



**Building Interior Polychlorinated
Biphenyl Wipe Sampling
Work Plan**

**Madison-Kipp Corporation
Madison, Wisconsin**

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**Work Plan for Polychlorinated
Biphenyl Building Wipe
Sampling**

Madison-Kipp Corporation
Madison, Wisconsin

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1. Introduction

On behalf of Madison-Kipp Corporation, ARCADIS has been retained to conduct interior building wipe sampling activities for polychlorinated biphenyls (PCBs) at its facility located at 201 Waubesa Street in Madison, Wisconsin (Site). Below is a chronology of work plans, reports, meetings, and responses from the Wisconsin Department of Natural Resources (WDNR) and United States Environmental Protection Agency (U.S. EPA) regarding the investigation and remediation of PCBs.

- On May 31, 2012, a *Site Investigation Work Plan* (Work Plan) was submitted to the (WDNR) for approval to complete site investigation activities at the Site (ARCADIS, 2012a). The WDNR provided a *Conditional Approval* letter dated June 25, 2012, for this Work Plan (WDNR, 2012a).
- On September 28, 2012, a *Site Investigation Work Plan Addendum, Building Subsurface Investigation* (Addendum) was submitted to the WDNR (ARCADIS, 2012b). The Addendum was approved by WDNR in a letter dated October 17, 2012 (WDNR, 2012b).
- On February 14, 2013, a *Building Subsurface Investigation Summary* was submitted to the WDNR to summarize the investigation activities and results (ARCADIS, 2013a).
- On March 15, 2013, a *Site Investigation and Interim Actions Report, February 2012 – January 2013* (SI Report) was submitted to the WDNR to summarize investigation activities and results for the reporting period (ARCADIS, 2013b). On May 29, 2013, a *Supplemental Site Information/Addendum 1* was submitted to the WDNR to provide further information regarding the Site (SI Addendum 1) (ARCADIS, 2013c). The SI Report was reviewed by the WDNR and a response letter dated June 20, 2013, was prepared that requested a work plan to address "sampling for degree and extent of PCB [polychlorinated biphenyls] and VOC [volatile organic compounds] soil contamination beneath the MKC manufacturing buildings."
- On July 8, 2013, ARCADIS met with the WDNR to discuss the agency's June 20, 2013, response letter and requested a joint meeting with the WDNR and U.S. EPA to clarify the investigation expectations for beneath the manufacturing building.

- On July 23, 2013, ARCADIS met with the WDNR and U.S. EPA to discuss the investigation results completed to date, conduct a site walk, and discuss the objective of additional investigation activities.
- On August 1, 2013, a *Supplemental Work Plan for Polychlorinated Biphenyl Building Subsurface Investigation* (Work Plan) was submitted to the WDNR (ARCADIS, 2013d). The Work Plan was approved by WDNR in the *Madison Kipp Corporation (MKC) Work Plan Reviews* letter dated October 9, 2013 (WDNR, 2013b).
- On April 22, 2014, a *Supplemental Building Interior Polychlorinated Biphenyl Work Plan Subsurface Investigation Summary* (SI Report) was submitted to the WDNR to provide details of the investigation completed from December 2013 through February 2014 (ARCADIS, 2014).
- On August 27, 2014, ARCADIS met with the WDNR and U.S. EPA to discuss the next steps for addressing the soils containing PCBs beneath the building. At this meeting U.S. EPA requested the completion of indoor air and surface wipe sampling activities, a technical justification submittal for management of PCB contaminated soils beneath the building, and additional soil investigation activities for beneath the building.

This document presents the work plan for completing wipe sampling activities for PCBs in the manufacturing building as discussed during the August 27, 2014, meeting with the WDNR and U.S. EPA. The information provided herein is based on the requirements of NR 716 Wis. Admin. Code. An NR 712.09 submittal certification is included in Appendix A.

2. Project Background

2.1 Site Location, Contacts, and Description

The Site is located at 201 Waubesa Street in Madison, Wisconsin. The Site is located in the southwest quarter of Section 5, Township 7 North, Range 10 East in Dane County. The location of the site is illustrated on a topographic quadrangle presented as Figure 2-1.

