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ENVIRONMENT

Subject:

Building Subsurface Investigation Summary, Madison-Kipp Corporation, 201 Waubesa Street, Madison, Wisconsin. Facility ID No. 113125320, BRRTS No. 02-13-001569

Dear Mr. Schmoller:

On behalf of Madison-Kipp Corporation, a *Site Investigation Work Plan* (Work Plan) was submitted to the Wisconsin Department of Natural Resources (WDNR) on May 31, 2012, for approval to complete site investigation activities at the Madison-Kipp facility located at 201 Waubesa Street (Site). The WDNR provided a *Conditional Approval* letter dated June 25, 2012, for this Work Plan. On September 28, 2012, a *Site Investigation Work Plan Addendum, Building Subsurface Investigation* (Addendum) was submitted to the WDNR to present the proposed investigation activities to fill data gaps concerning potential source areas beneath the on-Site building floor. The Addendum was approved by WDNR in a letter dated October 17, 2012.

As requested by the WDNR, this letter report provides a summary of the investigation activities completed pursuant to the Addendum and results. A complete summary of procedures and results as well as copies of all boring logs, borehole abandonment forms, construction logs, and analytical reports will be submitted as part of the comprehensive site investigation report following completion of all site investigation activities.

Investigation Activities

The following site investigation activities were completed in accordance with the approved Addendum:

- Prepared a site-specific health and safety plan (HSP).
- Conducted utility clearing activities.

Date:

February 14, 2013

Contact:

Jennine Trask

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414.276.7742

Email:

jennine.trask@arcadisus.com

Our ref:

WI001283.0007

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- Advanced 41 soil borings using a hand cart direct push rig.
- Collected and submitted a total of 68 soil samples for laboratory analysis of volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), Resource Conservation Recovery Act (RCRA) metals, and total cyanide.
- Advanced and sampled four additional soil borings using a mini-sonic drill rig for installation of two monitoring wells and two piezometers.
- Collected and submitted groundwater samples from the four new wells for laboratory analysis of VOCs, PCBs, PAHs, and dissolved RCRA metals.
- Surveyed soil boring and monitoring well locations.
- Managed the investigative-derived waste.

Health and Safety

Prior to beginning the investigation, the Site HSP was updated to address the planned field activities. Utility marking arrangements were made through Digger's Hotline (the State of Wisconsin Public Utility clearance service), a private utility locater, and discussions with property owners.

Soil Boring Advancement

Advancement and sampling of the soil borings was initiated on October 15, 2012. The boring locations were selected following a site walk and based on employee knowledge of historic Site operations. The soil boring locations are presented on Figure 1.

Forty one of the soil borings were advanced using a direct-push hand-cart Geoprobe unit. Soil samples were 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. Once the sampler reached the desired depth, the sampler was opened by removing a stop pin in the sampler. The sampler was driven an additional 4 feet to push a soil sample into the sampler, preserving the sample in a 1.5-inch by 4-foot acetate liner inside the sampler. The acetate sleeves allowed for continuous collection of soil samples from each boring.

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Companion sampling was completed at the soil boring locations by collecting two aliquots of soil from each sampling interval and placing each aliquot into a separate resealable plastic bag. One of the companion samples from each interval was used for field screening for the presence of total ionizable VOC vapors with a calibrated photoionization detector (PID). The screening samples will be warmed and the headspace PID reading of the soil taken by inserting the probe end of the PID into the plastic bag through the seal. The screened samples were appropriately discarded; the unscreened companion samples were used for preparing samples for analytical testing.

An ARCADIS scientist was on Site to oversee the drilling activities and visually screen and describe the condition and engineering properties of the soil. Soil descriptions and field screening PID results were recorded on Soil Boring Logs (WDNR Form 4400-122) and Borehole Abandonment Forms (WDNR Form 3300-005) will be prepared in accordance with WDNR requirements and submitted as part of the comprehensive site investigation report.

A total of 41 soil borings were completed with 22 soil borings advanced to approximately 8 feet below ground surface (ft bgs) and 19 soil borings advanced to approximately 16 ft bgs. The soil boring locations are shown on Figure 1. Below is a summary of the sampling plan.

- Two soil samples were collected per boring advanced to 16 feet bgs. Soil samples
 were collected from the 2 foot interval with highest PID reading from 0 to 4 ft bgs
 and the 2 foot interval with the highest PID from greater than 4 ft bgs or the 2 foot
 interval at the bottom of the borehole if PID readings were below background.
- One soil sample was collected per boring advanced to 8 feet bgs. The sample was collected at the 2 foot interval with the highest PID reading.
- 60 soil samples were submitted for laboratory analysis of VOCs, PCBs, PAHs, RCRA metals, and total cyanide.

Well Installation and Sampling

Two monitoring wells and two piezometers were installed inside the building to evaluate groundwater quality. The locations of the wells were determined based on the soil analytical results from the 41 interior soil borings completed as part of the Addendum. Approval for the location and design of the monitoring wells was provided via email correspondence from you on December 11, 2012.

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The boreholes were advanced using a mini-sonic drill rig due to the physical constraints within the building. Two locations were advanced to approximately 35 ft bgs, and 2 locations advanced to approximately 50 ft bgs. The location of the monitoring wells and piezometers are shown on Figure 1. Below is a summary of the installation and sampling activities.

- Soil samples were collected at 2 foot intervals from the top of the water table to the
 top of bedrock. The soils were field screened for the presence of volatile
 compounds and the characteristics were logged. Once bedrock was encountered,
 an 8-inch temporary casing was set approximately 5 feet into competent bedrock.
 The bedrock was blind drilled using sonic drilling methods.
- Soil sampling included the collection of two soil samples per boring for laboratory analysis. Soil samples were collected from the 2 foot interval with highest PID reading from 0 to 4 ft bgs and the 2 foot interval with the highest PID from greater than 4 ft bgs and above the water table or the 2 foot interval above the water table if PID readings were below background. The soil samples were submitted for laboratory analysis of VOCs, PAHs, PCBs, RCRA metals, and total cyanide.
- Each well consists of a single screen and was constructed and developed in accordance with NR141 Wis. Adm. Code. Ten foot, 0.010-inch, stainless steel screens and Schedule 80 polyvinyl chloride (PVC) risers were used for each of the two monitoring wells. The monitoring wells are screened from approximately 25 to 35 ft bgs (MW-22S and MW-23S). Five foot, 0.010-inch stainless steel screens and Schedule 80 PVC risers were used for the two piezometers. The piezometers are screened from approximately 45 to 50 ft bgs (MW-22D and MW-23D). The wells were completed at the surface with a flush-mount well compartment set in concrete.
- The new wells were developed using air lifting techniques to minimize sediment, drill cuttings and drilling fluids in the water.
- Groundwater samples were collected from the new wells using a combination of bailer and low-flow sampling techniques. Low-flow sampling techniques are used to collect representative water samples in the formation adjacent to the well screen while 1) reducing water turbulence which may unnecessarily volatilize contaminants; 2) reduce turbidity levels that may bias analytical results high; and 3) reduce the volume of water requiring management.

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- Low-flow sampling was attempted at shallow Monitoring Wells MW-22S and MW-23S; however, the wells went dry. Therefore, these wells were purged using a bailer, allowed to recharge, and then sampled with a new, dedicated bailer.
- Monitoring Wells MW-22D and MW-23D were sampled by low-flow sampling techniques. Low-flow sampling consists of purging the groundwater at a low-flow rate (less than 150 milliliters per minute) until a set of field parameters (dissolved oxygen, temperature, pH, conductivity, oxidation-reduction potential, and turbidity) stabilize to within 10 percent for three consecutive readings. Purging was completed using a submersible pump with dedicated polyethylene tubing, depending on the depth to water. Field parameters were measured using a calibrated multi-parameter meter. Once the field parameters stabilized, the water samples were collected. Nitrile gloves were worn by the sampling personnel and discarded between each sampling location and following any activity that may have produce cross-contamination.
- The groundwater samples were collected and submitted for laboratory analysis of VOCs, PAHs, PCBs, and dissolved RCRA metals. All containers and preservatives were obtained directly from the analytical laboratories. Immediately after collection, the sample containers were placed in a cooler with ice until shipment to the laboratory was arranged. Standard chain-of-custody procedures were followed throughout sample collection, storage, and shipment.

Surveying

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

Investigative-Derived Waste

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

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Evaluation of Results

The following sections present a summary of the geology/hydrogeology, soil and groundwater regulatory criteria, and analytical results.

Surface Soil Geologic and Hydrogeologic Conditions

The geology under the building consisted of 6 to 8 inches of concrete overlaying 4 to 8 feet of dark yellowish brown (10YR 4/4/ 10YR 4/6) clay with little to some silt, trace fine sand or gravel. The clay was generally stiff with low to moderate plasticity. Underlying the clay is brownish yellow (10YR 6/6), very fine to fine sand with trace to little gravel. Sandstone bedrock was encountered at approximately 36 feet. Groundwater was encountered at approximately 29.5 feet.

Soil Regulatory Criteria

The WDNR Remediation and Redevelopment Program has prepared a spreadsheet with soil to groundwater residual contaminant level (RCL), non-industrial and industrial direct contact RCLs for chemicals, calculated using the United States Environmental Protection Agency (U.S. EPA) Regional Screening Table web calculator. The RCLs for VOCs, PAHs, PCBs, RCRA metals, and total cyanide are summarized in Table 1.

In addition to the WDNR RCLs, Title 40 Code of Federal Regulations §761.61 provides cleanup and disposal options for PCB remediation waste. Soil PCB analytical results were compared to the bulk remediation waste cleanup level for high occupancy cleanup level of less than or equal to 1 milligram per kilograms (mg/kg) and a total PCB concentration greater than or equal to 50 mg/kg to determine soil disposal options. These criteria are summarized in Table 1.

Soil Analytical Results

A total of 45 soil borings were advanced and sampled beneath the building floor (41 using the direct-push rig and 4 using the mini-sonic rig). A total of 64 soil samples were collected and submitted for laboratory analysis of VOCs, PAHs, PCBs, RCRA metals, and total cyanide. Four soil samples (from the well installation activities) were submitted for analysis for VOCs and PCBs. A summary of the soil analytical results are presented in Table 1.

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VOCs

Petroleum and chlorinated VOCs were detected in the 37 of the 64 soil samples analyzed for VOCs. Concentrations of petroleum VOCs were reported for 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, ethylbenzene, isopropylbenzene, naphthalene, n-butylbenzene, n-propylbenzene, p-isopropyltoluene, secbutylbenzene, toluene, and total xylenes. Concentrations of chlorinated VOCs were reported for 1,2,4-trichlorobenzene, cis-1,2-dichloroethene, 1,2-dichlorobenzene, methylene chloride, tetrachloroethene (PCE), trichloroethene (TCE), and vinyl chloride. No VOCs were detected above their respective industrial direct contact RCL.

PAHs

PAHs were detected in 16 of the 60 soil samples analyzed for PAHs. Benzo(a)pyrene and dibenz(a,h)anthracene were the only PAHs detected above the industrial direct contact RCLs (B-134, B-165, B-166).

PCBs

PCBs were detected in 48 of the 64 soil samples analyzed for PCBs. Seventeen of the samples collected were above the industrial direct contact RCL of 0.744 mg/kg, and 15 samples were detected above the U.S. EPA high occupancy cleanup level of 1 mg/kg. The highest concentrations of PCBs were detected from samples collected from soil borings B-148 (20,000 mg/kg – 5.8 to 7.8 ft bgs), B-149 (10,000 mg/kg – 0.7 to 0.7 ft bgs and 0.7 ft bgs and 0.7 ft bgs, B-158 (1,900 mg/kg – 0.7 to 0.7 ft bgs, and B-160 (200 mg/kg – 0.7 ft bgs).

