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Work Plan for Supplemental Polychlorinated Biphenyl Investigation

Madison-Kipp Corporation Madison, Wisconsin

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Work Plan for Supplemental **Polychlorinated Biphenyl** Investigation

Madison-Kipp Corporation Madison, Wisconsin

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Work Plan for Supplemental PCB Investigation

Madison-Kipp Corporation Madison, Wisconsin

1.	Introdu	ction and Objectives	1
	1.1	Summary of PCB Investigation to Date	2
2.	Overvi	ew of Investigation Strategy	3
3.	Investi	gation Work Plan	4
	3.1	Health and Safety	4
	3.2	Hand Auger Boring Locations	4
	3.3	Direct-Push Boring Locations	5
	3.4	Soil Boring Sampling and Analysis Plan	5
	3.5	Surveying	7
	3.6	Management of Investigative-Derived Wastes	7
	3.7	Investigation Reporting	7

Table

1-1	Summar	y of PCB Soil	Analytical Result	ts
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Figures

1-1	Site Location Map
1-2	PCB Results (0 to 2 feet below ground surface)
1-3	PCB Results (2 to 4 feet below ground surface)
1-4	PCB Results (4+ feet below ground surface)
3-1	Proposed Soil Boring Locations

Appendix

A	Submittal	Certification
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Work Plan for Supplemental PCB Investigation

Madison-Kipp Corporation Madison, Wisconsin

1. Introduction and Objectives

On behalf of Madison-Kipp Corporation, ARCADIS has been retained to support investigation and remediation activities at its facility located at 201 Waubesa Street in Madison, Wisconsin (Site, Figure 1-1). The Site is approximately 7.5 acres in size. A 130,000-square foot building occupies much of the Site, with asphalt parking lots 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. 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 also located at the northeast end of the Madison isthmus, approximately 1,500 feet north of Lake Monona and approximately 6,800 feet east of Lake Mendota.

A Work Plan for Polychlorinated Biphenyl Investigation dated May 21, 2012 was submitted to the Wisconsin Department of Natural Resources (WDNR) for approval to complete site investigation activities associated with polychlorinated biphenyls (PCBs) at the Site. The WDNR provided a *Conditional Approval* letter dated May 30, 2012 for this work plan. A modified sampling location map was submitted electronically to WDNR for approval on June 1, 2012. WDNR approved of the modified map in electronic correspondence dated June 1, 2012. Investigation activities related to the *Work Plan for Polychlorinated Biphenyl Investigation* were initiated on June 1, 2012 and are ongoing.

A summary of the PCB analytical data, consisting of data collected through June 26, 2012, was submitted to the WDNR on July 12, 2012. The PCB data submitted to the WDNR is attached as Table 1-1 and Figures 1-2, 1-3, and 1-4. The PCB data was discussed in a conference call with Madison-Kipp, WDNR, and United States Environmental Protection Agency (U.S. EPA) representatives on July 12, 2012 to discuss the PCB site investigation activities and results. During this conference call, the WDNR requested a work plan for conducting supplemental investigation activities to further evaluate the extent of impacts associated with PCBs. The information provided herein is based on the requirements of NR 716 Wis. adm. code. An NR 712.09 submittal certification is included in Appendix A.

Work Plan for Supplemental PCB Investigation

Madison-Kipp Corporation Madison, Wisconsin

1.1 Summary of PCB Investigation to Date

As part of ongoing investigation activities, starting in April 2012 and continuing as part of the WDNR-approved *Work Plan for Polychlorinated Biphenyl Investigation*, shallow soil borings were advanced in the backyards of residences adjacent to the Site. As of June 26, 2012, a total of 42 soil borings were advanced at 22 adjacent residences.¹ The soil borings were completed at the residential properties using a hand auger to a depth of approximately 4 feet below ground surface (ft bgs). Soil samples were collected from each soil boring from depths of 0 to 1 ft bgs and from 3 to 4 ft bgs, and submitted for laboratory analysis of PCBs and volatile organic compounds (VOCs). Additionally, select soil samples were also submitted for laboratory analysis of polycyclic aromatic hydrocarbons (PAHs), resource conservation and recovery act (RCRA) metals, and total cyanide.

Additionally, a total of 84 soil borings were advanced on-site in accordance with the WDNR-approved *Work Plan for Polychlorinated Biphenyl Investigation*. The soil borings were advanced using direct-push drilling methods or were hand augered to depths of approximately 4 to 35 ft bgs. One to two soil samples were collected from each soil boring and submitted for lab analysis of PCBs, volatile organic compounds, polycyclic aromatic hydrocarbons, RCRA metals, and total cyanide.

As noted above, a summary of the PCB analytical data, consisting of data collected through June 26, 2012, was submitted to the WDNR on July 12, 2012. The PCB data was compared to the WDNR's non-industrial direct contact and industrial direct contact residual contaminant levels (RCLs), the U.S. EPA's self-implementing high-occupancy cleanup level with no site restrictions, and the Toxic Substance Control Act disposal limit. The PCB data submitted to the WDNR is presented in Table 1-1 and on Figures 1-2, 1-3, and 1-4.

¹ Access was recently obtained to collect soil samples from the 138 South Marquette Street and 245 Waubesa Street properties, and soil sampling at these properties was performed on July 20, 2012. Access to the remaining three residential properties is being negotiated.

Work Plan for Supplemental PCB Investigation

Madison-Kipp Corporation Madison, Wisconsin

2. Overview of Investigation Strategy

This work plan presents the means and methods for conducting additional requested investigation activities at the Site to further evaluate soil conditions for PCBs. The results of this supplemental investigation will be used in conjunction with the previous investigation data to evaluate the extent of impacts and to develop a remediation strategy. To respond to the Agency's request, this work plan proposes the following additional investigation activities:

- A soil investigation to further evaluate PCB concentrations along the eastern fence line between the Site and residential properties. In summary, up to 32 soil borings will be advanced using a hand auger from north to south along the eastern fence line. Soil samples will be collected for analysis of PCBs.
- A soil investigation to further evaluate PCB concentrations onsite to delineate areas with soil samples containing total detected PCB concentrations above 50 milligrams per kilogram (mg/kg). In summary, up to 22 soil borings will be advanced using direct-push drilling methods. Soil samples will be collected for analysis of PCBs.
- The results will be presented in a data summary letter.

Work Plan for Supplemental PCB Investigation

Madison-Kipp Corporation Madison, Wisconsin

3. Investigation Work Plan

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

3.1 Health and Safety

Prior to beginning the investigation, the Site health and safety plan will be updated to address the planned field activities. Utility marking arrangements will be made through Digger's Hotline (the State of Wisconsin Public Utility clearance service), a ground penetrating radar survey, a private utility locator, and discussions with property owners. 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 re-evaluated to determine the appropriate actions that will ensure the health and well-being of the workers.

3.2 Hand Auger Boring Locations

The hand auger boring locations described in this work plan were selected based on the information identified during the investigation scoping, existing analytical results, and discussions with the WDNR and U.S. EPA. In summary, up to 32 soil borings are proposed for the investigation.

To evaluate the extent of the PCB impacts in soil, borings will be advanced along the eastern fence line. These borings will be advanced onsite east of the previously collected soil samples containing concentrations of PCBs above 50 mg/kg (Soil Borings B-13, B-14, B-15, B-17). As noted on Table 1-1, the soil samples collected from east of the fence line in the residential yards located at 134, 142, 146, and 150 South Marquette Street either did not contain concentrations of PCBs above laboratory detection limits or contained low-level concentrations of PCBs below the WDNR RCLs and the U.S. EPA's self-implementing high-occupancy cleanup level. The proposed soil borings will be advanced at a spacing of 5 feet north to south along the fence line. Based on this spacing, soil borings will be advanced at up to 32 locations to evaluate soil for the presence of PCBs. Figure 3-1 depicts the boring locations.

Work Plan for Supplemental PCB Investigation

Madison-Kipp Corporation Madison, Wisconsin

Access was recently obtained to collect soil samples from the 138 South Marquette Street and 245 Waubesa Street properties, and soil sampling at these properties was performed on July 20, 2012. The proposed soil borings were advanced in the backyards at a 10-foot offset from the property corners.

