCB Activity Database System

MLTS ---------- Material Licensing Tracking System
RADINFO ---------- Radiation Information Database
RAATS ---------- RCRA Administrative Action Tracking System
RMP ---------- Risk Management Plans
WI DRYCLEANERS ---------- Five Star Recognition Program Sites
WI AIRS ---------- Air Permit Program Listing
WI LEAD ---------- Lead Inspection Data
INDIAN RESERV ---------- Indian Reservations
SCRD DRYCLEANERS ---------- State Coalition for Remediation of Drycleaners Listing
WI COAL ASH ---------- Coal Ash Disposal Site Listing
COAL ASH EPA ---------- Coal Combustion Residues Surface Impoundments List
EPA WATCH LIST ---------- EPA WATCH LIST
US FIN ASSUR ---------- Financial Assurance Information
PRP ---------- Potentially Responsible Parties
PCB TRANSFORMER ---------- PCB Transformer Registration Database
LEAD SMELTERS ---------- Lead Smelter Sites
COAL ASH DOE ---------- Steam-Electric Plant Operation Data

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP ---------- EDR Proprietary Manufactured Gas Plants

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS NFRAP site List

CERC-NFRAP: Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

A review of the CERC-NFRAP list, as provided by EDR, and dated 04/26/2013 has revealed that there are 2 CERC-NFRAP sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
JOHNSON CONTROLS INC BATTERY (	*900 E KEEFE AVE*	*E 1/4 - 1/2 (0.288 mi.)*	*98*	*421*
JOHNSON CONTROLS INC HUMBOLDT	*3713 HUMBOLDT AVENUE*	*ENE 1/4 - 1/2 (0.460 mi.)*	*119*	*623*

Federal RCRA CORRACTS facilities list

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 07/11/2013 has revealed that there is 1 CORRACTS site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
JOHNSON CONTROLS INC HUMBOLDT	*3713 HUMBOLDT AVENUE*	*ENE 1/4 - 1/2 (0.460 mi.)*	*119*	*623*

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 07/11/2013 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
TULIP CORPORATION (KEEFE PLANT	*714 EAST KEEFE AVE.*	*ENE 1/8 - 1/4 (0.173 mi.)*	*H54*	*184*

RCRA-CESQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-CESQG list, as provided by EDR, and dated 07/11/2013 has revealed that there are 9 RCRA-CESQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MEDOVATIONS	*102 E KEEFE AVE*	*W 1/8 - 1/4 (0.236 mi.)*	*N81*	*288*

Lower Elevation	Address	Direction / Distance	Map ID	Page
BULK PETROLEUM CORP	*3474 N HOLTON ST*	*ENE 0 - 1/8 (0.033 mi.)*	*A16*	*69*
RECYCLING WORLD NORTH (FORMER)	*3607 N RICHARDS ST*	*NW 0 - 1/8 (0.101 mi.)*	*D33*	*102*
PETERS ENGINEERING CO INC	*245 E KEEFE AVE*	*WNW 0 - 1/8 (0.121 mi.)*	*D40*	*122*
COMPO STELL PRIDUCTS INC	*3637 N HOLTON ST*	*NNE 1/8 - 1/4 (0.132 mi.)*	*E42*	*149*

Lower Elevation	Address	Direction / Distance	Map ID	Page
UNIQUE INDOOR COMFORT	***3707 N RICHARDS ST***	***NNW 1/8 - 1/4 (0.188 mi.)***	***I59***	***214***
ADJUSTABLE FIXTURE CO	***3726 N BOOTH ST***	***NNE 1/8 - 1/4 (0.223 mi.)***	***L73***	***251***
ADVANCE DIE CASTING CO	***3760 N HOLTON ST***	***N 1/8 - 1/4 (0.244 mi.)***	***P90***	***387***
KUEHN RUBBER CO	***3747 N BOOTH ST***	***NNE 1/8 - 1/4 (0.245 mi.)***	***L91***	***392***

State- and tribal - equivalent CERCLIS

WI SHWS: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Department of Natural Resources' Hazard Ranking System/Wisconsin Remedial Site Evaluation Report.

A review of the WI SHWS list, as provided by EDR, and dated 11/30/1994 has revealed that there is 1 WI SHWS site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
BLUEHOLE LANDFILL	810 E CAPITAL DRIVE	NNE 1/2 - 1 (0.605 mi.)	125	779

State and tribal landfill and/or solid waste disposal site lists

WI WDS: The Registry was created by the DNR to serve as a comprehensive listing of all sites where solid or hazardous wastes have been or may have been deposited.

A review of the WI WDS list, as provided by EDR, and dated 01/09/2013 has revealed that there is 1 WI WDS site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
JOHNSON CONTROLS INC BATTERY (	***900 E KEEFE AVE***	***E 1/4 - 1/2 (0.288 mi.)***	***98***	***421***

State and tribal leaking storage tank lists

WI LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Natural Resource's LUST Database.

A review of the WI LUST list, as provided by EDR, and dated 06/03/2013 has revealed that there are 29 WI LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ALPHA INDUSTRIES INC Facility Status: CLOSED	***3404 N HOLTON ST***	***SSE 0 - 1/8 (0.052 mi.)***	***B25***	***77***
KOHLS FOOD STORE Facility Status: CLOSED	***3304 N HOLTON AVE***	***SSE 1/8 - 1/4 (0.150 mi.)***	***F46***	***161***
METAL FORMS CORP Facility Status: CLOSED	***3334 N BOOTH ST***	***SSE 1/8 - 1/4 (0.165 mi.)***	***F49***	***173***

EXECUTIVE SUMMARY

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MEDOVATIONS Facility Status: CLOSED	***102 E KEEFE AVE***	***W 1/8 - 1/4 (0.236 mi.)***	***N81***	***288***
Not reported Facility Status: CLOSED	***3105 N HOLTON ST***	***S 1/4 - 1/2 (0.419 mi.)***	***112***	***573***
NASH, GRACE PROPERTY Facility Status: CLOSED	***3105 N RICHARDS ST***	***SSW 1/4 - 1/2 (0.429 mi.)***	***R114***	***587***

Lower Elevation	Address	Direction / Distance	Map ID	Page
HOLTON ST PROPERTY Facility Status: CLOSED	3434 N HOLTON ST	SE 0 - 1/8 (0.033 mi.)	B11	17
BULK PETROLEUM CORP Facility Status: CLOSED	***3474 N HOLTON ST***	***ENE 0 - 1/8 (0.033 mi.)***	***A14***	***19***
BUEGE PEPAN BLDG CO Facility Status: CLOSED	***3710 N RICHARDS ST***	***NNW 1/8 - 1/4 (0.197 mi.)***	***I61***	***217***
ADJUSTABLE FIXTURE CO Facility Status: CLOSED	***3726 N BOOTH ST***	***NNE 1/8 - 1/4 (0.223 mi.)***	***L73***	***251***
Not reported Facility Status: CLOSED	***801 E KEEFE AVE***	***E 1/8 - 1/4 (0.226 mi.)***	***K74***	***263***
KLEMENT SAUSAGE CO INC Facility Status: CLOSED	***3275 N PIERCE ST***	***SE 1/4 - 1/2 (0.260 mi.)***	***94***	***396***
DODCO INC Facility Status: CLOSED	***3775 N HOLTON ST***	***N 1/4 - 1/2 (0.262 mi.)***	***P95***	***400***
JOHNSON BROTHERS BEVERAGES Facility Status: CLOSED	***3775 N RICHARDS ST***	***NNW 1/4 - 1/2 (0.272 mi.)***	***O96***	***403***
JOHNSON CONTROLS INC BATTERY (Facility Status: OPEN	***900 E KEEFE AVE***	***E 1/4 - 1/2 (0.288 mi.)***	***98***	***421***
FRATNEY ST ELEMENTARY SCHOOL Facility Status: CLOSED	***3255 N FRATNEY ST***	***SE 1/4 - 1/2 (0.317 mi.)***	***100***	***477***
MCCALL PROPERTY Facility Status: CLOSED	3424 N WEIL AVE	ESE 1/4 - 1/2 (0.348 mi.)	103	491
SCHOOL RIDE INC Facility Status: CLOSED	***3850 N HOLTON***	***N 1/4 - 1/2 (0.356 mi.)***	***104***	***492***
DAIMLER CHRYSLER MOTORS MILW M Facility Status: CLOSED	***3880 N RICHARDS ST***	***N 1/4 - 1/2 (0.362 mi.)***	***105***	***497***
KOCH ROBERT PROPERTY Facility Status: OPEN	***3178 N FRATNEY ST***	***SSE 1/4 - 1/2 (0.379 mi.)***	***107***	***516***
JOHNSON CHARITABLE TRUST C/O P Facility Status: CLOSED	***811 E VIENNA***	***NE 1/4 - 1/2 (0.383 mi.)***	***108***	***552***
HEIDER & BOTT CO INC Facility Status: CLOSED	3840 N PALMER ST	NNW 1/4 - 1/2 (0.411 mi.)	111	572
WIS THERMOSET MOLDING Facility Status: CLOSED	***900 E VIENNA AVE***	***NE 1/4 - 1/2 (0.430 mi.)***	***T115***	***597***
EMIL JUEDES & SONS Facility Status: CLOSED	***101 W ABERT PL***	***NNW 1/4 - 1/2 (0.445 mi.)***	***S116***	***599***
AMERITECH Facility Status: CLOSED	***3845 N BREMEN ST***	***NE 1/4 - 1/2 (0.451 mi.)***	***T118***	***620***

Lower Elevation	Address	Direction / Distance	Map ID	Page
JOHNSON CONTROLS INC HUMBOLDT Facility Status: CLOSED	***3713 HUMBOLDT AVENUE***	***ENE 1/4 - 1/2 (0.460 mi.)***	***119***	***623***
AMERICAN AUTO BEAUTY CARSTAR Facility Status: CLOSED	***3866 N FRATNEY***	***NNE 1/4 - 1/2 (0.464 mi.)***	***V121***	***724***
MENZLS TOWING INC Facility Status: CLOSED	***3872 N FRATNEY***	***NNE 1/4 - 1/2 (0.472 mi.)***	***V122***	***742***
L BREITHAUPT PRINTING CORP Facility Status: CLOSED	***3889 N 1ST ST***	***NNW 1/4 - 1/2 (0.497 mi.)***	***124***	***775***

WI LAST: A listing of leaking aboveground storage tank sites.

A review of the WI LAST list, as provided by EDR, and dated 06/03/2013 has revealed that there is 1 WI LAST site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
KOCH ROBERT PROPERTY	***3178 N FRATNEY ST***	***SSE 1/4 - 1/2 (0.379 mi.)***	***107***	***516***

State and tribal registered storage tank lists

WI UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Commerces' List: All Underground Storage Tanks Except for Fuel Oil.

A review of the WI UST list, as provided by EDR, and dated 07/26/2013 has revealed that there are 19 WI UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	3404 N HOLTON ST	SSE 0 - 1/8 (0.052 mi.)	B24	75
Not reported	3373 N HOLTON ST	SSE 0 - 1/8 (0.089 mi.)	C28	91
Not reported	3372 N HOLTON AVENUE	SSE 0 - 1/8 (0.091 mi.)	C29	92
Not reported	3304 N HOLTON AVE	SSE 1/8 - 1/4 (0.150 mi.)	F45	160
Not reported	102 KEEFE AVE	W 1/8 - 1/4 (0.239 mi.)	N83	324

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	***3474 N HOLTON AVE***	***ENE 0 - 1/8 (0.033 mi.)***	***A17***	***70***
Not reported	3416 N BOOTH ST	ESE 0 - 1/8 (0.099 mi.)	32	101
Not reported	3600 N HOLTON AVE	NNE 0 - 1/8 (0.110 mi.)	E36	118
Not reported	3519 N HUBBARD ST	WNW 1/8 - 1/4 (0.133 mi.)	D43	159
Not reported	714 E KEEFE AVENUE	ENE 1/8 - 1/4 (0.172 mi.)	H53	184
Not reported	3707 N RICHARDS ST	NNW 1/8 - 1/4 (0.188 mi.)	I58	212
Not reported	3710 N RICHARDS ST	NNW 1/8 - 1/4 (0.197 mi.)	I62	240
Not reported	3535 N PALMER STREET	WNW 1/8 - 1/4 (0.197 mi.)	J63	243
Not reported	3525 N PALMER	WNW 1/8 - 1/4 (0.211 mi.)	J68	247
Not reported	3613 N PALMER STREET	WNW 1/8 - 1/4 (0.214 mi.)	J70	248
Not reported	***801 E KEEFE AVE***	***E 1/8 - 1/4 (0.226 mi.)***	***K74***	***263***
Not reported	830 E KEEFE AVE	E 1/8 - 1/4 (0.244 mi.)	K87	365
Not reported	3760 N HOLTON ST	N 1/8 - 1/4 (0.244 mi.)	P89	386
Not reported	3747 N BOOTH ST	NNE 1/8 - 1/4 (0.245 mi.)	L92	394

WI AST: The Aboveground Storage Tank database contains registered ASTs. The data come from the Department of Industry, Labor & Human Resources' List: All Aboveground Storage Tanks Except for Fuel Oil.

A review of the WI AST list, as provided by EDR, and dated 07/26/2013 has revealed that there is 1 WI AST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	3434 N HOLTON	SE 0 - 1/8 (0.033 mi.)	B12	18

State and tribal institutional control / engineering control registries

WI AUL: Date a deed restriction is recorded at the Register of Deeds office for a property. Extent of soil contamination is known but impracticable to remove now or an engineering control is required to be maintained or NR720 industrial stds are applied. Restricts property use or requires future actions.