The following contact information is provided for the facility and environmental consultant:

Facility Representative: Alina Satkoski
Madison-Kipp Corporation
201 Waubesa Street
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Environmental Attorney: David A. Crass
Michael Best & Friedrich, LLP
One South Pinckney Street, Suite 700
Madison, Wisconsin 53703
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608-283-2275 (fax)
dacrass@michaelbest.com

Environmental Consultant: Jennine L. Trask, PE
ARCADIS US, Inc.
126 North Jefferson Street, Suite 400
Milwaukee, Wisconsin 53202
414-276-7742 (telephone)
jennine.trask@arcadis-us.com

The Site is approximately 7.5 acres in size. A 130,000-square foot building occupies much of the Site. Asphalt parking lots are located in the northeastern, southwestern

and southeastern portions of the Site. The building has a 25,000-square foot second floor and a 25,000-square foot basement. Figure 2-2 depicts the layout of the Site. The Site is zoned M-1 (industrial/manufacturing). The Site is currently used as a metals casting facility.

The Site is located in the eastern portion of Madison, in a mixed use area of commercial, industrial and residential land use. The Site is bounded by a bicycle trail (Capital City Trail) to the north, Atwood Avenue to the south, and Waubesa Street to the west. Residences are located adjacent to the east and west sides of the Site, and further west (across Waubesa Street) and east (across Marquette Street). Commercial properties are located to the south (across Atwood Street) and further east. The Goodman Community Center is located to the north (across the Capital City Trail).

The Site is also located at the northeast end of the Madison isthmus, approximately 1,500 feet (ft) north of Lake Monona and approximately 6,800 ft east of Lake Mendota. The topography of the Site is relatively flat, with an elevation ranging from approximately 870 to 880 ft above mean sea level. The Site and surrounding area is serviced by municipal water supply and sewerage systems.

3. Investigation Objectives

On August 27, 2014, ARCADIS met with the WDNR and U.S. EPA to discuss the next steps for addressing the soils containing PCBs beneath the building. At this meeting the WDNR and U.S. EPA requested the completion of surface wipe sampling activities. This work plan presents the means and methods for conducting wipe sampling activities at the Site to evaluate whether potential residuals from activities at this facility in the form of dust, on “high-contact” or horizontal work surfaces and “low-contact” or remote seldom touched work surfaces, could pose a risk to current workers, through one of the following pathways: inhalation of or dermal contact with dust or atmospheric transport from residuals that may from time to time be exposed by Site activities.

4. Investigation Work Plan

The following sections present a description of the work to be completed during the investigation. The contents of this section were prepared in accordance with NR 716.09 Wis. Admin. Code.

4.1 Health and Safety

Prior to beginning work each day, a “tailgate” health and safety briefing will be held to discuss the activities and identify ways to ensure the health and safety of Site workers. If conditions are encountered during Site investigation activities that differ from those outlined in the health and safety plan, the Site activities will be reevaluated to determine the appropriate actions that will ensure the health and well-being of the workers.

4.2 Wipe Sampling and Analysis Plan

A standard wipe test is conducted on a non-porous surface (e.g., unpainted metal surface) and uses a 10 by 10 centimeter template which outlines the sampling area¹. Per the request of U.S. EPA, walls, floors, and columns, some of which may be porous surfaces, will be sampled. It is recommended by U.S. EPA that the wipe medium (e.g., gauze pad or glass wool) be of a known size, prepared with hexane in the laboratory, and sealed in a glass vial until it is used for the wipe test².

A 100- by 100-ft grid pattern will be used for the manufacturing footprint of the building, to identify wall, floor, and column wipe sampling activities. Samples (wall, floor, and column) will be collected from each 100- by 100-ft grid with actual sample locations being determined in the field based on visual observations. Wall and column samples will be taken from a breathing/working-zone height. In addition, wipe samples will be collected from a breathing/working-zone height on the surfaces of machines within the

¹ How to Test for PCBs and Characterize Suspect Materials;
<http://www.epa.gov/pcbsincaulk/guide/guide-sect3.htm>

² Title 40: Protection of Environment, PART 761-Polychlorinated Biphenyls Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions, Subpart G-PCB Spill Cleanup Policy, 40 CFR 761.123;
http://www.ecfr.gov/cgi-bin/text-idx?SID=2df8d68ef63d748da0318d2bd636ee18&node=se40.31.761_1123&rqn=div8

manufacturing building with an installation date prior to 1980 (Machine Number 1, 2, 3, and 21 – Figure 4-1).