It should be noted that the proposed boring locations depicted on Figure 3-1 are approximate. Deviations to the locations and/or number of soil borings may occur based on impediments such as underground utilities, tree coverage, root systems, and below ground impediments. Due to the proximity of the proposed sample locations, should refusal occur during hand-augering, the soil boring will be abandoned at the refusal depth and ARCADIS will move to the next proposed sample location.

3.3 Direct-Push Boring Locations

The direct-push boring locations described in this work plan were selected based on the information identified during the investigation scoping and discussions with the WDNR and U.S. EPA. In summary, up to 22 soil borings are proposed for the investigation. The proposed soil boring locations are presented on Figure 3-1.

To evaluate the extent of the PCB impacts in soil, borings will be advanced in a grid pattern in the areas adjacent to the previously collected soil samples containing concentrations of PCBs above 50 mg/kg. A direct-push drill rig will be used to advance soil borings for collecting the soil samples. A grid pattern was created to provide appropriate coverage, fill in data gaps, and delineate the existing on-site PCB impacts. Additionally, borings will be advanced in the location of existing Soil Borings B-13, B-14, B-15, B-17, and B-40 to collect a soil sample from 2 to 4 feet at these locations for vertical delineation.

It should be noted that the proposed boring locations depicted on Figure 3-1 are approximate. Deviations to the locations may occur based on receipt of additional information and impediments such as underground utilities and above-grade infrastructure.

3.4 Soil Boring Sampling and Analysis Plan

The direct-push soil borings will be advanced using a sampling vehicle equipped with a Geoprobe Series AT-660 Large Bore Soil Sampler (or comparable equipment). Soil samples will be collected by driving a steel sampling rod (sampler) with acetate liners to the desired sampling depth using the hydraulic ram and hammer on the Geoprobe rig.

Work Plan for Supplemental PCB Investigation

Madison-Kipp Corporation Madison, Wisconsin

Once the sampler reaches the desired depth, the sampler will be opened by removing a stop pin in the sampler. The sampler will be driven an additional 4 feet to push a soil sample into the sampler, preserving the sample in a 1-inch by 4-foot acetate liner inside the sampler. The acetate sleeves will allow continuous collection of soil samples from each boring.

Companion sampling will be completed at the proposed hand auger and direct-push soil boring locations by collecting two aliquots of soil from each sampling interval and placing each aliquot into a separate re-sealable plastic bag. One of the companion samples from each interval will be used for field screening for the presence of total ionizable VOC vapors with a calibrated flame ionization detector (FID). The screening samples will be warmed and the headspace FID reading of the soil taken by inserting the probe end of the FID into the plastic bag through the seal. The screened samples will be appropriately discarded; the unscreened companion samples will be used for preparing samples for analytical testing.

An ARCADIS scientist will oversee the drilling activities and visually screen and describe the condition and engineering properties of the soil. Soil descriptions and field screening FID results will be recorded on Soil Boring Logs (WDNR Form 4400-122) in accordance with WDNR requirements.

Soil samples will be collected for laboratory analysis of PCBs by U.S. EPA SW-846 Method 8082 from the proposed hand auger and direct-push borings. Sampling will be completed as follows:

- One soil sample from 2 to 4 ft bgs interval will be collected from Soil Borings B-13, B-14, B-15, B-17, and B-40. Soil samples were previously submitted from 0 to 2 ft bgs from Soil Borings B-13, B-14, B-17, and B-40 and from 1 to 3 feet from Soil Boring B-15.
- One soil sample from the 0 to 2 ft bgs interval and 2 to 4 ft bgs interval for the remainder of the proposed onsite soil borings.
- One soil sample from 0 to 1 foot and 3 to 4 feet interval was collected from each hand auger boring advanced at the residential properties located at 138 South Marquette Street and 245 Waubesa Street. Soil samples were also collected for VOCs by U.S. EPA SW-846 Method 8260B, PAHs by Method U.S. EPA SW-846 8270C, RCRA metals by Methods U.S. EPA SW-846 6010/7471A, and total cyanide by U.S. EPA SW-846 Method 9014.

Work Plan for Supplemental PCB Investigation

Madison-Kipp Corporation Madison, Wisconsin

3.5 Surveying

A Wisconsin-licensed surveyor will locate the horizontal location of each boring to Wisconsin state plane coordinates and vertical elevation. Ground elevations will be surveyed to an accuracy of +/-1 foot.

3.6 Management of Investigative-Derived Wastes

Soil cuttings and decontamination water from cleaning down-hole equipment generated during the investigation will be containerized in appropriate steel 55-gallon drums. Arrangements will be made with a licensed disposal facility for the transportation and disposal of the wastes.

3.7 Investigation Reporting

Following receipt of the soil analytical results, ARCADIS will prepare a data summary letter. The summary letter will present the results of the field screening and analytical testing. Copies of all boring logs, borehole abandonment forms, and analytical reports will be included as attachments to the summary letter. A complete summary of procedures and results will be submitted as part of the overall site investigation report.



Table 1-1. Summary	v of PCB Soil Analytica	al Results. Madison-Kii	pp Corporatio	n, Madison, Wisconsin.
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Boring Name	Soil to	Non-Industrial	Industrial	EPA	TSCA	10	2-1	102-2
Sample Depth	Groundwater	Direct	Direct	High Occupancy	Disposal	0-1'	3-4'	0-1'
Sample Date	Pathway RCL	Contact RCL	Contact RCL	Cleanup Level	Limit	4/27/12	6/20/12	4/27/12
PCBs								
Aroclor-1242	NE	0.222	0.744	NE	NE	<0.0062	<0.0061	<0.00628
Aroclor-1248	NE	0.222	0.744	NE	NE	<0.0039	<0.0073	<0.00395
Aroclor-1254	NE	0.222	0.744	NE	NE	<0.00367	<0.004	<0.00372
Aroclor-1260	NE	0.222	0.744	NE	NE	<0.00195	<0.0091	<0.00198
Total Detected PCBs	NE	NE	NE	1	50	ND	ND	ND

Only detected constituents are noted. Constituent concentrations are reported as milligrams per kilogram (mg/kg).

100 Exceeds the WDNR's soil to groundwater pathway residual contaminant level.

100 Exceeds the WDNR's non-industrial direct contact residual contaminant level.

100 Exceeds the WDNR's industrial direct contact residual contaminant level.

Exceeds the EPA's self-implementing high-occupancy cleanup level with no site restrictions.

100 Exceeds the Toxic Substance Control Act disposal limit.

< Constituent not detected above noted laboratory detection limit.

B Compound was found in the blank and sample.

B-3 (0-2') Soil Boring B-3 sampled 0 to 2 feet below grade.

EPA United States Environmental Protection Agency.

J Constituent concentration is an approximate value.

ND Total PCBs less than the laboratory detection limit.

NE Criteria not established.

PCBs Polychlorinated biphenyls.

RCL Residual contaminant level.

TSCA Toxic Substance Control Act.



Boring Name	106	6-1	106	6-2	11(110-1		110-2		4-1	114	-2
Sample Depth	0-1'	3-4'	0-1'	3-4'	0-1'	3-4'	0-1'	3-4'	0-1'	3-4'	0-1'	3-4'
Sample Date	5/17/12	6/20/12	5/17/12	6/20/12	4/27/12	6/21/12	4/27/12	6/21/12	4/27/12	6/21/12	4/27/12	6/21/12
PCBs												
Aroclor-1242	<0.00704	<0.0062	<0.00684	<0.0066	<0.00558	<0.0059	<0.00642	<0.0059	<0.00672	<0.0062	<0.00657	<0.006
Aroclor-1248	<0.00443	<0.0075	<0.00431	<0.0079	<0.00352	<0.0071	<0.00404	<0.0071	<0.00423	<0.0074	<0.00414	< 0.0072
Aroclor-1254	<0.00417	<0.0041	<0.00405	<0.0044	<0.00331	<0.0039	<0.00381	<0.0039	<0.00398	<0.0041	<0.00389	<0.004
Aroclor-1260	<0.00222	<0.0093	<0.00215	<0.0099	<0.00176	0.018	<0.00202	0.096	<0.00211	<0.0092	<0.00207	<0.009
Total Detected PCBs	ND	ND	ND	ND	ND	0.018	ND	0.096	ND	ND	ND	ND

Only detected constituents are noted. Constituent concentrations are reported as milligrams per kilogram (mg/kg).

