

OBG | There's a way

May 21, 2018

Margaret Brunette

Wisconsin Department of Natural Resources
2300 N. Dr. Martin Luther King Jr. Dr.
Milwaukee, WI 53213

Margaret.brunette@wisconsin.gov

RE: Groundwater Sampling Report and No Further Action Request
Burnham Canal, Milwaukee, WI
BRRTS# 02-41-552940

Dear Ms. Brunette:

On behalf of Miller Compressing Company (Miller), O'Brien & Gere Engineers, Inc. (OBG, formerly NRT) is submitting this Groundwater Sampling Report (Report) for the Burnham Canal Site (Site) located in Milwaukee, WI (Figure 1).

The Site consists of Miller's former wire reclamation furnace area and a portion of the Canal from the western terminus to the 11th Street Bridge. Miller controls the site through ownership and comprehensive remediation easements. Regional groundwater flow is towards Lake Michigan (i.e., west to east) and varies locally as influenced by utilities and the Canal system. The upland area of the Site mildly slopes towards the Canal. Per the October 27, 2017 Groundwater Sampling Work Plan for the Site (Work Plan), which incorporated comments received from the Wisconsin Department of Natural Resources (WDNR), the groundwater sampling conducted at the Site characterized groundwater quality downgradient of the area of discharge at the west end of the Canal (Figure 2).

Site investigation information required by Wisconsin Administrative Code Chapter NR 716 (NR 716) was previously documented in the Remedial Investigation (RI) Report (NRT, 2010), Preliminary Design Report (NRT, 2012), and Final Design Report (NRT, 2016). The groundwater sampling discussed in this Report supplements the prior work, and is submitted to fulfill the requirements of NR 716, as directed by WDNR.

MONITORING WELL INSTALLATION

OBG directed and documented the installation of three groundwater monitoring wells (MW-1 through MW-3), at the approximate locations shown in the approved Work Plan and shown on Figure 2, on October 27, 2017. To facilitate monitoring well construction, borings were advanced, using hollow stem auger drilling methods, to depths of approximately 15 feet below ground surface (bgs) by On-site Environmental Services, Inc. of Sun Prairie, Wisconsin. Monitoring wells were constructed in accordance with Wisconsin Administrative Code Chapter NR 141 requirements and were screened from approximately five to 15 feet bgs. Soil boring logs and monitoring well construction forms are included in Attachments 1 and 2, respectively. The monitoring wells were developed on October 30, 2017 and monitoring well development forms are included in Attachment 3.



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GROUNDWATER QUALITY SAMPLING

Per the approved Work Plan, the purpose of monitoring well sampling is to establish the presence or absence of contaminants in groundwater that may be associated with prior releases from the former wire reclamation operations. Based on the characteristics of the discharge, the agreed to sampling focused on specific contaminants of concern. These contaminants include dissolved copper, dissolved lead, and polycyclic aromatic hydrocarbons (PAHs).

In accordance with the approved Work Plan, the first groundwater sampling event was conducted on November 9, 2017, at least 10 days after well development. Well coordinates and top of casing (TOC) well elevations were surveyed with a real-time kinematic (RTK) global positioning system (GPS). Water levels were measured with an electronic water level indicator and then sampled using low-flow sampling methods. The canal water level was also surveyed at approximately the same time as groundwater samples were collected from the monitoring wells. Field equipment was calibrated prior to use and quality assurance/quality control samples were collected during each sampling event.

Groundwater samples were submitted for laboratory analysis of dissolved copper and dissolved lead, in accordance with Environmental Protection Agency (EPA) Method SW-846 6020, as well as PAHs in accordance with EPA Method SW-846 8270, at TestAmerica In University Park, IL (WDNR Certification No. 999580010). Analytical results are included in Attachment 4 and summarized in Table 1. Groundwater and canal water surface elevations are also included in Table 1. Concentrations detected in the samples collected from monitoring wells MW-1 through MW-3 on November 9, 2017 were all less than applicable Wisconsin standards (Wisconsin Administrative Code Chapter NR 140 Preventative Action Limits [PALs] and Enforcement Standards [ESs]). In accordance with NR 716, these results were transmitted to WDNR within 10 days of receipt of the final laboratory report.

In accordance with the approved Work Plan, the second round of sampling was conducted on December 11, 2017, at least 30 days after the first groundwater sampling event. The second sampling round was conducted using the same procedures as the first sampling round, as described above. Analytical results are included in Attachment 4 and summarized in Table 1. Groundwater and canal water surface elevations are also included in Table 1. Concentrations detected in the samples collected from monitoring wells MW-1 through MW-3 on December 11, 2017 were all less than NR 140 PALs and ESs. In accordance with NR 716, these results were transmitted to WDNR within 10 days of receipt of the final laboratory report.

GROUNDWATER SUMMARY AND MONITORING WELL ABANDONMENT AND TECHNICAL SUPPORT LETTER REQUEST (NFA REQUEST)

Per the approved Work Plan, the intent of the groundwater sampling conducted at the Site was to evaluate groundwater quality within close proximity and downgradient of the area of discharge at the west end of the Canal. No evidence of groundwater contamination was found associated with prior releases of contaminants of concern (dissolved copper, dissolved lead, and PAHs) from the former wire reclamation operations. As such, on behalf of Miller, OBG is requesting WDNR approval to abandon all three on-site groundwater monitoring wells. Following abandonment, WDNR Form 3300-005 will be completed for each well and submitted to the Department. OBG will also coordinate the pickup and disposal of investigative waste (soil cuttings and purge water) that is currently being stored on site.

Additionally, on behalf of Miller, OBG is requesting a Technical Support Letter from WDNR stating that the groundwater is not a pathway of concern with respect to the discharges at the west end of the Burnham Canal from the wire reclamation operation. OBG is also requesting that the letter state that investigation conducted at



the Site meets WDNR closure criteria for Bureau of Remediation and Redevelopment Tracking System (BRRTS) case No. 02-41-552940 with respect to groundwater, and that no further groundwater investigation or remediation associated with the Site is necessary. As such, WDNR Form 4400-237, requesting a No Further Action Letter (NFA) for this BRRTS case, is included in Attachment 5. It is important to the stakeholders responsible for addressing environmental matters associated with Miller's former wire reclamation operations to receive WDNR's technical determination that no further action related to the groundwater at the Site is required.

If you have any questions regarding this project or report, please contact me at 414-837-3563.

Sincerely,
O'BRIEN & GERE ENGINEERS, INC.

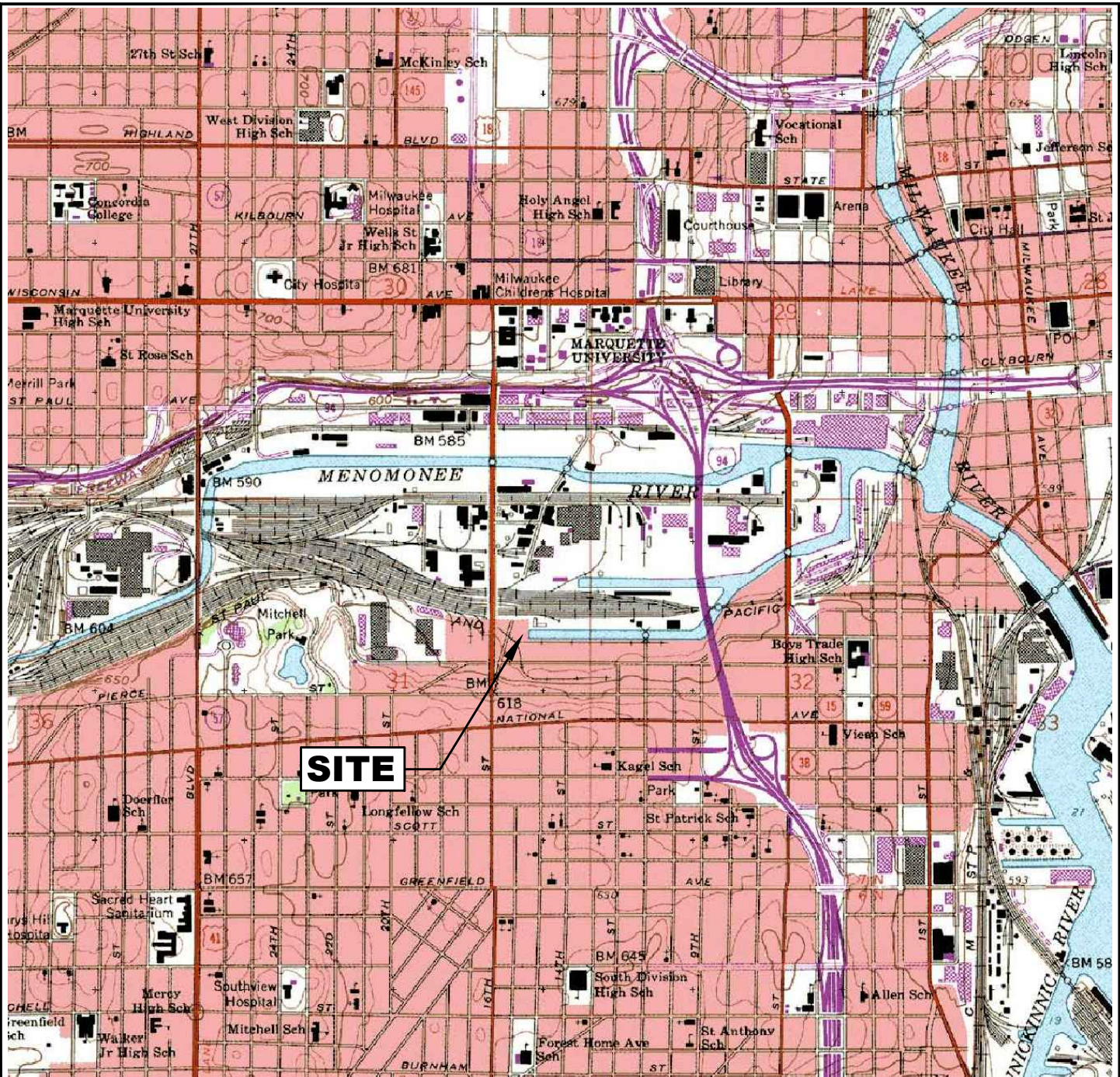


Mark D. Walter, PE
Environmental Engineer

Attachments: Figure 1 – Site Location
Figure 2 – Approximate Monitoring Well Locations
Table 1 – Groundwater Analytical Summary Table
Attachment 1 – Soil Boring Logs
Attachment 2 – Monitoring Well Construction Forms
Attachment 3 – Monitoring Well Development Forms
Attachment 4 – Laboratory Analytical Reports
Attachment 5 – WDNR Form 4400-237 Technical Assistance Request

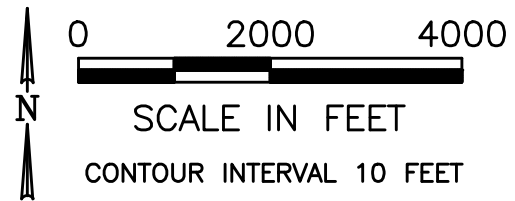


Figures



SITE

SOURCE: EARTHVISIONS U.S. TERRAIN SERIES,
 © EARTHVISIONS, INC. 603-433-8500.
 USGS 7.5 MINUTE QUADRANGLE,
 MILWAUKEE. DATED 1958.
 PHOTOREVISED 1971.



SITE LOCATION MAP

BURNHAM CANAL
 GROUNDWATER SAMPLING WORK PLAN
 MILLER COMPRESSING COMPANY
 MILWAUKEE, WISCONSIN

PROJECT NO.
 2117/8.1

 DRAWING NO.
 2117-8.1-A01

 FIGURE NO.
 1

DRAWN: AMM DATE: 05/08/17 CHK'D: KJB DATE: 05/09/17 APP'D: AMM DATE: 05/09/17

May 09, 2017 2:46pm PLOTTED BY: MillieAM SAVED BY: MillieAM
 Y:\Mapping\Projects\2117\CAD\18\2117-8.1-A01.dwg Layout
 IMAGES: Y:\Mapping\Projects\2117\CAD\SOURCE\MILWAUKEE.jpg
 REFERENCES:



Y:\Mapping\Projects\2117\TMD\Figure 2_Aprox Proposed Screening Well Locations.mxd Author: CushmanTD Date/Time: 10/18/2017 9:33:38 AM



BURNHAM CANAL

TW-1

TW-2

TW-3



APPROXIMATE LOCATION OF
GROUNDWATER SCREENING WELL



FORMER COPPER WIRE RECLAMATION FURNACE

Aerial Image Source: Milwaukee County Land Information Office, 2015.