A review of the WI AUL list, as provided by EDR, and dated 06/03/2013 has revealed that there are 21 WI AUL sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ALPHA INDUSTRIES INC	*3404 N HOLTON ST*	*SSE 0 - 1/8 (0.052 mi.)*	*B25*	*77*
KOHLS FOOD STORE	*3304 N HOLTON AVE*	*SSE 1/8 - 1/4 (0.150 mi.)*	*F46*	*161*
METAL FORMS CORP	*3334 N BOOTH ST*	*SSE 1/8 - 1/4 (0.165 mi.)*	*F49*	*173*
MEDOVATIONS	*102 E KEEFE AVE*	*W 1/8 - 1/4 (0.236 mi.)*	*N81*	*288*
3119 N RICHARDS ST	*3119 N RICHARDS ST*	*SSW 1/4 - 1/2 (0.409 mi.)*	*R110*	*564*
NASH, GRACE PROPERTY	*3105 N RICHARDS ST*	*SSW 1/4 - 1/2 (0.429 mi.)*	*R114*	*587*

Lower Elevation	Address	Direction / Distance	Map ID	Page
BULK PETROLEUM CORP	*3474 N HOLTON ST*	*ENE 0 - 1/8 (0.033 mi.)*	*A14*	*19*
RECYCLING WORLD NORTH (FORMER)	*3607 N RICHARDS ST*	*NW 0 - 1/8 (0.101 mi.)*	*D33*	*102*
TULIP CORPORATION (KEEFE PLANT	*714 EAST KEEFE AVE.*	*ENE 1/8 - 1/4 (0.173 mi.)*	*H54*	*184*
BUEGE PEPAN BLDG CO	*3710 N RICHARDS ST*	*NNW 1/8 - 1/4 (0.197 mi.)*	*I61*	*217*
CHARTER MFG CORP MELLOWS CO DI	*3704 N PALMER ST*	*NW 1/8 - 1/4 (0.228 mi.)*	*M78*	*269*
3744 N BOOTH STREET	*3744 N BOOTH ST*	*NNE 1/8 - 1/4 (0.243 mi.)*	*L85*	*325*
MANUFACTURERS BOX CO	*830 E KEEFE AVE*	*E 1/8 - 1/4 (0.244 mi.)*	*K88*	*366*
JOHNSON BROTHERS BEVERAGES	*3775 N RICHARDS ST*	*NNW 1/4 - 1/2 (0.272 mi.)*	*O96*	*403*
JOHNSON CONTROLS INC BATTERY (	*900 E KEEFE AVE*	*E 1/4 - 1/2 (0.288 mi.)*	*98*	*421*
KOCH ROBERT PROPERTY	*3178 N FRATNEY ST*	*SSE 1/4 - 1/2 (0.379 mi.)*	*107*	*516*
JOHNSON CHARITABLE TRUST C/O P	*811 E VIENNA*	*NE 1/4 - 1/2 (0.383 mi.)*	*108*	*552*
118 W ABERT PL	*118 W ABERT PL*	*NNW 1/4 - 1/2 (0.449 mi.)*	*S117*	*601*
3880-3896 N PALMER ST	*3880-3896 N PALMER*	*NNW 1/4 - 1/2 (0.461 mi.)*	*U120*	*654*
AMERICAN AUTO BEAUTY CARSTAR	*3866 N FRATNEY*	*NNE 1/4 - 1/2 (0.464 mi.)*	*V121*	*724*
3908 N PALMER ST	*3908 N PALMER ST*	*NNW 1/4 - 1/2 (0.496 mi.)*	*U123*	*748*

State and tribal voluntary cleanup sites

WI VCP: The Voluntary Party Liability Exemption is an elective environmental cleanup program. Interested persons who meet the definition of "voluntary party" are eligib le to apply. A "voluntary party" is any person who submits an application and pays all the necessary fees.

A review of the WI VCP list, as provided by EDR, and dated 06/03/2013 has revealed that there are 2

WI VCP sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
701-721 E VIENNA ST	***701-721 E VIENNA ST***	***NNE 1/4 - 1/2 (0.335 mi.)***	***Q101***	***479***
3880-3896 N PALMER ST	***3880-3896 N PALMER***	***NNW 1/4 - 1/2 (0.461 mi.)***	***U120***	***654***

State and tribal Brownfields sites

WI BROWNFIELDS: A listing of brownfields sites included in the BRRTS database. Brownfields are abandoned, idle or underused commercial or industrial properties, where the expansion or redevelopment is hindered by real or perceived contamination. Brownfields vary in size, location, age, and past use -- they can be anything from a five-hundred acre automobile assembly plant to a small, abandoned corner gas station.

A review of the WI BROWNFIELDS list, as provided by EDR, and dated 06/03/2013 has revealed that there are 9 WI BROWNFIELDS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
3372 N HOLTON ST	***3372 N HOLTON ST***	***SSE 0 - 1/8 (0.091 mi.)***	***C30***	***93***
MEDOVATIONS	***102 E KEEFE AVE***	***W 1/8 - 1/4 (0.236 mi.)***	***N81***	***288***

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	433 E KEEFE AV	N 0 - 1/8 (0.028 mi.)	A7	15
274 E KEEFE AVE	***274 E KEEFE AVE***	***WNW 0 - 1/8 (0.096 mi.)***	***D31***	***100***
ADVANCE PLATING CO	***104 E NASH STREET***	***NW 1/4 - 1/2 (0.288 mi.)***	***97***	***411***
701-721 E VIENNA ST	***701-721 E VIENNA ST***	***NNE 1/4 - 1/2 (0.335 mi.)***	***Q101***	***479***
118 W ABERT PL	***118 W ABERT PL***	***NNW 1/4 - 1/2 (0.449 mi.)***	***S117***	***601***
JOHNSON CONTROLS INC HUMBOLDT	***3713 HUMBOLDT AVENUE***	***ENE 1/4 - 1/2 (0.460 mi.)***	***119***	***623***
3880-3896 N PALMER ST	***3880-3896 N PALMER***	***NNW 1/4 - 1/2 (0.461 mi.)***	***U120***	***654***

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: The EPA's listing of Brownfields properties from the Cleanups in My Community program, which provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

A review of the US BROWNFIELDS list, as provided by EDR, and dated 06/24/2013 has revealed that there is 1 US BROWNFIELDS site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
701 EAST VIENNA STREET	***701 EAST VIENNA STREET***	***NNE 1/4 - 1/2 (0.335 mi.)***	***Q102***	***489***

EXECUTIVE SUMMARY

Local Lists of Hazardous waste / Contaminated Sites

WI ERP: Emergency Repair Program Database. Non - LUST Sites with Contaminated Soil and/or GW. Often these are historic releases to the environment.

A review of the WI ERP list, as provided by EDR, and dated 06/03/2013 has revealed that there are 26 WI ERP sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MORTON ENTERPRISES PROPERTY	***526 E CONCORDIA***	***SSE 1/8 - 1/4 (0.180 mi.)***	***F56***	***208***
MEDOVATIONS	***102 E KEEFE AVE***	***W 1/8 - 1/4 (0.236 mi.)***	***N81***	***288***
3127 N RICHARDS ST	3127 N RICHARDS ST	SSW 1/4 - 1/2 (0.398 mi.)	R109	561
3119 N RICHARDS ST	***3119 N RICHARDS ST***	***SSW 1/4 - 1/2 (0.409 mi.)***	***R110***	***564***

Lower Elevation	Address	Direction / Distance	Map ID	Page
BULK PETROLEUM CORP	***3474 N HOLTON ST***	***ENE 0 - 1/8 (0.033 mi.)***	***A14***	***19***
RECYCLING WORLD NORTH (FORMER)	***3607 N RICHARDS ST***	***NW 0 - 1/8 (0.101 mi.)***	***D33***	***102***
PETTIGREW, JACK PROPERTY	***3600 N HOLTON AVE***	***NNE 0 - 1/8 (0.109 mi.)***	***E35***	***115***
TULIP CORPORATION (KEEFE PLANT	***714 EAST KEEFE AVE.***	***ENE 1/8 - 1/4 (0.173 mi.)***	***H54***	***184***
AQUA-CHEM INC	3707 & 3725 N RICHARDS	NNW 1/8 - 1/4 (0.208 mi.)	I66	244
ADJUSTABLE FIXTURE CO	***3726 N BOOTH ST***	***NNE 1/8 - 1/4 (0.223 mi.)***	***L73***	***251***
CHARTER MFG CORP MELLOWS CO DI	***3704 N PALMER ST***	***NW 1/8 - 1/4 (0.228 mi.)***	***M78***	***269***
3744 N BOOTH STREET	***3744 N BOOTH ST***	***NNE 1/8 - 1/4 (0.243 mi.)***	***L85***	***325***
MANUFACTURERS BOX CO	***830 E KEEFE AVE***	***E 1/8 - 1/4 (0.244 mi.)***	***K88***	***366***
ADVANCE PLATING CO	***104 E NASH STREET***	***NW 1/4 - 1/2 (0.288 mi.)***	***97***	***411***
JOHNSON CONTROLS INC BATTERY (	***900 E KEEFE AVE***	***E 1/4 - 1/2 (0.288 mi.)***	***98***	***421***
PABST WAREHOUSE FACILITY	620 E VIENNA AVE	NNE 1/4 - 1/2 (0.316 mi.)	99	473
701-721 E VIENNA ST	***701-721 E VIENNA ST***	***NNE 1/4 - 1/2 (0.335 mi.)***	***Q101***	***479***
DAIMLER CHRYSLER MOTORS MILW M	***3880 N RICHARDS ST***	***N 1/4 - 1/2 (0.362 mi.)***	***105***	***497***
JOHNSON CONTROLS INC GLOBE BAT	***3238 NORTH BREMEN STREE***	***SE 1/4 - 1/2 (0.376 mi.)***	***106***	***505***
C H & E MFG CO	***3800 N 1ST ST***	***NW 1/4 - 1/2 (0.427 mi.)***	***S113***	***577***
118 W ABERT PL	***118 W ABERT PL***	***NNW 1/4 - 1/2 (0.449 mi.)***	***S117***	***601***
JOHNSON CONTROLS INC HUMBOLDT	***3713 HUMBOLDT AVENUE***	***ENE 1/4 - 1/2 (0.460 mi.)***	***119***	***623***
3880-3896 N PALMER ST	***3880-3896 N PALMER***	***NNW 1/4 - 1/2 (0.461 mi.)***	***U120***	***654***
AMERICAN AUTO BEAUTY CARSTAR	***3866 N FRATNEY***	***NNE 1/4 - 1/2 (0.464 mi.)***	***V121***	***724***
MENZLS TOWING INC	***3872 N FRATNEY***	***NNE 1/4 - 1/2 (0.472 mi.)***	***V122***	***742***
3908 N PALMER ST	***3908 N PALMER ST***	***NNW 1/4 - 1/2 (0.496 mi.)***	***U123***	***748***

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 07/11/2013 has revealed that there are 12 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ALPHA INDUSTRIES INC	***3404 N HOLTON ST***	***SSE 0 - 1/8 (0.052 mi.)***	***B25***	***77***
METAL FORMS CORP	***3334 N BOOTH ST***	***SSE 1/8 - 1/4 (0.165 mi.)***	***F49***	***173***
MILWAUKEE CITY OF	***3249 N RICHARDS***	***SSW 1/8 - 1/4 (0.245 mi.)***	***93***	***394***

Lower Elevation	Address	Direction / Distance	Map ID	Page
TRI G CORP	***630 E KEEFE AVE ENTIRE***	***ENE 0 - 1/8 (0.119 mi.)***	***38***	***119***
SNIDER AND GO INC	***3379 N PIERCE***	***ESE 1/8 - 1/4 (0.154 mi.)***	***48***	***171***
ELIAS GRINDING	***3713 N HOLTON ST***	***NNE 1/8 - 1/4 (0.185 mi.)***	***G57***	***211***
BUEGE PEPAN BUILDING CO	***3710 N RICHARDS ST***	***NNW 1/8 - 1/4 (0.197 mi.)***	***I60***	***216***
DAVES ENGINE AND TRANSMISSION	***3525 N PALMER***	***WNW 1/8 - 1/4 (0.211 mi.)***	***J67***	***245***
3613 N PALMER ST	***3613 N. PALMER ST***	***WNW 1/8 - 1/4 (0.214 mi.)***	***J71***	***248***
MELLOWES CO	***3704 N PALMER ST***	***NW 1/8 - 1/4 (0.228 mi.)***	***M77***	***266***
3744 N BOOTH STREET	3744 N BOOTH ST	NNE 1/8 - 1/4 (0.243 mi.)	L86	363
MANUFACTURERS BOX CO	***830 E KEEFE AVE***	***E 1/8 - 1/4 (0.244 mi.)***	***K88***	***366***

WI MANIFEST: Hazardous waste manifest information.

A review of the WI MANIFEST list, as provided by EDR, and dated 12/31/2012 has revealed that there are 6 WI MANIFEST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
COMPO STELL PRIDUCTS INC	***3637 N HOLTON ST***	***NNE 1/8 - 1/4 (0.132 mi.)***	***E42***	***149***
TULIP CORPORATION (KEEFE PLANT	***714 EAST KEEFE AVE.***	***ENE 1/8 - 1/4 (0.173 mi.)***	***H54***	***184***
3613 N PALMER ST	***3613 N. PALMER ST***	***WNW 1/8 - 1/4 (0.214 mi.)***	***J71***	***248***
ADJUSTABLE FIXTURE CO	***3726 N BOOTH ST***	***NNE 1/8 - 1/4 (0.223 mi.)***	***L73***	***251***
3744 N BOOTH STREET	***3744 N BOOTH ST***	***NNE 1/8 - 1/4 (0.243 mi.)***	***L85***	***325***
ADVANCE DIE CASTING CO	***3760 N HOLTON ST***	***N 1/8 - 1/4 (0.244 mi.)***	***P90***	***387***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 30 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ZIMA ENGINE SERVICE AUTO MACH	3437 BUFFUM ST N	SW 0 - 1/8 (0.023 mi.)	A6	15
Not reported	3425 N HOLTON ST	SE 0 - 1/8 (0.035 mi.)	B21	74
PERFECTION AUTO SPRINGS REPI	3425 HOLTON ST N	SE 0 - 1/8 (0.038 mi.)	B22	75
REINHARDT STANDARD SERVICE FIL	3412 HOLTON N	SSE 0 - 1/8 (0.048 mi.)	B23	75
Not reported	3400 N HOLTON ST	SSE 0 - 1/8 (0.056 mi.)	B26	91
CLIFFS T V SERVICE CO	3351 HOLTON ST N	SSE 0 - 1/8 (0.114 mi.)	C37	119
A & A AUTO SERVICE AUTO REPR G	3345 BOOTH N	SE 1/8 - 1/4 (0.153 mi.)	F47	171
COOKSON SERVICE FILLING STA	3304 HOLTON N	SSE 1/8 - 1/4 (0.172 mi.)	F52	183
CENTURY OIL CO FILLING STA	512 CONCORDIA AVE E	SSE 1/8 - 1/4 (0.179 mi.)	F55	208

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KEEFE SERVICE STATION	93 KEEFE AVE	W 1/8 - 1/4 (0.239 mi.)	N84	324