100 Exceeds the WDNR's soil to groundwater pathway residual contaminant level.

100 Exceeds the WDNR's non-industrial direct contact residual contaminant level.

100 Exceeds the WDNR's industrial direct contact residual contaminant level.

Exceeds the EPA's self-implementing high-occupancy cleanup level with no site restrictions.

100 Exceeds the Toxic Substance Control Act disposal limit.

< Constituent not detected above noted laboratory detection limit.

B Compound was found in the blank and sample.

B-3 (0-2') Soil Boring B-3 sampled 0 to 2 feet below grade.

EPA United States Environmental Protection Agency.

J Constituent concentration is an approximate value.

ND Total PCBs less than the laboratory detection limit.

NE Criteria not established.

PCBs Polychlorinated biphenyls.

RCL Residual contaminant level.

TSCA Toxic Substance Control Act.



Boring Name	11	8-1	118-2		126-1		126-2		128-1		128	3-2
Sample Depth	0-1'	3-4'	0-1'	3-4'	0-1'	3-4'	0-1'	3-4'	0-1'	3-4'	0-1'	3-4'
Sample Date	4/30/12	6/21/12	4/30/12	6/21/12	4/30/12	6/21/12	4/30/12	6/21/12	4/30/12	6/21/12	4/30/12	6/21/12
PCBs												
Aroclor-1242	<0.00668	<0.0062	<0.00702	<0.0061	<0.00712	<0.0068	<0.007	< 0.0063	<0.00684	< 0.0063	<0.00705	< 0.0062
Aroclor-1248	<0.0042	<0.0074	<0.00442	<0.0073	<0.00448	<0.0082	<0.00441	<0.0075	<0.00431	<0.0076	<0.00444	<0.0074
Aroclor-1254	<0.00396	<0.0041	<0.00416	<0.004	<0.00422	<0.0045	<0.00415	<0.0041	<0.00406	<0.0042	<0.00418	<0.0041
Aroclor-1260	<0.0021	<0.0092	<0.00221	<0.0091	<0.00224	<0.01	<0.0022	<0.0094	<0.00215	<0.0095	<0.00222	<0.0093
Total Detected PCBs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Only detected constituents are noted. Constituent concentrations are reported as milligrams per kilogram (mg/kg).

100 Exceeds the WDNR's soil to groundwater pathway residual contaminant level.

100 Exceeds the WDNR's non-industrial direct contact residual contaminant level.

100 Exceeds the WDNR's industrial direct contact residual contaminant level.

Exceeds the EPA's self-implementing high-occupancy cleanup level with no site restrictions.

100 Exceeds the Toxic Substance Control Act disposal limit.

< Constituent not detected above noted laboratory detection limit.

B Compound was found in the blank and sample.

B-3 (0-2') Soil Boring B-3 sampled 0 to 2 feet below grade.

EPA United States Environmental Protection Agency.

J Constituent concentration is an approximate value.

ND Total PCBs less than the laboratory detection limit.

NE Criteria not established.

PCBs Polychlorinated biphenyls.

RCL Residual contaminant level.

TSCA Toxic Substance Control Act.



Boring Name	13	0-1	134-1		134	134-2		142-1		2-2	14	6-1
Sample Depth	0-1'	3-4'	0-1'	3-4'	0-1'	3-4'	0-1'	3-4'	0-1'	3-4'	0-1'	3-4'
Sample Date	4/30/12	6/22/12	4/30/12	6/22/12	4/30/12	6/22/12	4/30/12	6/22/12	4/30/12	6/22/12	6/25/12	6/25/12
PCBs												
Aroclor-1242	<0.00714	<0.0067	<0.00729	<0.0069	<0.00684	<0.0063	<0.00689	< 0.0063	<0.0068	<0.0062	<0.0062	<0.0061
Aroclor-1248	<0.0045	<0.008	<0.00459	<0.0083	<0.00431	<0.0076	<0.00434	<0.0075	<0.00428	<0.0075	<0.0074	<0.0073
Aroclor-1254	<0.00423	<0.0044	<0.00432	<0.0046	<0.00406	<0.0042	<0.00408	0.0097 J	<0.00403	0.016 J	<0.0041	<0.004
Aroclor-1260	<0.00225	<0.0099	<0.00229	<0.01	<0.00215	<0.0095	<0.00217	<0.0094	<0.00214	<0.0093	<0.0092	<0.0092
Total Detected PCBs	ND	ND	ND	ND	ND	ND	ND	0.0097	ND	0.016	ND	ND

Only detected constituents are noted. Constituent concentrations are reported as milligrams per kilogram (mg/kg).

100 Exceeds the WDNR's soil to groundwater pathway residual contaminant level.

100 Exceeds the WDNR's non-industrial direct contact residual contaminant level.

100 Exceeds the WDNR's industrial direct contact residual contaminant level.

Exceeds the EPA's self-implementing high-occupancy cleanup level with no site restrictions.

100 Exceeds the Toxic Substance Control Act disposal limit.

< Constituent not detected above noted laboratory detection limit.

B Compound was found in the blank and sample.

B-3 (0-2') Soil Boring B-3 sampled 0 to 2 feet below grade.

EPA United States Environmental Protection Agency.

J Constituent concentration is an approximate value.

ND Total PCBs less than the laboratory detection limit.

NE Criteria not established.

PCBs Polychlorinated biphenyls.

RCL Residual contaminant level.

TSCA Toxic Substance Control Act.



Boring Name	14	6-2	150-1		15	150-2 154		4-1	162-1	162-2	16	6-1
Sample Depth	0-1'	3-4'	0-1'	3-4'	0-1'	3-4'	0-1'	3-4'	0-1'	0-1'	0-1'	3-4'
Sample Date	6/25/12	6/25/12	6/25/12	6/25/12	6/25/12	6/25/12	6/25/12	6/25/12	6/26/12	6/26/12	6/26/12	6/26/12
PCBs												
Aroclor-1242	<0.0057	<0.0062	0.094	<0.0063	0.02	<0.0063	<0.0062	<0.0062	<0.0078	<0.006	<0.0057	<0.006
Aroclor-1248	<0.0068	<0.0074	<0.0073	<0.0075	<0.0069	<0.0075	<0.0074	<0.0074	<0.0094	<0.0072	<0.0068	< 0.0072
Aroclor-1254	0.11	<0.0041	0.079	<0.0041	0.036	<0.0041	0.019	<0.0041	<0.0051	<0.0039	<0.0037	<0.004
Aroclor-1260	<0.0085	<0.0093	<0.009	<0.0094	<0.0086	<0.0093	<0.0092	<0.0092	<0.012	<0.009	<0.0085	<0.009
Total Detected PCBs	0.11	ND	0.173	ND	0.056	ND	0.019	ND	ND	ND	ND	ND

Only detected constituents are noted. Constituent concentrations are reported as milligrams per kilogram (mg/kg).

100 Exceeds the WDNR's soil to groundwater pathway residual contaminant level.

100 Exceeds the WDNR's non-industrial direct contact residual contaminant level.

100 Exceeds the WDNR's industrial direct contact residual contaminant level.

Exceeds the EPA's self-implementing high-occupancy cleanup level with no site restrictions.

100 Exceeds the Toxic Substance Control Act disposal limit.

< Constituent not detected above noted laboratory detection limit.

B Compound was found in the blank and sample.

B-3 (0-2') Soil Boring B-3 sampled 0 to 2 feet below grade.

EPA United States Environmental Protection Agency.

J Constituent concentration is an approximate value.

ND Total PCBs less than the laboratory detection limit.

NE Criteria not established.

PCBs Polychlorinated biphenyls.