DRAWN BY/DATE:
TDC 10/17/17
REVIEWED BY/DATE:
MDW 10/17/17
APPROVED BY/DATE:
MDW 10/18/17

PROPOSED SCREENING WELL LOCATIONS

BURNHAM CANAL SUPERFUND ALTERNATIVE SITE
MILLER COMPRESSING COMPANY
MILWAUKEE, WISCONSIN

PROJECT NO: 2117/8.1

FIGURE NO: 2






Tables

Groundwater Analytical Table
Burnham Canal, Milwaukee

Sample Location	Sample ID	Sample Date	Elevation (NAVD 88, Feet)				Dissolved Metals (ug/L)		PAHs (ug/L)																			
			Ground Surface	Top of Casing	Depth to Water (Below Top of Casing)	Depth to Water (Below Ground Surface)	Water Level	Copper	Lead	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene	Total PAHs
WI Groundwater PAL:			NA	NA	NA	NA	NA	1.30	1.5	NS	NS	600	NS	0.02	0.02	NS	NS	0.02	NS	80	80	NS	NS	NS	10	NS	50	NS
WI Groundwater ES:			NA	NA	NA	NA	NA	1,300	15	NS	NS	3,000	NS	0.2	0.2	NS	NS	0.2	NS	400	400	NS	NS	NS	100	NS	250	NS
MW-1	110917001	11/9/2017	584.17	583.74	2.09	2.52	581.65	<1.1	<2.0	0.018 J	<0.0050	<0.010	<0.0076	<0.011	<0.0057	<0.0068	<0.0076	<0.013	<0.010	0.011 J	<0.0080	<0.018	0.10	0.10	0.14	0.024 J	0.0099 J	0.41
	121117001	12/11/2017			2.22	2.65	581.52	<10.9	<2.0	0.017 J	<0.0049	<0.010	<0.0074	<0.010	<2.0	<0.0056	<0.0066	<0.0074	<0.013	<0.0098	<0.010	<0.0078	<0.017	0.090	0.090	0.14	0.039 J	0.013 J
MW-2	110917002	11/9/2017	583.68	583.32	2.74	3.10	580.58	2.4 J	0.30 J	<0.0061	0.013 J	0.14	0.016 J	<0.011	<0.0057	<0.0068	<0.0076	<0.013	<0.010	0.014 J	<0.0080	<0.018	0.038	<0.0049	0.14	<0.014	0.067	0.45
	110917003	11/9/2017			2.5 J	0.29 J	<0.0060	0.0099 J	0.13	0.014 J	<0.010	<0.0056	<0.0066	<0.0074	<0.013	<0.0098	0.013 J	<0.0078	<0.017	0.034	<0.0048	0.12	0.023 J	0.061	0.43			
	121117002	12/11/2017			4.3	0.89 J	0.28	0.034	0.090	0.0086 J	<0.011	<0.0057	<0.0068	<0.0076	<0.013	<0.010	0.050 J	0.31	<0.018	0.92	0.053	0.38	0.088	0.044	2.3			
	121117003	12/11/2017			2.1 J	0.27 J	0.34	0.040	0.10	0.013 J	<0.011	<0.0058	<0.0068	<0.0076	<0.013	<0.010	0.059	0.37	<0.018	1.1	0.060	0.42	0.078	0.049	2.6			
MW-3	110917004	11/9/2017	583.60	583.14	2.52	2.98	580.62	5.7	1.0	0.014 J	<0.0050	<0.010	<0.0076	<0.011	<0.0057	<0.0068	<0.0076	<0.013	<0.010	0.017 J	0.013 J	<0.018	0.029 J	0.024 J	0.040 J	0.041 J	0.011 J	0.21
	121117004	12/11/2017			2.49	2.95	580.65	7.6	1.2	0.0087 J	<0.0050	0.012 J	<0.0076	<0.011	<0.0057	<0.0068	<0.0076	<0.013	<0.010	0.013 J	<0.0080	<0.018	0.0069 J	0.0056 J	<0.018	0.018 J	0.012 J	0.099
Canal Water Surface	NA	11/9/2017	NA	NA	NA	NA	580.96	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NA	12/11/2017	NA	NA	NA	NA	580.77	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

[O: MDW 11/30/17; C: KJK 12/1/17; U: MDW 1/4/18; C: EDP 1/4/18]

NOTES:
Italic Underline = result attains or exceeds WDNR Preventative Action Limit (PAL)
Bold Italic Underline = result attains or exceeds WDNR PAL and Enforcement Standard (ES)
 PAL and ES from WI Administrative Code NR 140 groundwater quality standard revised effective July 2015.
 J = Indicates an estimated value
 ug/L = micrograms per liter
 NA = Not Analyzed or Not Applicable
 NS = No Standard
 PAHs = Polycyclic Aromatic Hydrocarbons
 WDNR = Wisconsin Department of Natural Resources
 WI = Wisconsin



**Attachment 1 – Soil
Boring Logs**

Route To: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Facility/Project Name MCC Holding, Inc. - Burnham Canal		License/Permit/Monitoring Number		Boring Number MW-1	
Boring Drilled By: Name of crew chief (first, last) and Firm Tony Kapugi On-Site Environmental Services, Inc.			Date Drilling Started 10/27/2017	Date Drilling Completed 10/27/2017	Drilling Method hollow stem auger
WI Unique Well No. VR923	DNR Well ID No.	Common Well Name MW-1	Final Static Water Level Feet (NAVD88)	Surface Elevation 584.2 Feet (NAVD88)	Borehole Diameter inches
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input checked="" type="checkbox"/>		State Plane N, E S/C/N		Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
1/4 of		1/4 of Section, T N, R		Lat 43° 1' 34.428" Long 87° 55' 52.369"	
Facility ID		County Milwaukee	County Code 41	Civil Town/City/ or Village Milwaukee	

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID 10.6 eV Lamp	Soil Properties						RQD/ Comments
									Compressive Strength (tsf)	Moisture Content	Liquid Limit	Plasticity Index	P 200		
1 CS	60 25		1	0 - 0.5' ASPHALT (FILL). 0.5 - 5.5' FILL, CONCRETE (FILL), light gray (10YR 7/1), few gravel, some sand, dry, rip rap.	(FILL)										Sample #1 low recovery.
2 CS	60 45		5	5.5 - 12.4' SILTY CLAY CL/ML, gray (10YR 5/1), trace dark gray (10YR 4/1) organics, and sand, low plasticity, low toughness, slow dilatency, wet.	CL/ML				0.5						
3 CS	60 45		10	12.4 - 15' ORGANIC SILT: OL, very dark gray (10YR 3/1), trace sand, little shells, fibrous wood debris, and organics, moist.	OL				0.25						
			15	15' End of Boring.											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature 	Firm Natural Resource Technology 234 W. Florida Street, Floor 5, Milwaukee, WI 53204	Tel: (414) 837-3607 Fax: (414) 837-3608
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Date Modified: 12/13/2017

Template: WDNR SBL 1998 MKE ADDRESS - Project: 2117 GINT.GPJ

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Route To: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Facility/Project Name MCC Holding, Inc. - Burnham Canal		License/Permit/Monitoring Number		Boring Number MW-2	
Boring Drilled By: Name of crew chief (first, last) and Firm Tony Kapugi On-Site Environmental Services, Inc.			Date Drilling Started 10/27/2017	Date Drilling Completed 10/27/2017	Drilling Method hollow stem auger
WI Unique Well No. VR921	DNR Well ID No.	Common Well Name MW-2	Final Static Water Level Feet (NAVD88)	Surface Elevation 583.7 Feet (NAVD88)	Borehole Diameter inches
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input checked="" type="checkbox"/>		State Plane N, E S/C/N		Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
1/4 of		1/4 of Section, T N, R		Lat 43° 1' 34.902" Long 87° 55' 52.473"	
Facility ID		County Milwaukee	County Code 41	Civil Town/City/ or Village Milwaukee	

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID 10.6 eV Lamp	Soil Properties					RQD/ Comments
									Compressive Strength (tsf)	Moisture Content	Liquid Limit	Plasticity Index	P 200	
1 CS	60 25		1	0 - 1.5' ASPHALT to CONCRETE (FILL).	(FILL)									Sample #1 low recovery
2 CS	60 26		2-5	1.5 - 8.6' FILL, POORLY-GRADED SAND WITH SILT: SP-SM, very dark gray (10YR 3/1), few wood debris, moist to wet, increasing moisture content with depth. 5.3' wet, strong odor, sheen on core sample liner.	SP-SM									Sample #2 low recovery due to wood in core sample
3 CS	60 30		9	8.6 - 10.2' SILTY CLAY CL/ML, gray (10YR 5/1), trace shells, sand and organics, nonplastic, low toughness, moist.	CL/ML				0.25					
			10-15	10.2 - 15' ORGANIC SILT: OL, very dark gray (10YR 3/1), trace to few shells and organics, nonplastic, low toughness, slow dilatency, wet.	OL									
			15	15' End of Boring.										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature  Firm **Natural Resource Technology** Tel: (414) 837-3607
234 W. Florida Street, Floor 5, Milwaukee, WI 53204 Fax: (414) 837-3608

Date Modified: 12/13/2017

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Route To: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Facility/Project Name MCC Holding, Inc. - Burnham Canal		License/Permit/Monitoring Number		Boring Number MW-3	
Boring Drilled By: Name of crew chief (first, last) and Firm Tony Kapugi On-Site Environmental Services, Inc.			Date Drilling Started 10/27/2017	Date Drilling Completed 10/27/2017	Drilling Method hollow stem auger
WI Unique Well No. VR922	DNR Well ID No.	Common Well Name MW-3	Final Static Water Level Feet (NAVD88)	Surface Elevation 583.6 Feet (NAVD88)	Borehole Diameter inches
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input checked="" type="checkbox"/>	State Plane N, E S/C/N		Lat 43° 1' 35.462"	Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
1/4 of	1/4 of Section	T	N, R	Long 87° 55' 52.467"	Feet <input type="checkbox"/> S <input type="checkbox"/> W
Facility ID	County Milwaukee	County Code 41	Civil Town/City/ or Village Milwaukee		

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID 10.6 eV Lamp	Soil Properties						RQD/ Comments		
									Compressive Strength (tsf)	Moisture Content	Liquid Limit	Plasticity Index	P 200				
1 CS	60 32		1	0 - 0.5' FILL, ASPHALT (FILL).	(FILL)												
			2	0.5 - 4.8' FILL, CONCRETE (FILL), (10YR 4/3) to (10YR 3/3), few gravel, some sand, few clay, dry to wet.	(FILL)												Sample #1 low recovery
2 CS	60 38		5	4.8 - 13.2' ORGANIC SILT: OL, very dark gray (10YR 3/1), trace sand and fibrous wood debris, few shells and organics, nonplastic, low toughness, slow dilatency, moist to wet.	OL												
3 CS	60 39		11	10.8' sand lens (1" thick).													
			13.2	13.2 - 13.6' POORLY-GRADED SAND: SP, dark gray (10YR 4/1), coarse subangular to subrounded sand, trace shells and gravel, saturated.	SP												
			13.6	13.6 - 15' ORGANIC SILT: OL, very dark gray (10YR 3/1), trace sand and wood fibers, few shells and organics, nonplastic, low toughness, slow dilatency, wet.	OL												
			15	15' End of Boring.													

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature  Firm **Natural Resource Technology** Tel: (414) 837-3607
234 W. Florida Street, Floor 5, Milwaukee, WI 53204 Fax: (414) 837-3608

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**Attachment 2 –
Monitoring Well
Construction Forms**

Facility/Project Name MCC Holding, Inc. - Burnham Canal	Local Grid Location of Well _____ ft. <input type="checkbox"/> N. _____ ft. <input type="checkbox"/> E. <input type="checkbox"/> S. _____ ft. <input type="checkbox"/> W.	Well Name MW-1
Facility License, Permit or Monitoring No.	Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Well Location <input checked="" type="checkbox"/> Lat. <u>43° 1' 34.4"</u> Long. <u>87° 55' 52.4"</u> or	Wis. Unique Well No. <u>VR923</u> DNR Well Number _____
Facility ID	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed <u>10/27/2017</u>
Type of Well	Section Location of Waste/Source _____ 1/4 of _____ 1/4 of Sec. _____, T. _____ N, R. _____ <input type="checkbox"/> E <input type="checkbox"/> W	Well Installed By: (Person's Name and Firm) <u>Tony Kapugi</u>
Well Code 11/mw	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	Gov. Lot Number _____
Distance from Waste/Source ft.	Enf. Stds. Apply <input type="checkbox"/>	On-Site Environmental Services, Inc.

A. Protective pipe, top elevation	<u>584.17</u> ft. (NAVD88)	1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation	<u>583.74</u> ft. (NAVD88)	2. Protective cover pipe: a. Inside diameter: <u>8.0</u> in. b. Length: <u>1.0</u> ft. c. Material: Steel <input checked="" type="checkbox"/> 04 Other <input type="checkbox"/>
C. Land surface elevation	<u>584.2</u> ft. (NAVD88)	d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____
D. Surface seal, bottom	<u>584.2</u> ft. (NAVD88) or <u>0.0</u> ft.	3. Surface seal: Bentonite <input checked="" type="checkbox"/> 30 Concrete <input type="checkbox"/> 01 Other <input type="checkbox"/>
12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input checked="" type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input checked="" type="checkbox"/> MH <input type="checkbox"/> CL <input checked="" type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>		4. Material between well casing and protective pipe: Bentonite <input checked="" type="checkbox"/> 30 Sand <input checked="" type="checkbox"/>
13. Sieve analysis attached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5. Annular space seal: a. Granular/Chipped Bentonite <input checked="" type="checkbox"/> 33 b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight . . . Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite . . . Bentonite-cement grout <input type="checkbox"/> 50 e. _____ Ft ³ volume added for any of the above
14. Drilling method used:	Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input checked="" type="checkbox"/> 41 Other <input type="checkbox"/>	f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input checked="" type="checkbox"/> 08
15. Drilling fluid used:	Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input checked="" type="checkbox"/> 99	6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 32 c. _____ Other <input type="checkbox"/>
16. Drilling additives used?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7. Fine sand material: Manufacturer, product name & mesh size a. <u>R.W. Sidley, Inc.</u> b. Volume added _____ ft ³
Describe _____		8. Filter pack material: Manufacturer, product name & mesh size a. <u>Red Flint Sand and Gravel</u> b. Volume added _____ ft ³
17. Source of water (attach analysis, if required): <u>n/a</u>		9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/>
E. Bentonite seal, top	<u>584.2</u> ft. (NAVD88) or <u>0.0</u> ft.	10. Screen material: <u>Schedule 40 PVC</u> a. Screen Type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/>
F. Fine sand, top	<u>580.2</u> ft. (NAVD88) or <u>4.0</u> ft.	b. Manufacturer _____ c. Slot size: <u>0.010</u> in. d. Slotted length: <u>10.0</u> ft.
G. Filter pack, top	<u>579.2</u> ft. (NAVD88) or <u>5.0</u> ft.	11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/>
H. Screen joint, top	<u>579.2</u> ft. (NAVD88) or <u>5.0</u> ft.	
I. Well bottom	<u>569.2</u> ft. (NAVD88) or <u>15.0</u> ft.	
J. Filter pack, bottom	<u>568.7</u> ft. (NAVD88) or <u>15.5</u> ft.	
K. Borehole, bottom	<u>568.7</u> ft. (NAVD88) or <u>15.5</u> ft.	
L. Borehole, diameter	_____ in.	
M. O.D. well casing	<u>2.38</u> in.	
N. I.D. well casing	<u>2.07</u> in.	