Forty wipe samples will be collected from various surfaces in the building. The proposed approximate locations of these wipe samples are depicted on Figure 4-1; however, these are subject to change based on visual observations. Wipe samples will be collected and submitted to TestAmerica, Inc. for laboratory analysis of PCBs by Method 8082/8082A (seven Aroclor analysis). Sampling will be completed as follows:

- Collect two wipe samples (horizontal surface and vertical surface) from a breathing/working-zone height of each of the four machines listed above, for a total of eight machine wipe samples.
- Collect one wall, one floor, and one column wipe sample from a breathing/working-zone height from each 100- by 100-ft grid, for a total of 10 wall wipe samples, 10 floor wipe samples, and 10 column wipe samples.
- Collect two duplicate wipe samples which will consist of a “double-wipe” of the investigative location. A separate wipe medium will be used for the duplicate sample. The duplicate sample should be clearly labeled as the “double-wipe” for the investigative location⁴.
- The sample area will be wiped in a serpentine pattern both horizontally and vertically³. The goal for this type of pattern is to thoroughly wipe the entire sample area twice in a different direction and orientation⁴.
- All wipe samples will be analyzed immediately upon submittal to the laboratory and produce results in units of micrograms per centimeters squared.

³ EPA/600/R-12/051 September 2012 “Polychlorinated Biphenyls (PCBs) in School Buildings: Sources, Environmental Levels, and Exposures”;
http://www.epa.gov/pcbsincaulk/pdf/pcb_EPA600R12051_final.pdf

⁴ June 1987 “Wipe Sampling and Double Wash/Rinse Cleanup as recommended by the Environmental Protection Agency PCB Spill Cleanup Policy”;
<http://www.epa.gov/epawaste/hazard/tsd/pcbs/pubs/wipe-samp.pdf>

- The sampling supplies provided by the laboratory include a prepared sterile gauze pad with hexane solution and sample jar. The sampler uses the prepared gauze pad and wipes the sample area as described above. The gauze pad is then folded and placed in the sample jar for transport to the laboratory. Although standard methods are not available for wipe sampling, Standard Operating Practices will be based on the relevant U.S. EPA and Occupational Safety & Health Administration documents⁵ and/or laboratory-provided sample collection guidance.

4.3 Management of Investigative-Derived Wastes

Investigative-derived wastes are not expected to be generated during the investigation activities.

4.4 Investigation Reporting

Following receipt of the wipe sample analytical results, ARCADIS will prepare a letter report. The letter report will include a summary of the activities completed and the analytical results, and provide recommendations. A copy of the analytical report will be included as an attachment to the summary letter.

⁵ EPA/600/R-07/004 January 2007 "A Literature Review of Wipe Sampling Methods for Chemical Warfare Agents and Toxic Industrial Chemicals and OSHA Evaluation Guidelines for Surface Sampling Methods";
<http://www.osha.gov/dts/sltc/methods/surfacesampling/surfacesampling.html>

5. References

ARCADIS. 2012a. Site Investigation Work Plan. May 2012.

ARCADIS. 2012b. Site Investigation Work Plan Addendum, Building Subsurface Investigation. September 2012.

ARCADIS. 2013a. Building Subsurface Investigation Summary. February 2013.

ARCADIS. 2013b. Site Investigation and Interim Actions Report February 2012-January 2013. March 2013.

ARCADIS. 2013c. Supplemental Site Information/Addendum 1. May 2013.

ARCADIS. 2013d. Supplemental Work Plan for Polychlorinated Biphenyl Building Subsurface Investigation. August 2013.