RCL Residual contaminant level.

TSCA Toxic Substance Control Act.



Boring Name	16	6-2	202-1		20	202-2		233-1		233-2		1-1
Sample Depth	0-1'	3-4'	0-1'	3-4'	0-1'	3-4'	0-1'	3-4'	0-1'	3-4'	0-1'	3-4'
Sample Date	6/26/12	6/26/12	6/26/12	6/26/12	6/26/12	6/26/12	6/26/12	6/26/12	6/25/12	6/25/12	6/26/12	6/26/12
PCBs												
Aroclor-1242	<0.0061	<0.006	<0.006	<0.0063	<0.0062	<0.0064	<0.0065	<0.0063	<0.0068	< 0.0063	<0.0058	<0.0064
Aroclor-1248	<0.0073	<0.0072	<0.0072	<0.0075	<0.0074	<0.0077	<0.0078	<0.0076	<0.0081	<0.0076	<0.007	<0.0077
Aroclor-1254	<0.004	<0.004	<0.0039	<0.0041	<0.0041	<0.0042	0.047	<0.0042	0.022	<0.0042	0.063	<0.0042
Aroclor-1260	<0.0092	<0.009	<0.0089	<0.0094	<0.0093	<0.0095	<0.0097	<0.0095	<0.01	<0.0095	<0.0087	<0.0096
Total Detected PCBs	ND	ND	ND	ND	ND	ND	0.047	ND	0.022	ND	0.063	ND

Only detected constituents are noted. Constituent concentrations are reported as milligrams per kilogram (mg/kg).

100 Exceeds the WDNR's soil to groundwater pathway residual contaminant level.

100 Exceeds the WDNR's non-industrial direct contact residual contaminant level.

100 Exceeds the WDNR's industrial direct contact residual contaminant level.

100 Exceeds the EPA's self-implementing high-occupancy cleanup level with no site restrictions.

100 Exceeds the Toxic Substance Control Act disposal limit.

< Constituent not detected above noted laboratory detection limit.

B Compound was found in the blank and sample.

B-3 (0-2') Soil Boring B-3 sampled 0 to 2 feet below grade.

EPA United States Environmental Protection Agency.

J Constituent concentration is an approximate value.

ND Total PCBs less than the laboratory detection limit.

NE Criteria not established.

PCBs Polychlorinated biphenyls.

RCL Residual contaminant level.

TSCA Toxic Substance Control Act.



Boring Name	24	1-2	24	249-1		249-2 2		3-1	253-2		25	7-1
Sample Depth	0-1'	3-4'	0-1'	3-4'	0-1'	3-4'	0-1'	3-4'	0-1'	3-4'	0-1'	3-4'
Sample Date	6/26/12	6/26/12	6/26/12	6/26/12	6/26/12	6/26/12	6/26/12	6/26/12	6/26/12	6/26/12	6/26/12	6/26/12
PCBs												
Aroclor-1242	<0.0058	<0.006	<0.0058	<0.0057	<0.0056	<0.006	<0.006	<0.0065	<0.0058	<0.0063	<0.0057	<0.0064
Aroclor-1248	<0.0069	<0.0071	<0.0069	<0.0068	<0.0067	<0.0072	<0.0072	<0.0077	<0.007	<0.0076	<0.0069	<0.0077
Aroclor-1254	0.094	<0.0039	0.036	<0.0037	<0.0037	<0.0039	0.046	<0.0042	<0.0038	<0.0041	<0.0038	<0.0042
Aroclor-1260	<0.0086	<0.0089	<0.0086	<0.0085	<0.0083	<0.009	<0.009	<0.0096	<0.0087	<0.0094	<0.0085	<0.0096
Total Detected PCBs	0.094	ND	0.036	ND	ND	ND	0.046	ND	ND	ND	ND	ND

Only detected constituents are noted. Constituent concentrations are reported as milligrams per kilogram (mg/kg).

100 Exceeds the WDNR's soil to groundwater pathway residual contaminant level.

100 Exceeds the WDNR's non-industrial direct contact residual contaminant level.

100 Exceeds the WDNR's industrial direct contact residual contaminant level.

Exceeds the EPA's self-implementing high-occupancy cleanup level with no site restrictions.

100 Exceeds the Toxic Substance Control Act disposal limit.

< Constituent not detected above noted laboratory detection limit.

B Compound was found in the blank and sample.

B-3 (0-2') Soil Boring B-3 sampled 0 to 2 feet below grade.

EPA United States Environmental Protection Agency.

J Constituent concentration is an approximate value.

ND Total PCBs less than the laboratory detection limit.

NE Criteria not established.

PCBs Polychlorinated biphenyls.

RCL Residual contaminant level.

TSCA Toxic Substance Control Act.



Boring Name	25	7-2	26	5-1	26	5-2	E	8-1	B-2	B-3	B-3
Sample Depth	0-1'	3-4'	0-1'	3-4'	0-1'	3-4'	0-2'	5-7'	0-2'	0-2'	6-8'
Sample Date	6/26/12	6/26/12	6/26/12	6/26/12	6/26/12	6/26/12	6/12/12	6/12/12	6/21/12	6/8/12	6/19/12
PCBs											
Aroclor-1242	<0.0056	<0.0063	<0.0056	<0.0058	<0.0058	<0.0061	<0.0067	<0.0069	<6.2	<3.5	<0.0065
Aroclor-1248	<0.0068	<0.0075	<0.0067	<0.007	<0.0069	<0.0073	0.046	<0.0083	45	<4.2	<0.0077
Aroclor-1254	<0.0037	<0.0041	<0.0036	<0.0038	<0.0038	<0.004	<0.0044	<0.0045	<4.1	23	0.043
Aroclor-1260	<0.0084	<0.0094	<0.0083	<0.0087	<0.0086	<0.0091	<0.01	<0.01	<9.3	<5.2	<0.0097
Total Detected PCBs	ND	ND	ND	ND	ND	ND	0.046	ND	45	23	0.043

Only detected constituents are noted. Constituent concentrations are reported as milligrams per kilogram (mg/kg).

100 Exceeds the WDNR's soil to groundwater pathway residual contaminant level.

100 Exceeds the WDNR's non-industrial direct contact residual contaminant level.

100 Exceeds the WDNR's industrial direct contact residual contaminant level.

Exceeds the EPA's self-implementing high-occupancy cleanup level with no site restrictions.

100 Exceeds the Toxic Substance Control Act disposal limit.

< Constituent not detected above noted laboratory detection limit.

B Compound was found in the blank and sample.

B-3 (0-2') Soil Boring B-3 sampled 0 to 2 feet below grade.

EPA United States Environmental Protection Agency.

J Constituent concentration is an approximate value.

ND Total PCBs less than the laboratory detection limit.

NE Criteria not established.

PCBs Polychlorinated biphenyls.

RCL Residual contaminant level.

TSCA Toxic Substance Control Act.



Boring Name	B-4	B	-5	E	8-6	B-7	B-8	B-9	B	-10	B-11
Sample Depth	0-2'	0-2'	6-8'	0-2'	12-14'	0-2'	0-2'	0-2'	0-2'	16-18'	0-2'
Sample Date	6/4/12	6/5/12	6/5/12	6/5/12	6/5/12	6/5/12	6/5/12	6/5/12	6/1/12	6/1/12	6/1/12
PCBs											
Aroclor-1242	<0.0058	<0.0064	<0.0056	0.14	<0.0057	<0.0067	<0.012	<0.0063	<0.0065	<0.0058	<0.13
Aroclor-1248	<0.007	<0.0077	<0.0068	<0.0075	<0.0068	<0.0081	0.4	<0.0075	<0.0078	<0.0069	2.8
Aroclor-1254	0.016 J	<0.0042	<0.0037	0.082	<0.0037	<0.0044	<0.008	0.022	0.011 J	<0.0038	<0.085
Aroclor-1260	<0.0087	<0.0096	<0.0084	<0.0093	<0.0085	<0.01	<0.018	<0.0094	<0.0097	<0.0086	<0.19
Total Detected PCBs	0.016	ND	ND	0.222	ND	ND	0.4	0.022	0.011	ND	2.8

Only detected constituents are noted. Constituent concentrations are reported as milligrams per kilogram (mg/kg).