I hereby certify that the information on this form is true and correct to the best of my knowledge. Date Modified: 12/13/2017
 Signature [Signature] Firm Natural Resource Technology Tel: 414.837.3607
 234 W. Florida Street, Floor 5, Milwaukee, WI 53204 Fax: 414.837.3608

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

Facility/Project Name MCC Holding, Inc. - Burnham Canal	Local Grid Location of Well _____ ft. <input type="checkbox"/> N. _____ ft. <input type="checkbox"/> E. <input type="checkbox"/> S. _____ ft. <input type="checkbox"/> W.	Well Name MW-2
Facility License, Permit or Monitoring No.	Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Well Location <input checked="" type="checkbox"/> Lat. <u>43° 1' 34.9"</u> Long. <u>87° 55' 52.5"</u> or	Wis. Unique Well No. <u>VR921</u> DNR Well Number _____
Facility ID	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed <u>10/27/2017</u>
Type of Well	Section Location of Waste/Source _____ 1/4 of _____ 1/4 of Sec. _____, T. _____ N, R. _____ <input type="checkbox"/> E <input type="checkbox"/> W	Well Installed By: (Person's Name and Firm) <u>Tony Kapugi</u>
Well Code 11/mw	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	Gov. Lot Number _____
Distance from Waste/Source ft.	Enf. Stds. Apply <input type="checkbox"/>	On-Site Environmental Services, Inc.

A. Protective pipe, top elevation	<u>583.68</u> ft. (NAVD88)	1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation	<u>583.32</u> ft. (NAVD88)	2. Protective cover pipe: a. Inside diameter: <u>8.0</u> in. b. Length: <u>1.0</u> ft. c. Material: Steel <input checked="" type="checkbox"/> 04 Other <input type="checkbox"/>
C. Land surface elevation	<u>583.7</u> ft. (NAVD88)	d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____
D. Surface seal, bottom	<u>583.7</u> ft. (NAVD88) or <u>0.0</u> ft.	3. Surface seal: Bentonite <input checked="" type="checkbox"/> 30 Concrete <input type="checkbox"/> 01 Other <input type="checkbox"/>
12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input checked="" type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input checked="" type="checkbox"/> MH <input type="checkbox"/> CL <input checked="" type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>		4. Material between well casing and protective pipe: Bentonite <input checked="" type="checkbox"/> 30 Sand <input checked="" type="checkbox"/>
13. Sieve analysis attached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5. Annular space seal: a. Granular/Chipped Bentonite <input checked="" type="checkbox"/> 33 b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight . . . Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite . . . Bentonite-cement grout <input type="checkbox"/> 50 e. _____ Ft ³ volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input checked="" type="checkbox"/> 08
14. Drilling method used:	Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input checked="" type="checkbox"/> 41 Other <input type="checkbox"/>	6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 32 c. _____ Other <input type="checkbox"/>
15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input checked="" type="checkbox"/> 99		7. Fine sand material: Manufacturer, product name & mesh size a. <u>R.W. Sidley, Inc.</u> b. Volume added _____ ft ³
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		8. Filter pack material: Manufacturer, product name & mesh size a. <u>Red Flint Sand and Gravel</u> b. Volume added _____ ft ³
Describe _____		9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/>
17. Source of water (attach analysis, if required): <u>n/a</u>		10. Screen material: <u>Schedule 40 PVC</u> a. Screen Type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/>
E. Bentonite seal, top	<u>583.7</u> ft. (NAVD88) or <u>0.0</u> ft.	b. Manufacturer _____ c. Slot size: <u>0.010</u> in. d. Slotted length: <u>10.0</u> ft.
F. Fine sand, top	<u>579.7</u> ft. (NAVD88) or <u>4.0</u> ft.	11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/>
G. Filter pack, top	<u>578.7</u> ft. (NAVD88) or <u>5.0</u> ft.	
H. Screen joint, top	<u>578.7</u> ft. (NAVD88) or <u>5.0</u> ft.	
I. Well bottom	<u>568.7</u> ft. (NAVD88) or <u>15.0</u> ft.	
J. Filter pack, bottom	<u>568.2</u> ft. (NAVD88) or <u>15.5</u> ft.	
K. Borehole, bottom	<u>568.2</u> ft. (NAVD88) or <u>15.5</u> ft.	
L. Borehole, diameter	_____ in.	
M. O.D. well casing	<u>2.38</u> in.	
N. I.D. well casing	<u>2.07</u> in.	

I hereby certify that the information on this form is true and correct to the best of my knowledge. Date Modified: 12/13/2017

Signature [Signature] Firm **Natural Resource Technology** Tel: 414.837.3607
234 W. Florida Street, Floor 5, Milwaukee, WI 53204 Fax: 414.837.3608

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

Facility/Project Name MCC Holding, Inc. - Burnham Canal	Local Grid Location of Well _____ ft. <input type="checkbox"/> N. _____ ft. <input type="checkbox"/> E. <input type="checkbox"/> S. _____ ft. <input type="checkbox"/> W.	Well Name MW-3
Facility License, Permit or Monitoring No.	Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Well Location <input checked="" type="checkbox"/> Lat. <u>43° 1' 35.5"</u> Long. <u>87° 55' 52.5"</u> or	Wis. Unique Well No. <u>VR922</u> DNR Well Number _____
Facility ID	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed <u>10/27/2017</u>
Type of Well	Section Location of Waste/Source _____ 1/4 of _____ 1/4 of Sec. _____, T. _____ N, R. _____ <input type="checkbox"/> E <input type="checkbox"/> W	Well Installed By: (Person's Name and Firm) <u>Tony Kapugi</u>
Well Code 11/mw	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	Gov. Lot Number _____
Distance from Waste/Source _____ ft.	Enf. Stds. Apply <input type="checkbox"/>	On-Site Environmental Services, Inc.

A. Protective pipe, top elevation _____ 583.60 ft. (NAVD88)	1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation _____ 583.14 ft. (NAVD88)	2. Protective cover pipe: a. Inside diameter: _____ 8.0 in. b. Length: _____ 1.0 ft. c. Material: Steel <input checked="" type="checkbox"/> 0 4 Other <input type="checkbox"/>
C. Land surface elevation _____ 583.6 ft. (NAVD88)	d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____
D. Surface seal, bottom _____ 583.6 ft. (NAVD88) or 0.0 ft.	3. Surface seal: Bentonite <input checked="" type="checkbox"/> 3 0 Concrete <input type="checkbox"/> 0 1 Other <input type="checkbox"/>
12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input checked="" type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input checked="" type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>	4. Material between well casing and protective pipe: Bentonite <input checked="" type="checkbox"/> 3 0 Sand <input checked="" type="checkbox"/>
13. Sieve analysis attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5. Annular space seal: a. Granular/Chipped Bentonite <input checked="" type="checkbox"/> 3 3 b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry <input type="checkbox"/> 3 5 c. _____ Lbs/gal mud weight . . . Bentonite slurry <input type="checkbox"/> 3 1 d. _____ % Bentonite . . . Bentonite-cement grout <input type="checkbox"/> 5 0 e. _____ Ft ³ volume added for any of the above
14. Drilling method used: Rotary <input type="checkbox"/> 5 0 Hollow Stem Auger <input checked="" type="checkbox"/> 4 1 Other <input type="checkbox"/>	f. How installed: Tremie <input type="checkbox"/> 0 1 Tremie pumped <input type="checkbox"/> 0 2 Gravity <input checked="" type="checkbox"/> 0 8
15. Drilling fluid used: Water <input type="checkbox"/> 0 2 Air <input type="checkbox"/> 0 1 Drilling Mud <input type="checkbox"/> 0 3 None <input checked="" type="checkbox"/> 9 9	6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 3 3 b. <input type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 3 2 c. _____ Other <input type="checkbox"/>
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7. Fine sand material: Manufacturer, product name & mesh size a. _____ R.W. Sidley, Inc. _____ b. Volume added _____ ft ³
Describe _____	8. Filter pack material: Manufacturer, product name & mesh size a. _____ Red Flint Sand and Gravel _____ b. Volume added _____ ft ³
17. Source of water (attach analysis, if required): _____ n/a	9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 2 3 Flush threaded PVC schedule 80 <input type="checkbox"/> 2 4 Other <input type="checkbox"/>
E. Bentonite seal, top _____ 583.6 ft. (NAVD88) or 0.0 ft.	10. Screen material: Schedule 40 PVC a. Screen Type: Factory cut <input checked="" type="checkbox"/> 1 1 Continuous slot <input type="checkbox"/> 0 1 Other <input type="checkbox"/>
F. Fine sand, top _____ 579.6 ft. (NAVD88) or 4.0 ft.	b. Manufacturer _____
G. Filter pack, top _____ 578.6 ft. (NAVD88) or 5.0 ft.	c. Slot size: _____ 0.010 in.
H. Screen joint, top _____ 578.6 ft. (NAVD88) or 5.0 ft.	d. Slotted length: _____ 10.0 ft.
I. Well bottom _____ 568.6 ft. (NAVD88) or 15.0 ft.	11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 1 4 Other <input type="checkbox"/>
J. Filter pack, bottom _____ 568.1 ft. (NAVD88) or 15.5 ft.	
K. Borehole, bottom _____ 568.1 ft. (NAVD88) or 15.5 ft.	
L. Borehole, diameter _____ in.	
M. O.D. well casing _____ 2.38 in.	
N. I.D. well casing _____ 2.07 in.	

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Date Modified: 12/13/2017

Signature *[Signature]*

Firm **Natural Resource Technology**
234 W. Florida Street, Floor 5, Milwaukee, WI 53204

Tel: 414.837.3607
Fax: 414.837.3608

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.



**Attachment 3 –
Monitoring Well
Development Forms**

Route To: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Facility/Project Name MCC Holding, Inc.- Burnham Canal	County Milwaukee	Well Name MW-1	
Facility License, Permit or Monitoring Number	County Code 41	Wis. Unique Well Number VR923	DNR Well Number

1. Can this well be purged dry? Yes No

2. Well development method:
- surged with bailer and bailed 4 1
 - surged with bailer and pumped 6 1
 - surged with block and bailed 4 2
 - surged with block and pumped 6 2
 - surged with block, bailed, and pumped 7 0
 - compressed air 2 0
 - bailed only 1 0
 - pumped only 5 1
 - pumped slowly 5 0
 - other _____ _____

3. Time spent developing well 94 min.

4. Depth of well (from top of well casing) 15.0 ft.

5. Inside diameter of well 2.07 in.

6. Volume of water in filter pack and well casing 10.0168 gal.

7. Volume of water removed from well 44.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added not applicable

10. Analysis performed on water added? Yes No
(If yes, attach results)

17. Additional comments on development:
Well purged dry three times during development.

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 1.91 ft.	4.38 ft.
Date	b. 10/30/2017	10/30/2017
Time	c. 10:07 <input checked="" type="checkbox"/> a.m. <input type="checkbox"/> p.m.	02:20 <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.
12. Sediment in well bottom	0.0 inches	0.0 inches
13. Water clarity	Clear <input type="checkbox"/> 1 0 Turbid <input checked="" type="checkbox"/> 1 5 (Describe) <u>dark gray brown</u>	Clear <input type="checkbox"/> 2 0 Turbid <input checked="" type="checkbox"/> 2 5 (Describe) <u>light brown to clear</u>
Fill in if drilling fluids were used and well is at solid waste facility:		
14. Total suspended solids	mg/l	mg/l
15. COD	mg/l	mg/l
16. Well developed by: Person's Name and Firm Eric Plante Natural Resource Technology, Inc.		

Facility Address or Owner/Responsible Party Address


Name: _____

Firm: MCC Holding, LLC.

Street: 1004 E. Ogden Ave.

City/State/Zip: Milwaukee WI 53202

I hereby certify that the above information is true and correct to the best of my knowledge.

Signature: 

Print Name: Eric Plante

Firm: Natural Resource Technology

Route To: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Facility/Project Name <u>MCC Holding, Inc.- Burnham Canal</u>	County <u>Milwaukee</u>	Well Name <u>MW-2</u>	
Facility License, Permit or Monitoring Number	County Code <u>41</u>	Wis. Unique Well Number <u>VR921</u>	DNR Well Number

1. Can this well be purged dry? Yes No
2. Well development method:
- surged with bailer and bailed 4 1
 - surged with bailer and pumped 6 1
 - surged with block and bailed 4 2
 - surged with block and pumped 6 2
 - surged with block, bailed, and pumped 7 0
 - compressed air 2 0
 - bailed only 1 0
 - pumped only 5 1
 - pumped slowly 5 0
 - other _____
3. Time spent developing well 79 min.
4. Depth of well (from top of well casing) 14.7 ft.
5. Inside diameter of well 2.07 in.
6. Volume of water in filter pack and well casing 9.8706 gal.
7. Volume of water removed from well 27.0 gal.
8. Volume of water added (if any) 0.0 gal.
9. Source of water added not applicable
10. Analysis performed on water added? Yes No
(If yes, attach results)

		Before Development	After Development
11. Depth to Water (from top of well casing)	a.	2.47 ft.	7.80 ft.
Date	b.	10/30/2017	10/30/2017
Time	c.	11:06 <input checked="" type="checkbox"/> a.m. <input type="checkbox"/> p.m.	02:38 <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.
12. Sediment in well bottom		0.0 inches	0.0 inches
13. Water clarity (Describe)	Clear	<input type="checkbox"/> 1 0	Clear <input type="checkbox"/> 2 0
	Turbid	<input checked="" type="checkbox"/> 1 5	Turbid <input checked="" type="checkbox"/> 2 5
		<u>dark gray brown</u>	<u>light brown to clear</u>
Fill in if drilling fluids were used and well is at solid waste facility:			
14. Total suspended solids		mg/l	mg/l
15. COD		mg/l	mg/l
16. Well developed by: Person's Name and Firm			
Eric Plante Natural Resource Technology, Inc.			