Based on the concentrations of PCBs in two locations (B-148 through B-150, and B-158/B-160), one monitoring well and one piezometer were installed in each location as referenced above. As part of this installation, additional soil sampling was completed to vertically define the presence of PCBs. A total of four soil samples were collected from the soil borings at MW-22 and MW-23; two samples were collected from a depth of 27 to 29 ft bgs and two samples were collected from a depth of 34 to 36 ft bgs (saturated samples). The two soil samples collected from MW-22 contained PCBs; however, none of the results were above the industrial direct contact RCL. The soils samples collected from MW-23 did not contain PCBs.

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RCRA Metals

RCRA metals include arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver. Arsenic was detected at 50 of the 60 soil samples analyzed for RCRA metals above the industrial direct contact RCL. Mercury was detected in one sample (B-134) above the industrial direct contact RCL.

Based on the widespread distribution of arsenic in the soil beneath the floor slab (and previously reported on and off site) within such a narrow range of concentrations (all concentrations less than or equal to 11 mg/kg), the presence of arsenic appears to represent naturally occurring background conditions.

Mercury was detected at Soil Boring B-134 at a concentration of 9 mg/kg compared with the industrial direct contact RCL of 3.13 mg/kg. The presence of mercury appears to be confined to this one location.

Total Cyanide

Total cyanide was detected in 8 of the 60 soil samples analyzed for total cyanide. All total cyanide analytical results were reported below the industrial direct contact RCL.

Groundwater Analytical Results

Two monitoring wells and two piezometers were installed beneath the building to evaluate groundwater quality. Each of the four wells was sampled in January 2013. The groundwater samples were collected and submitted for laboratory analysis of VOCs, PAHs, PCBs, and dissolved RCRA metals. A summary of the groundwater results is presented in Table 2.

VOCs

VOCs were detected in each of the 4 wells with PCE above the NR 140 Wis. Adm. Code Enforcement Standard (ES) in Monitoring Wells MW-22S, MW-22D, MW-23S, and MW-23D and TCE above the ES in Monitoring Well MW-22D. The concentrations of PCE at MW-23D, and PCE and TCE at MW-22D, are consistent or less than the concentrations present in the on-site wells with screens set at similar elevations (MW-2D, MW-3D).

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PAHs

Naphthalene was the only PAH detected in the groundwater samples. The naphthalene was detected in Monitoring Well MW-22S at a concentration of 0.31 micrograms per liter (μ g/L), which is below the NR 140 Wis. Adm. Code Preventive Action Limit (PAL) of 10 μ g/L.

PCBs

PCBs were detected in Monitoring Well MW-22S (12 μ g/L), MW-22D (2.4 μ g/L) and MW-23S (0.24 μ g/L) above the ES of 0.03 μ g/L. Detectable concentrations of PCBs at the site appear to be limited to beneath the building. A total of 58 well depths/locations were sampled as part of a site-wide sampling event in January 2013. Each of the wells was sampled for PCBs as part of the WDNR-approved scope of work. With the exception of MW-22S, MW-22D, and MW-23S, none of the other wells contained detections of PCBs above laboratory reporting limits. This data will be presented as part of the comprehensive site investigation report. Also, as part of the comprehensive site investigation report, a groundwater monitoring program will be proposed, which will include the collection of additional PCB data at select wells to confirm the presence of PCBs in groundwater.

RCRA Metals

Arsenic, barium, chromium, lead and selenium were detected in 1 or more of the monitoring wells installed beneath the building. Arsenic was detected above the PAL at 1.2 μ g/L (PAL 1 μ g/L) at monitoring Well MW-22S. The remaining detections were reported below the PAL.

Transport beneath the Building

Based on the results presented herein, additional evaluation was completed to determine the potential routes for transport of contaminants beneath the building. This evaluation included information obtained from interviews of former MKC employees. The highest concentrations of PCBs appeared in soil samples from B-148 through B-150, and MW-22. Historically there was a central piping trench that ran from south to north through the center of the facility. These soil borings are located adjacent to the former trench. This concrete-lined trench was reportedly constructed to house piping for natural gas, vacuum, hydraulic oil, and cooling water for the die-casting machines. The trench was approximately 4 ft wide, 2 to 4 ft deep,

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and was covered with steel plates. The trench reportedly did not connect to any sewer or drain systems in the facility.

Wastes that could have entered the piping trench included spilled hydraulic oils, PCE, water, and other liquid wastes. These hydraulic oils may have contained PCBs. Wastes from the piping trench were periodically removed and transferred to a waste container in the facility prior to removal by a waste hauler for off-site disposal. At some point prior to 1990, liquid wastes were collected and removed from the base of the trench and the trench was backfilled with clean sand and capped with concrete, abandoning the trench and former piping in place.

There were no floor drains in the area of the die-casting machines. Beneath some machines, there was a self-contained, concrete, shallow spill containment and collection feature. These features were not connected to the piping trench. Wastes from the spill containment and collection features were periodically removed and transferred to a waste container in the facility prior to removal by a waste hauler for off-site disposal.

A review of the utilities near the site identified that sanitary sewers along South Marquette Street and Waubesa Street are oriented north-south and do not provide a pathway from the Madison-Kipp facility.

Studies by the U.S. EPA¹ have demonstrated that PCBs are "insoluble in water," strongly adsorb to soils, and generally will not leach significantly in aqueous soil systems. As a result, PCBs are not expected to dissolve or migrate in groundwater. Based on the results of this investigation, the presence of elevated PCB concentrations in soil beneath the building is defined, and there does not appear to be a mechanism for potential transport from beneath the building. As stated above, routine groundwater monitoring will be implemented to document PCB concentrations in the groundwater and a cap maintenance plan will be developed and implemented.

¹ U.S. EPA 2012. Technical Fact Sheet on Polychlorinated Biphenyls (PCBs). National Primary Drinking Water Regulations. Available online at:

http://www.epa.gov/safewater/pdfs/factsheets/soc/tech/pcbs.pdf

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Summary of Findings

The following is a summary of the investigation results.

- Beneath the building 41 soil borings and four monitoring wells were advanced and sampled.
- PAHs, PCBs, and mercury were detected beneath the building above the industrial direct contact RCL and the extent of soils exceeding the industrial direct contact RCL has been defined. The soil is located beneath 6 to 8 inches of concrete and is therefore, not a direct contact issue. As part of the overall site plan, an Engineered Barrier (Cap) Maintenance Plan and Soil Management Plan will be developed as described in the *Final Revised Work Plan for Polychlorinated Biphenyl Recommended Activities*, dated December 4, 2012, and incorporated into the site operation and maintenance.
- VOCs and PCBs were detected at one or more of the new monitoring wells installed beneath the building above the respective ES. The concentrations of PCE and TCE are consistent or less than the concentrations present in the on-site wells with screens set at similar elevations. PCBs have only been detected in the interior monitoring wells at the site. As part of the Site Investigation report, a groundwater monitoring program will be proposed, which will include the collection of additional VOC data as well as PCB data at select wells to confirm the presence of PCBs in groundwater.

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Closing

If you have any questions regarding this letter, please contact me at (414) 276-7742.

Sincerely,

ARCADIS U.S., Inc.

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- Drask

Chris Kubacki, PE Senior Engineer

Jennine Trask, PE Project Manager

Copies:

David Crass – Michael Best Mark Meunier – Madison Kipp Robert J. Nauta – RJN Environmental Services LLC (electronic) Steve Tinker – Wisconsin Department of Justice (electronic) Table 1. Summary of Soil Analytical Results, Building Subsurface Investigation, Madison-Kipp Corporation, 201 Waubesa Street, Madison, Wisconsin.

Well/Boring		Non-Industrial	Industrial	EPA High	TSCA	B-134	B-	135	B-136
Sample Depth	Groundwater	Direct	Direct	Occupancy	Disposal	0-2'	0-1.8'	8-9.4'	2-4'
Sample Date	RCLs	Contact RCL	Contact RCL	Cleanup Level	Limit	10/25/12	10/15/12	10/15/12	10/25/12
VOCs									
1,2,4-Trichlorobenzene	0.408	22.1	98.7	NE	NE	< 0.039	< 0.021	<0.088	< 0.75
1,2,4-Trimethylbenzene	NE	89.8	219	NE	NE	< 0.022	0.032 J	1.2	50
1,2-Dichlorobenzene	1.168	376	376	NE	NE	< 0.021	< 0.011	<0.048	< 0.41
1,3,5-Trimethylbenzene	NE	182	182	NE	NE	< 0.021	< 0.011	1	19
cis-1,2-Dichloroethene	0.0412	156	2,040	NE	NE	<u>1</u>	<u>0.55</u>	< 0.029	< 0.24
Ethylbenzene	1.57	7.47	37	NE	NE	< 0.013	0.017	< 0.029	< 0.25
Isopropylbenzene	NE	268	268	NE	NE	< 0.026	< 0.014	<0.058	< 0.5
Naphthalene	0.6587	5.15	26	NE	NE	< 0.051	< 0.027	<0.11	<u>6.5</u>
n-Butylbenzene	NE	108	108	NE	NE	< 0.013	< 0.0071	< 0.03	< 0.26
N-Propylbenzene	NE	264	264	NE	NE	<0.018	<0.0096 *	<0.041 *	2.1 J
p-Isopropyltoluene	NE	162	162	NE	NE	< 0.019	< 0.01	< 0.043	8.7
sec-Butylbenzene	NE	145	145	NE	NE	< 0.016	< 0.0085	< 0.036	4.2
Tetrachloroethene	0.00454	30.7	153	NE	NE	<u> 26</u>	<u>19</u>	< 0.039	< 0.33
Toluene	1.1072	818	818	NE	NE	< 0.012	< 0.0063	< 0.027	< 0.23
Trichloroethene	0.00358	0.644	8.81	NE	NE	<u>1.5</u>	<u>1.8</u>	< 0.043	< 0.37
Vinyl chloride	0.000138	0.0671	2.03	NE	NE	< 0.011	< 0.0057	< 0.024	< 0.21
Xylenes, Total	3.94	258	258	NE	NE	<0.0071	0.048	<0.016	<0.14
PAHs									
1-Methylnaphthalene	NE	NE	NE	NE	NE	0.041	0.037	0.12	0.61
2-Methylnaphthalene	NE	229	368	NE	NE	0.055 J	< 0.045	0.068 J	0.96 J
Acenaphthene	NE	3,440	33,000	NE	NE	< 0.012	< 0.01	0.013 J	< 0.12
Acenaphthylene	NE	487	487	NE	NE	0.012 J	<0.008 *	<0.0087 *	< 0.095
Anthracene	196.74	17,200	100,000	NE	NE	0.089	< 0.0082	< 0.0089	< 0.097
Benzo(a)anthracene	NE	0.148	2.11	NE	NE	0.5	< 0.0073	0.027 J	< 0.086
Benzo(a)pyrene	0.470	0.0148	0.211	NE	NE	0.67	< 0.0063	0.016 J	< 0.075
Benzo(b)fluoranthene	0.480	0.148	2.11	NE	NE	1.1	< 0.0067	0.021 J	< 0.08
Benzo(g,h,i)perylene	NE	NE	NE	NE	NE	0.88	< 0.012	0.024 J	< 0.14
Benzo(k)fluoranthene	NE	1.48	21.1	NE	NE	0.51	< 0.0083	0.021 J	< 0.098
Chrysene	0.1451	14.8	211	NE	NE	0.67	< 0.0078	0.03 J	< 0.093
Dibenz(a,h)anthracene	NE	0.0148	0.211	NE	NE	0.24	< 0.0097	< 0.011	< 0.12

Table 1. Summary of Soil Analytical Results, Building Subsurface Investigation, Madison-Kipp Corporation, 201 Waubesa Street, Madison, Wisconsin.