100 Exceeds the WDNR's soil to groundwater pathway residual contaminant level.

100 Exceeds the WDNR's non-industrial direct contact residual contaminant level.

100 Exceeds the WDNR's industrial direct contact residual contaminant level.

100 Exceeds the EPA's self-implementing high-occupancy cleanup level with no site restrictions.

100 Exceeds the Toxic Substance Control Act disposal limit.

< Constituent not detected above noted laboratory detection limit.

B Compound was found in the blank and sample.

B-3 (0-2') Soil Boring B-3 sampled 0 to 2 feet below grade.

EPA United States Environmental Protection Agency.

J Constituent concentration is an approximate value.

ND Total PCBs less than the laboratory detection limit.

NE Criteria not established.

PCBs Polychlorinated biphenyls.

RCL Residual contaminant level.

TSCA Toxic Substance Control Act.



Boring Name	B-12	B-13	В	8-14	B	-15	В	8-16	B-17	B-18	B-18	B-19
Sample Depth	0-2'	0-2'	0-2'	16-18'	1-3'	6-8'	0-2'	6-8'	0-2'	0-2'	16-18'	0-2'
Sample Date	6/1/12	6/1/12	6/2/12	6/2/12	6/1/12	6/1/12	6/5/12	6/5/12	6/5/12	6/6/12	6/6/12	6/5/12
PCBs												
Aroclor-1242	<0.34	1,200	380	0.069	560	0.028	<1.1	<0.0057	<14	<0.066	<0.0058	<1.2
Aroclor-1248	14	<31	<15	<0.007	<30	<0.0067	15	0.079	140	1.2	<0.0069	15
Aroclor-1254	<0.22	<17	<8.3	<0.0038	<16	<0.0037	<0.74	<0.0038	<8.9	0.98	<0.0038	<0.8
Aroclor-1260	<0.5	<39	<19	<0.0087	<37	<0.0083	<1.7	<0.0086	<20	<0.098	<0.0087	<1.8
Total Detected PCB	s 14	1,200	380	0.069	560	0.028	15	0.079	140	2.18	ND	15

Only detected constituents are noted. Constituent concentrations are reported as milligrams per kilogram (mg/kg).

100 Exceeds the WDNR's soil to groundwater pathway residual contaminant level.

100 Exceeds the WDNR's non-industrial direct contact residual contaminant level.

100 Exceeds the WDNR's industrial direct contact residual contaminant level.

100 Exceeds the EPA's self-implementing high-occupancy cleanup level with no site restrictions.

100 Exceeds the Toxic Substance Control Act disposal limit.

< Constituent not detected above noted laboratory detection limit.

B Compound was found in the blank and sample.

B-3 (0-2') Soil Boring B-3 sampled 0 to 2 feet below grade.

EPA United States Environmental Protection Agency.

J Constituent concentration is an approximate value.

ND Total PCBs less than the laboratory detection limit.

NE Criteria not established.

PCBs Polychlorinated biphenyls.

RCL Residual contaminant level.

TSCA Toxic Substance Control Act.



Boring Name	B-20	B-21	B-22	В	-23	B·	-24	B	-25	В	-26
Sample Depth	0-2'	0-2'	0-2'	0-1'	2-4'	2-4'	10-12'	0-2'	4-6'	2-4'	8-9'
Sample Date	6/4/12	6/4/12	6/4/12	6/21/12	6/21/12	6/18/12	6/18/12	6/12/12	6/12/12	6/8/12	6/8/12
PCBs											
Aroclor-1242	<0.14	<1.3	3.3	<0.039	<0.07	<0.0066	<0.0062	<0.0064	<0.0069	<0.0058	<0.0063
Aroclor-1248	3	23	<0.16	0.82	2.5	<0.008	<0.0075	0.38	<0.0082	<0.007	<0.0076
Aroclor-1254	<0.093	<0.83	<0.086	< 0.026	<0.046	0.11	0.0066 J	<0.0042	<0.0045	0.024	0.022
Aroclor-1260	<0.21	<1.9	<0.2	<0.059	<0.1	<0.0099	<0.0093	<0.0096	<0.01	<0.0087	<0.0094
Total Detected PCB	3	23	3.3	0.82	2.5	0.11	0.0066	0.38	ND	0.024	0.022

Only detected constituents are noted. Constituent concentrations are reported as milligrams per kilogram (mg/kg).

100 Exceeds the WDNR's soil to groundwater pathway residual contaminant level.

100 Exceeds the WDNR's non-industrial direct contact residual contaminant level.

100 Exceeds the WDNR's industrial direct contact residual contaminant level.

Exceeds the EPA's self-implementing high-occupancy cleanup level with no site restrictions.

100 Exceeds the Toxic Substance Control Act disposal limit.

< Constituent not detected above noted laboratory detection limit.

B Compound was found in the blank and sample.

B-3 (0-2') Soil Boring B-3 sampled 0 to 2 feet below grade.

EPA United States Environmental Protection Agency.

J Constituent concentration is an approximate value.

ND Total PCBs less than the laboratory detection limit.

NE Criteria not established.

PCBs Polychlorinated biphenyls.

RCL Residual contaminant level.

TSCA Toxic Substance Control Act.



Boring Name	B-27	B-	28	B-29	B	-30	B-31	B	-32	B-	-33
Sample Depth	0-2'	0-2'	14-16'	0-2'	0-2'	14-16'	0-2'	2-4'	16-18'	2-4'	18-20'
Sample Date	6/8/12	6/7/12	6/7/12	6/7/12	6/19/12	6/19/12	6/7/12	6/19/12	6/19/12	6/8/12	6/8/12
PCBs											
Aroclor-1242	<0.03	<0.0064	<0.0058	<0.0061	<0.0063	<0.0058	<0.064	<0.0063	<0.0056	<0.0054	<0.0058
Aroclor-1248	<0.036	<0.0077	<0.0069	<0.0073	0.091	<0.007	1	0.34	<0.0068	0.02	<0.007
Aroclor-1254	0.62	<0.0042	<0.0038	<0.004	<0.0042	<0.0038	< 0.042	<0.0042	<0.0037	<0.0036	<0.0038
Aroclor-1260	<0.045	<0.0096	<0.0086	<0.0091	<0.0095	<0.0087	<0.096	<0.0095	<0.0084	<0.0081	<0.0087
Total Detected PCBs	0.62	ND	ND	ND	0.091	ND	1	0.34	ND	0.02	ND

Only detected constituents are noted. Constituent concentrations are reported as milligrams per kilogram (mg/kg).

100 Exceeds the WDNR's soil to groundwater pathway residual contaminant level.

100 Exceeds the WDNR's non-industrial direct contact residual contaminant level.

100 Exceeds the WDNR's industrial direct contact residual contaminant level.

Exceeds the EPA's self-implementing high-occupancy cleanup level with no site restrictions.

100 Exceeds the Toxic Substance Control Act disposal limit.

< Constituent not detected above noted laboratory detection limit.

B Compound was found in the blank and sample.

B-3 (0-2') Soil Boring B-3 sampled 0 to 2 feet below grade.

EPA United States Environmental Protection Agency.

J Constituent concentration is an approximate value.

ND Total PCBs less than the laboratory detection limit.

NE Criteria not established.

PCBs Polychlorinated biphenyls.

RCL Residual contaminant level.

TSCA Toxic Substance Control Act.

PCBs Aroclor-1242

Aroclor-1248

Aroclor-1254



< 0.0066

< 0.008

0.03

< 0.0064

< 0.0076

0.0093 J

< 0.0062

0.1

0.11

< 0.0065

<0.0078

< 0.0043

< 0.0058

< 0.0069

< 0.0038

< 0.0086

ND

B-38 0-2'

6/9/12

< 0.0064

< 0.0077

< 0.0042

0.044

0.044

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Boring Name	B-	·34		B-35			B-36		B-	37
Sample Depth	0-1'	2-4'	0-2'	14-16'	8-10'	2-4'	13-15'	9-11'	2-4'	12-14'
Sample Date	6/21/12	6/21/12	6/18/12	6/18/12	6/18/12	6/9/12	6/9/12	6/9/12	6/9/12	6/9/12

< 0.0062

0.17

0.18

Table 1-1. Summary of PCB Soil Analytical Results, Madison-Kipp Corporation, Madison, Wisconsin.