17. Additional comments on development:
Well purged dry three times during development.

Facility Address or Owner/Responsible Party Address


Name: _____

Firm: MCC Holding, LLC.

Street: 1004 E. Ogden Ave.

City/State/Zip: Milwaukee WI 53202

I hereby certify that the above information is true and correct to the best of my knowledge.

Signature: 

Print Name: Eric Plante

Firm: Natural Resource Technology

Route To: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Facility/Project Name MCC Holding, Inc.- Burnham Canal	County Milwaukee	Well Name MW-3	
Facility License, Permit or Monitoring Number	County Code 41	Wis. Unique Well Number VR922	DNR Well Number

1. Can this well be purged dry? Yes No

2. Well development method:

surged with bailer and bailed	<input checked="" type="checkbox"/>	4 1
surged with bailer and pumped	<input type="checkbox"/>	6 1
surged with block and bailed	<input type="checkbox"/>	4 2
surged with block and pumped	<input type="checkbox"/>	6 2
surged with block, bailed, and pumped	<input type="checkbox"/>	7 0
compressed air	<input type="checkbox"/>	2 0
bailed only	<input type="checkbox"/>	1 0
pumped only	<input type="checkbox"/>	5 1
pumped slowly	<input type="checkbox"/>	5 0
other _____	<input type="checkbox"/>	

3. Time spent developing well 81 min.

4. Depth of well (from top of well casing) 14.7 ft.

5. Inside diameter of well 2.07 in.

6. Volume of water in filter pack and well casing 9.8978 gal.

7. Volume of water removed from well 49.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added not applicable

10. Analysis performed on water added? Yes No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 2.33 ft.	2.54 ft.
Date	b. 10/30/2017	10/30/2017
Time	c. 11:58 <input checked="" type="checkbox"/> a.m. <input type="checkbox"/> p.m.	03:06 <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.
12. Sediment in well bottom	0.0 inches	0.0 inches
13. Water clarity	Clear <input type="checkbox"/> 1 0 Turbid <input checked="" type="checkbox"/> 1 5 (Describe) <u>dark gray brown</u>	Clear <input type="checkbox"/> 2 0 Turbid <input checked="" type="checkbox"/> 2 5 (Describe) <u>light brown to clear</u>

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids mg/l

15. COD mg/l

16. Well developed by: Person's Name and Firm
Eric Plante
Natural Resource Technology, Inc.

17. Additional comments on development:
Well purged dry three times during development.

Facility Address or Owner/Responsible Party Address


Name: _____

Firm: MCC Holding, LLC.

Street: 1004 E. Ogden Ave.

City/State/Zip: Milwaukee WI 53202

I hereby certify that the above information is true and correct to the best of my knowledge.

Signature: 

Print Name: Eric Plante

Firm: Natural Resource Technology



**Attachment 4 –
Laboratory Analytical
Reports**

November 29, 2017

Julie Zimdars
NATURAL RESOURCE TECHNOLOGY
234 W. Florida St, 5th Floor
Milwaukee, WI 53204

RE: Project: 2117/8.1 MCC HOLDING INC-BURNH
Pace Project No.: 40160686

Dear Julie Zimdars:

Enclosed are the analytical results for sample(s) received by the laboratory on November 11, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Brian Basten
brian.basten@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Data Delivery Team, Natural Resources Technologies



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: 2117/8.1 MCC HOLDING INC-BURNH

Pace Project No.: 40160686

Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302

Florida/NELAP Certification #: E87948

Illinois Certification #: 200050

Kentucky UST Certification #: 82

Louisiana Certification #: 04168

Minnesota Certification #: 055-999-334

New York Certification #: 12064

North Dakota Certification #: R-150

Virginia VELAP ID: 460263

South Carolina Certification #: 83006001

Texas Certification #: T104704529-14-1

Wisconsin Certification #: 405132750

Wisconsin DATCP Certification #: 105-444

USDA Soil Permit #: P330-16-00157

Federal Fish & Wildlife Permit #: LE51774A-0

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE SUMMARY

Project: 2117/8.1 MCC HOLDING INC-BURNH

Pace Project No.: 40160686

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40160686001	110917001	Water	11/09/17 10:08	11/11/17 10:00
40160686002	110917002	Water	11/09/17 11:01	11/11/17 10:00
40160686003	110917003	Water	11/09/17 11:06	11/11/17 10:00
40160686004	110917004	Water	11/09/17 11:46	11/11/17 10:00

REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: 2117/8.1 MCC HOLDING INC-BURNH

Pace Project No.: 40160686

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40160686001	110917001	EPA 6020	SDW	2
		EPA 8270 by HVI	TPO	21
40160686002	110917002	EPA 6020	SDW	2
		EPA 8270 by HVI	TPO	21
40160686003	110917003	EPA 6020	SDW	2
		EPA 8270 by HVI	TPO	21
40160686004	110917004	EPA 6020	SDW	2
		EPA 8270 by HVI	TPO	21

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 2117/8.1 MCC HOLDING INC-BURNH

Sample Project No.: 40160686

Sample: 110917001 Lab ID: 40160686001 Collected: 11/09/17 10:08 Received: 11/11/17 10:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS		Analytical Method: EPA 6020 Preparation Method: EPA 3010							
Copper	<1.1	ug/L	3.6	1.1	1	11/16/17 08:12	11/17/17 03:41	7440-50-8	
Lead	<2.0	ug/L	10.0	2.0	10	11/16/17 08:12	11/17/17 18:12	7439-92-1	D3
8270 MSSV PAH by HVI		Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510							
Acenaphthene	0.018J	ug/L	0.030	0.0061	1	11/14/17 10:27	11/15/17 15:35	83-32-9	
Acenaphthylene	<0.0050	ug/L	0.025	0.0050	1	11/14/17 10:27	11/15/17 15:35	208-96-8	
Anthracene	<0.010	ug/L	0.052	0.010	1	11/14/17 10:27	11/15/17 15:35	120-12-7	
Benzo(a)anthracene	<0.0076	ug/L	0.038	0.0076	1	11/14/17 10:27	11/15/17 15:35	56-55-3	
Benzo(a)pyrene	<0.011	ug/L	0.053	0.011	1	11/14/17 10:27	11/15/17 15:35	50-32-8	
Benzo(b)fluoranthene	<0.0057	ug/L	0.029	0.0057	1	11/14/17 10:27	11/15/17 15:35	205-99-2	
Benzo(g,h,i)perylene	<0.0068	ug/L	0.034	0.0068	1	11/14/17 10:27	11/15/17 15:35	191-24-2	
Benzo(k)fluoranthene	<0.0076	ug/L	0.038	0.0076	1	11/14/17 10:27	11/15/17 15:35	207-08-9	
Chrysene	<0.013	ug/L	0.065	0.013	1	11/14/17 10:27	11/15/17 15:35	218-01-9	
Dibenz(a,h)anthracene	<0.010	ug/L	0.050	0.010	1	11/14/17 10:27	11/15/17 15:35	53-70-3	
Fluoranthene	0.011J	ug/L	0.053	0.011	1	11/14/17 10:27	11/15/17 15:35	206-44-0	
Fluorene	<0.0080	ug/L	0.040	0.0080	1	11/14/17 10:27	11/15/17 15:35	86-73-7	
Indeno(1,2,3-cd)pyrene	<0.018	ug/L	0.088	0.018	1	11/14/17 10:27	11/15/17 15:35	193-39-5	
1-Methylnaphthalene	0.10	ug/L	0.030	0.0059	1	11/14/17 10:27	11/15/17 15:35	90-12-0	
2-Methylnaphthalene	0.10	ug/L	0.024	0.0049	1	11/14/17 10:27	11/15/17 15:35	91-57-6	
Naphthalene	0.14	ug/L	0.092	0.018	1	11/14/17 10:27	11/15/17 15:35	91-20-3	
Phenanthrene	0.024J	ug/L	0.069	0.014	1	11/14/17 10:27	11/15/17 15:35	85-01-8	
Pyrene	0.0099J	ug/L	0.038	0.0076	1	11/14/17 10:27	11/15/17 15:35	129-00-0	
Total PAHs	0.41	ug/L			1	11/14/17 10:27	11/15/17 15:35		
Surrogates									
2-Fluorobiphenyl (S)	48	%	35-84		1	11/14/17 10:27	11/15/17 15:35	321-60-8	
Terphenyl-d14 (S)	56	%	10-129		1	11/14/17 10:27	11/15/17 15:35	1718-51-0	

Sample: 110917002 Lab ID: 40160686002 Collected: 11/09/17 11:01 Received: 11/11/17 10:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS		Analytical Method: EPA 6020 Preparation Method: EPA 3010							
Copper	2.4J	ug/L	3.6	1.1	1	11/16/17 08:12	11/17/17 03:56	7440-50-8	
Lead	0.30J	ug/L	1.0	0.20	1	11/16/17 08:12	11/17/17 03:56	7439-92-1	
8270 MSSV PAH by HVI		Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510							
Acenaphthene	<0.0061	ug/L	0.030	0.0061	1	11/14/17 10:27	11/15/17 15:54	83-32-9	
Acenaphthylene	0.013J	ug/L	0.025	0.0050	1	11/14/17 10:27	11/15/17 15:54	208-96-8	
Anthracene	0.14	ug/L	0.052	0.010	1	11/14/17 10:27	11/15/17 15:54	120-12-7	
Benzo(a)anthracene	0.016J	ug/L	0.038	0.0076	1	11/14/17 10:27	11/15/17 15:54	56-55-3	
Benzo(a)pyrene	<0.011	ug/L	0.053	0.011	1	11/14/17 10:27	11/15/17 15:54	50-32-8	
Benzo(b)fluoranthene	<0.0057	ug/L	0.029	0.0057	1	11/14/17 10:27	11/15/17 15:54	205-99-2	
Benzo(g,h,i)perylene	<0.0068	ug/L	0.034	0.0068	1	11/14/17 10:27	11/15/17 15:54	191-24-2	
Benzo(k)fluoranthene	<0.0076	ug/L	0.038	0.0076	1	11/14/17 10:27	11/15/17 15:54	207-08-9	

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ANALYTICAL RESULTS

Project: 2117/8.1 MCC HOLDING INC-BURNH

Project No.: 40160686

Sample: 110917002 **Lab ID: 40160686002** Collected: 11/09/17 11:01 Received: 11/11/17 10:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by HVI		Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510							
Chrysene	<0.013	ug/L	0.065	0.013	1	11/14/17 10:27	11/15/17 15:54	218-01-9	
Dibenz(a,h)anthracene	<0.010	ug/L	0.050	0.010	1	11/14/17 10:27	11/15/17 15:54	53-70-3	
Fluoranthene	0.014J	ug/L	0.053	0.011	1	11/14/17 10:27	11/15/17 15:54	206-44-0	
Fluorene	<0.0080	ug/L	0.040	0.0080	1	11/14/17 10:27	11/15/17 15:54	86-73-7	
Indeno(1,2,3-cd)pyrene	<0.018	ug/L	0.088	0.018	1	11/14/17 10:27	11/15/17 15:54	193-39-5	
1-Methylnaphthalene	0.038	ug/L	0.030	0.0059	1	11/14/17 10:27	11/15/17 15:54	90-12-0	
2-Methylnaphthalene	<0.0049	ug/L	0.024	0.0049	1	11/14/17 10:27	11/15/17 15:54	91-57-6	
Naphthalene	0.14	ug/L	0.092	0.018	1	11/14/17 10:27	11/15/17 15:54	91-20-3	
Phenanthrene	<0.014	ug/L	0.069	0.014	1	11/14/17 10:27	11/15/17 15:54	85-01-8	
Pyrene	0.067	ug/L	0.038	0.0076	1	11/14/17 10:27	11/15/17 15:54	129-00-0	
Total PAHs	0.45	ug/L			1	11/14/17 10:27	11/15/17 15:54		
Surrogates									
2-Fluorobiphenyl (S)	52	%	35-84		1	11/14/17 10:27	11/15/17 15:54	321-60-8	
Terphenyl-d14 (S)	54	%	10-129		1	11/14/17 10:27	11/15/17 15:54	1718-51-0	