Well/Boring		Non-Industrial	Industrial	EPA High	TSCA	B-134	B-	135	B-136
Sample Depth	Groundwater	Direct	Direct	Occupancy	Disposal	0-2'	0-1.8'	8-9.4'	2-4'
Sample Date	RCLs	Contact RCL	Contact RCL	Cleanup Level	Limit	10/25/12	10/15/12	10/15/12	10/25/12
PAHs (continued)									
Fluoranthene	88.82	2,290	22,000	NE	NE	0.57	< 0.014	0.037	< 0.17
Fluorene	14.81	2,290	22,000	NE	NE	0.016 J	< 0.0079	<0.0086	< 0.094
Indeno(1,2,3-cd)pyrene	NE	0.148	2.11	NE	NE	0.65	< 0.012	0.017 J	< 0.14
Naphthalene	0.6587	5.15	26	NE	NE	0.032 J	< 0.0067	0.12	<u>12</u>
Phenanthrene	NE	115	115	NE	NE	0.25	0.033 J	0.051	< 0.17
Pyrene	54.47	1,720	16,500	NE	NE	0.67	<0.013	0.029 J	<0.15
Metals and Cyanide									
Arsenic	0.584	0.39	1.59	NE	NE	<u>7.6</u>	<u>1.5</u>	4.4	6.4
Barium	164.8	15,300	100,000	NE	NE	130	14 B	75 B	110
Cadmium	0.752	70.2	803	NE	NE	0.61	0.17 J	0.29	< 0.062
Chromium	360,000	NE	NE	NE	NE	16	3.7	8.2	19
Cyanide, Total	4.04	46.9	613	NE	NE	0.53 J	<0.18	< 0.13	< 0.2
Lead	27	400	800	NE	NE	<u>140</u>	3.4	18	11
Mercury	0.208	3.13	3.13	NE	NE	9	0.15	0.058	< 0.007
Selenium	0.52	391	5,110	NE	NE	0.73 J	< 0.3	< 0.33	<u>1.1 J</u>
Silver	0.8497	391	5,110	NE	NE	<u>0.91</u>	< 0.063	<0.069	<0.075
PCBs									
Aroclor-1242	NE	0.222	0.744	NE	NE	0.11	< 0.0059	< 0.006	56
Arcolor-1248	NE	0.222	0.744	NE	NE	< 0.0079	< 0.0071	< 0.0072	<1.6
Aroclor-1254	NE	0.222	0.744	NE	NE	<0.0043	<0.0039	<0.0039	<0.89
Total Detected PCBs	NE	NE	NE	1	50	0.11	ND	ND	56

Table 1. Summary of Soil Analytical Results, Building Subsurface Investigation, Madison-Kipp Corporation, 201 Waubesa Street, Madison, Wisconsin.

Well/Boring	B-′	137	B-138	B-	139	B-140	B-141	B-	142	B-143
Sample Depth	2-4'	4-6'	1.8-3.1'	0.9-2.1'	8-9.7'	2-4'	5.8-7.8'	0.6-2.6'	13.3-15.3'	0.5-1.9'
Sample Date	10/16/12	10/16/12	10/16/12	10/16/12	10/16/12	10/16/12	10/16/12	10/16/12	10/16/12	10/17/12
VOCs										
1,2,4-Trichlorobenzene	< 0.023	< 0.022	< 0.024	< 0.024	< 0.02	< 0.023	< 0.023	< 0.023	< 0.021	< 0.023
1,2,4-Trimethylbenzene	< 0.013	< 0.012	< 0.013	< 0.014	< 0.011	< 0.013	< 0.013	< 0.013	< 0.011	< 0.013
1,2-Dichlorobenzene	< 0.013	< 0.012	< 0.013	< 0.013	< 0.011	< 0.013	< 0.012	< 0.012	< 0.011	< 0.012
1,3,5-Trimethylbenzene	< 0.013	< 0.012	< 0.013	< 0.013	< 0.011	< 0.013	< 0.012	< 0.012	<0.011	< 0.012
cis-1,2-Dichloroethene	< 0.0075	< 0.0072	< 0.0078	< 0.0079	< 0.0066	< 0.0076	< 0.0074	< 0.0074	< 0.0067	< 0.0073
Ethylbenzene	< 0.0077	< 0.0074	<0.008	< 0.0081	< 0.0067	<0.0078	< 0.0076	< 0.0076	<0.0068	< 0.0075
Isopropylbenzene	< 0.015	< 0.015	< 0.016	< 0.016	< 0.013	< 0.016	< 0.015	< 0.015	< 0.014	< 0.015
Naphthalene	< 0.03	< 0.029	< 0.031	< 0.032	< 0.026	< 0.031	< 0.03	< 0.03	< 0.027	< 0.029
n-Butylbenzene	< 0.0079	< 0.0075	< 0.0082	< 0.0083	< 0.0069	< 0.008	< 0.0077	< 0.0078	< 0.007	< 0.0077
N-Propylbenzene	<0.011 *	<0.01 *	<0.011 *	<0.011 *	<0.0094 *	<0.011 *	<0.011 *	<0.011 *	<0.0095 *	< 0.01
p-Isopropyltoluene	< 0.011	< 0.011	< 0.012	< 0.012	< 0.0099	<0.011	<0.011	< 0.011	<0.01	< 0.011
sec-Butylbenzene	< 0.0094	< 0.009	<0.0098	< 0.0099	< 0.0082	< 0.0095	< 0.0093	< 0.0093	< 0.0084	< 0.0092
Tetrachloroethene	<u>0.12</u>	<u>2.6</u>	<u>0.31</u>	<u>0.12</u>	<0.0089	<u>0.057 J</u>	<0.01	0.38	< 0.0091	<u>0.051 J</u>
Toluene	< 0.007	< 0.0067	< 0.0073	< 0.0074	< 0.0062	< 0.0071	< 0.0069	< 0.007	< 0.0062	< 0.0069
Trichloroethene	< 0.011	<u>0.11</u>	< 0.012	< 0.012	<0.01	<0.011	<0.011	< 0.011	<0.01	< 0.011
Vinyl chloride	< 0.0063	< 0.0061	< 0.0066	< 0.0067	< 0.0056	< 0.0064	< 0.0062	< 0.0063	< 0.0057	< 0.0062
Xylenes, Total	<0.0042	<0.004	<0.0043	<0.0044	<0.0037	<0.0042	<0.0041	<0.0041	<0.0037	<0.0041
PAHs										
1-Methylnaphthalene	< 0.02	< 0.019	< 0.02	< 0.02	< 0.017	< 0.02	< 0.02	< 0.019	<0.018	< 0.019
2-Methylnaphthalene	< 0.052	< 0.05	< 0.053	< 0.052	< 0.046	< 0.052	< 0.051	< 0.051	< 0.047	< 0.05
Acenaphthene	< 0.012	< 0.011	0.035 J	< 0.012	<0.01	< 0.012	< 0.012	< 0.012	< 0.011	< 0.012
Acenaphthylene	<0.0093 *	<0.0088 *	<0.0094 *	<0.0092 *	<0.0081 *	<0.0093 *	<0.0091 *	<0.009 *	<0.0082 *	< 0.0089
Anthracene	< 0.0095	< 0.009	0.072	< 0.0094	< 0.0082	< 0.0095	< 0.0093	< 0.0092	< 0.0084	< 0.0091
Benzo(a)anthracene	< 0.0084	< 0.008	0.16	< 0.0084	< 0.0073	< 0.0084	< 0.0083	< 0.0082	< 0.0075	< 0.0081
Benzo(a)pyrene	< 0.0073	< 0.007	0.11	< 0.0073	< 0.0064	< 0.0073	< 0.0072	< 0.0071	< 0.0065	< 0.007
Benzo(b)fluoranthene	< 0.0078	< 0.0074	0.12	< 0.0078	<0.0068	<0.0078	< 0.0077	< 0.0076	< 0.007	< 0.0075
Benzo(g,h,i)perylene	< 0.014	< 0.013	0.062	< 0.014	< 0.012	< 0.014	< 0.013	< 0.013	< 0.012	< 0.013
Benzo(k)fluoranthene	< 0.0096	< 0.0091	0.072	< 0.0096	< 0.0084	<0.0096	< 0.0094	< 0.0093	<0.0086	< 0.0092
Chrysene	< 0.0091	<0.0086	<u>0.15</u>	< 0.0091	< 0.0079	<0.0091	< 0.0089	<0.0088	<0.0081	< 0.0087
Dibenz(a,h)anthracene	< 0.011	< 0.011	0.031 J	< 0.011	<0.0098	< 0.011	< 0.011	< 0.011	<0.01	< 0.011

Table 1. Summary of Soil Analytical Results, Building Subsurface Investigation, Madison-Kipp Corporation, 201 Waubesa Street, Madison, Wisconsin.

Well/Boring	B-	137	B-138	B-	139	B-140	B-141	B-	142	B-143
Sample Depth	2-4'	4-6'	1.8-3.1'	0.9-2.1'	8-9.7'	2-4'	5.8-7.8'	0.6-2.6'	13.3-15.3'	0.5-1.9'
Sample Date	10/16/12	10/16/12	10/16/12	10/16/12	10/16/12	10/16/12	10/16/12	10/16/12	10/16/12	10/17/12
PAHs (continued)										
Fluoranthene	< 0.017	< 0.016	0.41	< 0.016	< 0.014	< 0.017	< 0.016	< 0.016	< 0.015	< 0.016
Fluorene	< 0.0092	< 0.0087	0.03 J	< 0.0091	<0.008	< 0.0092	< 0.009	< 0.0089	< 0.0082	<0.0088
Indeno(1,2,3-cd)pyrene	< 0.014	< 0.013	0.055	< 0.014	< 0.012	< 0.014	< 0.013	< 0.013	< 0.012	< 0.013
Naphthalene	< 0.0078	< 0.0074	< 0.0079	< 0.0077	<0.0068	<0.0078	< 0.0076	< 0.0075	< 0.0069	< 0.0074
Phenanthrene	< 0.017	< 0.016	0.31	< 0.017	< 0.015	< 0.017	< 0.017	< 0.016	< 0.015	< 0.016
Pyrene	< 0.015	<0.014	0.3	<0.015	<0.013	<0.015	<0.014	<0.014	<0.013	<0.014
Metals and Cyanide										
Arsenic	<u>8.5</u>	<u>7</u>	<u>3.7</u>	<u>7.2</u>	2.3	<u>4.5</u>	<u>5.7</u>	4.6	<u>2.1</u>	3.9
Barium	65 B	69 B	180 B	110 B	25 B	130 B	240 B	190 B	16 B	120
Cadmium	0.20 J	0.21 J	0.28	0.17 J	0.17 J	0.18 J	0.099 J	0.20 J	0.13 J	0.19 J
Chromium	18	15	9.5	45	8	49	18	12	5	10
Cyanide, Total	<0.18	< 0.17	< 0.2	<0.21	< 0.16	0.32 J	<0.19	<0.18	< 0.17	<0.18
Lead	18	14	19	12	3.1	12	9.2	14	3.4	14
Mercury	<u>2.6</u>	0.44	<0.0078	0.037	< 0.0059	0.017 J	0.022	0.016 J	< 0.006	0.017 J
Selenium	0.82 J	< 0.32	<u>0.78 J</u>	0.38 J	<0.28	<u>0.62 J</u>	0.36 J	0.43 J	<0.28	0.82 J
Silver	< 0.069	<0.068	0.080 J	< 0.065	0.24 J	< 0.074	<0.066	0.072 J	<0.058	<0.07
PCBs										
Aroclor-1242	0.011 J	< 0.0063	< 0.0067	< 0.0068	0.019	< 0.0064	0.017 J	0.063	< 0.0058	33 B
Arcolor-1248	< 0.0076	< 0.0075	<0.0081	< 0.0082	< 0.0069	< 0.0076	< 0.0078	< 0.0078	< 0.007	<0.76
Aroclor-1254	<0.0042	<0.0041	<0.0044	0.16	0.013 J	<0.0042	<0.0043	0.041	<0.0038	<0.42
Total Dectected PCBs	0.011	ND	ND	0.16	0.032	ND	0.017	0.104	ND	33

Table 1. Summary of Soil Analytical Results, Building Subsurface Investigation, Madison-Kipp Corporation, 201 Waubesa Street, Madison, Wisconsin.