Lower Elevation	Address	Direction / Distance	Map ID	Page
WOEHRER RAYMOND FILLING STA	433 KEEFE AVE E	N 0 - 1/8 (0.030 mi.)	A8	16
Not reported	3475 N HOLTON ST	ENE 0 - 1/8 (0.031 mi.)	A9	16
ACE ENGINE & PARTS SERVICE	3436 HOLTON ST N	SE 0 - 1/8 (0.033 mi.)	B10	16
Not reported	3434 N HOLTON ST	SE 0 - 1/8 (0.033 mi.)	B13	18
Not reported	3474 N HOLTON ST	ENE 0 - 1/8 (0.033 mi.)	A15	68
D & R TOWING	3475 HOLTON ST N	ENE 0 - 1/8 (0.034 mi.)	A18	73
BALL HOWARD L FILLING STA	3475 HOLTON N	ENE 0 - 1/8 (0.034 mi.)	A19	73
BILLS SERVICE GAS STA	3474 HOLTON ST N	ENE 0 - 1/8 (0.034 mi.)	A20	74
Not reported	3607 N RICHARDS ST	NW 0 - 1/8 (0.101 mi.)	D34	115
Not reported	245 E KEEFE AVE	WNW 0 - 1/8 (0.121 mi.)	D39	121
KEEFE AVENUE GARAGE	233 KEEFE AVE E	WNW 1/8 - 1/4 (0.132 mi.)	D41	148
JOHNNIE AUTO SERVICE	229 KEEFE AVE E	WNW 1/8 - 1/4 (0.136 mi.)	D44	160
R K MOTOR & MARINE AUTO REPR	3700 HOLTON ST N	NNE 1/8 - 1/4 (0.167 mi.)	G50	182
Not reported	3700 N HOLTON ST	NNE 1/8 - 1/4 (0.171 mi.)	G51	183
CENTRAL CITY UPHOLSTERY SERVIC	3274 HOLTON ST N	S 1/8 - 1/4 (0.208 mi.)	65	244
BATTERMAN GARAGE	3737 HOLTON N	NNE 1/8 - 1/4 (0.214 mi.)	G69	247
Not reported	3499 N FRATNEY ST	E 1/8 - 1/4 (0.222 mi.)	K72	251
Not reported	801 E KEEFE AVE	E 1/8 - 1/4 (0.226 mi.)	K75	265
FOX CHET AUTO SERVICE GAS STA	801 KEEFE AVE E	E 1/8 - 1/4 (0.226 mi.)	K76	266
DUSTIN BENJ AUTO REPR	3734 RICHARDS N	NNW 1/8 - 1/4 (0.238 mi.)	O82	324

EDR US Hist Cleaners: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Cleaners list, as provided by EDR, has revealed that there are 4 EDR US Hist Cleaners sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	3373 N HOLTON ST	SSE 0 - 1/8 (0.089 mi.)	C27	91
A B CLEANERS CLD	3301 RICHARDS N	SSW 1/8 - 1/4 (0.200 mi.)	64	243

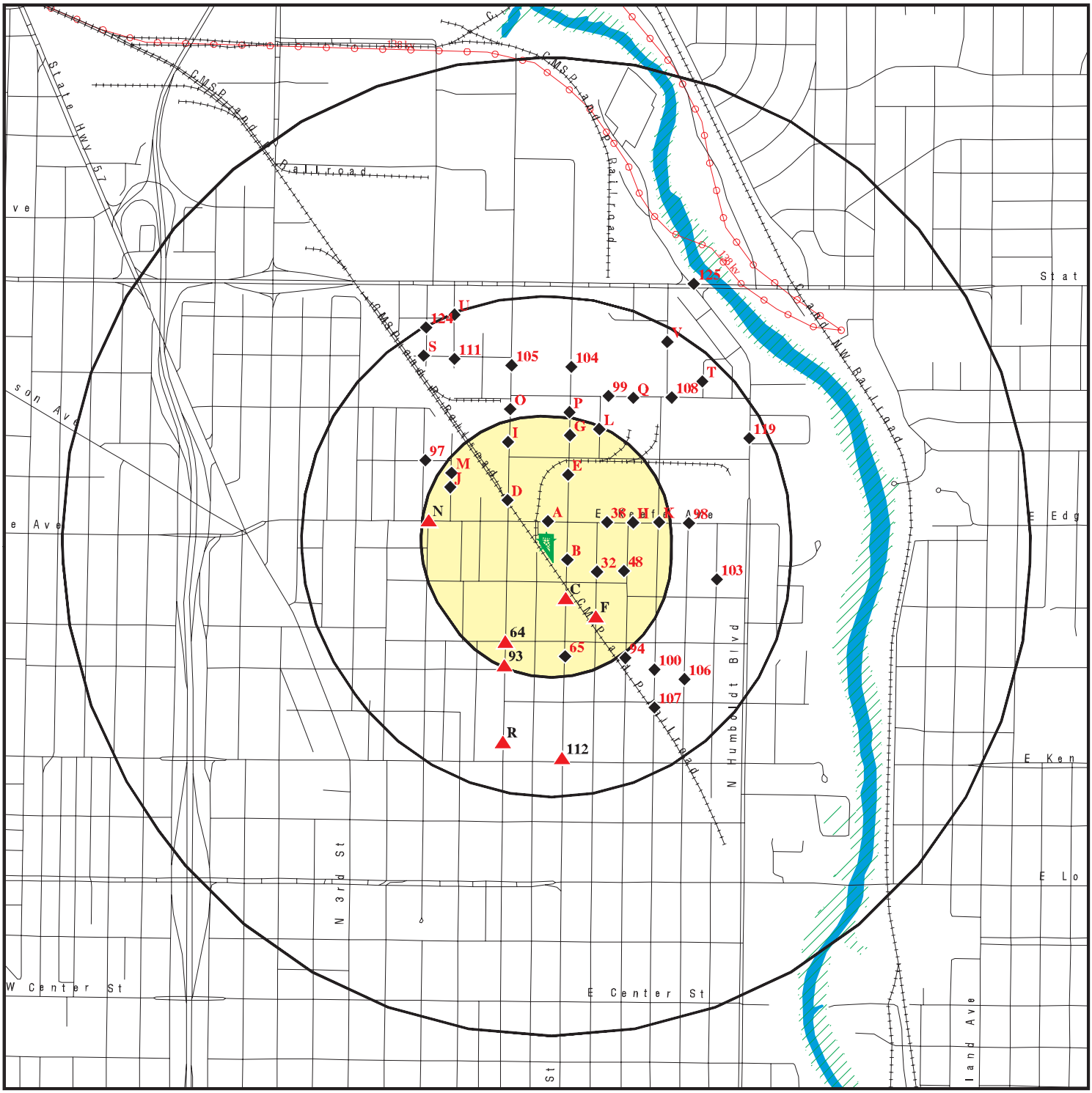
Lower Elevation	Address	Direction / Distance	Map ID	Page
CARLES CARPET CLEANERS INC	3736 BOOTH ST N	NNE 1/8 - 1/4 (0.233 mi.)	L79	287
Not reported	3736 N BOOTH ST	NNE 1/8 - 1/4 (0.234 mi.)	L80	288

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 20 records.

Site Name	Database(s)
100 S OF INTERS OF N 1OTH & HWY 7	SPILLS90
STIMAC BROS CORP	FINDS,SHWIMS,NPDES,RCRA-NLR,ERP
MILWAUKEE - MLK LLC	FINDS,SHWIMS,LUST
M & I SYDNEY CHARNEY TRUST	FINDS,LUST,RCRA-NLR
JOHN R SCHENKEL	FINDS,MANIFEST,RCRA-NLR
MILWAUKEE - MLK LLC	RCRA-NLR,MANIFEST
MMSD - MARQUETTE UNIV HS HHW CLNSW	FINDS
REED STREET YARDS	BROWNFIELDS,FINDS
4101 & 4131 NORTH 31ST STREET	BROWNFIELDS,FINDS
MILWAUKEE, CITY OF - SW	FINDS
U.S. AIR FORCE - 440TH TACTICAL AI	FINDS
3615 N HUMBOLDT BLVD AT KEEFE AVE.	FINDS
TEWS COMPANY - CRUSHER #505M2285	FINDS
DEA DRUG LAB CLEANUP - GREENFIELD	FINDS
HWY 145 @ N 124TH ST & FOND DU LAC	SPILLS
HWY 145 S BND @ N 91ST ST	SPILLS
1 BLK N OF HAMPTON AVE	SPILLS
MENOMONEE RIVER - HWY 100 & CAPITA	SPILLS
100' S OF N 1OTH & HWY 74 INTERS	SPILLS
SPILL AT 1401 N SHERIDAN	SPILLS

OVERVIEW MAP - 3765786.2s

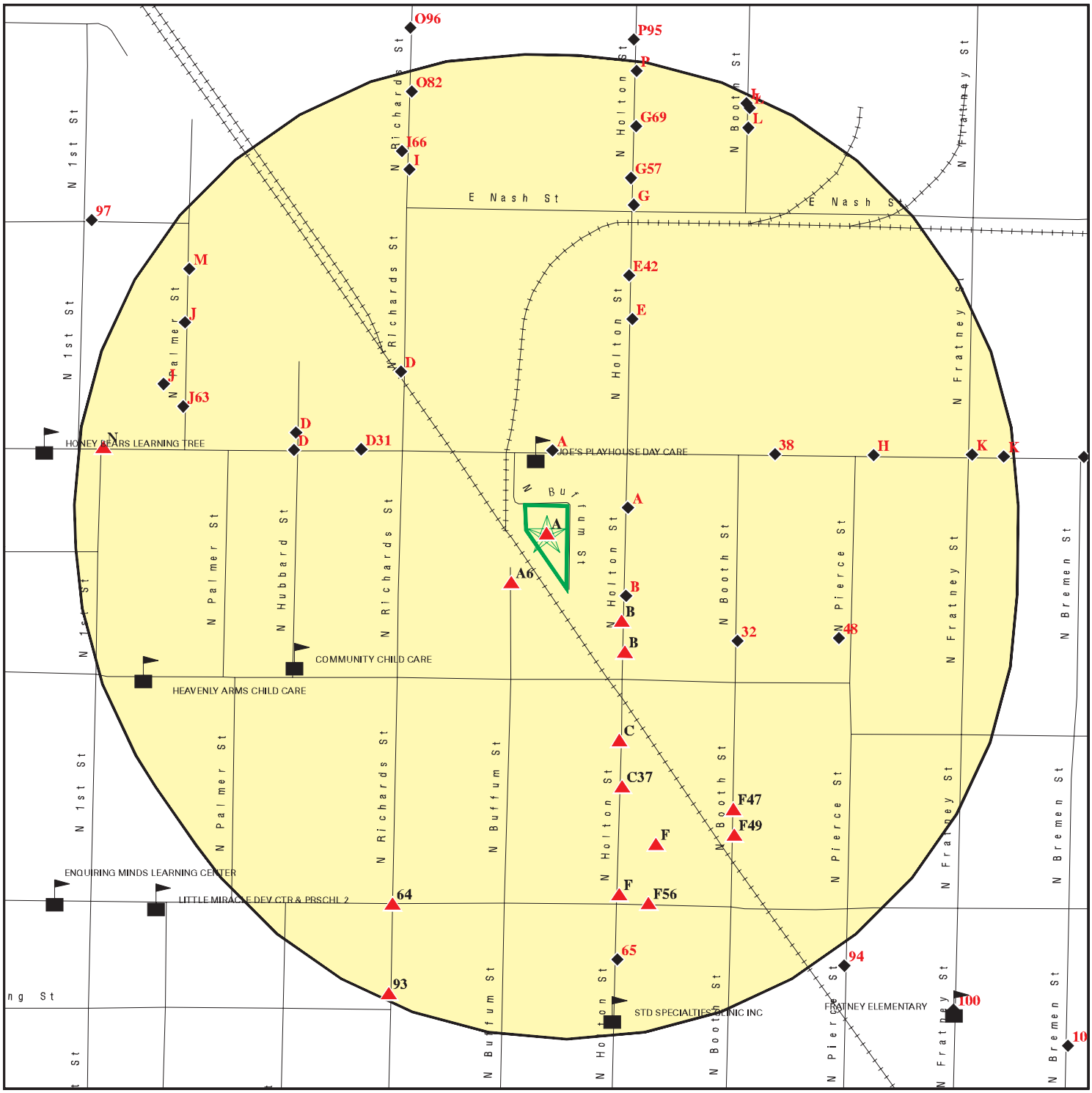


- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 3456 - 3462 N Buffum Street	CLIENT: Weston Solutions, Inc.
ADDRESS: 3456 - 3462 N Buffum Street Milwaukee WI 53212	CONTACT: Jamie Waldo INQUIRY #: 3765786.2s
LAT/LONG: 43.0814 / 87.9059	DATE: October 24, 2013 9:04 am

DETAIL MAP - 3765786.2s



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone

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ADDRESS: 3456 - 3462 N Buffum Street Milwaukee WI 53212	CONTACT: Jamie Waldo INQUIRY #: 3765786.2s
LAT/LONG: 43.0814 / 87.9059	DATE: October 24, 2013 9:04 am

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	2	NR	NR	2
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	1	0	NR	1
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	1	NR	NR	NR	1
RCRA-CESQG	0.250		3	6	NR	NR	NR	9
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
WI SHWS	1.000		0	0	0	1	NR	1
State and tribal landfill and/or solid waste disposal site lists								
WI SWF/LF	0.500		0	0	0	NR	NR	0
WI WDS	0.500		0	0	1	NR	NR	1
WI SHWIMS	TP	1	NR	NR	NR	NR	NR	1
State and tribal leaking storage tank lists								
WI LUST	0.500		3	6	20	NR	NR	29
WI LAST	0.500		0	0	1	NR	NR	1

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
WI UST	0.250		6	13	NR	NR	NR	19
WI AST	0.250		1	0	NR	NR	NR	1
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
WI CRS	TP		NR	NR	NR	NR	NR	0
WI AUL	0.500		3	8	10	NR	NR	21
State and tribal voluntary cleanup sites								
WI VCP	0.500		0	0	2	NR	NR	2
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
WI BEAP	0.500		0	0	0	NR	NR	0
WI BROWNFIELDS	0.500	2	3	1	5	NR	NR	11
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	1	NR	NR	1
Local Lists of Landfill / Solid Waste Disposal Sites								
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
WI SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
WI ERP	0.500		3	8	15	NR	NR	26
WI CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
WI LIENS	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
WI SPILLS	TP	1	NR	NR	NR	NR	NR	1
WI AGSPILLS	TP		NR	NR	NR	NR	NR	0
WI SPILLS 80	TP		NR	NR	NR	NR	NR	0
WI SPILLS 90	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		2	10	NR	NR	NR	12
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP	1	NR	NR	NR	NR	NR	1
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
WI BRRTS	TP	1	NR	NR	NR	NR	NR	1
WI NPDES	TP		NR	NR	NR	NR	NR	0
WI MANIFEST	0.250		0	6	NR	NR	NR	6
NY MANIFEST	0.250		0	0	NR	NR	NR	0
WI DRYCLEANERS	0.250		0	0	NR	NR	NR	0
WI WRRSER	TP		NR	NR	NR	NR	NR	0
WI AIRS	TP		NR	NR	NR	NR	NR	0
WI TIER 2	TP		NR	NR	NR	NR	NR	0
WI LEAD	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
WI COAL ASH	0.500		0	0	0	NR	NR	0
WI Financial Assurance	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
US AIRS	TP	1	NR	NR	NR	NR	NR	1
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		16	14	NR	NR	NR	30

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EDR US Hist Cleaners	0.250		1	3	NR	NR	NR	4

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1
Target Property
NORTH SIDE SCRAP METAL
3456 N. BUFFUM STREET
MILWAUKEE, WI

FINDS **1016065622**
N/A

Site 1 of 16 in cluster A

Actual: 680 ft.