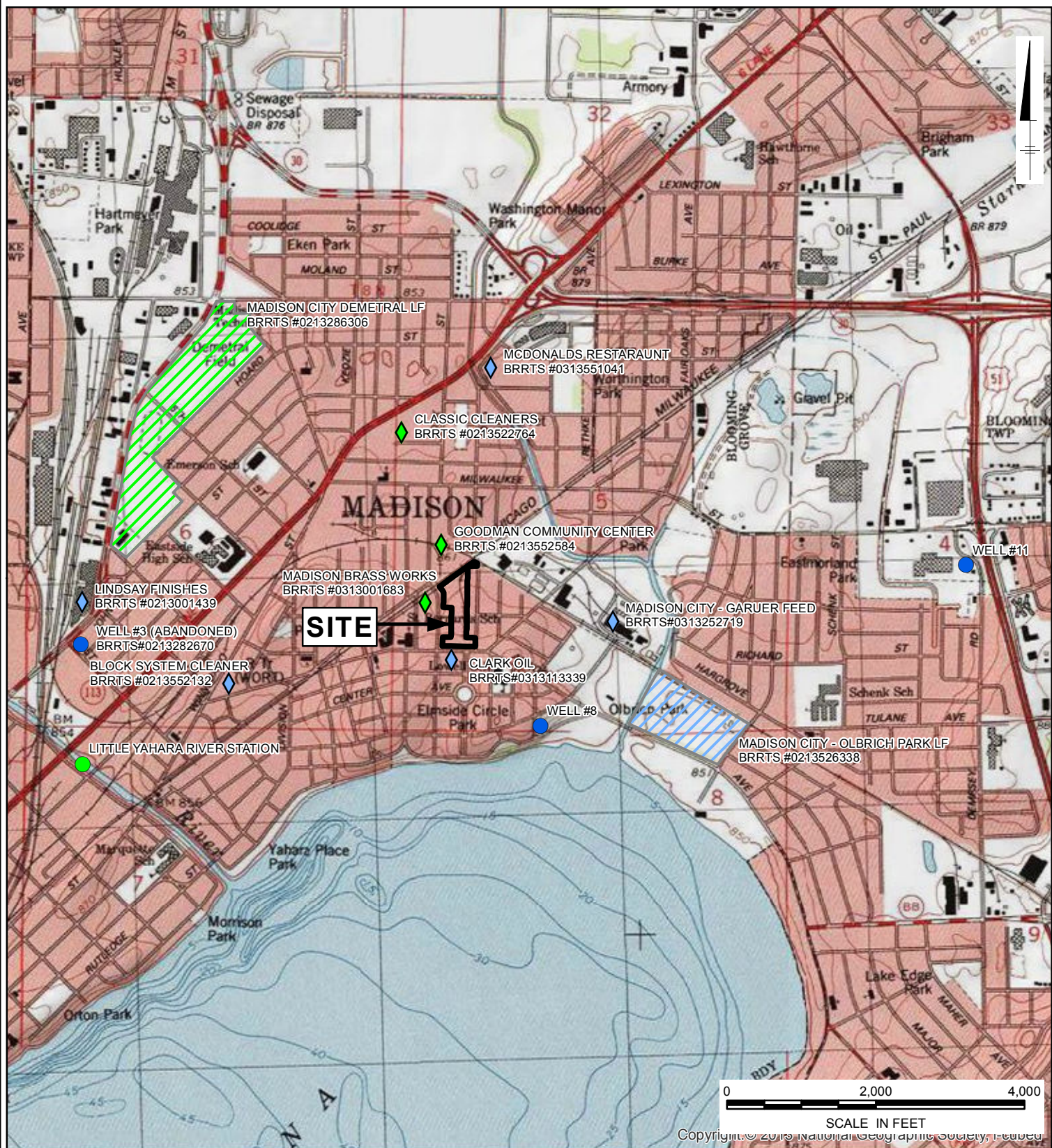
ARCADIS. 2014. Supplemental Building Interior Polychlorinated Biphenyl Work Plan Subsurface Investigation Summary. April 2014.

WDNR. 2012a. Conditional Approval: May 2012 Site Investigation Work Plan. June 2012.