Well/Boring	B-	144	B-′	145	B-1	46	B-	147	B-148
Sample Depth	2-4'	5.7-7.7'	0.6-2.6'	5.6-7.6'	2-4'	4-6'	1.9-3.9'	6-8'	5.8-7.8'
Sample Date	10/17/12	10/17/12	10/15/12	10/15/12	10/25/12	10/25/12	10/16/12	10/25/12	10/19/12
VOCs									
1,2,4-Trichlorobenzene	< 0.023	< 0.023	< 0.024	< 0.023	<0.038	< 0.038	< 0.023	< 0.034	0.15
1,2,4-Trimethylbenzene	< 0.013	< 0.013	< 0.013	< 0.013	< 0.021	< 0.021	< 0.013	< 0.019	0.53
1,2-Dichlorobenzene	< 0.013	< 0.012	< 0.013	< 0.012	< 0.02	< 0.021	0.053 J	< 0.019	< 0.012
1,3,5-Trimethylbenzene	< 0.013	< 0.012	< 0.013	< 0.012	< 0.021	< 0.021	< 0.012	< 0.019	0.19
cis-1,2-Dichloroethene	< 0.0075	< 0.0074	< 0.0077	< 0.0074	< 0.012	< 0.012	< 0.0074	<0.011	<u>0.13</u>
Ethylbenzene	< 0.0077	< 0.0076	< 0.0079	< 0.0076	< 0.013	< 0.013	< 0.0076	<0.011	< 0.0072
sopropylbenzene	< 0.015	< 0.015	< 0.016	< 0.015	< 0.025	< 0.025	< 0.015	< 0.023	0.21
Naphthalene	< 0.03	< 0.03	< 0.031	< 0.03	< 0.049	< 0.05	< 0.03	< 0.045	0.15
n-Butylbenzene	< 0.0079	<0.0078	< 0.0081	<0.0078	< 0.013	< 0.013	< 0.0077	< 0.012	< 0.0074
N-Propylbenzene	< 0.011	<0.011	<0.011 *	<0.011 *	< 0.017	<0.018	<0.01 *	< 0.016	0.069 J
o-Isopropyltoluene	< 0.011	< 0.011	< 0.012	< 0.011	<0.018	< 0.019	< 0.011	< 0.017	0.064 J
sec-Butylbenzene	< 0.0094	< 0.0093	< 0.0097	< 0.0093	< 0.015	< 0.016	< 0.0092	< 0.014	0.073
Tetrachloroethene	<0.01	<0.01	0.21	<0.01	0.29	<u>1.3</u>	0.036 J	0.041 J	<u>2</u>
Toluene	< 0.0071	< 0.0069	< 0.0072	0.0085 J	< 0.011	< 0.012	< 0.0069	<0.01	< 0.0066
Trichloroethene	< 0.011	<0.011	< 0.012	< 0.011	< 0.019	< 0.019	< 0.011	< 0.017	0.068
Vinyl chloride	< 0.0064	< 0.0063	< 0.0065	< 0.0063	< 0.01	< 0.01	< 0.0062	< 0.0094	<u>0.02</u>
Xylenes, Total	<0.0042	<0.0041	<0.0043	<0.0041	<0.0068	<0.0069	<0.0041	<0.0062	0.092
PAHs									
1-Methylnaphthalene	< 0.02	< 0.02	< 0.02	< 0.02	<0.018	<0.018	< 0.019	< 0.019	< 0.36
2-Methylnaphthalene	< 0.052	< 0.051	< 0.053	< 0.052	< 0.046	<0.048	< 0.05	< 0.049	< 0.95
Acenaphthene	< 0.012	< 0.012	< 0.012	< 0.012	< 0.011	< 0.011	< 0.011	< 0.011	< 0.22
Acenaphthylene	< 0.0092	< 0.009	<0.0093 *	<0.0092 *	< 0.0081	< 0.0084	<0.0088 *	< 0.0087	<0.17
Anthracene	< 0.0095	< 0.0093	< 0.0095	< 0.0094	<0.0083	<0.0086	< 0.009	< 0.0089	<0.17
Benzo(a)anthracene	< 0.0084	< 0.0082	<0.0085	< 0.0084	0.054	< 0.0077	< 0.008	< 0.0079	<0.15
Benzo(a)pyrene	< 0.0073	< 0.0072	< 0.0074	< 0.0073	< 0.0065	< 0.0067	< 0.007	< 0.0069	<0.13
Benzo(b)fluoranthene	< 0.0078	< 0.0076	< 0.0079	< 0.0077	< 0.0069	< 0.0071	< 0.0074	< 0.0074	<0.14
Benzo(g,h,i)perylene	< 0.014	< 0.013	< 0.014	< 0.013	< 0.012	< 0.012	< 0.013	< 0.013	< 0.25
Benzo(k)fluoranthene	< 0.0096	< 0.0094	< 0.0096	< 0.0095	<0.0085	< 0.0087	< 0.0091	< 0.009	<0.17
Chrysene	< 0.0091	< 0.0089	< 0.0091	< 0.009	0.049	< 0.0083	<0.0086	<0.0086	<0.17
Dibenz(a,h)anthracene	< 0.011	< 0.011	< 0.011	< 0.011	< 0.0099	< 0.01	< 0.011	< 0.011	< 0.2

Table 1. Summary of Soil Analytical Results, Building Subsurface Investigation, Madison-Kipp Corporation, 201 Waubesa Street, Madison, Wisconsin.

Well/Boring	B-′	144	B-	145	B-1	46	B-1	147	B-148
Sample Depth	2-4'	5.7-7.7'	0.6-2.6'	5.6-7.6'	2-4'	4-6'	1.9-3.9'	6-8'	5.8-7.8'
Sample Date	10/17/12	10/17/12	10/15/12	10/15/12	10/25/12	10/25/12	10/16/12	10/25/12	10/19/12
PAHs (continued)									
Fluoranthene	< 0.016	< 0.016	< 0.017	< 0.016	< 0.015	< 0.015	< 0.016	< 0.016	< 0.3
Fluorene	< 0.0091	< 0.0089	< 0.0092	< 0.0091	< 0.0081	< 0.0083	< 0.0087	<0.0086	<0.17
Indeno(1,2,3-cd)pyrene	< 0.014	< 0.013	< 0.014	< 0.013	< 0.012	< 0.012	< 0.013	< 0.013	< 0.25
Naphthalene	< 0.0077	< 0.0076	< 0.0078	< 0.0077	<0.0068	< 0.0071	< 0.0074	< 0.0073	0.16 J
Phenanthrene	< 0.017	< 0.016	< 0.017	< 0.017	0.016 J	< 0.015	< 0.016	< 0.016	< 0.31
Pyrene	<0.015	<0.014	<0.015	<0.014	0.033 J	<0.013	<0.014	<0.014	<0.27 *
Metals and Cyanide									
Arsenic	<u>5.3</u>	<u>7</u>	<u>5.2</u>	<u>7.8</u>	<u>1.7</u>	<u>5.3</u>	<u>4.8</u>	<u>5</u>	3.3
Barium	130	99	120 B	99 B	18	60	78 B	77	51
Cadmium	0.11 J	0.11 J	0.15 J	0.095 J	0.46	< 0.058	0.096 J	0.11 J	0.092 J
Chromium	13	15	13	16	6.5	17	14	13	14
Cyanide, Total	0.16 J	0.23 J	<0.18	< 0.17	<0.17	<0.17	< 0.17	<0.17	<0.18
Lead	11	12	12	12	5.6	6.7	11	6.3	5.3 B
Mercury	0.021	0.049	0.021	0.033	0.01 J	0.026	0.024	0.074	0.013 J
Selenium	0.64 J	< 0.3	0.68 J	0.59 J	< 0.29	<u>0.81 J</u>	0.39 J	0.52 J	< 0.31
Silver	<0.071	<0.062	< 0.072	<0.067	<0.061	<0.07	<0.06	<0.069	< 0.065
PCBs									
Aroclor-1242	12 B	0.012 J	0.44	0.021	<5.7	< 0.063	0.58	< 0.0062	20,000
Arcolor-1248	<0.31	<0.0076	< 0.016	< 0.0076	46	1.3	< 0.015	< 0.0075	<380
Aroclor-1254	<0.17	<0.0042	<0.0088	<0.0041	<3.8	<0.042	<0.0083	<0.0041	<210
Total Dectected PCBs	12	0.012	0.44	0.021	46	1.3	0.58	ND	20,000

Table 1. Summary of Soil Analytical Results, Building Subsurface Investigation, Madison-Kipp Corporation, 201 Waubesa Street, Madison, Wisconsin.