FINDS:

Registry ID: 110037601379

Environmental Interest/Information System
AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

A2
Target Property
NORTH SIDE SCRAP METAL
3456 N. BUFFUM STREET
MILWAUKEE, WI 53212

US AIRS **1011936619**
N/A

Site 2 of 16 in cluster A

Actual: 680 ft.

AIRS (AFS):

Airs Minor Details:

EPA plant ID:	110037230966
Plant name:	NORTH SIDE SCRAP METAL
Plant address:	3456 N. BUFFUM STREET MILWAUKEE, WI 53212
County:	MILWAUKEE
Region code:	05
Dunn & Bradst #:	Not reported
Air quality cntrl region:	239
Sic code:	3341
Sic code desc:	SECONDARY NONFERROUS METALS
North Am. industrial classf:	Not reported
NAIC code description:	Not reported
Default compliance status:	IN COMPLIANCE - CERTIFICATION
Default classification:	POTENTIAL UNCONTROLLED EMISSIONS < 100 TONS/YEAR
Govt facility:	ALL OTHER FACILITIES NOT OWNED OR OPERATED BY A FEDERAL, STATE, OR LOCAL GOVERNMENT
Current HPV:	Not reported

Historical Compliance Minor Sources:

State compliance status:	IN COMPLIANCE - CERTIFICATION
Hist compliance date:	1002
Air prog code hist file:	CFC TRACKING
State compliance status:	IN COMPLIANCE - CERTIFICATION
Hist compliance date:	1004

NORTH SIDE SCRAP METAL (Continued) **1011936619**

Air prog code hist file: CFC TRACKING

State compliance status: IN COMPLIANCE - CERTIFICATION
Hist compliance date: 1101
Air prog code hist file: CFC TRACKING

State compliance status: IN COMPLIANCE - CERTIFICATION
Hist compliance date: 1103
Air prog code hist file: CFC TRACKING

State compliance status: IN COMPLIANCE - CERTIFICATION
Hist compliance date: 1201
Air prog code hist file: CFC TRACKING

State compliance status: IN COMPLIANCE - CERTIFICATION
Hist compliance date: 1202
Air prog code hist file: CFC TRACKING

State compliance status: IN COMPLIANCE - CERTIFICATION
Hist compliance date: 1204
Air prog code hist file: CFC TRACKING

State compliance status: IN COMPLIANCE - CERTIFICATION
Hist compliance date: 1001
Air prog code hist file: CFC TRACKING

State compliance status: IN COMPLIANCE - CERTIFICATION
Hist compliance date: 1003
Air prog code hist file: CFC TRACKING

State compliance status: IN COMPLIANCE - CERTIFICATION
Hist compliance date: 1102
Air prog code hist file: CFC TRACKING

State compliance status: IN COMPLIANCE - CERTIFICATION
Hist compliance date: 1104
Air prog code hist file: CFC TRACKING

State compliance status: IN COMPLIANCE - CERTIFICATION
Hist compliance date: 1203
Air prog code hist file: CFC TRACKING

Compliance & Violation Data by Minor Sources:
Air program code: CFC TRACKING
Plant air program pollutant: CHLOROFLUOROCARBONS
Default pollutant classification: POTENTIAL UNCONTROLLED EMISSIONS < 100 TONS/YEAR
Def. poll. compliance status: IN COMPLIANCE - CERTIFICATION
Def. attainment/non attnmnt: ATTAINMENT AREA FOR GIVEN POLLUTANT
Repeat violator date: Not reported
Turnover compliance: Not reported

A3 **WI BROWNFIELDS** **S113231133**
Target Property **3456 3462 N BUFFUM ST
MILWAUKEE, WI** **N/A**

Site 3 of 16 in cluster A

Actual: 680 ft.

BROWNFIELDS 2:

Tax Key:	2812678000
Aldermanic District:	6
Zoning:	IO2
Bldg Size:	27554
Lot Size:	18121
AV - Bldg:	431700
AV - Lot:	45300
Current Use:	warehouse
Past Use:	chem mfr.; prec. scrap metals; fertilizer comp

A4 **DOMBECK METALS INC** **WI SPILLS** **S108151033**
Target Property **3456 N BUFFUM ST
MILWAUKEE, WI 53212** **WI SHWIMS** **N/A**

Site 4 of 16 in cluster A

Actual: 680 ft.

WI Spills:

Site Id:	24511900
Detail Seq No:	558218
Activity Type:	SPILL
Activity Name:	3456 N BUFFUM ST
Activity Number:	0441558218
Activity Display Number:	04-41-558218
Activity Detail Address:	NONE
Activity Comments:	Not reported
Region Name:	SOUTHEAST
Faclity ID:	NONE
Start Date:	07/19/2006
End Date:	08/28/2006
Last Action:	08/28/2006
Status Cd:	C
Status:	CLOSED
Jurisdiction:	DNR RR
Act Code:	350
Owner Name:	Not reported
Owner Addr:	Not reported
Owner City,St,Zip:	Not reported
Dept Of Commerce Number:	NONE
Comm Occurrence Id:	NONE
EPA Cerclis Id:	Not reported
Risk Code:	N/A
Acres:	UNKNOWN
Acres 100:	N
EPA NPL Site?:	No
Dept Of Commerce Tracking:	No
PECFA Funds Eligible ?:	No
Above Ground Storage Tank?:	No
Drycleaner?:	No
Co-contamination?:	No
Public Land Survey System Desc:	? 1/4 of the ? 1/4 of Sec ?, T?N, R??
Geo Located:	N
DNR GIS Registry View Map Layers:	N
GIS Area Point Flag:	Not reported

DOMBECK METALS INC (Continued) **S108151033**

Actions:

Action Date: 07/19/2006 Action Code: 1
Action Name: Spill Incident Occurred
Action Desc: Date the Spill occurred or the date reported to DNR if actual date unknown.
Action Comments: Not reported

Action Date: 07/19/2006 Action Code: 5
Action Name: Spill Reported to DNR
Action Desc: Date the DNR was notified of the Spill incident.
Action Comments: Not reported

Action Date: 07/19/2006 Action Code: 99
Action Name: Miscellaneous
Action Desc: Miscellaneous action. Please see action comments.
Action Comments: ZC HIRED BY DNR

Action Date: 08/24/2006 Action Code: 201
Action Name: Immediate Action Response Cost
Action Desc: Date that DNR incurred costs in response to an environmental incident where no responsible party was identified or was willing and able to respond.
Action Comments: ZC COST WAS $1,405.65

Action Date: 08/28/2006 Action Code: 11
Action Name: Spill Closed
Action Desc: No further action; RP is not required to conduct NR716 investigation. NOTE: This is the ONLY action code that will close an activity.
Action Comments: Not reported

Spill Action Code: 04
Spill Action Desc: Cleanup Method - Absorbent
Spill Action Comments: Not reported

Spill Action Code: 25
Spill Action Desc: Vacuum
Spill Action Comments: PUMP UP LIQUID

Spill Action Code: 24
Spill Action Desc: Storm Sewer Cleaned Out
Spill Action Comments: Not reported

Spill Action Code: 16
Spill Action Desc: Products/Waste Removed
Spill Action Comments: Not reported

Spill Action Code: 07
Spill Action Desc: Contractor Hired
Spill Action Comments: BY DNR

Substances:

Substance Desc: Engine Waste Oil
Amount Released: 110
Release Code: Gal

Impact Number: 568927

DOMBECK METALS INC (Continued) **S108151033**

Impact Code: 13
Impact Comments: Concrete/Asphalt
Impact Potential: Not reported

Impact Number: 568928
Impact Code: 11
Impact Comments: Storm Sewer Contamination
Impact Potential: Not reported

Impact Number: 568929
Impact Code: 07
Impact Comments: Surface Water Contamination
Impact Potential: Y

Contacts:
Role Desc: Project Manager
Contact Name: SCOTT FERGUSON
Contact Address: 2300 N DR MLK JR DR
Contact Addr2: Not reported
Contact City,St,Zip: MILWAUKEE, WI 53212-0436
Contact Country: UNITED STATES
Company Address: MILWAUKEE, WI 53212

SHWIMS:
FID: 999929150
Status: OPERATING
Region: SOUTHEAST

A5 **3456-62 N BUFFUM ST** **WI BRRTS** **S108949705**
Target Property **3456-62 N BUFFUM ST** **WI BROWNFIELDS** **N/A**
MILWAUKEE, WI 53212

Site 5 of 16 in cluster A

Actual: 680 ft.

BRRTS:

Click here for WDNR BRRTS Link:

Site Id: 19271900
Region Name: SOUTHEAST
Facility ID: 341154660
Owner Name: Not reported
Owner Addr: Not reported
Owner City,St,Zip: Not reported
Activity Number: 0741550593
Activity Display Number: 07-41-550593
Detail Seq No: 550593
Status: GEN PROP
Activity Type: GENERAL PROPERTY
Activity Name: 3456-62 N BUFFUM ST
Activity Detail Address: NONE
Activity Comments: Not reported
Start Date: 11/02/2007
End Date: Not reported
Last Action: 03/16/2010
Dept Of Commerce Number: NONE
Comm Occurrence Id: NONE

3456-62 N BUFFUM ST (Continued) **S108949705**

EPA Cerclis Id:	Not reported
Jurisdiction:	DNR RR
Act Code:	380
Risk Code:	N/A
Acres:	UNKNOWN
Acres 100:	N
EPA NPL Site?:	No
Dept Of Commerce Tracking:	No
PECFA Funds Eligible ?:	No
Above Ground Storage Tank?:	No
Drycleaner?:	No
Co-contamination?:	No
Public Land Survey System Desc:	? 1/4 of the ? 1/4 of Sec ?, T?N, R??
Geo Located:	Y
DNR GIS Registry View Map Layers:	N
GIS Area Point Flag:	A

Actions:

Action Date: 11/02/2007 Action Code: 601
Action Name: Brownfields Site Assessment Grant - Application Received
Action Desc: The date that an application was received for this site for the DNR's Brownfields Site Assessment Grant (SAG) program. The SAG program provides grants to local government for site assessment, tank removal and other actions.
Action Comments: SAG-578 LARGE GRANT

Action Date: 03/15/2010 Action Code: 99
Action Name: Miscellaneous
Action Desc: Miscellaneous action. Please see action comments.
Action Comments: SIGMA REQUEST FOR NR 141 WELL CONSTRUCTION VARIANCE

Action Date: 03/16/2010 Action Code: 99
Action Name: Miscellaneous/2
Action Desc: Miscellaneous action. Please see action comments.
Action Comments: NR 141 WELL CONSTRUCTION VARIANCE GRANTED

Action Date: 02/20/2009 Action Code: 602
Action Name: Site Assessment Grant (SAG) - Small Award
Action Desc: DNR has awarded a SAG to a local government for assessment of contamination, demolition, tank/container removal or other actions.
Action Comments: SAG-634 AWARDED

Action Date: 11/03/2008 Action Code: 601
Action Name: Brownfields Site Assessment Grant - Application Received/2
Action Desc: The date that an application was received for this site for the DNR's Brownfields Site Assessment Grant (SAG) program. The SAG program provides grants to local government for site assessment, tank removal and other actions.
Action Comments: SAG-634 SMALL GRANT

Action Date: 02/12/2008 Action Code: 603
Action Name: Brownfields Site Assessment Grant - Grant Not Awarded
Action Desc: The date that it was determined that a grant will *not* be awarded for this site for the DNR's Brownfields Site Assessment Grant (SAG) program. The SAG program provides grants to local government for site assessment, tank removal and other actions.
Action Comments: SAG-578 NOT AWARDED

3456-62 N BUFFUM ST (Continued) **S108949705**

BROWNFIELDS:

Site Id:	19271900
Detail Seq No:	550593
Activity Type:	GENERAL PROPERTY
Activity Name:	3456-62 N BUFFUM ST
Activity Number:	0741550593
Activity Display Number:	07-41-550593
Activity Detail Address:	NONE
Activity Comments:	Not reported
Region Name:	SOUTHEAST
Faclity ID:	341154660
Start Date:	11/02/2007
End Date:	Not reported
Last Action:	03/16/2010
Action Comments:	SAG-634 AWARDED
Action Date:	02/20/2009
Status Cd:	G
Status:	GEN PROP
Jurisdiction:	DNR RR
Act Name:	Site Assessment Grant (SAG) - Small Award
Act Code:	602
ACT Description:	DNR has awarded a SAG to a local government for assessment of contamination, demolition, tank/container removal or other actions.
Owner Name:	Not reported
Owner Addr:	Not reported
Owner City,St,Zip:	Not reported
Dept Of Commerce Number:	NONE
Comm Occurrence Id:	NONE
EPA Cerclis Id:	Not reported
Risk Code:	N/A
Acres:	UNKNOWN
Acres 100:	N
EPA NPL Site?:	No
Dept Of Commerce Tracking:	No
PECFA Funds Eligible ?:	No
Above Ground Storage Tank?:	No
Drycleaner?:	No
Co-contamination?:	No
Public Land Survey System Desc:	? 1/4 of the ? 1/4 of Sec ?, T?N, R??
Geo Located:	Y
DNR GIS Registry View Map Layers:	N
GIS Area Point Flag:	A

Actions:

Action Date:	11/02/2007	Action Code:	601
Action Name:	Brownfields Site Assessment Grant - Application Received		
Action Desc:	The date that an application was received for this site for the DNR's Brownfields Site Assessment Grant (SAG) program. The SAG program provides grants to local government for site assessment, tank removal and other actions.		
Action Comments:	SAG-578 LARGE GRANT		
Action Date:	03/15/2010	Action Code:	99
Action Name:	Miscellaneous		
Action Desc:	Miscellaneous action. Please see action comments.		
Action Comments:	SIGMA REQUEST FOR NR 141 WELL CONSTRUCTION VARIANCE		

3456-62 N BUFFUM ST (Continued) **S108949705**

Action Date: 03/16/2010 Action Code: 99
Action Name: Miscellaneous/2
Action Desc: Miscellaneous action. Please see action comments.
Action Comments: NR 141 WELL CONSTRUCTION VARIANCE GRANTED

Action Date: 02/20/2009 Action Code: 602
Action Name: Site Assessment Grant (SAG) - Small Award
Action Desc: DNR has awarded a SAG to a local government for assessment of contamination, demolition, tank/container removal or other actions.
Action Comments: SAG-634 AWARDED

Action Date: 11/03/2008 Action Code: 601
Action Name: Brownfields Site Assessment Grant - Application Received/2
Action Desc: The date that an application was received for this site for the DNR's Brownfields Site Assessment Grant (SAG) program. The SAG program provides grants to local government for site assessment, tank removal and other actions.
Action Comments: SAG-634 SMALL GRANT

Action Date: 02/12/2008 Action Code: 603
Action Name: Brownfields Site Assessment Grant - Grant Not Awarded
Action Desc: The date that it was determined that a grant will *not* be awarded for this site for the DNR's Brownfields Site Assessment Grant (SAG) program. The SAG program provides grants to local government for site assessment, tank removal and other actions.
Action Comments: SAG-578 NOT AWARDED

A6 **ZIMA ENGINE SERVICE AUTO MACH SHOP** **EDR US Hist Auto Stat** **1014183270**
SW **3437 BUFFUM ST N** **N/A**
< 1/8 **MILWAUKEE, WI 53212**
0.023 mi.
122 ft. **Site 6 of 16 in cluster A**

Relative: EDR Historical Auto Stations:
Higher Name: ZIMA ENGINE SERVICE AUTO MACH SHOP
Year: 1982
Actual: Type: AUTOMOBILE REPAIRING
681 ft.

A7 **WI BROWNFIELDS** **S113231145**
North **433 E KEEFE AV** **N/A**
< 1/8 **MILWAUKEE, WI**
0.028 mi.
148 ft. **Site 7 of 16 in cluster A**

Relative: BROWNFIELDS 2:
Lower Tax Key: 2812670000
Aldermanic District: 6
Actual: Zoning: IO2
678 ft. Bldg Size: 1285
Lot Size: 6270
AV - Bldg: 27500
AV - Lot: 15700
Current Use: auto repair
Past Use: Gas Station

3456 ? 3462 N Buffum Street

3456 ? 3462 N Buffum Street

Milwaukee, WI 53212

Inquiry Number: 3765786.3

October 23, 2013

Certified Sanborn® Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

10/23/13

Site Name:
3456 ? 3462 N Buffum Street
3456 ? 3462 N Buffum Street
Milwaukee, WI 53212

Client Name:
Weston Solutions, Inc.
750 E. Bunker CT.
Vernon Hills, IL 60061

EDR Inquiry # 3765786.3

Contact: Jamie Waldo

EDR® Environmental Data Resources Inc

The complete Sanborn Library collection has been searched by EDR, and fire insurance maps covering the target property location provided by Weston Solutions, Inc. were identified for the years listed below. The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by Sanborn Library LLC, the copyright holder for the collection.

Certified Sanborn Results:

Site Name: 3456 ? 3462 N Buffum Street
Address: 3456 ? 3462 N Buffum Street
City, State, Zip: Milwaukee, WI 53212
Cross Street:
P.O. # 20405.016.001.2252.00
Project: 3456 ? 3462 N Buffum Street
Certification # 6B12-41B0-B202

Maps Provided:

1968
1950
1910

Sanborn® Library search results
Certification # 6B12-41B0-B202

The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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Sanborn Sheet Thumbnails

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

1968 Source Sheets

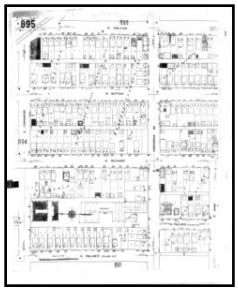
Volume 8, Sheet 894

Volume 8, Sheet 895

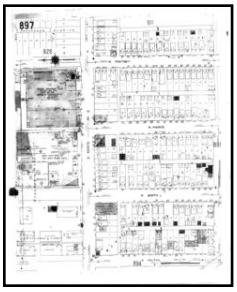
Volume 8, Sheet 897

1950 Source Sheets

Volume 8, Sheet 894



Volume 8, Sheet 895



Volume 8, Sheet 897

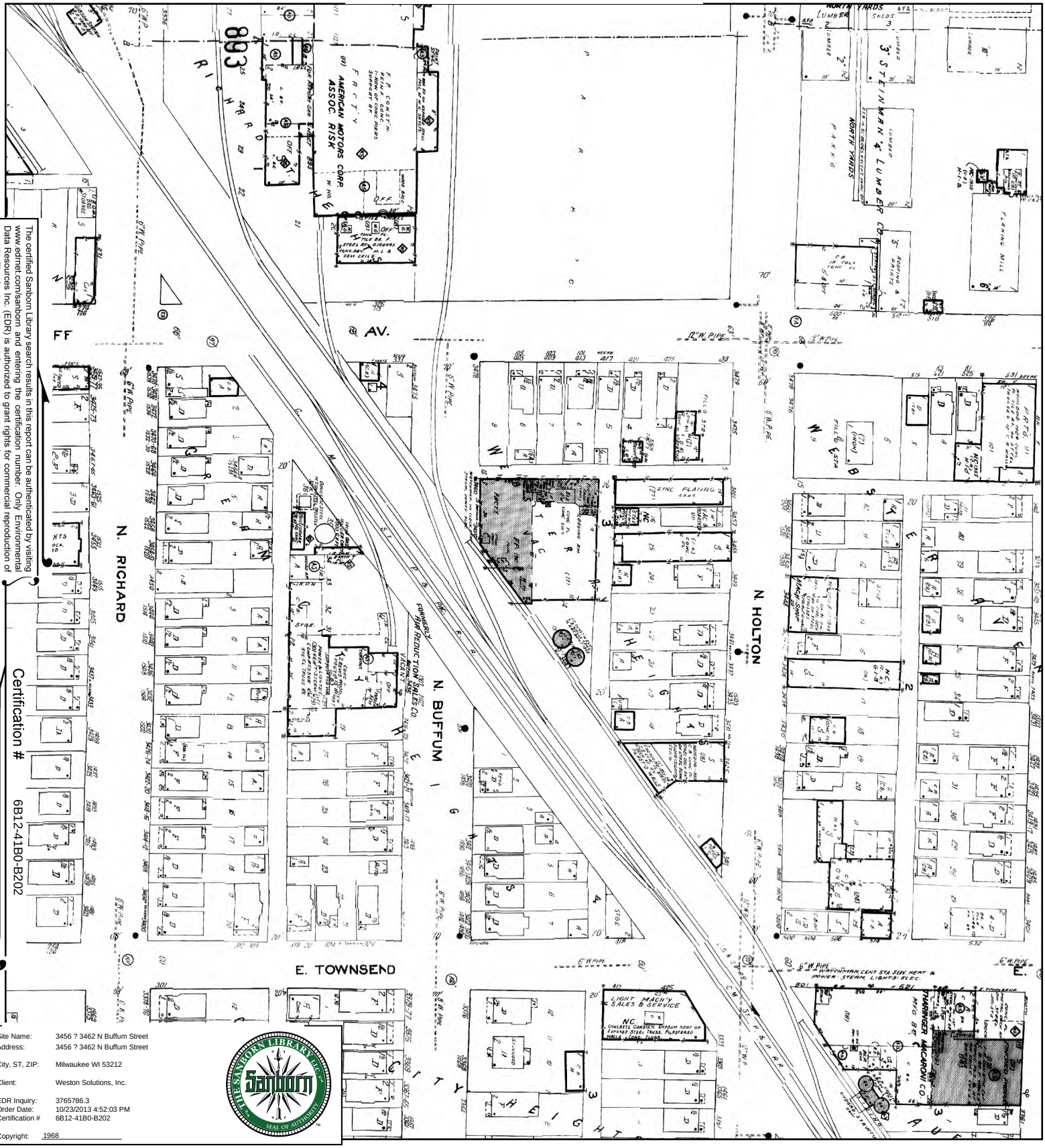
1910 Source Sheets

Volume 8, Sheet 894

Volume 8, Sheet 895

Volume 8, Sheet 897

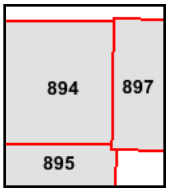
1968 Certified Sanborn Map



Certification # 6B12-41B0-B202

Site Name: 3456 ? 3462 N Buffum Street
Address: 3456 ? 3462 N Buffum Street
City, ST, ZIP: Milwaukee WI 53212
Client: Weston Solutions, Inc.
EDR Inquiry: 3765786.3
Order Date: 10/23/2013 4:52:03 PM
Certification # 6B12-41B0-B202
Copyright: 1968

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

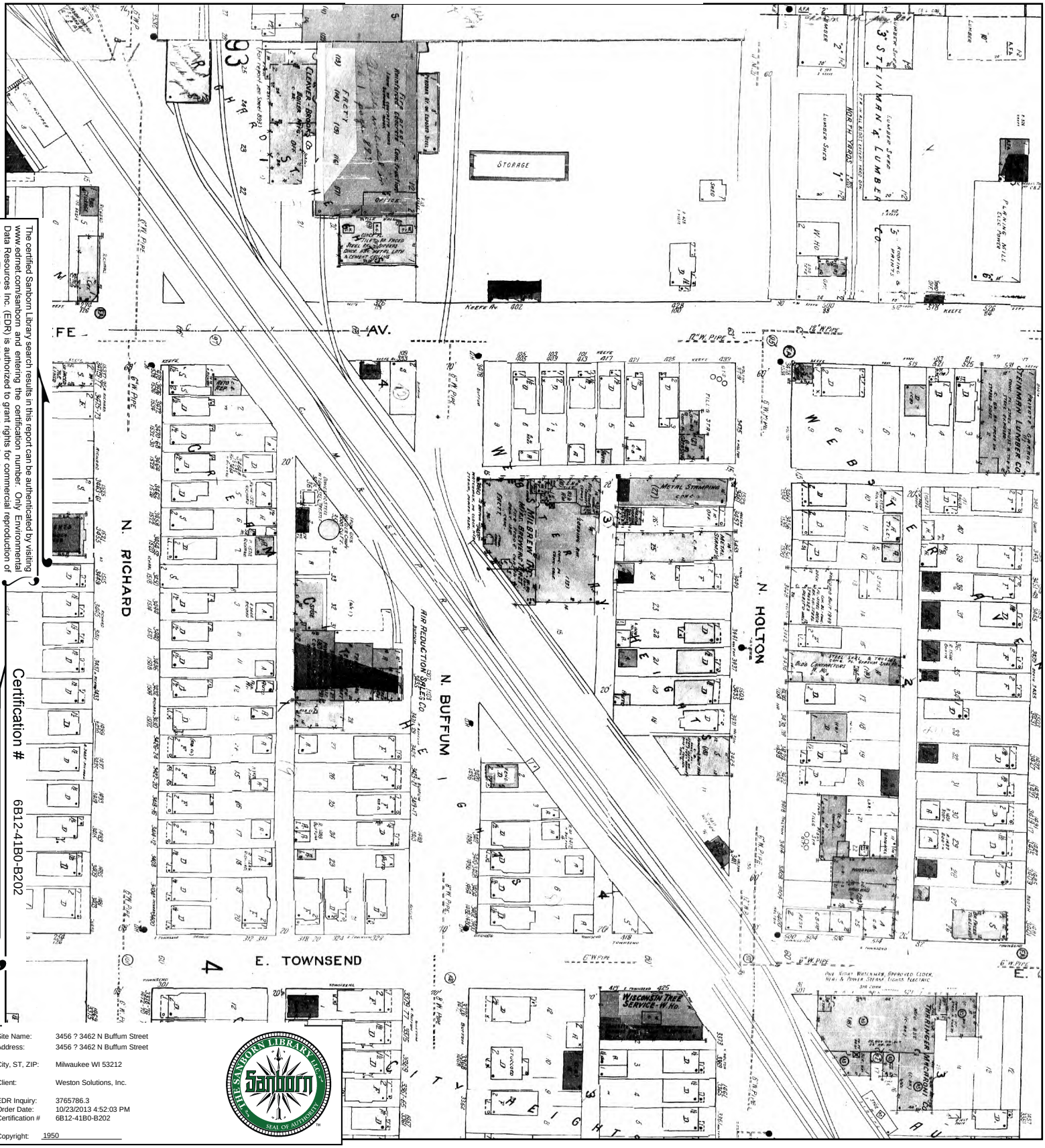


Volume 8, Sheet 894
Volume 8, Sheet 895
Volume 8, Sheet 897

0 Feet 150 300 600

N

1950 Certified Sanborn Map



Certification # 6B12-41B0-B202

Site Name: 3456 ? 3462 N Buffum Street
Address: 3456 ? 3462 N Buffum Street
City, ST, ZIP: Milwaukee WI 53212
Client: Weston Solutions, Inc.
EDR Inquiry: 3765786.3
Order Date: 10/23/2013 4:52:03 PM
Certification # 6B12-41B0-B202
Copyright: 1950

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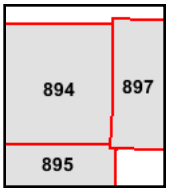


Volume 8, Sheet 894
Volume 8, Sheet 895
Volume 8, Sheet 897

0 Feet 150 300 600

N

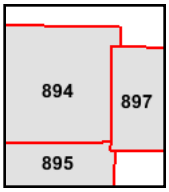
1910 Certified Sanborn Map

Certification # 6B12-41B0-B202

Site Name:	3456 ? 3462 N Buffum Street
Address:	3456 ? 3462 N Buffum Street
City, ST, ZIP:	Milwaukee WI 53212
Client:	Weston Solutions, Inc.
EDR Inquiry:	3765786.3
Order Date:	10/23/2013 4:52:03 PM
Certification #	6B12-41B0-B202
Copyright:	1910