Sample: 110917003 **Lab ID: 40160686003** Collected: 11/09/17 11:06 Received: 11/11/17 10:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS		Analytical Method: EPA 6020 Preparation Method: EPA 3010							
Copper	2.5J	ug/L	3.6	1.1	1	11/16/17 08:12	11/17/17 04:03	7440-50-8	
Lead	0.29J	ug/L	1.0	0.20	1	11/16/17 08:12	11/17/17 04:03	7439-92-1	
8270 MSSV PAH by HVI		Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510							
Acenaphthene	<0.0060	ug/L	0.030	0.0060	1	11/14/17 10:27	11/15/17 16:49	83-32-9	
Acenaphthylene	0.0099J	ug/L	0.024	0.0049	1	11/14/17 10:27	11/15/17 16:49	208-96-8	
Anthracene	0.13	ug/L	0.051	0.010	1	11/14/17 10:27	11/15/17 16:49	120-12-7	
Benzo(a)anthracene	0.014J	ug/L	0.037	0.0074	1	11/14/17 10:27	11/15/17 16:49	56-55-3	
Benzo(a)pyrene	<0.010	ug/L	0.052	0.010	1	11/14/17 10:27	11/15/17 16:49	50-32-8	
Benzo(b)fluoranthene	<0.0056	ug/L	0.028	0.0056	1	11/14/17 10:27	11/15/17 16:49	205-99-2	
Benzo(g,h,i)perylene	<0.0066	ug/L	0.033	0.0066	1	11/14/17 10:27	11/15/17 16:49	191-24-2	
Benzo(k)fluoranthene	<0.0074	ug/L	0.037	0.0074	1	11/14/17 10:27	11/15/17 16:49	207-08-9	
Chrysene	<0.013	ug/L	0.064	0.013	1	11/14/17 10:27	11/15/17 16:49	218-01-9	
Dibenz(a,h)anthracene	<0.0098	ug/L	0.049	0.0098	1	11/14/17 10:27	11/15/17 16:49	53-70-3	
Fluoranthene	0.013J	ug/L	0.052	0.010	1	11/14/17 10:27	11/15/17 16:49	206-44-0	
Fluorene	<0.0078	ug/L	0.039	0.0078	1	11/14/17 10:27	11/15/17 16:49	86-73-7	
Indeno(1,2,3-cd)pyrene	<0.017	ug/L	0.086	0.017	1	11/14/17 10:27	11/15/17 16:49	193-39-5	
1-Methylnaphthalene	0.034	ug/L	0.029	0.0058	1	11/14/17 10:27	11/15/17 16:49	90-12-0	
2-Methylnaphthalene	<0.0048	ug/L	0.024	0.0048	1	11/14/17 10:27	11/15/17 16:49	91-57-6	
Naphthalene	0.12	ug/L	0.090	0.018	1	11/14/17 10:27	11/15/17 16:49	91-20-3	
Phenanthrene	0.023J	ug/L	0.068	0.014	1	11/14/17 10:27	11/15/17 16:49	85-01-8	
Pyrene	0.061	ug/L	0.038	0.0075	1	11/14/17 10:27	11/15/17 16:49	129-00-0	
Total PAHs	0.43	ug/L			1	11/14/17 10:27	11/15/17 16:49		

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ANALYTICAL RESULTS

Project: 2117/8.1 MCC HOLDING INC-BURNH

Pace Project No.: 40160686

Sample: 110917003 **Lab ID: 40160686003** Collected: 11/09/17 11:06 Received: 11/11/17 10:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by HVI Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510									
<i>Surrogates</i>									
2-Fluorobiphenyl (S)	46	%	35-84		1	11/14/17 10:27	11/15/17 16:49	321-60-8	
Terphenyl-d14 (S)	46	%	10-129		1	11/14/17 10:27	11/15/17 16:49	1718-51-0	

Sample: 110917004 **Lab ID: 40160686004** Collected: 11/09/17 11:46 Received: 11/11/17 10:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS Analytical Method: EPA 6020 Preparation Method: EPA 3010									
Copper	5.7	ug/L	3.6	1.1	1	11/16/17 08:12	11/17/17 02:56	7440-50-8	
Lead	1.0	ug/L	1.0	0.20	1	11/16/17 08:12	11/17/17 02:56	7439-92-1	

8270 MSSV PAH by HVI Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510									
Acenaphthene	0.014J	ug/L	0.030	0.0061	1	11/14/17 10:27	11/15/17 10:58	83-32-9	
Acenaphthylene	<0.0050	ug/L	0.025	0.0050	1	11/14/17 10:27	11/15/17 10:58	208-96-8	
Anthracene	<0.010	ug/L	0.052	0.010	1	11/14/17 10:27	11/15/17 10:58	120-12-7	
Benzo(a)anthracene	<0.0076	ug/L	0.038	0.0076	1	11/14/17 10:27	11/15/17 10:58	56-55-3	
Benzo(a)pyrene	<0.011	ug/L	0.053	0.011	1	11/14/17 10:27	11/15/17 10:58	50-32-8	
Benzo(b)fluoranthene	<0.0057	ug/L	0.029	0.0057	1	11/14/17 10:27	11/15/17 10:58	205-99-2	
Benzo(g,h,i)perylene	<0.0068	ug/L	0.034	0.0068	1	11/14/17 10:27	11/15/17 10:58	191-24-2	
Benzo(k)fluoranthene	<0.0076	ug/L	0.038	0.0076	1	11/14/17 10:27	11/15/17 10:58	207-08-9	
Chrysene	<0.013	ug/L	0.065	0.013	1	11/14/17 10:27	11/15/17 10:58	218-01-9	
Dibenz(a,h)anthracene	<0.010	ug/L	0.050	0.010	1	11/14/17 10:27	11/15/17 10:58	53-70-3	
Fluoranthene	0.017J	ug/L	0.053	0.011	1	11/14/17 10:27	11/15/17 10:58	206-44-0	
Fluorene	0.013J	ug/L	0.040	0.0080	1	11/14/17 10:27	11/15/17 10:58	86-73-7	
Indeno(1,2,3-cd)pyrene	<0.018	ug/L	0.088	0.018	1	11/14/17 10:27	11/15/17 10:58	193-39-5	
1-Methylnaphthalene	0.029J	ug/L	0.030	0.0059	1	11/14/17 10:27	11/15/17 10:58	90-12-0	
2-Methylnaphthalene	0.024J	ug/L	0.024	0.0049	1	11/14/17 10:27	11/15/17 10:58	91-57-6	
Naphthalene	0.040J	ug/L	0.092	0.018	1	11/14/17 10:27	11/15/17 10:58	91-20-3	
Phenanthrene	0.041J	ug/L	0.069	0.014	1	11/14/17 10:27	11/15/17 10:58	85-01-8	
Pyrene	0.011J	ug/L	0.038	0.0076	1	11/14/17 10:27	11/15/17 10:58	129-00-0	
Total PAHs	0.21	ug/L			1	11/14/17 10:27	11/15/17 10:58		
<i>Surrogates</i>									
2-Fluorobiphenyl (S)	51	%	35-84		1	11/14/17 10:27	11/15/17 10:58	321-60-8	
Terphenyl-d14 (S)	58	%	10-129		1	11/14/17 10:27	11/15/17 10:58	1718-51-0	

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QUALITY CONTROL DATA

Project: 2117/8.1 MCC HOLDING INC-BURNH

Pace Project No.: 40160686

QC Batch: 274392 Analysis Method: EPA 6020
QC Batch Method: EPA 3010 Analysis Description: 6020 MET
Associated Lab Samples: 40160686001, 40160686002, 40160686003, 40160686004

METHOD BLANK: 1614560 Matrix: Water
Associated Lab Samples: 40160686001, 40160686002, 40160686003, 40160686004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	<1.1	3.6	11/17/17 02:11	
Lead	ug/L	<0.20	1.0	11/17/17 02:11	

LABORATORY CONTROL SAMPLE: 1614561

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	500	476	95	80-120	
Lead	ug/L	500	456	91	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1614562 1614563

Parameter	Units	40160686004		1614563		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Copper	ug/L	5.7	500	500	439	436	87	86	75-125	1	20
Lead	ug/L	1.0	500	500	472	470	94	94	75-125	0	20

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QUALITY CONTROL DATA

Project: 2117/8.1 MCC HOLDING INC-BURNH

Pace Project No.: 40160686

QC Batch: 274061 Analysis Method: EPA 8270 by HVI
 QC Batch Method: EPA 3510 Analysis Description: 8270 Water PAH by HVI
 Associated Lab Samples: 40160686001, 40160686002, 40160686003, 40160686004

METHOD BLANK: 1612882 Matrix: Water
 Associated Lab Samples: 40160686001, 40160686002, 40160686003, 40160686004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/L	<0.0059	0.030	11/15/17 10:03	
2-Methylnaphthalene	ug/L	<0.0049	0.024	11/15/17 10:03	
Acenaphthene	ug/L	<0.0061	0.030	11/15/17 10:03	
Acenaphthylene	ug/L	<0.0050	0.025	11/15/17 10:03	
Anthracene	ug/L	<0.010	0.052	11/15/17 10:03	
Benzo(a)anthracene	ug/L	<0.0076	0.038	11/15/17 10:03	
Benzo(a)pyrene	ug/L	<0.011	0.053	11/15/17 10:03	
Benzo(b)fluoranthene	ug/L	<0.0057	0.029	11/15/17 10:03	
Benzo(g,h,i)perylene	ug/L	<0.0068	0.034	11/15/17 10:03	
Benzo(k)fluoranthene	ug/L	<0.0076	0.038	11/15/17 10:03	
Chrysene	ug/L	<0.013	0.065	11/15/17 10:03	
Dibenz(a,h)anthracene	ug/L	<0.010	0.050	11/15/17 10:03	
Fluoranthene	ug/L	<0.011	0.053	11/15/17 10:03	
Fluorene	ug/L	<0.0080	0.040	11/15/17 10:03	
Indeno(1,2,3-cd)pyrene	ug/L	<0.018	0.088	11/15/17 10:03	
Naphthalene	ug/L	<0.018	0.092	11/15/17 10:03	
Phenanthrene	ug/L	<0.014	0.069	11/15/17 10:03	
Pyrene	ug/L	<0.0076	0.038	11/15/17 10:03	
Total PAHs	ug/L	0.0057		11/15/17 10:03	
2-Fluorobiphenyl (S)	%	56	35-84	11/15/17 10:03	
Terphenyl-d14 (S)	%	71	10-129	11/15/17 10:03	

LABORATORY CONTROL SAMPLE: 1612883

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/L	2	1.4	68	39-83	
2-Methylnaphthalene	ug/L	2	1.3	66	38-86	
Acenaphthene	ug/L	2	1.2	62	35-85	
Acenaphthylene	ug/L	2	1.3	64	31-88	
Anthracene	ug/L	2	1.4	72	47-104	
Benzo(a)anthracene	ug/L	2	1.3	67	36-105	
Benzo(a)pyrene	ug/L	2	1.5	73	69-117	
Benzo(b)fluoranthene	ug/L	2	1.4	71	54-107	
Benzo(g,h,i)perylene	ug/L	2	0.97	48	13-86	
Benzo(k)fluoranthene	ug/L	2	1.4	72	63-128	
Chrysene	ug/L	2	1.7	86	69-150	
Dibenz(a,h)anthracene	ug/L	2	0.88	44	10-87	
Fluoranthene	ug/L	2	1.6	79	57-103	
Fluorene	ug/L	2	1.3	67	38-85	
Indeno(1,2,3-cd)pyrene	ug/L	2	1.5	73	40-111	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: 2117/8.1 MCC HOLDING INC-BURNH

Pace Project No.: 40160686

LABORATORY CONTROL SAMPLE: 1612883

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/L	2	1.1	56	39-82	
Phenanthrene	ug/L	2	1.4	70	46-96	
Pyrene	ug/L	2	1.6	79	57-110	
Total PAHs	ug/L		24.3			
2-Fluorobiphenyl (S)	%			57	35-84	
Terphenyl-d14 (S)	%			72	10-129	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1612884 1612885

Parameter	Units	40160686004		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec					
1-Methylnaphthalene	ug/L	0.029J	2	2	1.1	1.3	56	64	27-86	13	29		
2-Methylnaphthalene	ug/L	0.024J	2	2	1.1	1.3	56	63	30-86	12	35		
Acenaphthene	ug/L	0.014J	2	2	1.0	1.1	51	57	28-85	10	29		
Acenaphthylene	ug/L	<0.0050	2	2	1.0	1.2	51	58	27-88	12	29		
Anthracene	ug/L	<0.010	2	2	1.3	1.2	64	62	38-104	3	35		
Benzo(a)anthracene	ug/L	<0.0076	2	2	0.84	0.93	42	46	10-105	10	28		
Benzo(a)pyrene	ug/L	<0.011	2	2	0.64	0.73	32	36	10-130	13	26		
Benzo(b)fluoranthene	ug/L	<0.0057	2	2	0.65	0.70	32	35	10-115	7	25		
Benzo(g,h,i)perylene	ug/L	<0.0068	2	2	0.45	0.51	23	26	10-87	12	42		
Benzo(k)fluoranthene	ug/L	<0.0076	2	2	0.64	0.76	32	38	10-133	16	25		
Chrysene	ug/L	<0.013	2	2	1.2	1.2	57	62	17-150	7	24		
Dibenz(a,h)anthracene	ug/L	<0.010	2	2	0.41	0.45	20	22	10-89	9	49		
Fluoranthene	ug/L	0.017J	2	2	1.2	1.3	62	66	41-103	7	32		
Fluorene	ug/L	0.013J	2	2	1.1	1.2	55	60	32-85	9	28		
Indeno(1,2,3-cd)pyrene	ug/L	<0.018	2	2	0.42	0.46	21	23	10-111	10	37		
Naphthalene	ug/L	0.040J	2	2	1.0	1.2	49	56	23-88	13	28		
Phenanthrene	ug/L	0.041J	2	2	1.2	1.3	58	61	33-96	6	25		
Pyrene	ug/L	0.011J	2	2	1.2	1.4	62	68	38-110	9	28		
Total PAHs	ug/L	0.21			16.6	18.2					9		
2-Fluorobiphenyl (S)	%						48	53	35-84				
Terphenyl-d14 (S)	%						46	50	10-129				

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 2117/8.1 MCC HOLDING INC-BURNH

Pace Project No.: 40160686

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2117/8.1 MCC HOLDING INC-BURNH