< 0.032

1.1

< 0.021

Aroclor-1260 < 0.0098 < 0.01 < 0.047 < 0.0092 < 0.0092 < 0.0099 < 0.0095 < 0.0093 < 0.0097 **Total Detected PCBs** 0.48 0.27 0.03 0.0093 0.21 ND 0.119 1.1 0.35

< 0.0062

0.15

0.12

Only detected constituents are noted. Constituent concentrations are reported as milligrams per kilogram (mg/kg).

100 Exceeds the WDNR's soil to groundwater pathway residual contaminant level.

100 Exceeds the WDNR's non-industrial direct contact residual contaminant level.

100 Exceeds the WDNR's industrial direct contact residual contaminant level.

100 Exceeds the EPA's self-implementing high-occupancy cleanup level with no site restrictions.

100 Exceeds the Toxic Substance Control Act disposal limit.

<0.0066 <0.0067

0.065

0.054 B

0.23

0.25 B

< Constituent not detected above noted laboratory detection limit.

B Compound was found in the blank and sample.

B-3 (0-2') Soil Boring B-3 sampled 0 to 2 feet below grade.

EPA United States Environmental Protection Agency.

J Constituent concentration is an approximate value.

ND Total PCBs less than the laboratory detection limit.

NE Criteria not established.

PCBs Polychlorinated biphenyls.

RCL Residual contaminant level.

TSCA Toxic Substance Control Act.



Boring Name	B·	-39	B·	-40	B·	-41	B-	-42		B-43		B-44
Sample Depth	0-2'	14-16'	0-2'	16-18'	0-2'	16-18'	0-1'	2-4'	2-4'	10-12'	8-10'	0-2'
Sample Date	6/10/12	6/10/12	6/3/12	6/3/12	6/3/12	6/3/12	6/21/12	6/21/12	6/16/12	6/16/12	6/16/12	6/12/12
PCBs												
Aroclor-1242	<0.0064	<0.0057	530	0.095	0.3	<0.0057	<0.012	<0.0066	<0.0067	<0.0058	<0.0065	<0.13
Aroclor-1248	<0.0077	<0.0069	<31	<0.007	<0.0077	<0.0069	0.32	<0.0079	<0.008	<0.0069	<0.0078	<0.16
Aroclor-1254	0.023	<0.0038	<17	<0.0038	0.094	<0.0038	0.23 B	<0.0043	<0.0044	<0.0038	<0.0043	<0.086
Aroclor-1260	<0.0096	<0.0085	<39	<0.0087	<0.0096	<0.0085	<0.018	<0.0099	<0.01	<0.0086	<0.0097	0.89
Total Detected PCBs	0.023	ND	530	0.095	0.394	ND	0.55	ND	ND	ND	ND	0.89

Only detected constituents are noted. Constituent concentrations are reported as milligrams per kilogram (mg/kg).

100 Exceeds the WDNR's soil to groundwater pathway residual contaminant level.

100 Exceeds the WDNR's non-industrial direct contact residual contaminant level.

100 Exceeds the WDNR's industrial direct contact residual contaminant level.

Exceeds the EPA's self-implementing high-occupancy cleanup level with no site restrictions.

100 Exceeds the Toxic Substance Control Act disposal limit.

< Constituent not detected above noted laboratory detection limit.

B Compound was found in the blank and sample.

B-3 (0-2') Soil Boring B-3 sampled 0 to 2 feet below grade.

EPA United States Environmental Protection Agency.

J Constituent concentration is an approximate value.

ND Total PCBs less than the laboratory detection limit.

NE Criteria not established.

PCBs Polychlorinated biphenyls.

RCL Residual contaminant level.

TSCA Toxic Substance Control Act.



Boring Name	B-	-45	B-46	B	-47	B-48	B-49		B-50			
Sample Depth	0-2'	10-12'	0-2'	0-2'	12-14'	0-2'	0-2'	12-14'	0-1'	2-4'	7-9'	9.5-11.5'
Sample Date	6/16/12	6/16/12	6/10/12	6/10/12	6/10/12	6/10/12	6/3/12	6/3/12	6/21/12	6/21/12	6/21/12	6/21/12
PCBs												
Aroclor-1242	<0.006	<0.0058	<0.0065	<0.0064	<0.0058	<0.0065	<0.031	<0.0055	<0.029	<1.4	<0.0065	<0.0063
Aroclor-1248	<0.0071	<0.007	0.048	<0.0077	<0.0069	<0.0078	<0.037	<0.0065	0.5	13	<0.0077	<0.0076
Aroclor-1254	<0.0039	<0.0038	<0.0043	<0.0042	<0.0038	0.057	0.69	<0.0036	0.47 B	6.9 B	0.017 J B	0.015 J B
Aroclor-1260	<0.0089	<0.0087	<0.0097	<0.0096	<0.0086	<0.0097	<0.046	<0.0082	<0.043	<2.1	<0.0096	<0.0095
Total Detected PCBs	ND	ND	0.048	ND	ND	0.057	0.69	ND	0.97	19.9	0.017	0.015

Only detected constituents are noted. Constituent concentrations are reported as milligrams per kilogram (mg/kg).

100 Exceeds the WDNR's soil to groundwater pathway residual contaminant level.

100 Exceeds the WDNR's non-industrial direct contact residual contaminant level.

100 Exceeds the WDNR's industrial direct contact residual contaminant level.

Exceeds the EPA's self-implementing high-occupancy cleanup level with no site restrictions.

100 Exceeds the Toxic Substance Control Act disposal limit.

< Constituent not detected above noted laboratory detection limit.

B Compound was found in the blank and sample.

B-3 (0-2') Soil Boring B-3 sampled 0 to 2 feet below grade.

EPA United States Environmental Protection Agency.

J Constituent concentration is an approximate value.

ND Total PCBs less than the laboratory detection limit.

NE Criteria not established.

PCBs Polychlorinated biphenyls.

RCL Residual contaminant level.

TSCA Toxic Substance Control Act.



Boring Name	B·	-51	B-	52	В	-53	B-	·54	B-	-55	B-56	
Sample Depth	0-2'	8-10'	0-2'	10-12'	2-4'	14-16'	0-2'	4-6'	0-2'	14-16	0-2'	16-18'
Sample Date	6/12/12	6/12/12	6/12/12	6/12/12	6/18/12	6/18/12	6/12/12	6/12/12	6/15/12	6/15/12	6/2/12	6/2/12
PCBs												
Aroclor-1242	<0.061	<0.0063	0.072	<0.0062	<0.14	<0.0058	<0.0063	<0.0065	<0.0066	<0.0059	0.6	<0.0058
Aroclor-1248	1.9	<0.0076	<0.0073	<0.0075	<0.16	<0.007	<0.0075	<0.0078	<0.0079	<0.0071	<0.038	0.012 J
Aroclor-1254	1.6	0.03	0.064	0.3	5.1	0.0047 J	0.038	<0.0043	<0.0043	<0.0039	0.15	<0.0038
Aroclor-1260	<0.091	<0.0095	<0.0091	<0.0093	<0.2	<0.0087	0.013 J	<0.0097	<0.0098	<0.0089	<0.048	<0.0087
Total Detected PCBs	3.5	0.03	0.136	0.3	5.1	0.0047	0.051	ND	ND	ND	0.75	0.012

Only detected constituents are noted. Constituent concentrations are reported as milligrams per kilogram (mg/kg).

100 Exceeds the WDNR's soil to groundwater pathway residual contaminant level.

100 Exceeds the WDNR's non-industrial direct contact residual contaminant level.

100 Exceeds the WDNR's industrial direct contact residual contaminant level.

Exceeds the EPA's self-implementing high-occupancy cleanup level with no site restrictions.