Well/Boring	B-	149	B-150	B-	151	B-152	B-	153	B-154
Sample Depth	0.7-2.7'	5.7-7.7'	1.0-3.0'	2-4'	9.1-11.1'	1.5-3.5'	0.7-2.7'	13.8-15.8'	5.2-7.2'
Sample Date	10/19/12	10/19/12	10/19/12	10/19/12	10/19/12	10/19/12	10/19/12	10/19/12	10/19/12
VOCs									
1,2,4-Trichlorobenzene	< 0.023	< 0.021	< 0.023	< 0.023	< 0.019	< 0.021	< 0.023	< 0.02	< 0.019
1,2,4-Trimethylbenzene	0.29	< 0.012	< 0.013	0.2	0.13	< 0.012	< 0.013	< 0.011	<0.011
1,2-Dichlorobenzene	< 0.012	< 0.012	< 0.013	< 0.012	< 0.011	< 0.011	< 0.012	< 0.011	< 0.011
1,3,5-Trimethylbenzene	0.1 J	< 0.012	< 0.013	0.061 J	0.04 J	< 0.011	< 0.012	< 0.011	< 0.011
cis-1,2-Dichloroethene	< 0.0074	< 0.007	< 0.0075	< 0.0075	0.03 J	< 0.0069	< 0.0074	< 0.0065	< 0.0063
Ethylbenzene	< 0.0076	< 0.0071	< 0.0077	< 0.0076	< 0.0065	< 0.007	< 0.0076	< 0.0067	< 0.0065
Isopropylbenzene	0.043 J	< 0.014	< 0.015	< 0.015	< 0.013	< 0.014	< 0.015	< 0.013	< 0.013
Naphthalene	< 0.03	<0.028	< 0.03	0.087 J	0.075 J	< 0.028	< 0.03	< 0.026	< 0.025
n-Butylbenzene	<0.0078	< 0.0073	< 0.0079	0.047 J	< 0.0067	< 0.0072	< 0.0078	<0.0068	<0.0066
N-Propylbenzene	0.038 J	< 0.0099	< 0.011	< 0.011	< 0.009	< 0.0097	< 0.011	< 0.0093	< 0.009
p-Isopropyltoluene	< 0.011	<0.01	< 0.011	< 0.011	< 0.0095	< 0.01	< 0.011	<0.0098	< 0.0095
sec-Butylbenzene	< 0.0093	< 0.0087	< 0.0094	< 0.0093	< 0.0079	< 0.0086	< 0.0093	< 0.0082	< 0.0079
Tetrachloroethene	<u>0.12</u>	0.046 J	<u>0.038 J</u>	<u>0.11</u>	<u>0.51</u>	< 0.0093	< 0.01	< 0.0089	<0.0086
Toluene	0.01 J	< 0.0065	< 0.007	0.012 J	< 0.0059	< 0.0064	< 0.0069	< 0.0061	< 0.0059
Trichloroethene	<u>0.016 J</u>	< 0.011	< 0.011	< 0.011	<u>0.013 J</u>	< 0.01	< 0.011	< 0.0099	< 0.0095
Vinyl chloride	< 0.0063	< 0.0059	< 0.0064	< 0.0063	< 0.0054	<0.0058	< 0.0063	< 0.0055	< 0.0053
Xylenes, Total	0.051	<0.0039	<0.0042	0.041	0.016 J	<0.0038	<0.0041	<0.0036	<0.0035
PAHs									
1-Methylnaphthalene	<1.9	<0.18	< 0.2	0.11 J	0.17 J	<0.018	< 0.019	< 0.017	< 0.017
2-Methylnaphthalene	<5	< 0.47	< 0.51	< 0.25	< 0.44	<0.048	< 0.05	< 0.046	< 0.043
Acenaphthene	<1.2	<0.11	< 0.12	<0.058	<0.1	< 0.011	< 0.011	< 0.011	< 0.0099
Acenaphthylene	< 0.89	< 0.083	< 0.091	< 0.044	< 0.078	<0.0085	<0.0088	<0.0081	< 0.0076
Anthracene	< 0.91	< 0.085	< 0.093	< 0.045	<0.08	<0.0087	< 0.009	< 0.0083	<0.0078
Benzo(a)anthracene	<0.81	< 0.076	< 0.083	< 0.041	< 0.072	< 0.0077	<0.008	< 0.0074	< 0.007
Benzo(a)pyrene	<0.71	< 0.066	< 0.072	< 0.035	< 0.062	< 0.0067	< 0.007	< 0.0064	< 0.0061
Benzo(b)fluoranthene	< 0.75	< 0.071	< 0.077	<0.038	< 0.066	< 0.0072	< 0.0074	<0.0068	< 0.0065
Benzo(g,h,i)perylene	<1.3	<0.12	<0.13	< 0.065	<0.12	< 0.012	< 0.013	< 0.012	<0.011
Benzo(k)fluoranthene	< 0.92	<0.087	< 0.095	< 0.046	<0.081	<0.0088	< 0.0091	<0.0084	< 0.0079
Chrysene	<0.87	<0.082	< 0.09	< 0.044	< 0.077	<0.0083	<0.0086	< 0.0079	< 0.0075
Dibenz(a,h)anthracene	<1.1	<0.1	<0.11	< 0.054	< 0.095	< 0.01	< 0.011	<0.0098	< 0.0093

Table 1. Summary of Soil Analytical Results, Building Subsurface Investigation, Madison-Kipp Corporation, 201 Waubesa Street, Madison, Wisconsin.

Well/Boring	B-1	149	B-150	B-	151	B-152	B-	153	B-154
Sample Depth	0.7-2.7'	5.7-7.7'	1.0-3.0'	2-4'	9.1-11.1'	1.5-3.5'	0.7-2.7'	13.8-15.8'	5.2-7.2'
Sample Date	10/19/12	10/19/12	10/19/12	10/19/12	10/19/12	10/19/12	10/19/12	10/19/12	10/19/12
PAHs (continued)									
Fluoranthene	<1.6	<0.15	<0.16	< 0.079	< 0.14	< 0.015	< 0.016	< 0.014	< 0.014
Fluorene	<0.88	< 0.083	< 0.09	< 0.044	<0.078	< 0.0084	< 0.0087	<0.008	< 0.0076
Indeno(1,2,3-cd)pyrene	<1.3	<0.12	<0.13	< 0.065	<0.12	< 0.012	< 0.013	< 0.012	< 0.011
Naphthalene	< 0.75	< 0.07	< 0.076	0.06 J	0.088 J	< 0.0071	< 0.0074	<0.0068	< 0.0064
Phenanthrene	<1.6	<0.15	<0.17	0.14 J	< 0.14	< 0.015	< 0.016	< 0.015	< 0.014
Pyrene	<1.4	<0.13 *	<0.14	< 0.07	<0.12 *	<0.013	<0.014	<0.013	< 0.012
Metals and Cyanide									
Arsenic	<u>3.6</u>	<u>3.7</u>	<u>9.4</u>	<u>10</u>	<u>1.3</u>	4.2	<u>8</u>	<u>1.5</u>	0.85 J
Barium	150	60	90	110	12	56	120	16	12
Cadmium	0.15 J	0.16 J	0.074 J	0.054 J	0.12 J	0.10 J	0.15 J	0.14 J	0.12 J
Chromium	13	10	21	21	4.2	12	18	5.3	3.1
Cyanide, Total	<0.18	<0.18	<0.18	<0.18	<0.16	0.43 J	< 0.17	<0.17	< 0.15
Lead	12 B	21 B	14 B	14 B	2.5 B	6.2 B	12 B	2.9 B	1.4 B
Mercury	0.015 J	0.011 J	0.024	0.043	< 0.0063	0.015 J	0.024	< 0.0064	< 0.0062
Selenium	0.51 J	< 0.32	0.34 J	0.43 J	< 0.27	0.36 J	<u>0.73 J</u>	<0.26	< 0.29
Silver	0.095 J	<0.068	<0.068	< 0.063	<0.056	<0.064	< 0.063	<0.054	<0.061
PCBs									
Aroclor-1242	10,000	12,000	2,800	25	1	0.57	0.015 J	< 0.0057	< 0.0054
Arcolor-1248	<190	<370	<79	<0.78	<0.032	< 0.036	< 0.0077	<0.0068	< 0.0065
Aroclor-1254	<100	<200	<43	< 0.43	<0.018	<0.019	< 0.0042	< 0.0037	<0.0036
Total Dectected PCBs	10,000	12,000	2,800	25	1	0.57	0.015	ND	ND

Table 1. Summary of Soil Analytical Results, Building Subsurface Investigation, Madison-Kipp Corporation, 201 Waubesa Street, Madison, Wisconsin.

Well/Boring	B-1	155	B-156	B-157	B-158	B-	159	B-160	B-	161
Sample Depth	1.9-3.9'	5.0-7.0'	1.8-3.8'	1.8-3.8'	4-6'	2-4'	4.8-6.8'	0.9-2.9'	2-4'	13.2-15.2
Sample Date	10/19/12	10/19/12	10/20/12	10/19/12	10/17/12	10/17/12	10/18/12	10/17/12	10/18/12	10/18/12
VOCs										
1,2,4-Trichlorobenzene	< 0.022	< 0.019	< 0.022	< 0.022	0.051 J	< 0.023	< 0.02	< 0.022	< 0.022	< 0.02
1,2,4-Trimethylbenzene	< 0.012	< 0.011	< 0.012	< 0.012	0.09 J	< 0.013	< 0.011	< 0.012	< 0.012	< 0.011
1,2-Dichlorobenzene	< 0.012	< 0.01	< 0.012	< 0.012	0.098 J	< 0.013	< 0.011	< 0.012	< 0.012	< 0.011
1,3,5-Trimethylbenzene	< 0.012	<0.011	< 0.012	< 0.012	0.031 J	< 0.013	<0.011	< 0.012	< 0.012	<0.011
cis-1,2-Dichloroethene	< 0.0072	< 0.0063	< 0.0072	< 0.0072	<0.0071	< 0.0075	<0.0065	< 0.0073	< 0.0073	<0.0066
Ethylbenzene	< 0.0074	< 0.0064	< 0.0074	< 0.0073	< 0.0073	< 0.0077	<0.0066	< 0.0074	< 0.0075	<0.0068
Isopropylbenzene	<0.015	<0.013	<0.015	<0.015	0.16	<0.015	<0.013	< 0.015	<0.015	< 0.013
Naphthalene	< 0.029	< 0.025	< 0.029	<0.029	< 0.029	< 0.03	<0.026	< 0.029	< 0.029	< 0.027
n-Butylbenzene	< 0.0075	<0.0066	< 0.0076	< 0.0075	<0.0075	<0.0079	<0.0068	<0.0076	<0.0076	< 0.0069
N-Propylbenzene	<0.01	<0.0089	<0.01	<0.01	<0.01	<0.011	<0.0092	<0.01	<0.01	<0.0094
p-Isopropyltoluene	<0.011	<0.0094	<0.011	<0.011	<0.011	<0.011	<0.0097	<0.011	< 0.011	<0.0099
sec-Butylbenzene	< 0.009	<0.0079	<0.0091	< 0.009	<0.0089	<0.0094	<0.0081	<0.0091	<0.0091	<0.0083
Tetrachloroethene	<0.0097	<0.0085	<0.0098	<0.0097	<0.0097	<0.01	<0.0088	<0.0098	<0.0099	< 0.009
Toluene	<0.0067	<0.0059	<0.0068	< 0.0067	<0.0067	<0.0071	<0.0061	<0.0068	<0.0068	< 0.0062
Trichloroethene	<0.011	<0.0095	<0.011	<0.011	<0.011	<0.011	<0.0098	<0.011	< 0.011	<0.01
Vinyl chloride	< 0.0061	<0.0053	<0.0061	<0.0061	<0.006	<0.0064	<0.0055	<0.0061	< 0.0062	<0.0056
Xylenes, Total	<0.004	<0.0035	<0.004	<0.004	<0.004	<0.0042	<0.0036	<0.004	<0.004	<0.0037
PAHs										
1-Methylnaphthalene	< 0.019	< 0.017	<0.018	< 0.019	< 0.91	< 0.02	< 0.017	< 0.019	< 0.019	< 0.017
2-Methylnaphthalene	< 0.049	< 0.044	<0.048	< 0.049	<2.4	< 0.052	< 0.045	< 0.05	< 0.05	< 0.045
Acenaphthene	< 0.011	<0.01	< 0.011	<0.011	<0.55	< 0.012	<0.01	<0.011	< 0.012	<0.01
Acenaphthylene	<0.0087	< 0.0077	<0.0085	<0.0088	< 0.42	< 0.0092	< 0.0079	<0.0088	<0.0089	<0.008
Anthracene	<0.0089	<0.0079	<0.0087	< 0.009	< 0.43	< 0.0094	<0.0081	< 0.009	<0.0091	<0.0082
Benzo(a)anthracene	<0.008	<0.007	<0.0078	<0.008	<0.38	<0.0084	< 0.0072	<0.008	<0.0081	< 0.0073
Benzo(a)pyrene	< 0.0069	<0.0061	< 0.0067	< 0.0069	< 0.33	< 0.0073	< 0.0063	< 0.007	< 0.0071	<0.0064
Benzo(b)fluoranthene	< 0.0074	< 0.0065	< 0.0072	< 0.0074	< 0.36	<0.0078	<0.0067	< 0.0074	< 0.0076	<0.0068
Benzo(g,h,i)perylene	< 0.013	<0.011	<0.012	<0.013	< 0.62	< 0.013	< 0.012	< 0.013	< 0.013	< 0.012
Benzo(k)fluoranthene	< 0.0091	<0.008	<0.0088	<0.0091	<0.44	<0.0095	<0.0082	<0.0091	<0.0093	<0.0083
Chrysene	<0.0086	<0.0076	<0.0084	<0.0086	<0.41	< 0.009	<0.0078	<0.0086	<0.0088	<0.0079
Dibenz(a,h)anthracene	<0.011	<0.0094	<0.01	<0.011	<0.51	<0.011	<0.0096	<0.011	< 0.011	<0.0098

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Table 1. Summary of Soil Analytical Results, Building Subsurface Investigation, Madison-Kipp Corporation, 201 Waubesa Street, Madison, Wisconsin.