Pace Project No.: 40160686

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40160686001	110917001	EPA 3010	274392	EPA 6020	274550
40160686002	110917002	EPA 3010	274392	EPA 6020	274550
40160686003	110917003	EPA 3010	274392	EPA 6020	274550
40160686004	110917004	EPA 3010	274392	EPA 6020	274550
40160686001	110917001	EPA 3510	274061	EPA 8270 by HVI	274165
40160686002	110917002	EPA 3510	274061	EPA 8270 by HVI	274165
40160686003	110917003	EPA 3510	274061	EPA 8270 by HVI	274165
40160686004	110917004	EPA 3510	274061	EPA 8270 by HVI	274165

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(Please Print Clearly)



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CHAIN OF CUSTODY

UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

Page 1 of 1
40160686
Custody Seals: 2117-1110-001 + 2117-1110-002

Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

Company Name: *Natural Resource Technology*

Branch/Location: *Waukesha*

Project Contact: *Mark Walker*

Phone: *(414) 837-3563*

Project Number: *2117 / Task 81*

Project Name: *McC Holdings Inc - Barken Canal*

Project State: *Wisconsin*

Sampled By (Print): *Eric Plante*

Sampled By (Sign): *Eric Plante*

PO #: _____

Regulatory Program: _____

Data Package Options (billable)

EPA Level III

EPA Level IV

MSMSD (billable)

On your sample

NOT needed on your sample

Matrix Codes

A = Air B = Bioa C = Charcoal O = Oil S = Soil SI = Sludge

W = Water DW = Drinking Water GW = Ground Water SW = Surface Water WP = Waste Water

PAGE LAB # CLIENT FIELD ID

DATE	COLLECTION TIME	MATRIX
001 110917001	11-17 1008	GW
002 110917002	1101	
003 110917003	1106	
004 110917004	1146	

Rush Turnaround Time Requested - Prelims (Rush TAT subject to approval/surcharge)

Date Needed: _____

Transmit Prelim Rush Results by (complete what you want):

Email #1: _____

Email #2: _____

Telephone: _____

Fax: _____

Samples on HOLD are subject to special pricing and release of liability

Analyses Requested	FILTERED? (YES/NO)		PRESERVATION (CODE)
	Y/N	Pick Letter	
PAH's 8270	N	A	
Metals*6020	Y	D	

Quote #: _____

Mail To Contact: *Mark Walker*

Mail To Company: *Natural Resource Tech*

Mail To Address: *234 W. Florida Street Waukesha WI 53091*

Invoice To Contact: *Same as Above*

Invoice To Company: _____

Invoice To Address: _____

Invoice To Phone: _____

CLIENT COMMENTS: *Lab PB, BARKEN*

LAB COMMENTS (Lab Use Only): *1-250 ml p 2-125 ml ag 4*

Profile #: *05/11/17*

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
<i>Eric Plante</i>	<i>11/17 0955</i>	<i>OSBORN</i>	<i>11/17 1000</i>
<i>Logistics</i>	<i>11/17 1000</i>		

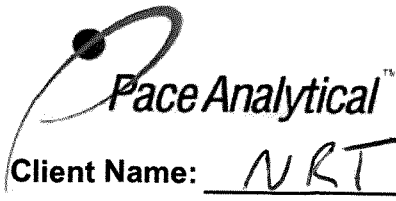
PAGE Project No. *40160686*

Receipt Temp = *ROT* °C

Sample Receipt pH *OK/ Adjusted*

Cooler Custody Seal Present / Not Present *Intact / Not Intact*

Version: 0.06/12/05



Sample Condition Upon Receipt

Pace Analytical Services, LLC. - Green Bay WI
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Project #:

WO#: 40160686

Client Name: NRT

Courier: Fed Ex UPS Client Pace Other: CS Logistics

Tracking #:



Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Custody Seal on Samples Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used MA Type of Ice: Wet Blue Dry None Samples on ice, cooling process has begun

Cooler Temperature Uncorr: Rot /Corr: Biological Tissue is Frozen: yes no

Temp Blank Present: yes no

Person examining contents:
Date: 11/11/17
Initials: BS

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C.

Comments:

Table with 15 rows of custody and sample condition checks. Includes items like Chain of Custody Present, Short Hold Time Analysis, and Headspace in VOA Vials.

Client Notification/ Resolution:
Person Contacted: Date/Time:
Comments/ Resolution: Returned 1 250 ml p

Project Manager Review: Date: 11-13-17

January 04, 2018

Mark Walter
Natural Resource Technology
234 W. Florida Street
Fifth Floor
Milwaukee, WI 53204

RE: Project: 2117 MCC HOLDING INC-BURNHAM C
Pace Project No.: 40162323

Dear Mark Walter:

Enclosed are the analytical results for sample(s) received by the laboratory on December 13, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Brian Basten
brian.basten@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Data Delivery Team, Natural Resources Technologies
Julie Zimdars, NATURAL RESOURCE TECHNOLOGY



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 2117 MCC HOLDING INC-BURNHAM C

Pace Project No.: 40162323

Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302

Florida/NELAP Certification #: E87948

Illinois Certification #: 200050

Kentucky UST Certification #: 82

Louisiana Certification #: 04168

Minnesota Certification #: 055-999-334

New York Certification #: 12064

North Dakota Certification #: R-150

Virginia VELAP ID: 460263

South Carolina Certification #: 83006001

Texas Certification #: T104704529-14-1

Wisconsin Certification #: 405132750

Wisconsin DATCP Certification #: 105-444

USDA Soil Permit #: P330-16-00157

Federal Fish & Wildlife Permit #: LE51774A-0

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 2117 MCC HOLDING INC-BURNHAM C

Pace Project No.: 40162323

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40162323001	121117001	Water	12/11/17 11:17	12/13/17 10:20
40162323002	121117002	Water	12/11/17 12:16	12/13/17 10:20
40162323003	121117003	Water	12/11/17 12:21	12/13/17 10:20
40162323004	121117004	Water	12/11/17 13:31	12/13/17 10:20

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SAMPLE ANALYTE COUNT

Project: 2117 MCC HOLDING INC-BURNHAM C

Pace Project No.: 40162323

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40162323001	121117001	EPA 6020	SDW	2
		EPA 8270 by HVI	TPO	21
40162323002	121117002	EPA 6020	SDW	2
		EPA 8270 by HVI	TPO	21
40162323003	121117003	EPA 6020	SDW	2
		EPA 8270 by HVI	TPO	21
40162323004	121117004	EPA 6020	SDW	2
		EPA 8270 by HVI	TPO	21

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 2117 MCC HOLDING INC-BURNHAM C

Pace Project No.: 40162323

Sample: 121117001 Lab ID: 40162323001 Collected: 12/11/17 11:17 Received: 12/13/17 10:20 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS, Dissolved		Analytical Method: EPA 6020 Preparation Method: EPA 3010							
Copper, Dissolved	<0.019	ug/L	36.5	10.9	10	12/14/17 08:44	12/29/17 04:56	7440-50-8	D3
Lead, Dissolved	<2.0	ug/L	10.0	2.0	10	12/14/17 08:44	12/29/17 04:56	7439-92-1	D3
8270 MSSV PAH by HVI		Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510							
Acenaphthene	0.017J	ug/L	0.030	0.0060	1	12/18/17 08:06	12/18/17 12:59	83-32-9	
Acenaphthylene	<0.0049	ug/L	0.024	0.0049	1	12/18/17 08:06	12/18/17 12:59	208-96-8	
Anthracene	<0.010	ug/L	0.051	0.010	1	12/18/17 08:06	12/18/17 12:59	120-12-7	
Benzo(a)anthracene	<0.0074	ug/L	0.037	0.0074	1	12/18/17 08:06	12/18/17 12:59	56-55-3	
Benzo(a)pyrene	<0.010	ug/L	0.052	0.010	1	12/18/17 08:06	12/18/17 12:59	50-32-8	
Benzo(b)fluoranthene	<0.0056	ug/L	0.028	0.0056	1	12/18/17 08:06	12/18/17 12:59	205-99-2	
Benzo(g,h,i)perylene	<0.0066	ug/L	0.033	0.0066	1	12/18/17 08:06	12/18/17 12:59	191-24-2	
Benzo(k)fluoranthene	<0.0074	ug/L	0.037	0.0074	1	12/18/17 08:06	12/18/17 12:59	207-08-9	
Chrysene	<0.013	ug/L	0.064	0.013	1	12/18/17 08:06	12/18/17 12:59	218-01-9	
Dibenz(a,h)anthracene	<0.0098	ug/L	0.049	0.0098	1	12/18/17 08:06	12/18/17 12:59	53-70-3	
Fluoranthene	<0.010	ug/L	0.052	0.010	1	12/18/17 08:06	12/18/17 12:59	206-44-0	
Fluorene	<0.0078	ug/L	0.039	0.0078	1	12/18/17 08:06	12/18/17 12:59	86-73-7	
Indeno(1,2,3-cd)pyrene	<0.017	ug/L	0.086	0.017	1	12/18/17 08:06	12/18/17 12:59	193-39-5	
1-Methylnaphthalene	0.090	ug/L	0.029	0.0058	1	12/18/17 08:06	12/18/17 12:59	90-12-0	
2-Methylnaphthalene	0.090	ug/L	0.024	0.0048	1	12/18/17 08:06	12/18/17 12:59	91-57-6	
Naphthalene	0.14	ug/L	0.090	0.018	1	12/18/17 08:06	12/18/17 12:59	91-20-3	
Phenanthrene	0.039J	ug/L	0.068	0.014	1	12/18/17 08:06	12/18/17 12:59	85-01-8	
Pyrene	0.013J	ug/L	0.038	0.0075	1	12/18/17 08:06	12/18/17 12:59	129-00-0	B
Total PAHs	0.40	ug/L			1	12/18/17 08:06	12/18/17 12:59		
Surrogates									
2-Fluorobiphenyl (S)	51	%	35-84		1	12/18/17 08:06	12/18/17 12:59	321-60-8	
Terphenyl-d14 (S)	60	%	10-129		1	12/18/17 08:06	12/18/17 12:59	1718-51-0	

Sample: 121117002 Lab ID: 40162323002 Collected: 12/11/17 12:16 Received: 12/13/17 10:20 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS, Dissolved		Analytical Method: EPA 6020 Preparation Method: EPA 3010							
Copper, Dissolved	4.3	ug/L	3.6	1.1	1	12/14/17 08:44	12/27/17 04:33	7440-50-8	B
Lead, Dissolved	0.89J	ug/L	1.0	0.20	1	12/14/17 08:44	12/27/17 04:33	7439-92-1	
8270 MSSV PAH by HVI		Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510							
Acenaphthene	0.28	ug/L	0.030	0.0061	1	12/14/17 08:15	12/15/17 18:13	83-32-9	
Acenaphthylene	0.034	ug/L	0.025	0.0050	1	12/14/17 08:15	12/15/17 18:13	208-96-8	
Anthracene	0.090	ug/L	0.052	0.010	1	12/14/17 08:15	12/15/17 18:13	120-12-7	
Benzo(a)anthracene	0.0086J	ug/L	0.038	0.0076	1	12/14/17 08:15	12/15/17 18:13	56-55-3	
Benzo(a)pyrene	<0.011	ug/L	0.053	0.011	1	12/14/17 08:15	12/15/17 18:13	50-32-8	
Benzo(b)fluoranthene	<0.0057	ug/L	0.029	0.0057	1	12/14/17 08:15	12/15/17 18:13	205-99-2	
Benzo(g,h,i)perylene	<0.0068	ug/L	0.034	0.0068	1	12/14/17 08:15	12/15/17 18:13	191-24-2	
Benzo(k)fluoranthene	<0.0076	ug/L	0.038	0.0076	1	12/14/17 08:15	12/15/17 18:13	207-08-9	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 2117 MCC HOLDING INC-BURNHAM C

Pace Project No.: 40162323

Sample: 121117002 **Lab ID: 40162323002** Collected: 12/11/17 12:16 Received: 12/13/17 10:20 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by HVI		Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510							
Chrysene	<0.013	ug/L	0.065	0.013	1	12/14/17 08:15	12/15/17 18:13	218-01-9	
Dibenz(a,h)anthracene	<0.010	ug/L	0.050	0.010	1	12/14/17 08:15	12/15/17 18:13	53-70-3	
Fluoranthene	0.050J	ug/L	0.053	0.011	1	12/14/17 08:15	12/15/17 18:13	206-44-0	
Fluorene	0.31	ug/L	0.040	0.0080	1	12/14/17 08:15	12/15/17 18:13	86-73-7	
Indeno(1,2,3-cd)pyrene	<0.018	ug/L	0.088	0.018	1	12/14/17 08:15	12/15/17 18:13	193-39-5	
1-Methylnaphthalene	0.92	ug/L	0.030	0.0059	1	12/14/17 08:15	12/15/17 18:13	90-12-0	
2-Methylnaphthalene	0.053	ug/L	0.024	0.0049	1	12/14/17 08:15	12/15/17 18:13	91-57-6	
Naphthalene	0.38	ug/L	0.092	0.018	1	12/14/17 08:15	12/15/17 18:13	91-20-3	
Phenanthrene	0.088	ug/L	0.069	0.014	1	12/14/17 08:15	12/15/17 18:13	85-01-8	
Pyrene	0.044	ug/L	0.038	0.0076	1	12/14/17 08:15	12/15/17 18:13	129-00-0	
Total PAHs	2.3	ug/L			1	12/14/17 08:15	12/15/17 18:13		
Surrogates									
2-Fluorobiphenyl (S)	37	%	35-84		1	12/14/17 08:15	12/15/17 18:13	321-60-8	
Terphenyl-d14 (S)	46	%	10-129		1	12/14/17 08:15	12/15/17 18:13	1718-51-0	