WDNR. 2012b. September 28, 2012 Site Investigation Work Plan Addendum: Building Subsurface Investigation. October 2012.

WDNR. 2013a. Review of March 2013 Madison Kipp Site Investigation and Interim Actions Report February 2012 – January 2013.

WDNR. 2013b. Madison Kipp Corporation (MKC) Work Plan Reviews. October 2013.



CITY:MPLS DIV:GROUP: IMI_DB:MG_LD:CK MADISON-KIPP
 Z:GISPROJECTS_ENV\Map\Map\2014-10\Fig2_1_Site_Location_Map_8x11.mxd

LEGEND

- ◆ OPEN SITE (ONGOING CLEANUP)
- ▭ OPEN SITE - SITE BOUNDARIES
- ◆ CLOSED SITE (COMPLETED CLEANUP)
- ▭ CLOSED SITE - SITE BOUNDARIES
- GAUGING STATION
- MUNICIPAL WATER SUPPLY WELL
- ▭ PROJECT BOUNDARY



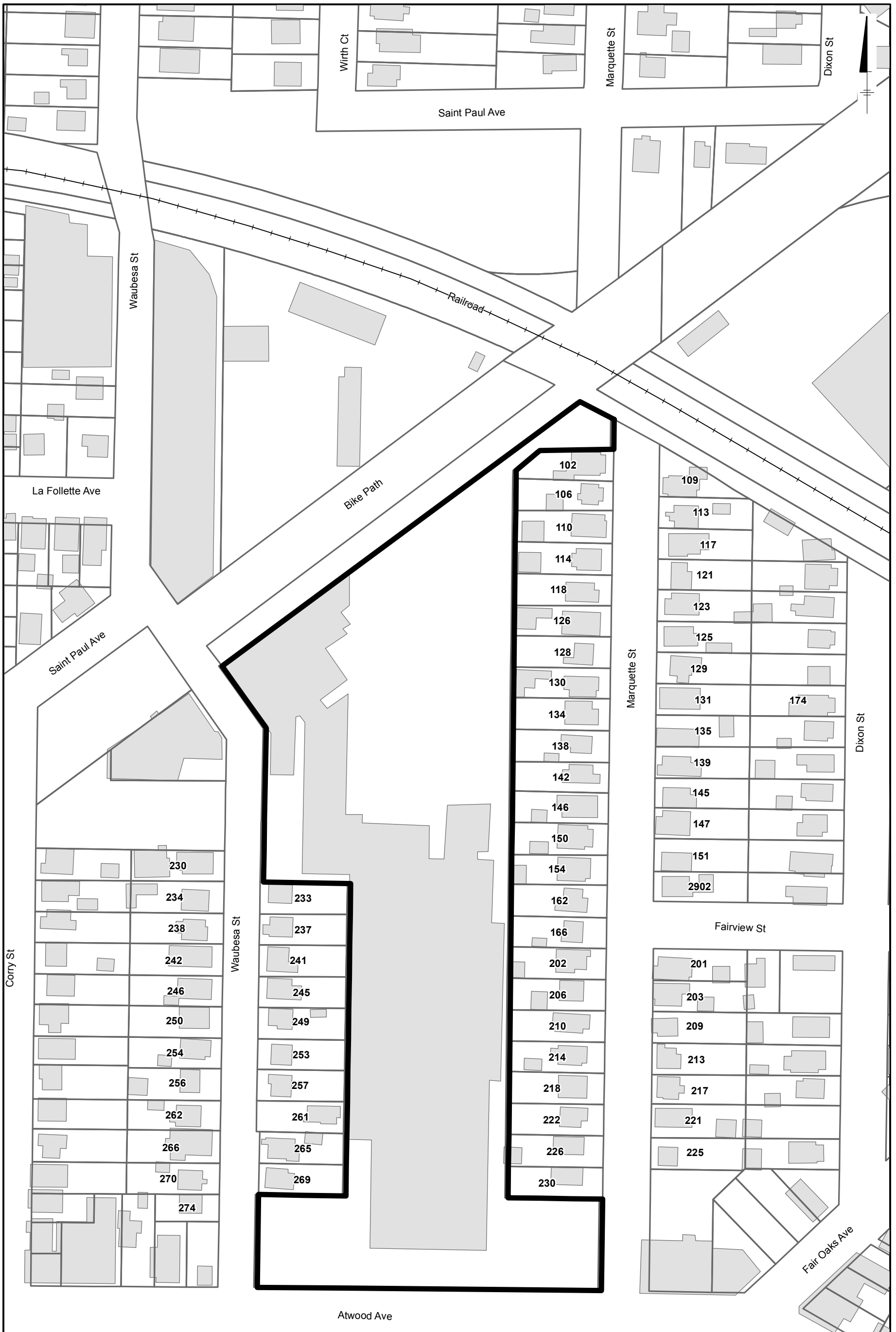
SITE LOCATION →

MADISON-KIPP CORPORATION
 201 WAUBESA STREET
 MADISON, WISCONSIN
**BUILDING INTERIOR POLYCHLORINATED
 BIPHENYL WIPE SAMPLING WORK PLAN**

SITE LOCATION MAP






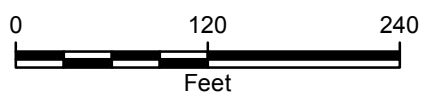
FIGURE
2-1



CITY: MPLS_DIV/GROUP: IM DB: MG LD: CK MADISON-KIPP
 Z: GISPROJECTS_LEN\MadisonKipp\Map\2014-10\Fig2_SITE_LAYOUT.mxd

LEGEND

-  PARCELS
-  BUILDING FOOTPRINTS
-  SITE



MADISON-KIPP CORPORATION
 201 WAUBESA STREET
 MADISON, WISCONSIN
**BUILDING INTERIOR POLYCHLORINATED
 BIPHENYL WIPE SAMPLING WORK PLAN**

SITE LAYOUT MAP



FIGURE
2-2

CITY: MKE DIV/ GROUP: IM DB: GM LD: CK MADISON-KIPP