100 Exceeds the Toxic Substance Control Act disposal limit.

< Constituent not detected above noted laboratory detection limit.

B Compound was found in the blank and sample.

B-3 (0-2') Soil Boring B-3 sampled 0 to 2 feet below grade.

EPA United States Environmental Protection Agency.

J Constituent concentration is an approximate value.

ND Total PCBs less than the laboratory detection limit.

NE Criteria not established.

PCBs Polychlorinated biphenyls.

RCL Residual contaminant level.

TSCA Toxic Substance Control Act.



Boring Name	B-57	B-58	В	-59	B-60	B·	-61	B-62	B·	·63	B-64
Sample Depth	0-2'	0-2'	2-4'	12-14'	0-2'	0-2'	17-19'	0-2'	0-2'	25-27'	0-2'
Sample Date	6/12/12	6/13/12	6/13/12	6/13/12	6/11/12	6/12/12	6/12/12	6/11/12	6/11/12	6/12/12	6/11/12
PCBs											
Aroclor-1242	<0.0066	<0.0062	<0.0068	<0.0059	<0.0061	<0.0042	<0.0058	<0.0063	<0.0056	<0.0057	<0.0061
Aroclor-1248	<0.0079	<0.0074	<0.0081	<0.007	<0.0073	<0.0077	<0.007	<0.0076	<0.0067	<0.0069	<0.0074
Aroclor-1254	0.34	<0.004	<0.0045	<0.0038	<0.004	<0.0042	<0.0038	<0.0041	<0.0036	<0.0038	<0.004
Aroclor-1260	<0.0098	<0.0092	<0.01	<0.0087	<0.0091	<0.0096	<0.0087	<0.0094	<0.0083	<0.0086	<0.0092
Total Detected PCBs	0.34	ND									

Only detected constituents are noted. Constituent concentrations are reported as milligrams per kilogram (mg/kg).

100 Exceeds the WDNR's soil to groundwater pathway residual contaminant level.

100 Exceeds the WDNR's non-industrial direct contact residual contaminant level.

100 Exceeds the WDNR's industrial direct contact residual contaminant level.

100 Exceeds the EPA's self-implementing high-occupancy cleanup level with no site restrictions.

100 Exceeds the Toxic Substance Control Act disposal limit.

< Constituent not detected above noted laboratory detection limit.

B Compound was found in the blank and sample.

B-3 (0-2') Soil Boring B-3 sampled 0 to 2 feet below grade.

EPA United States Environmental Protection Agency.

J Constituent concentration is an approximate value.

ND Total PCBs less than the laboratory detection limit.

NE Criteria not established.

PCBs Polychlorinated biphenyls.

RCL Residual contaminant level.

TSCA Toxic Substance Control Act.



Boring Name	B-	·65	B-66	B-67	B-68	B	-69	B-70	B-	71	B-72
Sample Depth	2-4'	25-27'	2-4'	0-2'	4-6'	0-2'	12-14'	0-2'	0-2'	22-24'	0-2'
Sample Date	6/11/12	6/11/12	6/13/12	6/13/12	6/13/12	6/11/12	6/11/12	6/11/12	6/11/12	6/11/12	6/11/12
PCBs											
Aroclor-1242	<0.0063	<0.0057	<0.0068	<0.029	<0.006	<0.006	<0.0057	<0.0058	<0.0064	<0.0056	<0.0065
Aroclor-1248	<0.0075	<0.0068	0.13	0.77	0.019	0.29	<0.0069	<0.007	<0.0077	<0.0067	<0.0078
Aroclor-1254	<0.0041	<0.0037	<0.0045	<0.019	<0.0039	<0.0039	<0.0038	<0.0038	<0.0042	<0.0037	<0.0043
Aroclor-1260	<0.0094	<0.0085	<0.01	<0.044	<0.0089	0.091	<0.0086	<0.0087	<0.0096	<0.0084	<0.0097
Total Detected PCBs	ND	ND	0.13	0.77	0.019	0.381	ND	ND	ND	ND	ND

Only detected constituents are noted. Constituent concentrations are reported as milligrams per kilogram (mg/kg).

100 Exceeds the WDNR's soil to groundwater pathway residual contaminant level.

100 Exceeds the WDNR's non-industrial direct contact residual contaminant level.

100 Exceeds the WDNR's industrial direct contact residual contaminant level.

Exceeds the EPA's self-implementing high-occupancy cleanup level with no site restrictions.

100 Exceeds the Toxic Substance Control Act disposal limit.

< Constituent not detected above noted laboratory detection limit.

B Compound was found in the blank and sample.

B-3 (0-2') Soil Boring B-3 sampled 0 to 2 feet below grade.

EPA United States Environmental Protection Agency.

J Constituent concentration is an approximate value.

ND Total PCBs less than the laboratory detection limit.

NE Criteria not established.

PCBs Polychlorinated biphenyls.

RCL Residual contaminant level.

TSCA Toxic Substance Control Act.



Boring Name	B-	-73	B-74	B	-75	B-76	B-77	В	-78	B-79	B·	·80
Sample Depth	2-4'	20-22'	0-2'	0-2'	20-22'	2-4'	2-4'	0-2'	26-28'	0-2	2-4'	28-30'
Sample Date	6/14/12	6/14/12	6/13/12	6/14/12	6/14/12	6/13/12	6/13/12	6/15/12	6/15/12	6/15/12	6/14/12	6/14/12
PCBs												
Aroclor-1242	<0.0058	<0.0058	<0.0059	<0.0061	<0.0056	<0.0063	<0.0064	<0.0061	<0.0057	<0.0064	<0.0061	< 0.0056
Aroclor-1248	<0.0069	<0.007	<0.0071	<0.0073	<0.0067	<0.0075	<0.0076	<0.0073	<0.0068	<0.0076	<0.0074	<0.0067
Aroclor-1254	<0.0038	<0.0038	0.067	<0.004	<0.0037	<0.0041	<0.0042	<0.004	<0.0037	<0.0042	<0.004	<0.0037
Aroclor-1260	<0.0086	<0.0087	<0.0088	0.019	<0.0083	<0.0093	<0.0095	<0.0092	<0.0085	<0.0095	<0.0092	<0.0083
Total Detected PCBs	ND	ND	0.067	0.019	ND							

Only detected constituents are noted. Constituent concentrations are reported as milligrams per kilogram (mg/kg).

100 Exceeds the WDNR's soil to groundwater pathway residual contaminant level.

100 Exceeds the WDNR's non-industrial direct contact residual contaminant level.

100 Exceeds the WDNR's industrial direct contact residual contaminant level.

100 Exceeds the EPA's self-implementing high-occupancy cleanup level with no site restrictions.

100 Exceeds the Toxic Substance Control Act disposal limit.

< Constituent not detected above noted laboratory detection limit.

B Compound was found in the blank and sample.

B-3 (0-2') Soil Boring B-3 sampled 0 to 2 feet below grade.

EPA United States Environmental Protection Agency.

J Constituent concentration is an approximate value.

ND Total PCBs less than the laboratory detection limit.

NE Criteria not established.

PCBs Polychlorinated biphenyls.

RCL Residual contaminant level.

TSCA Toxic Substance Control Act.



Boring Name	B-81	B-	-82	B-	·83	B-84
Sample Depth	2-4'	2-4'	30-32'	0-1'	2-4'	2-4'
Sample Date	6/13/12	6/15/12	6/15/12	6/21/12	6/21/12	6/21/12
PCBs						
Aroclor-1242	<0.0062	<0.006	<0.0059	<0.0056	<0.0068	<0.063
Aroclor-1248	<0.0074	<0.0072	<0.0071	0.059	<0.0081	1.7
Aroclor-1254	<0.0041	<0.0039	<0.0039	0.043 B	<0.0045	<0.042
Aroclor-1260	<0.0092	<0.0089	<0.0088	<0.0084	<0.01	<0.095
Total Detected PCBs	ND	ND	ND	0.102	ND	1.7

Only detected constituents are noted. Constituent concentrations are reported as milligrams per kilogram (mg/kg).