Well/Boring	B-1	155	B-156	B-157	B-158	B-	159	B-160	B-1	161
Sample Depth	1.9-3.9'	5.0-7.0'	1.8-3.8'	1.8-3.8'	4-6'	2-4'	4.8-6.8'	0.9-2.9'	2-4'	13.2-15.2
Sample Date	10/19/12	10/19/12	10/20/12	10/19/12	10/17/12	10/17/12	10/18/12	10/17/12	10/18/12	10/18/12
PAHs (continued)										
Fluoranthene	< 0.016	< 0.014	0.024 J	< 0.016	< 0.75	< 0.016	< 0.014	< 0.016	< 0.016	< 0.014
Fluorene	< 0.0087	< 0.0076	< 0.0084	< 0.0087	< 0.42	< 0.0091	<0.0078	< 0.0087	<0.0088	<0.008
Indeno(1,2,3-cd)pyrene	< 0.013	< 0.011	< 0.012	< 0.013	< 0.62	< 0.013	< 0.012	< 0.013	< 0.013	< 0.012
Naphthalene	< 0.0073	< 0.0065	< 0.0071	< 0.0073	< 0.35	< 0.0077	< 0.0067	< 0.0074	< 0.0075	< 0.0067
Phenanthrene	< 0.016	< 0.014	0.023 J	< 0.016	< 0.77	< 0.017	< 0.014	< 0.016	< 0.016	< 0.015
Pyrene	<0.014	<0.012	0.019 J *	<0.014	<0.66	<0.014	<0.012	<0.014	<0.014	<0.013
Metals and Cyanide										
Arsenic	<u>7</u>	<u>1.8</u>	<u>8.2</u>	<u>7.4</u>	<u>5.4</u>	<u>7.3</u>	<u>1.3</u>	<u>5.4</u>	<u>7.3</u>	<u>6.1</u>
Barium	100	15	130	100	84	110	14	79	83	68
Cadmium	0.12 J	0.12 J	0.098 J	0.090 J	0.089 J	0.067 J	0.13 J	0.085 J	0.069 J	0.23
Chromium	15	4.1	21	19	14	15	3.8	17	15	16
Cyanide, Total	0.37 J	0.39 J	<0.16	<0.19	<0.17	<0.18	<0.17	<0.18	<0.18	<0.17
Lead	12 B	2.4 B	15 B	13 B	7.4	11	2.2	8	13	<u>70</u>
Mercury	0.038	< 0.0063	0.037	0.058	0.047	0.064	< 0.0064	0.017 J	0.049	< 0.006
Selenium	< 0.32	<0.28	0.35 J	< 0.31	< 0.32	< 0.3	<0.28	< 0.32	< 0.31	0.47 J
Silver	<0.067	<0.058	<0.068	< 0.065	<0.066	<0.064	<0.058	<0.068	<0.065	<0.064
PCBs										
Aroclor-1242	< 0.0063	0.0096 J	0.35	0.013 J	1,900 B	4.2 B	0.046	200 B	0.19	0.0092 J
Arcolor-1248	< 0.0076	< 0.0065	< 0.0075	< 0.0074	<73	<0.15	<0.0068	<7.7	< 0.0078	< 0.0069
Aroclor-1254	<0.0041	<0.0036	<0.0041	<0.004	<40	<0.084	<0.0037	<4.2	<0.0043	<0.0038
Total Dectected PCBs	ND	0.0096	0.35	0.013	1,900	4.2	0.046	200	0.19	0.0092

Table 1. Summary of Soil Analytical Results, Building Subsurface Investigation, Madison-Kipp Corporation, 201 Waubesa Street, Madison, Wisconsin.

Well/Boring	B-162	B-163	B-	164	B-165	B-	166	B-167	B-168
Sample Depth	1.3-3.3'	5-7'	2-4'	4-6'	0.6-2.6'	1.3-3.3'	9.1-11.1'	0.9-2.8	4-6'
Sample Date	10/18/12	10/18/12	10/18/12	10/18/12	10/18/12	10/18/12	10/18/12	10/18/12	10/20/12
/OCs									
1,2,4-Trichlorobenzene	< 0.023	< 0.02	< 0.023	<0.023 H	< 0.023	< 0.022	< 0.02	< 0.023	< 0.021
1,2,4-Trimethylbenzene	< 0.013	< 0.011	< 0.013	<0.013 H	< 0.013	< 0.012	< 0.011	< 0.013	< 0.012
1,2-Dichlorobenzene	< 0.012	< 0.011	< 0.012	<0.012 H	< 0.012	< 0.012	< 0.011	< 0.012	< 0.011
I,3,5-Trimethylbenzene	< 0.013	< 0.011	< 0.013	<0.013 H	< 0.013	< 0.012	< 0.011	< 0.013	< 0.011
cis-1,2-Dichloroethene	< 0.0075	< 0.0065	< 0.0075	<0.0075 H	< 0.0075	< 0.0071	<0.0066	< 0.0075	<0.0068
thylbenzene	< 0.0076	<0.0066	< 0.0077	<0.0077 H	< 0.0077	< 0.0072	< 0.0067	< 0.0076	< 0.007
sopropylbenzene	< 0.015	< 0.013	< 0.015	<0.015 H	< 0.015	< 0.014	< 0.013	< 0.015	< 0.014
Naphthalene	< 0.03	< 0.026	< 0.03	<0.03 H *	0.043 J	<0.028	< 0.026	< 0.03	< 0.027
n-Butylbenzene	<0.0078	<0.0068	<0.0078	<0.0078 H	< 0.0079	< 0.0074	< 0.0069	<0.0078	< 0.0072
N-Propylbenzene	< 0.011	< 0.0092	< 0.011	<0.011 H	< 0.011	<0.01	< 0.0094	< 0.011	< 0.0097
-Isopropyltoluene	< 0.011	< 0.0097	< 0.011	<0.011 H	< 0.011	< 0.011	< 0.0099	< 0.011	< 0.01
ec-Butylbenzene	< 0.0093	< 0.0081	< 0.0094	<0.0094 H	< 0.0094	<0.0088	< 0.0082	< 0.0093	<0.0085
etrachloroethene	< 0.01	0.032 J	0.098	<u>0.34 H</u>	0.036 J	<u>0.19</u>	<0.0089	<u>0.37</u>	< 0.0093
oluene	< 0.007	< 0.006	< 0.007	<0.007 H	< 0.007	< 0.0066	< 0.0062	< 0.007	< 0.0064
richloroethene	<0.011	<0.0098	< 0.011	<u>0.019 J H</u>	< 0.011	< 0.011	< 0.01	< 0.011	< 0.01
/inyl chloride	< 0.0063	< 0.0055	< 0.0063	<0.0063 H	< 0.0063	< 0.006	< 0.0056	< 0.0063	<0.0058
(ylenes, Total	<0.0042	<0.0036	< 0.0042	<0.0042 H	<0.0042	<0.0039	< 0.0037	<0.0042	<0.0038
PAHs									
-Methylnaphthalene	< 0.019	< 0.017	< 0.019	0.045 H	< 0.098	< 0.094	< 0.017	< 0.19	< 0.017
-Methylnaphthalene	< 0.05	< 0.045	< 0.05	<0.052 H	< 0.26	<0.25	< 0.044	<0.5	< 0.045
Acenaphthene	< 0.012	<0.01	< 0.012	<0.012 H	0.094 J	< 0.057	< 0.01	< 0.12	< 0.01
Acenaphthylene	< 0.0089	< 0.0079	<0.0088	<0.0092 H	< 0.045	< 0.043	< 0.0078	< 0.089	< 0.008
Anthracene	< 0.0091	< 0.0081	< 0.009	<0.0094 H	0.12 J	0.092 J	<0.008	< 0.091	< 0.0082
Benzo(a)anthracene	<0.0081	< 0.0072	<0.0081	0.009 J H	0.34	0.44	< 0.0071	0.23 J	< 0.0073
Benzo(a)pyrene	< 0.007	< 0.0063	< 0.007	0.0079 J H	0.37	0.4	<0.0062	0.21 J	< 0.0063
Benzo(b)fluoranthene	< 0.0075	< 0.0067	< 0.0075	<0.0078 H	0.42	0.39	<0.0066	0.18 J	<0.0068
Benzo(g,h,i)perylene	< 0.013	< 0.012	< 0.013	<0.013 H	0.23	0.28	< 0.011	0.17 J	< 0.012
Benzo(k)fluoranthene	< 0.0092	< 0.0082	< 0.0092	<0.0095 H	0.24	0.34	<0.0081	0.19 J	< 0.0083
Chrysene	< 0.0087	<0.0078	< 0.0087	<0.009 H	<u>0.55</u>	0.43	< 0.0077	<u>0.22 J</u>	< 0.0079
Dibenz(a,h)anthracene	< 0.011	< 0.0096	< 0.011	<0.011 H	< 0.055	0.13 J	< 0.0095	<0.11	< 0.0097

Table 1. Summary of Soil Analytical Results, Building Subsurface Investigation, Madison-Kipp Corporation, 201 Waubesa Street, Madison, Wisconsin.