 Z:\GIS\PROJECTS_LEN\MadisonKipp\Map2014-10\Proposed_Wipe_Samples_20141101.mxd



LEGEND

- MACHINE WIPE SAMPLE
(LOCATION OF HORIZONTAL SURFACE SAMPLE AND VERTICAL SURFACE SAMPLE)
- GRID WIPE SAMPLE
(LOCATION OF WALL, COLUMN, AND FLOOR SAMPLE)
- PLANT LAYOUT
- BUILDING FOOTPRINTS
- PARCELS
- 100' GRID

ACTUAL LOCATIONS OF WIPE SAMPLES WILL BE DETERMINED IN THE FIELD BASED ON VISUAL OBSERVATIONS

MADISON-KIPP CORPORATION
 201 WAUBESA STREET
 MADISON, WISCONSIN
**BUILDING INTERIOR POLYCHLORINATED
 BIPHENYL WIPE SAMPLING WORK PLAN**

PROPOSED WIPE SAMPLING LOCATIONS



FIGURE
4-1

Appendix A

Submittal Certification



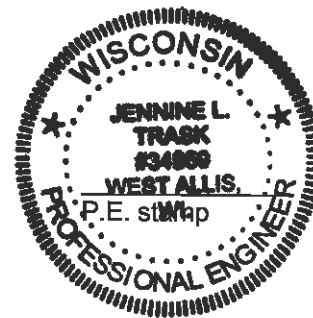
Submittal Certification

This attachment was prepared to satisfy the requirements of Wisconsin Administrative Code Chapter NR 712.09 and is applicable to the following document.

**Building Interior Polychlorinated Biphenyl Wipe Sampling Work Plan
Madison-Kipp Corporation
201 Waubesa Street
Madison, Wisconsin**

"I, Jennine L. Trask, hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the Rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."

J. Trask CEM #34959
Signature, title and P.E. number



"I, Trenna Seilheimer, hereby certify that I am a scientist as that term is defined in s. NR 712.03 (3), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."

T. Seilheimer Project Scientist
Signature and title

11-4-14
Date