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

0 Feet 150 300 600



Volume 8, Sheet 894
Volume 8, Sheet 895
Volume 8, Sheet 897

N

3456 ? 3462 N Buffum Street
3456 ? 3462 N Buffum Street
Milwaukee, WI 53212

Inquiry Number: 3765786.4
October 24, 2013

EDR Historical Topographic Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Historical Topographic Map Report

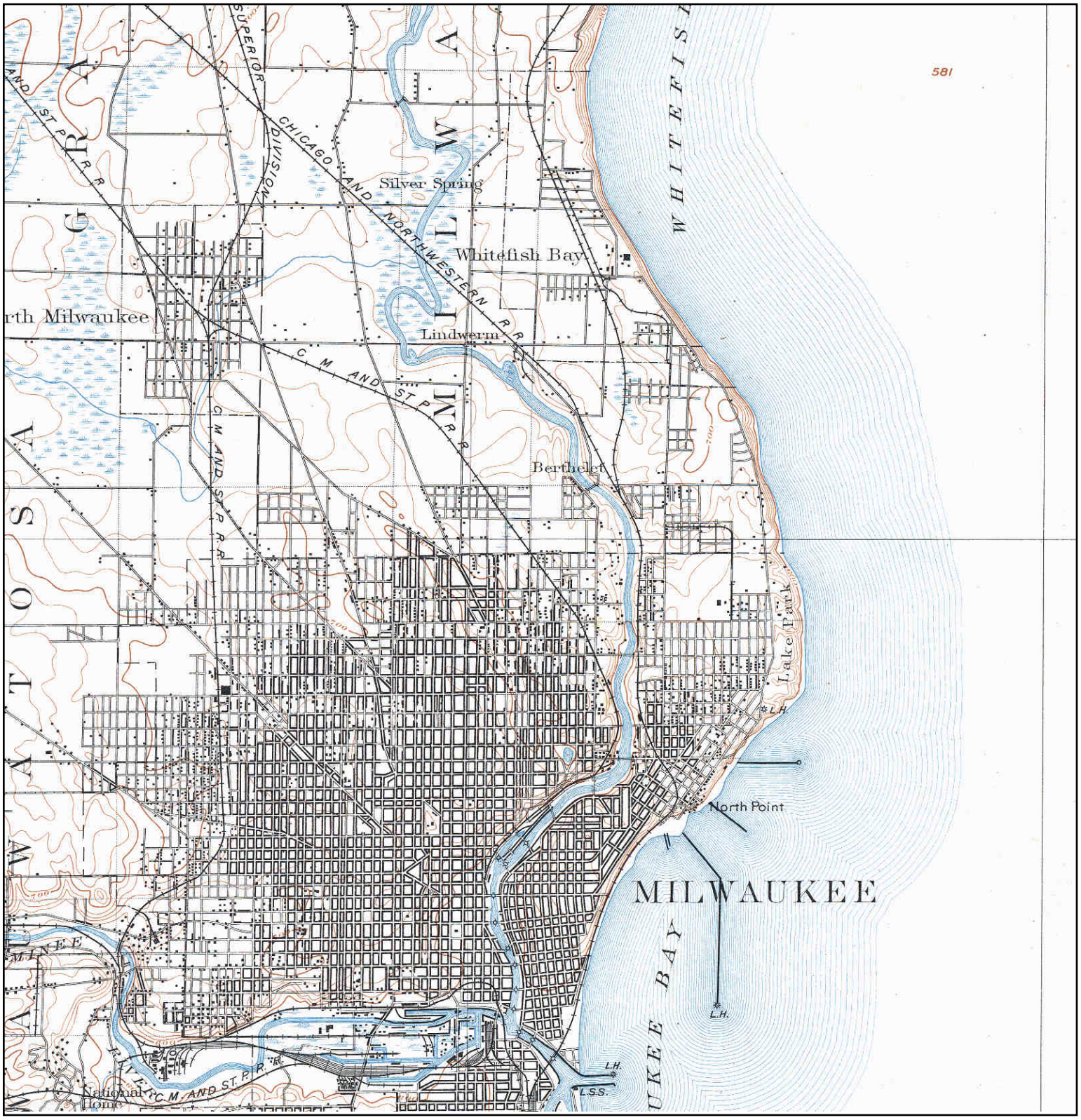
Environmental Data Resources, Inc.s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topographic Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the early 1900s.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Historical Topographic Map

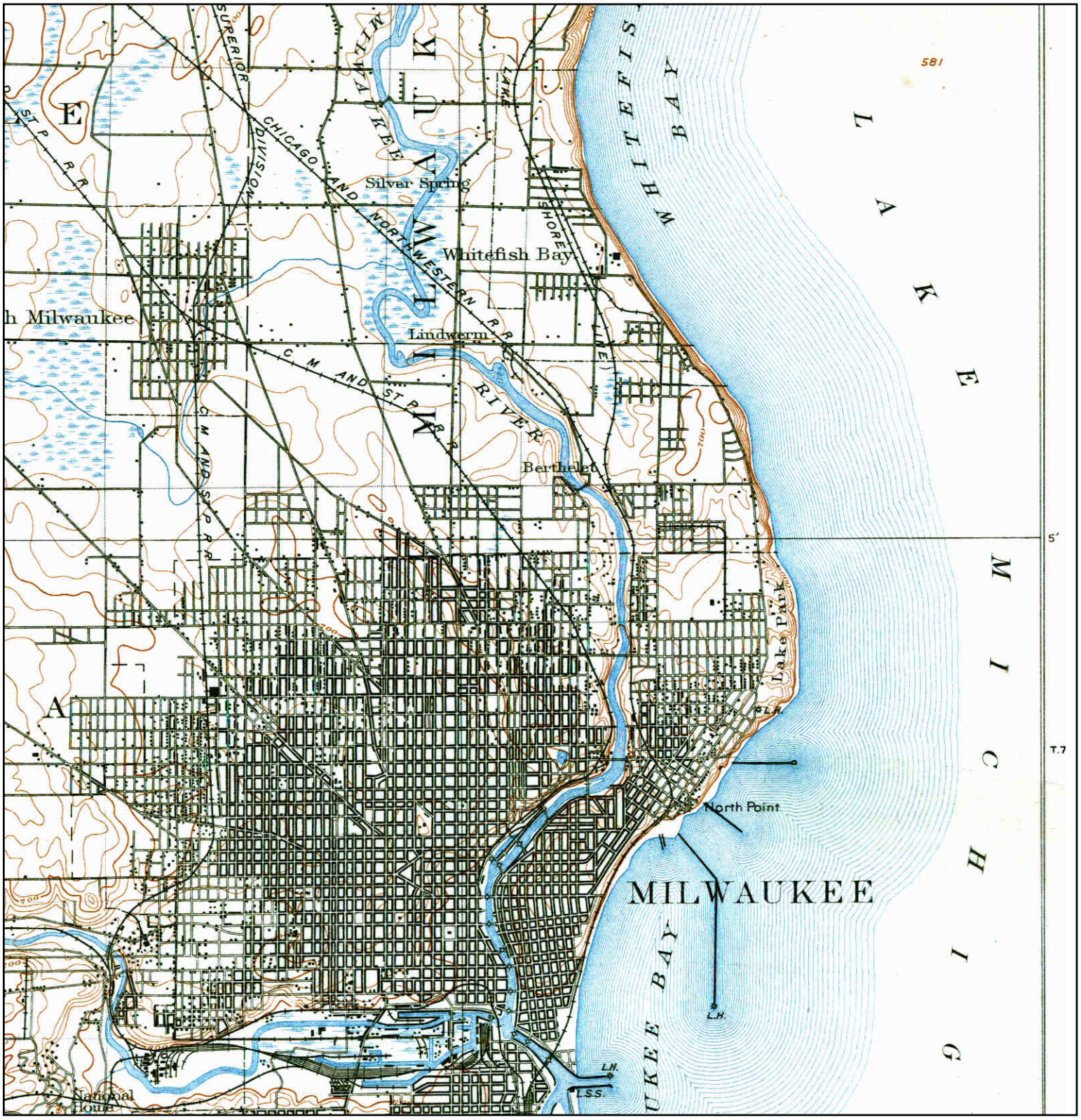
N	TARGET QUAD NAME: MILWAUKEE MAP YEAR: 1892 SERIES: 15 SCALE: 1:62500	SITE NAME: 3456 ? 3462 N Buffum Street ADDRESS: 3456 ? 3462 N Buffum Street Milwaukee, WI 53212 LAT/LONG: 43.0814 / -87.9059	CLIENT: Weston Solutions, Inc. CONTACT: Jamie Waldo INQUIRY#: 3765786.4 RESEARCH DATE: 10/24/2013

Historical Topographic Map



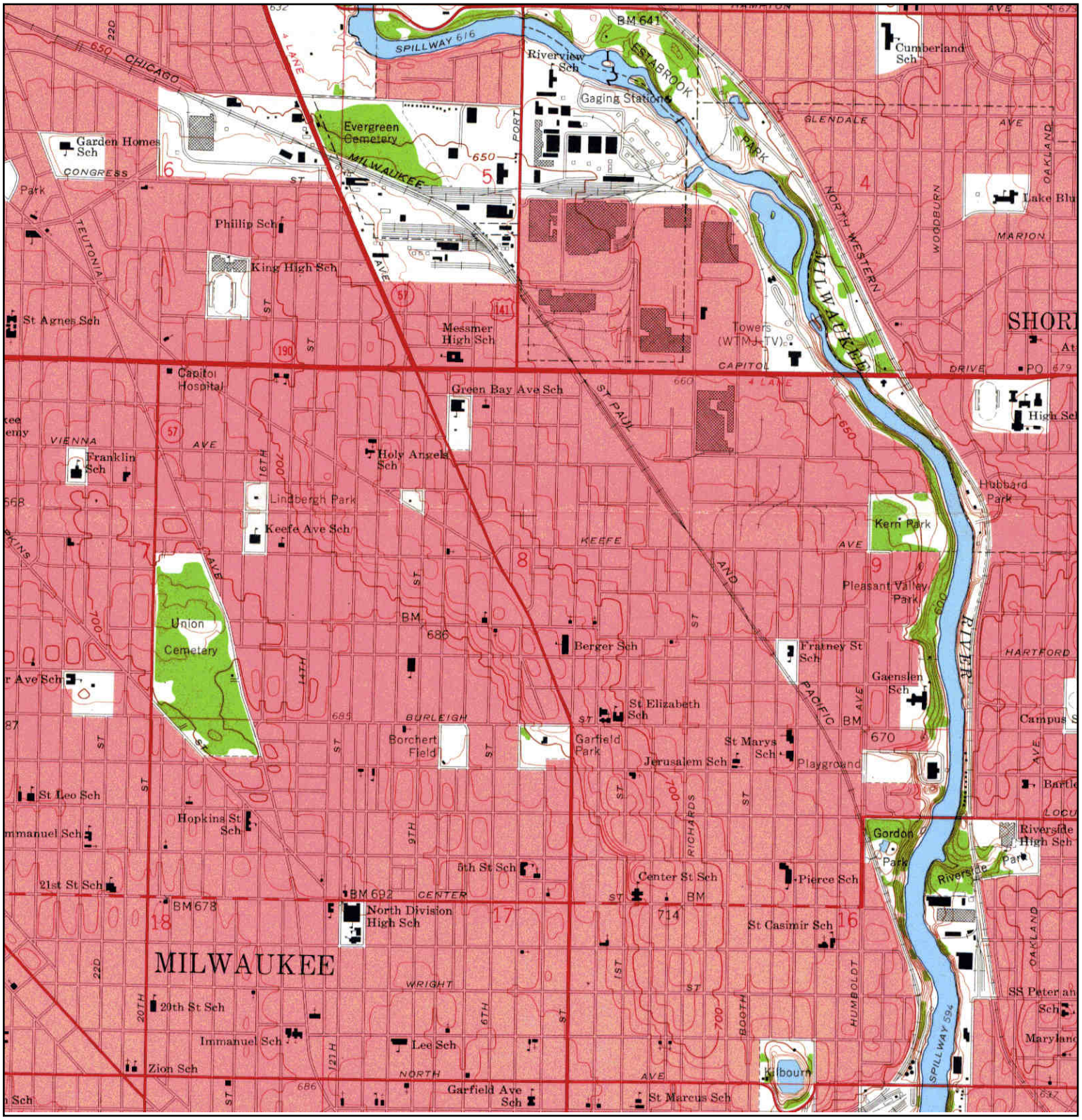
N	TARGET QUAD NAME: MILWAUKEE MAP YEAR: 1906 SERIES: 15 SCALE: 1:62500	SITE NAME: 3456 ? 3462 N Buffum Street ADDRESS: 3456 ? 3462 N Buffum Street Milwaukee, WI 53212 LAT/LONG: 43.0814 / -87.9059	CLIENT: Weston Solutions, Inc. CONTACT: Jamie Waldo INQUIRY#: 3765786.4 RESEARCH DATE: 10/24/2013