Sample: 121117003 **Lab ID: 40162323003** Collected: 12/11/17 12:21 Received: 12/13/17 10:20 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS, Dissolved		Analytical Method: EPA 6020 Preparation Method: EPA 3010							
Copper, Dissolved	2.1J	ug/L	3.6	1.1	1	12/14/17 08:44	12/27/17 04:46	7440-50-8	B
Lead, Dissolved	0.27J	ug/L	1.0	0.20	1	12/14/17 08:44	12/27/17 04:46	7439-92-1	
8270 MSSV PAH by HVI		Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510							
Acenaphthene	0.34	ug/L	0.031	0.0061	1	12/14/17 08:15	12/15/17 18:31	83-32-9	
Acenaphthylene	0.040	ug/L	0.025	0.0050	1	12/14/17 08:15	12/15/17 18:31	208-96-8	
Anthracene	0.10	ug/L	0.053	0.011	1	12/14/17 08:15	12/15/17 18:31	120-12-7	
Benzo(a)anthracene	0.013J	ug/L	0.038	0.0076	1	12/14/17 08:15	12/15/17 18:31	56-55-3	
Benzo(a)pyrene	<0.011	ug/L	0.053	0.011	1	12/14/17 08:15	12/15/17 18:31	50-32-8	
Benzo(b)fluoranthene	<0.0058	ug/L	0.029	0.0058	1	12/14/17 08:15	12/15/17 18:31	205-99-2	
Benzo(g,h,i)perylene	<0.0068	ug/L	0.034	0.0068	1	12/14/17 08:15	12/15/17 18:31	191-24-2	
Benzo(k)fluoranthene	<0.0076	ug/L	0.038	0.0076	1	12/14/17 08:15	12/15/17 18:31	207-08-9	
Chrysene	<0.013	ug/L	0.066	0.013	1	12/14/17 08:15	12/15/17 18:31	218-01-9	
Dibenz(a,h)anthracene	<0.010	ug/L	0.051	0.010	1	12/14/17 08:15	12/15/17 18:31	53-70-3	
Fluoranthene	0.059	ug/L	0.054	0.011	1	12/14/17 08:15	12/15/17 18:31	206-44-0	
Fluorene	0.37	ug/L	0.040	0.0081	1	12/14/17 08:15	12/15/17 18:31	86-73-7	
Indeno(1,2,3-cd)pyrene	<0.018	ug/L	0.089	0.018	1	12/14/17 08:15	12/15/17 18:31	193-39-5	
1-Methylnaphthalene	1.1	ug/L	0.030	0.0060	1	12/14/17 08:15	12/15/17 18:31	90-12-0	
2-Methylnaphthalene	0.060	ug/L	0.025	0.0049	1	12/14/17 08:15	12/15/17 18:31	91-57-6	
Naphthalene	0.42	ug/L	0.093	0.019	1	12/14/17 08:15	12/15/17 18:31	91-20-3	
Phenanthrene	0.078	ug/L	0.070	0.014	1	12/14/17 08:15	12/15/17 18:31	85-01-8	
Pyrene	0.049	ug/L	0.039	0.0077	1	12/14/17 08:15	12/15/17 18:31	129-00-0	
Total PAHs	2.6	ug/L			1	12/14/17 08:15	12/15/17 18:31		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 2117 MCC HOLDING INC-BURNHAM C

Pace Project No.: 40162323

Sample: 121117003 **Lab ID: 40162323003** Collected: 12/11/17 12:21 Received: 12/13/17 10:20 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by HVI Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510									
<i>Surrogates</i>									
2-Fluorobiphenyl (S)	48	%	35-84		1	12/14/17 08:15	12/15/17 18:31	321-60-8	
Terphenyl-d14 (S)	53	%	10-129		1	12/14/17 08:15	12/15/17 18:31	1718-51-0	

Sample: 121117004 **Lab ID: 40162323004** Collected: 12/11/17 13:31 Received: 12/13/17 10:20 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS, Dissolved Analytical Method: EPA 6020 Preparation Method: EPA 3010									
Copper, Dissolved	7.6	ug/L	3.6	1.1	1	12/14/17 08:44	12/27/17 05:07	7440-50-8	B
Lead, Dissolved	1.2	ug/L	1.0	0.20	1	12/14/17 08:44	12/27/17 05:07	7439-92-1	

8270 MSSV PAH by HVI Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510

Acenaphthene	0.0087J	ug/L	0.030	0.0061	1	12/14/17 08:15	12/18/17 20:21	83-32-9	
Acenaphthylene	<0.0050	ug/L	0.025	0.0050	1	12/14/17 08:15	12/18/17 20:21	208-96-8	
Anthracene	0.012J	ug/L	0.052	0.010	1	12/14/17 08:15	12/18/17 20:21	120-12-7	
Benzo(a)anthracene	<0.0076	ug/L	0.038	0.0076	1	12/14/17 08:15	12/18/17 20:21	56-55-3	
Benzo(a)pyrene	<0.011	ug/L	0.053	0.011	1	12/14/17 08:15	12/18/17 20:21	50-32-8	
Benzo(b)fluoranthene	<0.0057	ug/L	0.029	0.0057	1	12/14/17 08:15	12/18/17 20:21	205-99-2	
Benzo(g,h,i)perylene	<0.0068	ug/L	0.034	0.0068	1	12/14/17 08:15	12/18/17 20:21	191-24-2	
Benzo(k)fluoranthene	<0.0076	ug/L	0.038	0.0076	1	12/14/17 08:15	12/18/17 20:21	207-08-9	
Chrysene	<0.013	ug/L	0.065	0.013	1	12/14/17 08:15	12/18/17 20:21	218-01-9	
Dibenz(a,h)anthracene	<0.010	ug/L	0.050	0.010	1	12/14/17 08:15	12/18/17 20:21	53-70-3	
Fluoranthene	0.013J	ug/L	0.053	0.011	1	12/14/17 08:15	12/18/17 20:21	206-44-0	
Fluorene	<0.0080	ug/L	0.040	0.0080	1	12/14/17 08:15	12/18/17 20:21	86-73-7	
Indeno(1,2,3-cd)pyrene	<0.018	ug/L	0.088	0.018	1	12/14/17 08:15	12/18/17 20:21	193-39-5	
1-Methylnaphthalene	0.0069J	ug/L	0.030	0.0059	1	12/14/17 08:15	12/18/17 20:21	90-12-0	
2-Methylnaphthalene	0.0056J	ug/L	0.024	0.0049	1	12/14/17 08:15	12/18/17 20:21	91-57-6	
Naphthalene	<0.018	ug/L	0.092	0.018	1	12/14/17 08:15	12/18/17 20:21	91-20-3	
Phenanthrene	0.018J	ug/L	0.069	0.014	1	12/14/17 08:15	12/18/17 20:21	85-01-8	
Pyrene	0.012J	ug/L	0.038	0.0076	1	12/14/17 08:15	12/18/17 20:21	129-00-0	
Total PAHs	0.099	ug/L			1	12/14/17 08:15	12/18/17 20:21		
<i>Surrogates</i>									
2-Fluorobiphenyl (S)	50	%	35-84		1	12/14/17 08:15	12/18/17 20:21	321-60-8	
Terphenyl-d14 (S)	66	%	10-129		1	12/14/17 08:15	12/18/17 20:21	1718-51-0	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 2117 MCC HOLDING INC-BURNHAM C

Pace Project No.: 40162323

QC Batch: 277102 Analysis Method: EPA 6020
QC Batch Method: EPA 3010 Analysis Description: 6020 MET Dissolved
Associated Lab Samples: 40162323001, 40162323002, 40162323003, 40162323004

METHOD BLANK: 1629128 Matrix: Water
Associated Lab Samples: 40162323001, 40162323002, 40162323003, 40162323004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper, Dissolved	ug/L	1.4J	3.6	12/27/17 03:45	
Lead, Dissolved	ug/L	<0.20	1.0	12/27/17 03:45	

LABORATORY CONTROL SAMPLE: 1629129

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper, Dissolved	ug/L	500	514	103	80-120	
Lead, Dissolved	ug/L	500	488	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1629130 1629131

Parameter	Units	40162323001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Copper, Dissolved	ug/L	<10.9	500	500	498	488	99	97	75-125	2	20	
Lead, Dissolved	ug/L	<2.0	500	500	519	513	103	102	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 2117 MCC HOLDING INC-BURNHAM C

Pace Project No.: 40162323

QC Batch: 277103

Analysis Method: EPA 8270 by HVI

QC Batch Method: EPA 3510

Analysis Description: 8270 Water PAH by HVI

Associated Lab Samples: 40162323002, 40162323003, 40162323004

METHOD BLANK: 1629132

Matrix: Water

Associated Lab Samples: 40162323002, 40162323003, 40162323004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/L	<0.0059	0.030	12/15/17 11:46	
2-Methylnaphthalene	ug/L	<0.0049	0.024	12/15/17 11:46	
Acenaphthene	ug/L	<0.0061	0.030	12/15/17 11:46	
Acenaphthylene	ug/L	<0.0050	0.025	12/15/17 11:46	
Anthracene	ug/L	<0.010	0.052	12/15/17 11:46	
Benzo(a)anthracene	ug/L	<0.0076	0.038	12/15/17 11:46	
Benzo(a)pyrene	ug/L	<0.011	0.053	12/15/17 11:46	
Benzo(b)fluoranthene	ug/L	<0.0057	0.029	12/15/17 11:46	
Benzo(g,h,i)perylene	ug/L	<0.0068	0.034	12/15/17 11:46	
Benzo(k)fluoranthene	ug/L	<0.0076	0.038	12/15/17 11:46	
Chrysene	ug/L	<0.013	0.065	12/15/17 11:46	
Dibenz(a,h)anthracene	ug/L	<0.010	0.050	12/15/17 11:46	
Fluoranthene	ug/L	<0.011	0.053	12/15/17 11:46	
Fluorene	ug/L	<0.0080	0.040	12/15/17 11:46	
Indeno(1,2,3-cd)pyrene	ug/L	<0.018	0.088	12/15/17 11:46	
Naphthalene	ug/L	<0.018	0.092	12/15/17 11:46	
Phenanthrene	ug/L	<0.014	0.069	12/15/17 11:46	
Pyrene	ug/L	<0.0076	0.038	12/15/17 11:46	
2-Fluorobiphenyl (S)	%	51	35-84	12/15/17 11:46	
Terphenyl-d14 (S)	%	79	10-129	12/15/17 11:46	

LABORATORY CONTROL SAMPLE: 1629133

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/L	2	1.3	66	39-83	
2-Methylnaphthalene	ug/L	2	1.2	61	38-86	
Acenaphthene	ug/L	2	1.3	63	35-85	
Acenaphthylene	ug/L	2	1.2	61	31-88	
Anthracene	ug/L	2	1.6	79	47-104	
Benzo(a)anthracene	ug/L	2	1.3	66	36-105	
Benzo(a)pyrene	ug/L	2	1.6	80	69-117	
Benzo(b)fluoranthene	ug/L	2	1.5	76	54-107	
Benzo(g,h,i)perylene	ug/L	2	0.92	46	13-86	
Benzo(k)fluoranthene	ug/L	2	1.6	79	63-128	
Chrysene	ug/L	2	2.0	99	69-150	
Dibenz(a,h)anthracene	ug/L	2	0.87	44	10-87	
Fluoranthene	ug/L	2	1.7	84	57-103	
Fluorene	ug/L	2	1.3	66	38-85	
Indeno(1,2,3-cd)pyrene	ug/L	2	1.4	72	40-111	
Naphthalene	ug/L	2	1.1	56	39-82	

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QUALITY CONTROL DATA

Project: 2117 MCC HOLDING INC-BURNHAM C

Pace Project No.: 40162323

LABORATORY CONTROL SAMPLE: 1629133

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenanthrene	ug/L	2	1.3	63	46-96	
Pyrene	ug/L	2	1.6	80	57-110	
2-Fluorobiphenyl (S)	%			56	35-84	
Terphenyl-d14 (S)	%			78	10-129	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1629134 1629135

Parameter	Units	40162272003		MSD		MSD		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec					
1-Methylnaphthalene	ug/L	<0.0063	2.2	2.1	1.3	1.3	60	64	27-86	2	29		
2-Methylnaphthalene	ug/L	<0.0053	2.2	2.1	1.2	1.2	53	58	30-86	4	35		
Acenaphthene	ug/L	<0.0065	2.2	2.1	1.3	1.2	58	58	28-85	4	29		
Acenaphthylene	ug/L	<0.0054	2.2	2.1	1.2	1.2	54	56	27-88	2	29		
Anthracene	ug/L	<0.011	2.2	2.1	1.5	1.4	71	67	38-104	10	35		
Benzo(a)anthracene	ug/L	<0.0081	2.2	2.1	1.1	1.0	48	49	10-105	3	28		
Benzo(a)pyrene	ug/L	<0.011	2.2	2.1	1.3	1.2	58	59	10-130	1	26		
Benzo(b)fluoranthene	ug/L	<0.0062	2.2	2.1	1.3	1.3	60	62	10-115	1	25		
Benzo(g,h,i)perylene	ug/L	<0.0073	2.2	2.1	0.53	0.48	24	23	10-87	10	42		
Benzo(k)fluoranthene	ug/L	<0.0081	2.2	2.1	1.2	1.1	57	54	10-133	11	25		
Chrysene	ug/L	<0.014	2.2	2.1	1.9	1.8	86	87	17-150	3	24		
Dibenz(a,h)anthracene	ug/L	<0.011	2.2	2.1	0.54	0.40	25	19	10-89	30	49		
Fluoranthene	ug/L	<0.011	2.2	2.1	1.6	1.6	74	74	41-103	4	32		
Fluorene	ug/L	<0.0086	2.2	2.1	1.3	1.2	59	60	32-85	4	28		
Indeno(1,2,3-cd)pyrene	ug/L	<0.019	2.2	2.1	0.88	0.81	40	39	10-111	8	37		
Naphthalene	ug/L	<0.020	2.2	2.1	1.1	1.2	52	57	23-88	5	28		
Phenanthrene	ug/L	<0.015	2.2	2.1	1.3	1.2	58	57	33-96	6	25		
Pyrene	ug/L	<0.0082	2.2	2.1	1.6	1.5	72	72	38-110	4	28		
2-Fluorobiphenyl (S)	%						51	54	35-84				
Terphenyl-d14 (S)	%						65	67	10-129				