100 Exceeds the WDNR's soil to groundwater pathway residual contaminant level.

100 Exceeds the WDNR's non-industrial direct contact residual contaminant level.

100 Exceeds the WDNR's industrial direct contact residual contaminant level.

Exceeds the EPA's self-implementing high-occupancy cleanup level with no site restrictions.

100 Exceeds the Toxic Substance Control Act disposal limit.

< Constituent not detected above noted laboratory detection limit.

B Compound was found in the blank and sample.

B-3 (0-2') Soil Boring B-3 sampled 0 to 2 feet below grade.

EPA United States Environmental Protection Agency.

J Constituent concentration is an approximate value.

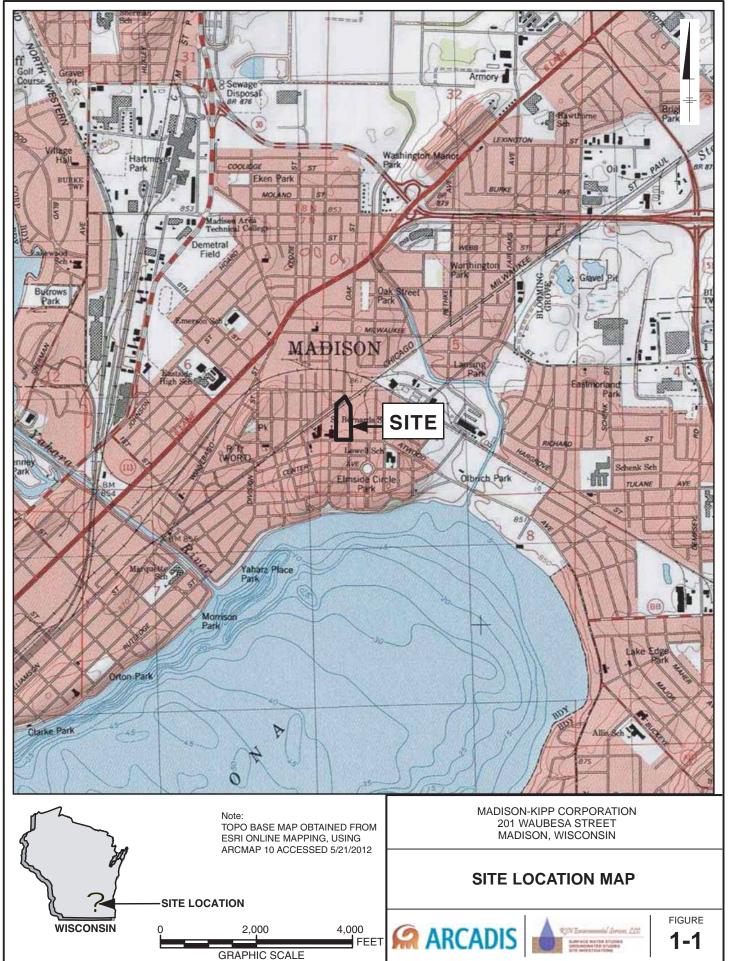
ND Total PCBs less than the laboratory detection limit.

NE Criteria not established.

PCBs Polychlorinated biphenyls.

RCL Residual contaminant level.

TSCA Toxic Substance Control Act.



23JUL12/ENVIRONMENT/CK/LMB MADISONKPP/W1001283/GRAPHICS/SITE LOCATION MAP.AI



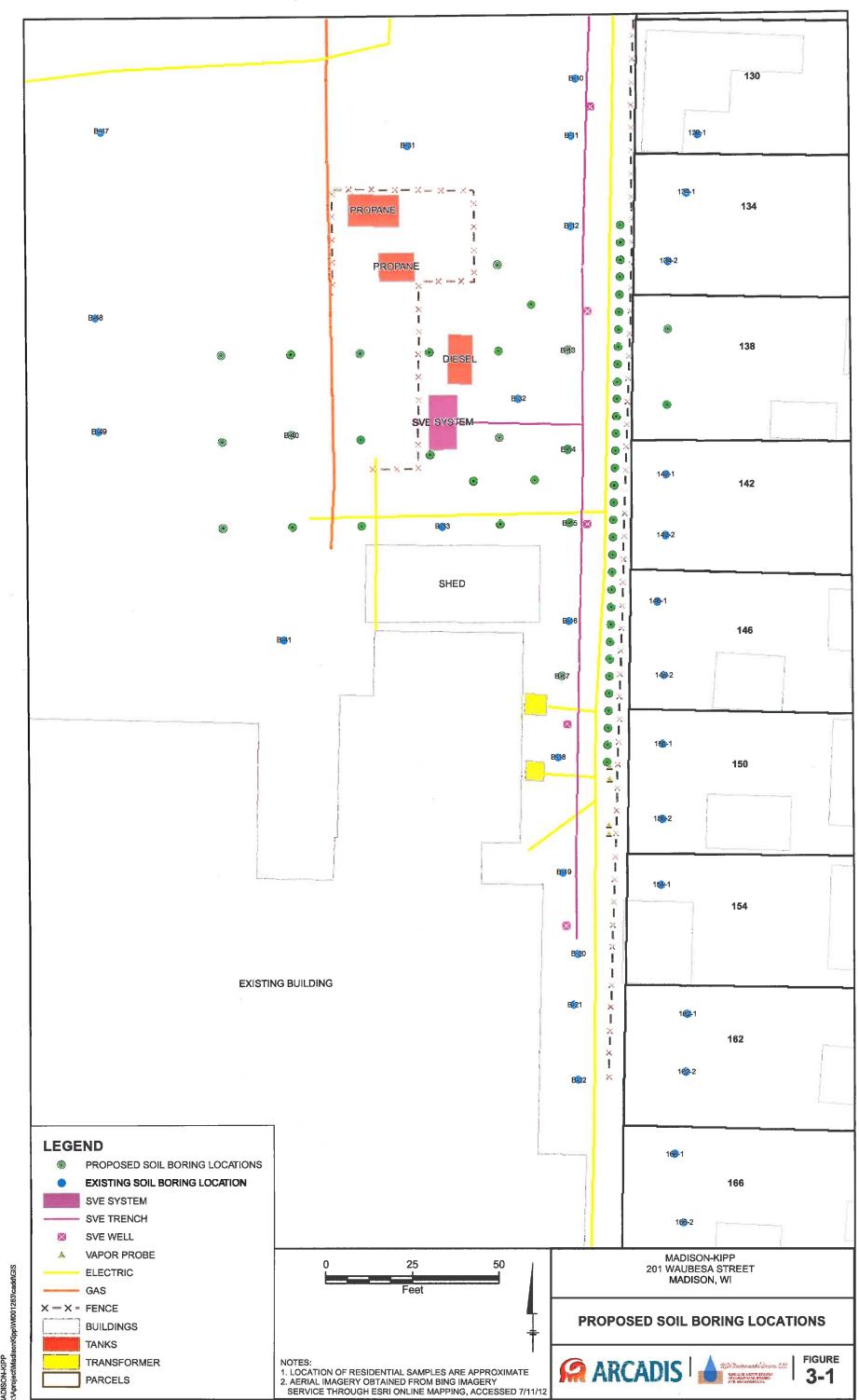
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CITY: MPLS DIV/GROUP: IM DB: MG LD: CK MADISON-K(PP G:Mproject/Madison/KippI/MD01283)cadd/GIS



CITY: MPLS DIV/GROUP: IM DB: MG LD: CK MADISON-KIPP G: AptrojectMadisonKipp/W001283/caddKGIS



CITY: MPLS DIV/GROUP: IM DB: MG LD: CK MADISON-KIPP G:Aproject/MadisonKipp/W001283/cadd/GIS



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.

Work Plan for Supplemental Polychlorinated Biphenyl Investigation **Madison-Kipp Corporation** 201 Waubesa Street Madison, Wisconsin

I, Jlance L Tras Chereby 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. Adam Control of the second sec

ash Project Manager 34959 Signature, title and P.E. number



I, TONI SCHOEN, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), 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."

1001, Hydrosedosist

Signature and title

7-23-12

Date