Historical Topographic Map



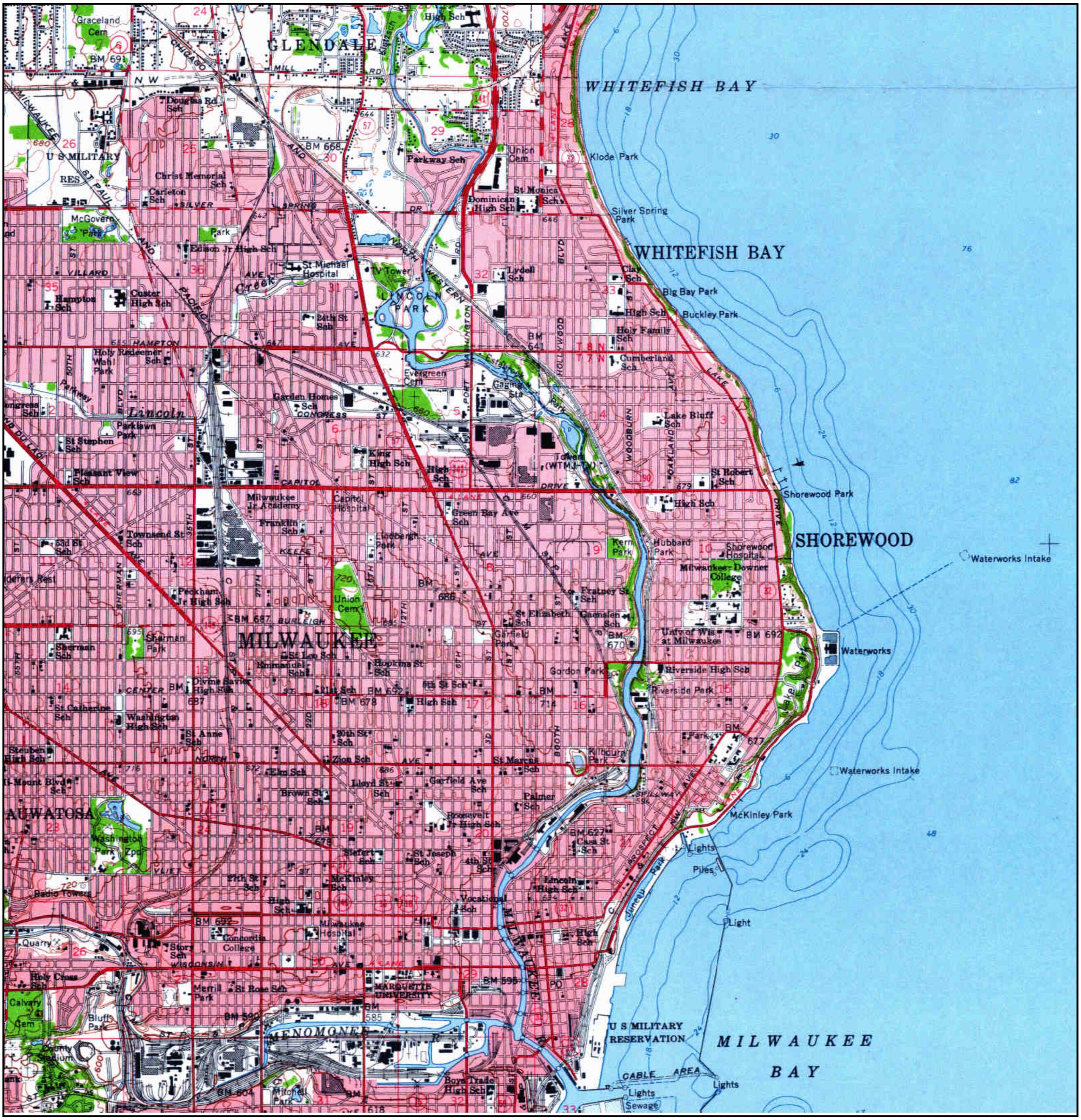
N	TARGET QUAD NAME: MILWAUKEE SPECIAL MAP YEAR: 1906 SERIES: 15 SCALE: 1:62500	SITE NAME: 3456 ? 3462 N Buffum Street ADDRESS: 3456 ? 3462 N Buffum Street Milwaukee, WI 53212 LAT/LONG: 43.0814 / -87.9059	CLIENT: Weston Solutions, Inc. CONTACT: Jamie Waldo INQUIRY#: 3765786.4 RESEARCH DATE: 10/24/2013

Historical Topographic Map



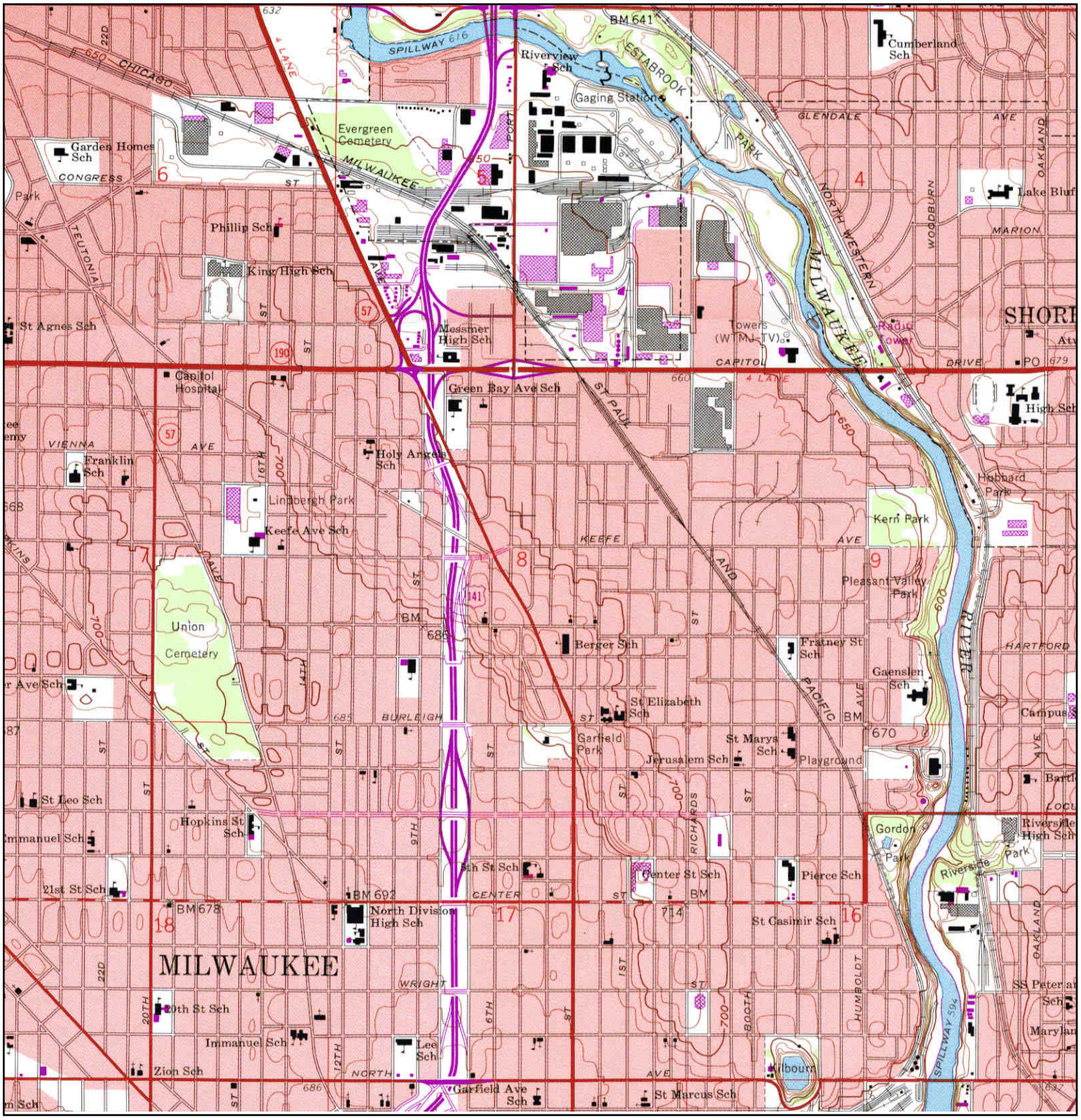
N	TARGET QUAD NAME: MILWAUKEE MAP YEAR: 1958 SERIES: 7.5 SCALE: 1:24000	SITE NAME: 3456 ? 3462 N Buffum Street ADDRESS: 3456 ? 3462 N Buffum Street Milwaukee, WI 53212 LAT/LONG: 43.0814 / -87.9059	CLIENT: Weston Solutions, Inc. CONTACT: Jamie Waldo INQUIRY#: 3765786.4 RESEARCH DATE: 10/24/2013

Historical Topographic Map



N ↑	TARGET QUAD NAME: MILWAUKEE MAP YEAR: 1958 SERIES: 15 SCALE: 1:62500	SITE NAME: 3456 ? 3462 N Buffum Street ADDRESS: 3456 ? 3462 N Buffum Street Milwaukee, WI 53212 LAT/LONG: 43.0814 / -87.9059	CLIENT: Weston Solutions, Inc. CONTACT: Jamie Waldo INQUIRY#: 3765786.4 RESEARCH DATE: 10/24/2013

Historical Topographic Map



N	TARGET QUAD				
	NAME:	MILWAUKEE	SITE NAME:	3456 ? 3462 N Buffum Street	CLIENT: Weston Solutions, Inc.
	MAP YEAR:	1971	ADDRESS:	3456 ? 3462 N Buffum Street	CONTACT: Jamie Waldo
	PHOTOREVISED FROM:	1958		Milwaukee, WI 53212	INQUIRY#: 3765786.4
	SERIES:	7.5	LAT/LONG:	43.0814 / -87.9059	RESEARCH DATE: 10/24/2013
	SCALE:	1:24000			

APPENDIX C
LABORATORY ANALYTICAL AND DATA VALIDATION REPORTS

BUFFUM MKE SITE
MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN
DATA VALIDATION REPORT

Date: January 16, 2014
Laboratory: ALS Environmental (ALS), Holland, Michigan
Laboratory Project #: 1312802
Data Validation Performed By: Lisa Graczyk, Weston Solutions, Inc. (WESTON®) Superfund Technical Assessment and Response Team (START)
Weston Analytical Work Order #/TDD #: 20405.016.001.2252.77/ S05-0001-1310-003

This data validation report has been prepared by WESTON START under the START III Region V contract. This report documents the data validation for one trip blank, six paint chip, three waste liquid, seven waste solid, and two wipe samples collected for the Buffum MKE Site that were analyzed for the following parameters and U.S. Environmental Protection Agency methods:

- Volatile Organic Compounds (VOC) by SW-846 Method 8260B
- Semivolatile Organic Carbons (SVOC) by SW-846 Method 8270
- Polychlorinated Biphenyls (PCB) by SW-846 Method 8082
- Metals by SW-846 Methods 6020A and 7471
- Total Cyanide by SW-846 Method 9012A
- Reactive cyanide by SW-846 7.3.3.2
- Total Sulfide by SW-846 Method 9030
- Reactive Sulfide by SW-846 7.3.4.2
- Ignitability (flashpoint) by ASTM D93
- Corrosivity (pH) by SW-846 Method 9040

A level II data package was requested from ALS. The data validation was conducted in general accordance with the U.S. EPA "Contract Laboratory Program National Functional Guidance for Superfund Organic Methods Data Review" dated June 2008 and "Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review" dated January 2010. The Attachment contains the results summary sheets with the hand-written qualifiers applied during data validation.

Data Validation Report
Buffum MKE Site
ALS Environmental
Laboratory Project #: 1312802

VOCs by SW-846 METHOD 8260B

1. Samples

The following table summarizes the samples for which this data validation is being conducted.

Samples	Lab ID	Matrix	Date Collected	Date Analyzed
BUF-LW01-121213	1312802-07	Liquid	12/12/2013	12/21/2013
BUF-LW01D-121213	1312802-08	Liquid	12/12/2013	12/21/2013
BUF-TB01-121213	1312802-10	Soil	12/12/2013	12/21/2013
BUF-SW01-121213	1312802-13	Solid	12/12/2013	12/21/2013
BUF-SW02-121213	1312802-14	Solid	12/12/2013	12/21/2013
BUF-SW03-121213	1312802-15	Solid	12/12/2013	12/21/2013
BUF-SW03D-121213	1312802-16	Solid	12/12/2013	12/21/2013
BUF-SW04-121213	1312802-17	Solid	12/12/2013	12/21/2013
BUF-SW05-121213	1312802-18	Solid	12/12/2013	12/21/2013
BUF-SW06-121213	1312802-19	Solid	12/12/2013	12/21/2013

2. Holding Times

The samples were analyzed within the required holding time limit of 14 days from sample collection.

3. Blanks

A method blank and a trip blank were analyzed with the VOC analyses and were free of VOCs above the reporting limits.

4. Surrogate Results

The surrogate recovery results were within the laboratory-established quality control (QC) limits.

5. Laboratory Control Sample (LCS) Results

The LCS recoveries were within laboratory QC limits.

6. Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results

A site-specific MS and MSD were analyzed with this work order using sample BUF-SW06-121213 as the spiked sample. The percent recoveries and relative percent differences (RPD) were mostly within QC limits. The exception was chlorethane which was detected low. In sample BUF-SW06-121213, the quantitation limit for chlorethane was flagged "UJ" as estimated.

7. Field Duplicate Results

There are two field duplicates associated with this work order which are designated with a "D" suffix: BUF-LW01D-121213 and BUF-SW03D-121213.

For field duplicate BUF-LW01D-121213 and its investigative sample, there were no detections of VOCs in either sample indicating good correlation between the samples.

In field duplicate BUF-SW03D-121213, two VOCs were detected and four VOCs were detected in the parent sample. Of the VOCs detected in both samples, the RPDs were 104 and 37 percent. There appears to be some minor heterogeneity associated with the VOCs in sample SW03.

8. Overall Assessment

The VOC data are acceptable for use as qualified based on the information received.

Data Validation Report
Buffum MKE Site
ALS Environmental
Laboratory Project #: 1312802

SVOCs by SW-846 METHOD 8270

1. Samples

The following table summarizes the samples for which this data validation is being conducted.

Samples	Lab ID	Matrix	Date Collected	Date Prepared	Date Analyzed
BUF-LW01-121213	1312802-07	Liquid	12/12/2013	12/26/2013	12/26/2013
BUF-LW01D-121213	1312802-08	Liquid	12/12/2013	12/26/2013	12/26/2013
BUF-SW01-121213	1312802-13	Solid	12/12/2013	12/18/2013	12/20/2013
BUF-SW02-121213	1312802-14	Solid	12/12/2013	12/18/2013	12/20/2013
BUF-SW03-121213	1312802-15	Solid	12/12/2013	12/18/2013	12/20/2013
BUF-SW03D-121213	1312802-16	Solid	12/12/2013	12/18/2013	12/20/2013
BUF-SW04-121213	1312802-17	Solid	12/12/2013	12/18/2013	12/20/2013
BUF-SW05-121213	1312802-18	Solid	12/12/2013	12/20/2013	12/23/2013
BUF-SW06-121213	1312802-19	Solid	12/12/2013	12/18/2013	12/20/2013

2. Holding Times

The samples were analyzed within the required holding time limit of 14 days from sample collection to extraction and 40 days from extraction to analysis.

3. Blanks

Method blanks were analyzed with the SVOC analyses. The method blanks were free of target compound contamination above the reporting limits except for as follows.

For the method blank associated with samples extracted on 12/18/2013, several SVOCs were detected. However, these SVOCs were detected in the samples at a much higher concentration and no qualifications were required.

4. Surrogate Results

Several of the surrogates were diluted below the calibration range of the instrument and were not adequately recovered. No qualifications are warranted.

5. LCS Results

The percent recoveries for the LCS results were within the laboratory-established QC limits.

6. MS and MSD Results

A site-specific MS and MSD were analyzed using sample BUF-SW06-121213 as the spiked sample. The percent recoveries and RPDs were within QC limits except for as follows.

In the MS/MSD using BUF-SW06-121213, the following compounds were detected low: 2,4-dinitrophenol and hexachlorocyclopentadiene. In sample BUF-SW06-121213, the quantitation limits for these two compounds were flagged "UJ" as estimated.