Well/Boring	B-162	B-163	B-	164	B-165	B-	166	B-167	B-168
Sample Depth	1.3-3.3'	5-7'	2-4'	4-6'	0.6-2.6'	1.3-3.3'	9.1-11.1'	0.9-2.8	4-6'
Sample Date	10/18/12	10/18/12	10/18/12	10/18/12	10/18/12	10/18/12	10/18/12	10/18/12	10/20/12
PAHs (continued)									
Fluoranthene	< 0.016	< 0.014	< 0.016	<0.016 H	1.4	0.94	< 0.014	0.54	< 0.014
Fluorene	<0.0088	< 0.0078	< 0.0087	<0.0091 H	0.095 J	< 0.043	< 0.0077	<0.088	< 0.0079
Indeno(1,2,3-cd)pyrene	< 0.013	< 0.012	< 0.013	<0.013 H	0.21	0.25	< 0.011	0.14 J	< 0.012
Naphthalene	< 0.0074	0.013 J	< 0.0074	0.0099 J H	0.17 J	< 0.036	< 0.0065	< 0.074	< 0.0067
Phenanthrene	< 0.016	< 0.014	< 0.016	0.032 J H	1.3	0.45	< 0.014	0.25 J	< 0.015
Pyrene	<0.014	<0.012	<0.014	<0.014 H	0.99	0.76	<0.012	0.39	<0.013 *
Metals and Cyanide									
Arsenic	<u>8.6</u>	<u>1.4</u>	<u>1.6</u>	3.0 B	<u>6.7</u>	<u>3.4</u>	<u>6.9</u>	<u>1.5</u> 12	<u>11</u>
Barium	150	14	16	52 V	130	36	93	12	61
Cadmium	0.088 J	0.13 J	0.16 J	0.18 J	0.071 J	0.26	0.12 J	0.13 J	0.28
Chromium	19	4.2	3.9	7.6	17	7.2	13	3.5	10
Cyanide, Total	<0.18	<0.16	< 0.2	<0.2 H	<0.18	<0.18	< 0.17	<0.17	<0.18
Lead	13	2.4	5.1	5.8	12	25	12	2.2	14 B
Mercury	0.025	< 0.0065	0.037	0.0085 J	0.015 J	0.021	< 0.0064	0.04	0.014 J
Selenium	< 0.35	<0.26	< 0.34	0.43 J B ^	0.42 J	< 0.31	0.48 J	< 0.32	<u>0.88 J</u>
Silver	<0.072	<0.055	<0.07	<0.069	<0.068	<0.065	<0.062	<0.066	< 0.065
PCBs									
Aroclor-1242	0.013 J	< 0.0057	< 0.0066	0.062	0.025	2.3 B	0.02	< 0.0063	0.99
Arcolor-1248	< 0.0077	< 0.0068	< 0.0079	<0.0078	< 0.0079	<0.071	<0.0068	< 0.0076	< 0.035
Aroclor-1254	<0.0042	<0.0037	<0.0043	<0.0043	<0.0043	<0.039	<0.0038	0.036	<0.019
Total Dectected PCBs	0.013	ND	ND	0.062	0.025	2.3	0.02	0.036	0.99

Table 1. Summary of Soil Analytical Results, Building Subsurface Investigation, Madison-Kipp Corporation, 201 Waubesa Street, Madison, Wisconsin.

Well/Boring B-169		B-170	B-	171	B-172	B-	173	B-174	
Sample Depth	0.9-2.9'	6-8'	4-6'	0.7-2.7'	8.8-10.8'	5-7'	1.6-3.6'	8-10'	0-2'
Sample Date	10/20/12	10/20/12	10/21/12	10/21/12	10/21/12	10/21/12	10/21/12	10/21/12	10/25/12
VOCs									
1,2,4-Trichlorobenzene	< 0.02	< 0.022	< 0.021	< 0.023	< 0.02	< 0.024	< 0.023	< 0.02	< 0.035
1,2,4-Trimethylbenzene	< 0.011	< 0.012	< 0.012	< 0.013	< 0.011	< 0.013	< 0.013	< 0.011	< 0.02
1,2-Dichlorobenzene	< 0.011	< 0.012	< 0.011	< 0.013	< 0.011	< 0.013	< 0.013	< 0.011	<0.019
1,3,5-Trimethylbenzene	< 0.011	< 0.012	< 0.011	< 0.013	< 0.011	< 0.013	< 0.013	<0.011	<0.019
cis-1,2-Dichloroethene	< 0.0064	< 0.0071	< 0.0067	< 0.0076	<0.0066	< 0.0077	< 0.0076	< 0.0067	<0.011
Ethylbenzene	<0.0066	< 0.0073	< 0.0069	<0.0078	< 0.0067	< 0.0079	<0.0078	<0.0068	<0.012
Isopropylbenzene	< 0.013	< 0.015	< 0.014	< 0.016	< 0.013	<0.016	< 0.016	< 0.014	< 0.023
Naphthalene	< 0.026	< 0.029	< 0.027	< 0.031	<0.026	< 0.031	< 0.031	< 0.027	<0.046
n-Butylbenzene	<0.0068	< 0.0075	< 0.007	<0.008	< 0.0069	<0.0081	<0.008	< 0.007	<0.012
N-Propylbenzene	<0.0092	<0.01	<0.0096	< 0.011	<0.0093	<0.011	<0.011	< 0.0095	<0.016
p-Isopropyltoluene	< 0.0097	<0.011	<0.01	< 0.011	<0.0099	< 0.012	<0.011	<0.01	<0.017
sec-Butylbenzene	<0.0081	<0.0089	<0.0084	<0.0095	<0.0082	< 0.0097	< 0.0095	<0.0083	<0.014
Tetrachloroethene	<0.0088	<0.0097	<u>0.059</u>	<u>0.096</u>	<0.0089	<u>0.045 J</u>	<u>1.3</u>	<u>0.13</u>	<u>0.085 J</u>
Toluene	< 0.006	<0.0066	< 0.0063	<0.0071	<0.0061	< 0.0072	<0.0071	< 0.0062	<0.011
Trichloroethene	<0.0097	<0.011	<0.01	< 0.012	<0.0099	<0.012	<u>0.018 J</u>	<0.01	<0.017
Vinyl chloride	< 0.0055	<0.006	< 0.0057	<0.0064	<0.0055	< 0.0065	< 0.0064	<0.0056	<0.0097
Xylenes, Total	<0.0036	<0.004	<0.0037	<0.0042	<0.0036	<0.0043	<0.0042	<0.0037	<0.0064
PAHs									
1-Methylnaphthalene	<0.17	< 0.019	< 0.017	<0.1	< 0.017	< 0.02	< 0.02	< 0.017	<0.68
2-Methylnaphthalene	< 0.44	<0.048	< 0.045	< 0.27	< 0.044	< 0.053	< 0.053	< 0.044	<1.8
Acenaphthene	<0.1	< 0.011	<0.01	< 0.062	<0.01	< 0.012	< 0.012	< 0.01	<0.41
Acenaphthylene	<0.078	<0.0086	<0.008	< 0.047	< 0.0077	< 0.0094	< 0.0094	<0.0078	<0.31
Anthracene	<0.08	<0.0088	<0.0082	<0.048	< 0.0079	<0.0096	< 0.0096	< 0.0079	< 0.32
Benzo(a)anthracene	< 0.071	<0.0078	<0.0073	0.15 J	< 0.0071	<0.0086	<0.0086	< 0.0071	<0.29
Benzo(a)pyrene	< 0.062	<0.0068	< 0.0063	0.16 J	<0.0061	< 0.0074	< 0.0075	< 0.0062	<0.25
Benzo(b)fluoranthene	<0.066	< 0.0072	< 0.0067	0.21	< 0.0065	< 0.0079	<0.008	<0.0066	<0.26
Benzo(g,h,i)perylene	<0.11	< 0.013	< 0.012	0.19 J	<0.011	<0.014	<0.014	<0.011	< 0.46
Benzo(k)fluoranthene	<0.081	<0.0089	<0.0083	0.11 J	<0.008	< 0.0097	<0.0098	<0.0081	< 0.32
Chrysene	< 0.077	<0.0084	<0.0078	0.23	< 0.0076	< 0.0092	< 0.0093	<0.0076	<0.31
Dibenz(a,h)anthracene	<0.095	<0.01	<0.0097	<0.057	<0.0094	<0.011	<0.011	<0.0094	<0.38

Table 1. Summary of Soil Analytical Results, Building Subsurface Investigation, Madison-Kipp Corporation, 201 Waubesa Street, Madison, Wisconsin.

Well/Boring	B-169		B-170	B-	B-171		B-	B-173	
Sample Depth	0.9-2.9'	6-8'	4-6'	0.7-2.7'	8.8-10.8'	5-7'	1.6-3.6'	8-10'	0-2'
Sample Date	10/20/12	10/20/12	10/21/12	10/21/12	10/21/12	10/21/12	10/21/12	10/21/12	10/25/12
PAHs (continued)									
Fluoranthene	<0.14	< 0.015	< 0.014	0.52	< 0.014	< 0.017	< 0.017	< 0.014	< 0.56
Fluorene	< 0.077	< 0.0085	< 0.0079	< 0.047	< 0.0077	< 0.0093	< 0.0093	< 0.0077	< 0.31
Indeno(1,2,3-cd)pyrene	<0.11	< 0.013	< 0.012	0.14 J	< 0.011	< 0.014	< 0.014	<0.011	< 0.46
Naphthalene	< 0.065	< 0.0072	< 0.0067	< 0.04	< 0.0065	< 0.0079	< 0.0079	< 0.0065	< 0.26
Phenanthrene	<0.14	< 0.016	< 0.015	0.3	< 0.014	< 0.017	< 0.017	< 0.014	< 0.57
Pyrene	<0.12 *	<0.013 *	<0.013 *	0.33	<0.012	<0.015	<0.015	<0.012	< 0.49
Metals and Cyanide									
Arsenic	<u>1.2</u>	<u>8</u>	<u>1.8</u>	<u>5.8</u>	0.37 J	<u>6</u>	<u>7.7</u>	<u>1.7</u>	<u>1.2</u> 25
Barium	15	150	23	96	4.7	89	98	18	25
Cadmium	0.14 J	0.083 J	0.047 J	0.12 J	0.093 J	0.15 J	0.089 J	0.14 J	<u>1.1</u>
Chromium	4	21	5.5	15	1.9	21	20	6.6	6.3
Cyanide, Total	< 0.14	< 0.19	<0.18	<0.2	<0.16	< 0.19	< 0.14	<0.16	0.15 J
Lead	2.9 B	15 B	3.2 B	14 B	0.9	10 ^	14 ^	2.7	<u>99</u>
Mercury	< 0.0063	0.017 J	< 0.0067	0.021	< 0.0059	0.03	0.038	< 0.0064	< 0.0064
Selenium	< 0.26	<u>0.79 J</u>	< 0.26	<u>0.64 J</u>	0.41 J	0.32 J	<u>0.65 J</u>	0.31 J	0.30 J
Silver	<0.055	<0.064	< 0.055	<0.064	<0.055	<0.064	<0.073	<0.057	<0.06
PCBs									
Aroclor-1242	0.31	1.3	0.067	0.076	<0.0058	< 0.0065	0.033	0.023	< 0.29
Arcolor-1248	< 0.0065	<0.036	< 0.007	< 0.0079	< 0.007	< 0.0078	< 0.0079	< 0.0071	< 0.35
Aroclor-1254	<0.0036	<0.02	<0.0039	<0.0043	<0.0038	0.018 J	<0.0043	<0.0039	<0.19
Total Dectected PCBs	0.31	1.3	0.067	0.076	ND	0.018	0.033	0.023	ND

Table 1. Summary of Soil Analytical Results, Building Subsurface Investigation, Madison-Kipp Corporation, 201 Waubesa Street, Madison, Wisconsin.

Well/Boring MW-22S		MW	-23S		
Sample Depth	27-29'	34-36'**	27-29'	34-36'**	
Sample Date	01/04/13	01/04/13	01/03/13	01/03/13	
VOCs					
1,2,4-Trichlorobenzene	< 0.03	< 0.031	< 0.033	< 0.026	
1,2,4-Trimethylbenzene	< 0.017	< 0.017	< 0.019	< 0.014	
1,2-Dichlorobenzene	< 0.016	< 0.017	< 0.018	< 0.014	
1,3,5-Trimethylbenzene	< 0.016	< 0.017	< 0.018	< 0.014	
cis-1,2-Dichloroethene	<0.0098	<0.01	< 0.011	< 0.0084	
Ethylbenzene	< 0.01	<0.01	< 0.011	<0.0086	
Isopropylbenzene	< 0.02	< 0.02	< 0.022	< 0.017	
Naphthalene	< 0.039	< 0.04	< 0.043	< 0.034	
n-Butylbenzene	< 0.01	< 0.011	< 0.011	<0.0088	
N-Propylbenzene	< 0.014	< 0.014	< 0.015	< 0.012	
p-Isopropyltoluene	< 0.015	< 0.015	< 0.016	< 0.013	
sec-Butylbenzene	< 0.012	< 0.013	< 0.014	< 0.011	
Tetrachloroethene	< 0.013	< 0.014	< 0.015	0.12	
Toluene	< 0.0092	< 0.0094	< 0.01	< 0.0079	
Trichloroethene	< 0.015	< 0.015	< 0.016	< 0.013	
Vinyl chloride	< 0.0083	< 0.0085	< 0.0092	< 0.0071	
Xylenes, Total	<0.0054	<0.0056	<0.006	<0.0047	
PAHs					
1-Methylnaphthalene	NA	NA	NA	NA	
2-Methylnaphthalene	NA	NA	NA	NA	
Acenaphthene	NA	NA	NA	NA	
Acenaphthylene	NA	NA	NA	NA	
Anthracene	NA	NA	NA	NA	
Benzo(a)anthracene	NA	NA	NA	NA	
Benzo(a)pyrene	NA	NA	NA	NA	
Benzo(b)fluoranthene	NA	NA	NA	NA	
Benzo(g,h,i)perylene	NA	NA	NA	NA	
Benzo(k)fluoranthene	NA	NA	NA	NA	
Chrysene	NA	NA	NA	NA	
Dibenz(a,h)anthracene	NA	NA	NA	NA	

Dibenz(a,h)anthracene Footnotes on Page 17.

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Table 1. Summary of Soil Analytical Results, Building Subsurface Investigation, Madison-Kipp Corporation, 201 Waubesa Street, Madison, Wisconsin.

Well/Boring	MW	-22S	MW	-23S	
Sample Depth	27-29'	34-36'**	27-29'	34-36'**	
Sample Date	01/04/13	01/04/13	01/03/13	01/03/13	
PAHs (continued)					
Fluoranthene	NA	NA	NA	NA	
Fluorene	NA	NA	NA	NA	
Indeno(1,2,3-cd)pyrene	NA	NA	NA	NA	
Naphthalene	NA	NA	NA	NA	
Phenanthrene	NA	NA	NA	NA	
Pyrene	NA	NA	NA	NA	
Metals and Cyanide					
Arsenic	NA	NA	NA	NA	
Barium	NA	NA	NA	NA	
Cadmium	NA	NA	NA	NA	
Chromium	NA	NA	NA	NA	
Cyanide, Total	NA	NA	NA	NA	
Lead	NA	NA	NA	NA	
Mercury	NA	NA	NA	NA	
Selenium	NA	NA	NA	NA	
Silver	NA	NA	NA	NA	
PCBs					
Aroclor-1242	0.028	0.72	< 0.0055	<0.0058	
Arcolor-1248	< 0.0068	< 0.014	< 0.0066	< 0.007	
Aroclor-1254	< 0.0037	<0.0078	<0.0036	<0.0038	
Total Dectected PCBs	0.028	0.72	ND	ND	

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Table 1. Summary of Soil Analytical Results, Building Subsurface Investigation, Madison-Kipp Corporation, 201 Waubesa Street, Madison, Wisconsin.

	animaly of continuity was recommed, building cubounded in congularly induiced rapp corporation,
Only detec	cted constituents are noted. Constituent concentrations are reported as milligrams per kilogram (mg/kg).
<u>100</u>	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 Toxic Substance Control Act disposal limit.
100	Exceeds the EPA's self-implementing high-occupancy cleanup level with no site restrictions.
0-2'	Soil sample collection depth in feet below ground surface.
*	Laboratory Control Spike or Laboratory Control Spike Duplicate exceeds the control limits.
**	Soil samples were collected from beneath the water table.
^	Instrument related quality control exceeds the control limits.
<	Constituent not detected above noted laboratory detection limit.
В	Compound was found in the blank and sample.
Н	Sample was prepped or analyzed beyond the specified holding time.
J	Constituent concentration is an approximate value.
NA	Not analyzed.
ND	Total PCBs less than the laboratory detection limit.
NE	Criteria not established.
PAH	Polycyclic Aromatic Hydrocarbons.
PCBs	Polychlorinated biphenyls.
RCL	Residual contaminant level.
TSCA	Toxic Substance Control Act.
	United States Environmental Protection Agency
V	Serial dilution exceeds the control limits.

VOCs

Volatile organic compounds.

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Table 2. Summary of Groundwater Analytical Results, Building Subsurface Investigation, Madison-Kipp Corporation, 201 Waubesa Street, Madison, Wisconsin.

Monitoring Well	Preventive	Enforcement	MW-22S	MW-22D	MW-23S	MW-23D	
Sample Date	Action Limit	Standard	1/15/13	1/15/13	1/15/13	1/14/13	
VOCs							
1,2,4-Trimethylbenzene	96	480	0.86 J	<0.14	<0.14	< 0.14	
Benzene	0.5	5	1.1	< 0.074	0.73	0.32 J	
Chloroform	0.6	6	1	<0.2	<0.2	<0.2	
Chloromethane	3	30	<0.18	0.47 J	1.2	<0.18	
cis-1,2-Dichloroethene	7	70	1.8	3.6	<0.12	< 0.12	
Ethylbenzene	140	700	0.5	<0.13	0.43 J	0.20 J	
Tetrachloroethene	0.5	5	180	520	290	100	
Toluene	160	800	1.7	<0.11	1.3	0.6	
Trichloroethene	0.5	5	<i>4.</i> 8	5.8	0.64	< 0.19	
Xylenes, Total	400	2,000	1.5	<0.068	0.95 J	0.68 J	
RCRA Metals							
Arsenic (Dissolved)	1	10	1.2	0.29 J	0.56 J	0.35 J	
Barium (Dissolved)	400	2,000	200	130	120	120	
Chromium (Dissolved)	10	100	<0.64	1.8 J	0.90 J	< 0.64	
Lead (Dissolved)	1.5	15	0.22 J	<0.16	0.25 J	< 0.16	
Selenium (Dissolved)	10	50	0.34 J	<0.25	0.79 J	1.0 J	
PAHs							
Naphthalene	10	100	0.31 J	<0.31	<0.31	<0.33	
PCBs							
Aroclor-1016	0.003	0.03	12	2.4	<0.19	<0.16	
Aroclor-1242	0.003	0.03	<0.69	<0.13	<0.15	0.24 J	

Only detected constituents are presented. Constituent concentrations are reported as micrograms per liter (µg/L).

100 Concentration exceeds the NR 140 Wis. adm. code Preventive Action Limit.

Concentration exceeds the NR 140 Wis. adm. code Enforcement Standard.

< Not detected.

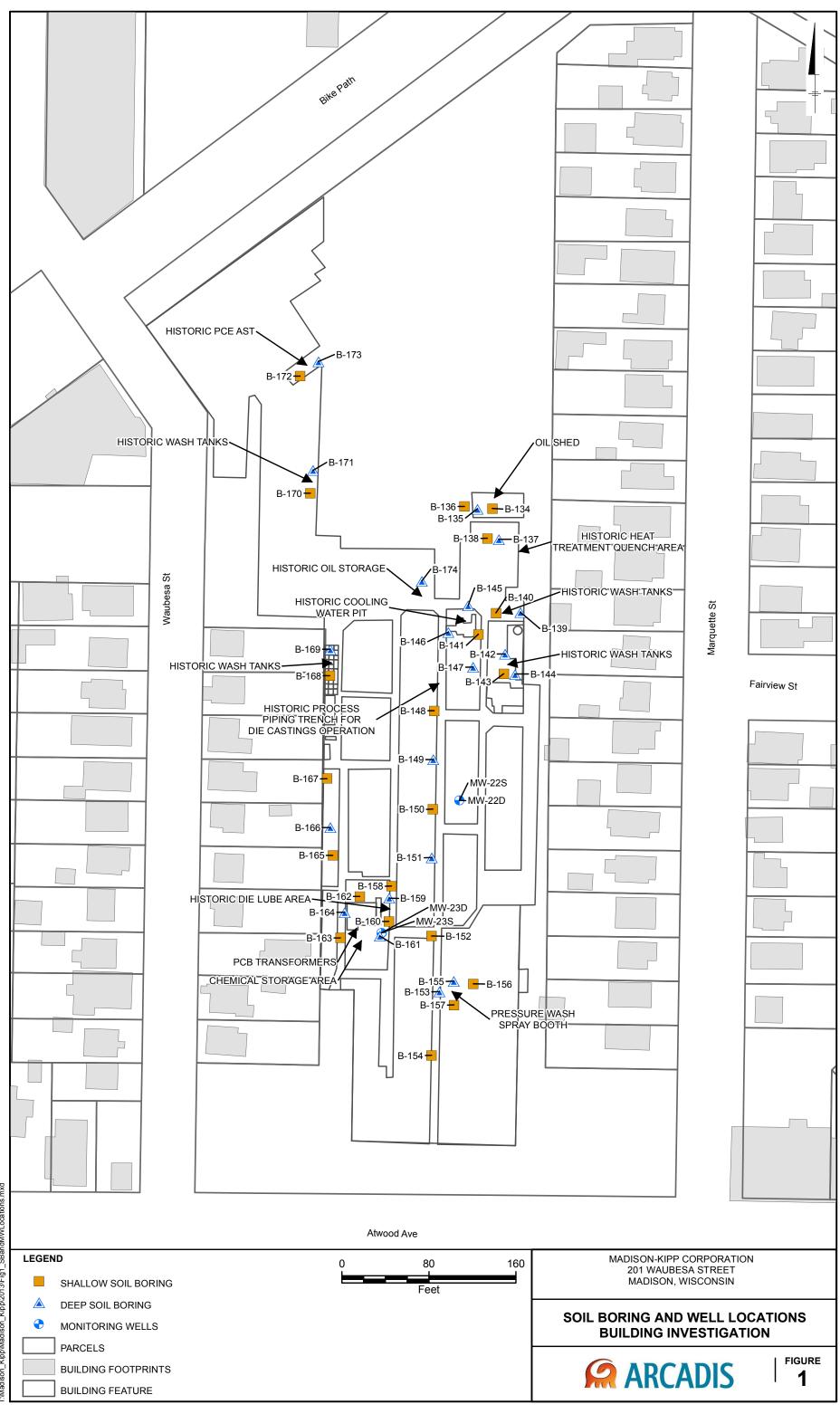
J Result is between the method detection limit and the limit of quantitation.

PAHs Polycyclic Aromatic Hydrocarbons

PCBs Polychlorinated biphenyls

RCRA Resource Conservation and Recovery Act

VOCs Volatile organic compounds



CITY: MKE DIV/GROUP: IM DB: GM LD: CK MADISON-KIPP I:Madison_KippWadison_KippN2013\Fig1_SBandMWLocations.mxd