7. Field Duplicate Results

There are two field duplicates associated with this work order which are designated with a "D" suffix: BUF-LW01D-121213 and BUF-SW03D-121213.

The only SVOC detected in these samples was bis(2-ethylhexyl)phthalate in sample BUF-SW03D-121213 and its parent sample. The calculated RPD was 62 percent which exceeds a standard QC limit of 50 RPD. In summary there appears to be some minor heterogeneity associated with SVOCs in this sample.

8. Overall Assessment

The SVOC data are acceptable for use based on the information received.

Data Validation Report
Buffum MKE Site
ALS Environmental
Laboratory Project #: 1312802

PCBs by SW-846 METHOD 8082

1. Samples

The following table summarizes the samples for which this data validation was conducted.

Samples	Lab ID	Matrix	Date Collected	Date Prepared	Date Analyzed
BUF-PC01-121213	1312802-01	Paint Chip	12/12/2012	12/18/2013	12/20/2013
BUF-PC02-121213	1312802-02	Paint Chip	12/12/2012	12/18/2013	12/20/2013
BUF-PC03-121213	1312802-03	Paint Chip	12/12/2012	12/18/2013	12/20/2013
BUF-PC04-121213	1312802-04	Paint Chip	12/12/2012	12/18/2013	12/20/2013
BUF-PC04D-121213	1312802-05	Paint Chip	12/12/2012	12/18/2013	12/20/2013
BUF-PC05-121213	1312802-06	Paint Chip	12/12/2012	12/18/2013	12/20/2013
BUF-LW01-121213	1312802-07	Liquid	12/12/2013	12/18/2013	12/18/2013
BUF-LW01D-121213	1312802-08	Liquid	12/12/2013	12/18/2013	12/18/2013
BUF-WP01-121213	1312802-11	Wipe	12/12/2013	12/23/2013	12/23/2013
BUF-WP02-121213	1312802-12	Wipe	12/12/2013	12/23/2013	12/23/2013
BUF-SW01-121213	1312802-13	Solid	12/12/2013	12/18/2013	12/20/2013
BUF-SW02-121213	1312802-14	Solid	12/12/2013	12/18/2013	12/20/2013
BUF-SW03-121213	1312802-15	Solid	12/12/2013	12/18/2013	12/20/2013
BUF-SW03D-121213	1312802-16	Solid	12/12/2013	12/18/2013	12/20/2013
BUF-SW04-121213	1312802-17	Solid	12/12/2013	12/18/2013	12/20/2013
BUF-SW05-121213	1312802-18	Solid	12/12/2013	12/18/2013	12/20/2013
BUF-SW06-121213	1312802-19	Solid	12/12/2013	12/18/2013	12/20/2013

2. Holding Times

The sample was analyzed within the required holding time limit of 14 days from sample collection to extraction and 40 days from extraction to analysis.

3. Blanks

Method blanks were analyzed with the PCB analyses. The method blanks were free of target compound contamination above the reporting limit.

4. Surrogates

The surrogate recoveries were within QC limits except for as follows.

In sample BUF-SW03-121213, the surrogate recovery was high, above the QC limit. The detected PCB results in this sample, were flagged "J" as estimated.

5. LCS Results

The LCS recoveries were within the laboratory-established QC limits.

6. MS and MSD Results

A site-specific MS and MSD were analyzed using sample BUF-SW06-121213 as the spiked sample. The percent recoveries and RPDs were with QC limits except for as follows. Aroclor 1260 was detected high in the MS and low in the MSD. In sample BUF-SW06-121213, Aroclor 1260 was flagged "J" as estimated due to potential matrix interference.

7. Field Duplicate Results

There are three field duplicates associated with this work order which are designated with a "D" suffix: BUF-PC04D-121213, BUF-LW01D-121213 and BUF-SW03D-121213.

The RPDs for detected PCBs were acceptable except for BUF-PC04D-121213. The RPDs for field duplicate BUF-PC04D-121213 were 179 and 193 for Aroclors 1254 and 1260, respectively. There appears to be extreme sample heterogeneity associated with PCBs in this paint chip sample.

8. Overall Assessment

The PCB data are acceptable for use as qualified based on the information received.

Data Validation Report
Buffum MKE Site
ALS Environmental
Laboratory Project #: 1312802

TOTAL METALS BY SW-846 METHODS 6020A AND 7471

1. Samples

The following table summarizes the samples for which this data validation is being conducted. Note that the paint chip samples were analyzed for lead only.

Samples	Lab ID	Matrix	Date Collected	Date Analyzed
BUF-PC01-121213	1312802-01	Paint Chip	12/12/2012	12/23/2013
BUF-PC02-121213	1312802-02	Paint Chip	12/12/2012	12/24/2013
BUF-PC03-121213	1312802-03	Paint Chip	12/12/2012	12/24/2013
BUF-PC04-121213	1312802-04	Paint Chip	12/12/2012	12/23/2013
BUF-PC04D-121213	1312802-05	Paint Chip	12/12/2012	12/23/2013
BUF-PC05-121213	1312802-06	Paint Chip	12/12/2012	12/23/2013
BUF-LW01-121213	1312802-07	Liquid	12/12/2013	12/24/2013 – 12/27/2013
BUF-LW01D-121213	1312802-08	Liquid	12/12/2013	12/24/2013 – 12/27/2013
BUF-WP01-121213	1312802-11	Wipe	12/12/2013	12/20/2013 – 12/26/2013
BUF-WP02-121213	1312802-12	Wipe	12/12/2013	12/20/2013 – 12/26/2013
BUF-SW01-121213	1312802-13	Solid	12/12/2013	12/19/2013 – 12/23/2013
BUF-SW02-121213	1312802-14	Solid	12/12/2013	12/19/2013 – 12/23/2013
BUF-SW03-121213	1312802-15	Solid	12/12/2013	12/20/2013 – 12/26/2013
BUF-SW03D-121213	1312802-16	Solid	12/12/2013	12/20/2013 – 12/26/2013
BUF-SW04-121213	1312802-17	Solid	12/12/2013	12/21/2013 – 12/26/2013
BUF-SW05-121213	1312802-18	Solid	12/12/2013	12/21/2013 – 12/26/2013
BUF-SW06-121213	1312802-19	Solid	12/12/2013	12/21/2013 – 12/26/2013

2. Holding Times

The samples were analyzed within the required holding time limit of 28 days from sample collection to analysis for mercury and 180 days from sample collection to analysis for all other metals.

3. Blank Results

Method blanks were analyzed with the metals analysis. The blanks were free of target analyte contamination above the reporting limits. Some metals were detected below the reporting limits in the method blanks; however, the sample concentrations were either non-detect or much higher than the blank concentrations. No qualifications were required.

4. LCS Results

The LCS recoveries were within the laboratory-established QC limits.

5. MS and MSD Results

One site-specific MS and MSD were analyzed. The percent recoveries and RPDs were within QC limits except for as follows.

Several metals were detected outside QC limits but the sample concentration was more than four times the spike concentration. In these instances no qualification was required.

6. Field Duplicate Results

There are two field duplicates associated with this work order which are designated with a "D" suffix: BUF-PC04D-121213, BUF-LW01D-121213, and BUF-SW03D-121213.

The RPDs were calcuculated for detected metals and were acceptable except for chromium in field duplicate BUF-SW03D-121213 which had an RPD of 153. This indicates sample heterogeneity associated with chromium in BUF-SW03D-121213.

7. Overall Assessment

The metals data are acceptable for use as qualified based on the information received.

Data Validation Report
Buffum MKE Site
ALS Environmental
Laboratory Project #: 1312802

GENERAL CHEMISTRY PARAMETERS (Total Cyanide by 9012A, Reactive Cyanide by 7.3.3.2, Total Sulfide by 9030, Reactive Sulfide by 7.3.4.2, Ignitability by ASTM D93, and Corrosivity by 9040)

1. Samples

The following table summarizes the samples for which this data validation is being conducted.

Samples	Lab ID	Matrix	Date Collected	Date Analyzed
BUF-LW01-121213	1312802-07	Liquid	12/12/2013	12/17/2013 – 12/23/2013
BUF-LW01D-121213	1312802-08	Liquid	12/12/2013	12/17/2013 – 12/23/2013
BUF-LW02-121213	1312802-09	Liquid	12/12/2013	12/17/2013 – 12/20/2013

2. Holding Times

The sample holding times were acceptable.

3. Method Blanks

Method blanks were analyzed with the cyanide and sulfide analyses and were free of target analyte contamination above the reporting limit. Cyanide was detected below the reporting limit in the method blank; however, the cyanide detections in samples were above the reporting limit and no qualification was applied.

4. LCS Results

The percent recoveries were within QC limits for the LCSs analyzed.

5. Laboratory Duplicate Results

Laboratory duplicates were analyzed and the RPD was within QC limits.

6. Field Duplicate Results

There is one field duplicate associated with this work order for general chemistry parameters. The field duplicate results were acceptable except for total sulufide which had an RPD of 84. Sample BUF-LW01-121213 shows some minor heterogeneity associated with sulfide.

7. Overall Assessment

The general chemistry data are acceptable for use based on the information received.

Data Validation Report
Buffum MKE Site
ALS Environmental
Laboratory Project #: 1312802

ATTACHMENT

ALS ENVIRONMENTAL
RESULTS SUMMARY WITH QUALIFIERS

03-Jan-2014

Lisa Graczyk
Weston Solutions, Inc
20 North Wacker Drive
Suite 1210
Chicago, IL 60606

Re: **20405.016.001.2252.00/Buffum MKE Site** Work Order: **1312802**

Dear Lisa,

ALS Environmental received 19 samples on 16-Dec-2013 for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with NELAP standard requirements and QC results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 109.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Electronically approved by: Tom Beamish

Tom Beamish
Senior Project Manager

Certificate No: MN 532786

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185
ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

ALS Group USA, Corp

Date: 03-Jan-14

Client: Weston Solutions, Inc
Project: 20405.016.001.2252.00/Buffum MKE Site
Work Order: **1312802**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1312802-01	BUF-PC01-121213	Misc		12/12/13 12:34	12/16/13 08:00	☐
1312802-02	BUF-PC02-121213	Misc		12/12/13 12:50	12/16/13 08:00	☐
1312802-03	BUF-PC03-121213	Misc		12/12/13 13:12	12/16/13 08:00	☐
1312802-04	BUF-PC04-121213	Misc		12/12/13 14:59	12/16/13 08:00	☐
1312802-05	BUF-PC04D-121213	Misc		12/12/13 15:00	12/16/13 08:00	☐
1312802-06	BUF-PC05-121213	Misc		12/12/13 16:00	12/16/13 08:00	☐
1312802-07	BUF-LW01-121213	Liquid		12/12/13 11:46	12/16/13 08:00	☐
1312802-08	BUF-LW01D-121213	Liquid		12/12/13 11:48	12/16/13 08:00	☐
1312802-09	BUF-LW02-121213	Liquid		12/12/13 15:10	12/16/13 08:00	☐
1312802-10	BUF-TB01-121213	Soil		12/12/13	12/16/13 08:00	☐
1312802-11	BUF-WP01-121213	Wipe		12/12/13 10:11	12/16/13 08:00	☐
1312802-12	BUF-WP02-121213	Wipe		12/12/13 12:17	12/16/13 08:00	☐
1312802-13	BUF-SW01-121213	Solid		12/12/13 09:57	12/16/13 08:00	☐
1312802-14	BUF-SW02-121213	Solid		12/12/13 10:28	12/16/13 08:00	☐
1312802-15	BUF-SW03-121213	Solid		12/12/13 10:46	12/16/13 08:00	☐
1312802-16	BUF-SW03D-121213	Solid		12/12/13 10:52	12/16/13 08:00	☐
1312802-17	BUF-SW04-121213	Solid		12/12/13 12:25	12/16/13 08:00	☐
1312802-18	BUF-SW05-121213	Solid		12/12/13 15:33	12/16/13 08:00	☐
1312802-19	BUF-SW06-121213	Solid		12/12/13 15:51	12/16/13 08:00	☐

ALS Group USA, Corp

Date: 03-Jan-14

Client: Weston Solutions, Inc
Project: 20405.016.001.2252.00/Buffum MKE Site
WorkOrder: **1312802**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

Units Reported	Description
% of sample	Percent of Sample
°F	Degrees Fahrenheit
mg/Kg	Milligrams per Kilogram
mg/Kg-dry	Milligrams per Kilogram Dry Weight
mg/L	Milligrams per Liter
mg/wipe	Milligrams per Wipe
s.u.	Standard Units

Client: Weston Solutions, Inc
Project: 20405.016.001.2252.00/Buffum MKE Site
Work Order: 1312802

Case Narrative

Analytical Comments:

Batch 54245, Method SVO_8270_S, Sample 1312802-14A: One or more SVOC surrogate recoveries are unavailable due to sample matrix interference. Target analytes were not affected by the interference. No qualification is necessary.

Batch 54245, Method SVO_8270_S, Sample 1312802-15A: One or more SVOC surrogate recoveries are unavailable due to sample matrix interference. Target analytes were not affected by the interference. No qualification is necessary.

Batch 54245, Method SVO_8270_S, Sample 1312802-16A: One or more SVOC surrogate recoveries are unavailable due to sample matrix interference. Target analytes were not affected by the interference. No qualification is necessary.

Batch 54245, Method SVO_8270_S, Sample 1312802-17A: One or more SVOC surrogate recoveries are unavailable due to sample matrix interference. Target analytes were not affected by the interference. No qualification is necessary.

Batch 54269, Method PCB_8082_S, Sample 1312802-15A: One or more PCB surrogate recoveries are out of range high due to matrix interference.

QC Comments:

Batch 54269, Method PCB_8082_S, Sample 1312802-19A MS: MS and MSD recoveries and RPD for Aroclor 1260 are out of range due to a non-homogenous parent sample that contained elevated levels of Aroclor 1260.

Batch 54364, Method ICP_6020_S, Sample 1312802-19AMSD: The MS and/or MSD recovery was above the upper control limit. The corresponding result in the parent sample may be biased high for Silver.

Batch 54245, Method SVO_8270_S, Sample 1312802-19A MSD: The MS and/or MSD recovery was below the lower control limit. The corresponding result in the parent sample may be biased low for 2,4-Dinitrophenol and Hexachlorocyclopentadiene.

Batch 54253, Method VOC_8260_S, Sample 1312802-19A MSD: The MS and/or MSD recovery was below the lower control limit. The corresponding result in the parent sample

may be biased low for Chloroethane.