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QUALITY CONTROL DATA

Project: 2117 MCC HOLDING INC-BURNHAM C

Pace Project No.: 40162323

QC Batch: 277342

Analysis Method: EPA 8270 by HVI

QC Batch Method: EPA 3510

Analysis Description: 8270 Water PAH by HVI

Associated Lab Samples: 40162323001

METHOD BLANK: 1630827

Matrix: Water

Associated Lab Samples: 40162323001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/L	<0.0059	0.030	12/18/17 11:08	
2-Methylnaphthalene	ug/L	<0.0049	0.024	12/18/17 11:08	
Acenaphthene	ug/L	<0.0061	0.030	12/18/17 11:08	
Acenaphthylene	ug/L	<0.0050	0.025	12/18/17 11:08	
Anthracene	ug/L	<0.010	0.052	12/18/17 11:08	
Benzo(a)anthracene	ug/L	<0.0076	0.038	12/18/17 11:08	
Benzo(a)pyrene	ug/L	<0.011	0.053	12/18/17 11:08	
Benzo(b)fluoranthene	ug/L	<0.0057	0.029	12/18/17 11:08	
Benzo(g,h,i)perylene	ug/L	<0.0068	0.034	12/18/17 11:08	
Benzo(k)fluoranthene	ug/L	<0.0076	0.038	12/18/17 11:08	
Chrysene	ug/L	<0.013	0.065	12/18/17 11:08	
Dibenz(a,h)anthracene	ug/L	<0.010	0.050	12/18/17 11:08	
Fluoranthene	ug/L	<0.011	0.053	12/18/17 11:08	
Fluorene	ug/L	<0.0080	0.040	12/18/17 11:08	
Indeno(1,2,3-cd)pyrene	ug/L	<0.018	0.088	12/18/17 11:08	
Naphthalene	ug/L	<0.018	0.092	12/18/17 11:08	
Phenanthrene	ug/L	<0.014	0.069	12/18/17 11:08	
Pyrene	ug/L	0.0084J	0.038	12/18/17 11:08	
2-Fluorobiphenyl (S)	%	56	35-84	12/18/17 11:08	
Terphenyl-d14 (S)	%	78	10-129	12/18/17 11:08	

LABORATORY CONTROL SAMPLE: 1630828

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/L	2	1.4	68	39-83	
2-Methylnaphthalene	ug/L	2	1.3	67	38-86	
Acenaphthene	ug/L	2	1.2	62	35-85	
Acenaphthylene	ug/L	2	1.3	66	31-88	
Anthracene	ug/L	2	1.6	81	47-104	
Benzo(a)anthracene	ug/L	2	1.5	77	36-105	
Benzo(a)pyrene	ug/L	2	1.6	80	69-117	
Benzo(b)fluoranthene	ug/L	2	1.5	75	54-107	
Benzo(g,h,i)perylene	ug/L	2	0.83	42	13-86	
Benzo(k)fluoranthene	ug/L	2	1.5	75	63-128	
Chrysene	ug/L	2	1.7	87	69-150	
Dibenz(a,h)anthracene	ug/L	2	0.78	39	10-87	
Fluoranthene	ug/L	2	1.8	90	57-103	
Fluorene	ug/L	2	1.4	69	38-85	
Indeno(1,2,3-cd)pyrene	ug/L	2	1.4	70	40-111	
Naphthalene	ug/L	2	1.2	59	39-82	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 2117 MCC HOLDING INC-BURNHAM C

Pace Project No.: 40162323

LABORATORY CONTROL SAMPLE: 1630828

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenanthrene	ug/L	2	1.5	74	46-96	
Pyrene	ug/L	2	1.6	81	57-110	
2-Fluorobiphenyl (S)	%			59	35-84	
Terphenyl-d14 (S)	%			80	10-129	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1630829 1630830

Parameter	Units	MS		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		40162323001	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec					
1-Methylnaphthalene	ug/L	0.090	2	2	1.3	1.4	61	65	27-86	6	29		
2-Methylnaphthalene	ug/L	0.090	2	2	1.3	1.3	59	62	30-86	4	35		
Acenaphthene	ug/L	0.017J	2	2	1.1	1.1	54	56	28-85	2	29		
Acenaphthylene	ug/L	<0.0049	2	2	1.1	1.1	55	58	27-88	3	29		
Anthracene	ug/L	<0.010	2	2	1.3	1.2	64	60	38-104	7	35		
Benzo(a)anthracene	ug/L	<0.0074	2	2	0.92	0.88	46	44	10-105	5	28		
Benzo(a)pyrene	ug/L	<0.010	2	2	0.86	0.88	43	44	10-130	2	26		
Benzo(b)fluoranthene	ug/L	<0.0056	2	2	0.88	0.91	44	46	10-115	3	25		
Benzo(g,h,i)perylene	ug/L	<0.0066	2	2	0.45	0.43	22	22	10-87	3	42		
Benzo(k)fluoranthene	ug/L	<0.0074	2	2	0.84	0.86	42	43	10-133	2	25		
Chrysene	ug/L	<0.013	2	2	1.3	1.4	67	71	17-150	5	24		
Dibenz(a,h)anthracene	ug/L	<0.0098	2	2	0.40	0.38	20	19	10-89	4	49		
Fluoranthene	ug/L	<0.010	2	2	1.4	1.4	68	69	41-103	0	32		
Fluorene	ug/L	<0.0078	2	2	1.1	1.2	57	59	32-85	2	28		
Indeno(1,2,3-cd)pyrene	ug/L	<0.017	2	2	0.55	0.56	28	28	10-111	2	37		
Naphthalene	ug/L	0.14	2	2	1.2	1.3	52	57	23-88	7	28		
Phenanthrene	ug/L	0.039J	2	2	1.2	1.2	57	57	33-96	1	25		
Pyrene	ug/L	0.013J	2	2	1.3	1.3	66	67	38-110	1	28		
2-Fluorobiphenyl (S)	%						51	55	35-84				
Terphenyl-d14 (S)	%						56	58	10-129				

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QUALIFIERS

Project: 2117 MCC HOLDING INC-BURNHAM C
Pace Project No.: 40162323

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2117 MCC HOLDING INC-BURNHAM C
Pace Project No.: 40162323

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40162323001	121117001	EPA 3010	277102	EPA 6020	277205
40162323002	121117002	EPA 3010	277102	EPA 6020	277205
40162323003	121117003	EPA 3010	277102	EPA 6020	277205
40162323004	121117004	EPA 3010	277102	EPA 6020	277205
40162323001	121117001	EPA 3510	277342	EPA 8270 by HVI	277402
40162323002	121117002	EPA 3510	277103	EPA 8270 by HVI	277166
40162323003	121117003	EPA 3510	277103	EPA 8270 by HVI	277166
40162323004	121117004	EPA 3510	277103	EPA 8270 by HVI	277166

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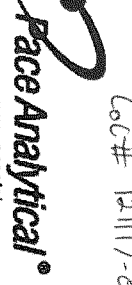
(Please Print Clearly)

Loc# 12117-001

UPPER MIDWEST REGION

MN: 612-607-1700 WI: 920-469-2436

Page 1 of 1



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CHAIN OF CUSTODY

A=None B=HCL C=H2SO4 D=HNO3 E=D1 Water F=Methanol G=NaOH
 H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

FILTERED?
 (YES/NO)
 PRESERVATION
 (CODE)*

Company Name: Natural Resource Technology
 Branch/Location: Milwaukee WI
 Project Contact: Mark Walter
 Phone: (414) 837-3563
 Project Number: 2117
 Project Name: MtC Holdings Inc - Burnham East
 Project State: Wisconsin
 Sampled By (Print): Eric Planke
 Sampled By (Sign): Eric Planke
 PO #: _____
 Regulatory Program: _____

Data Package Options
 (billable)
 EPA Level III
 EPA Level IV
 On your sample (billable)
 NOT needed on your sample

Matrix Codes
 A = Air B = Biot
 C = Charcoal O = Oil S = Soil
 SI = Sludge
 W = Water DW = Drinking Water
 GW = Ground Water SW = Surface Water
 WW = Waste Water WP = WPP

PAGE LAB #	CLIENT FIELD ID	COLLECTION		MATRIX
		DATE	TIME	
001	12117001	12-11-17	1117	GD
002	12117002		1216	
003	12117003		1221	
004	12117004		1331	
005	12117005		1345	

Analyses Requested

V/I/N	Pick Letter	Y	N	D
600	Metals (Cu+Pb)	X		
8270	PAH	X		
	RCRA Metals + Cu Total	X		

Rush Turnaround Time Requested - Prelims
 (Rush TAT subject to approval/surcharge)
 Date Needed: _____
 Transmit Prelim Rush Results by (complete what you want):
 Email #1: _____
 Email #2: _____
 Telephone: _____
 Fax: _____
 Samples on HOLD are subject to special pricing and release of liability

Relinquished By: _____
 Date/Time: 12-12-17 1400
 Relinquished By: _____
 Date/Time: _____
 Relinquished By: _____
 Date/Time: _____
 Relinquished By: _____
 Date/Time: _____

Received By: OSCAR'S PAUL
 Date/Time: 12/13/17 1020
 Received By: _____
 Date/Time: _____
 Received By: _____
 Date/Time: _____
 Received By: _____
 Date/Time: _____

Quote #: _____
 Mail To Contact: _____
 Mail To Company: _____
 Mail To Address: _____
 Invoice To Contact: _____
 Invoice To Company: _____
 Invoice To Address: _____
 Invoice To Phone: _____
 CLIENT COMMENTS: _____
 LAB COMMENTS (Lab Use Only): _____
 Profile #: _____

PACE Project No. 40762323
 Receipt Temp = 102 °C
 Sample Receipt pH OK / Adjusted
 Container Custody Seal Present / Not Present Intact / Not Intact
 Version 6.2.06/14/06



Sample Condition Upon Receipt

Pace Analytical Services, LLC. - Green Bay WI
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Project #: WO#: 40162323

Client Name: MRT

Courier: Fed Ex UPS Client Pace Other: CS Logistics



Tracking #:
Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Custody Seal on Samples Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used N/A Type of Ice: Wet Blue Dry None Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 20.5 C Corr: Biological Tissue is Frozen: yes no

Temp Blank Present: yes no

Person examining contents:
Date: 12/13/17
Initials: DS


Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C.

Comments:

Table with 15 rows of inspection items and checkboxes. Items include Chain of Custody Present, Short Hold Time Analysis, Rush Turn Around Time Requested, etc.

Client Notification/ Resolution:
Person Contacted: Date/Time:
Comments/ Resolution:

Project Manager Review: Date: 12-13-17



**Attachment 5 – WDNR
Form 4400-237 Technical
Assistance Request**

Notice: Use this form to request a **written response (on agency letterhead)** from the Department of Natural Resources (DNR) regarding technical assistance, a post-closure change to a site, a specialized agreement or liability clarification for Property with known or suspected environmental contamination. A fee will be required as is authorized by s. 292.55, Wis. Stats., and NR 749, Wis. Adm. Code., unless noted in the instructions below. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law [ss. 19.31 - 19.39, Wis. Stats.].

Definitions

"Property" refers to the subject Property that is perceived to have been or has been impacted by the discharge of hazardous substances.

"Liability Clarification" refers to a written determination by the Department provided in response to a request made on this form. The response clarifies whether a person is or may become liable for the environmental contamination of a Property, as provided in s. 292.55, Wis. Stats.

"Technical Assistance" refers to the Department's assistance or comments on the planning and implementation of an environmental investigation or environmental cleanup on a Property in response to a request made on this form as provided in s. 292.55, Wis. Stats.

"Post-closure modification" refers to changes to Property boundaries and/or continuing obligations for Properties or sites that received closure letters for which continuing obligations have been applied or where contamination remains. Many, but not all, of these sites are included on the GIS Registry layer of RR Sites Map to provide public notice of residual contamination and continuing obligations.

Select the Correct Form

This form should be used to request the following from the DNR:

- Technical Assistance
- Liability Clarification
- Post-Closure Modifications
- Specialized Agreements (tax cancellation, negotiated agreements, etc.)

Do not use this form if one of the following applies:

- Request for an **off-site liability exemption or clarification** for Property that has been or is perceived to be contaminated by one or more hazardous substances that originated on another Property containing the source of the contamination. Use DNR's Off-Site Liability Exemption and Liability Clarification Application Form 4400-201.
- Submittal of an Environmental Assessment for the **Lender Liability Exemption**, s 292.21, Wis. Stats., **if no response or review by DNR is requested**. Use the Lender Liability Exemption Environmental Assessment Tracking Form 4400-196.
- Request for an **exemption to develop on a historic fill site** or licensed landfill. Use DNR's Form 4400-226 or 4400-226A.
- **Request for closure** for Property where the investigation and cleanup actions are completed. Use DNR's Case Closure - GIS Registry Form 4400-202.

All forms, publications and additional information are available on the internet at: dnr.wi.gov/topic/Brownfields/Pubs.html.

Instructions

1. Complete sections 1, 2, 6 and 7 for all requests. Be sure to provide adequate and complete information.
2. Select the type of assistance requested: Section 3 for technical assistance or post-closure modifications, Section 4 for a written determination or clarification of environmental liabilities; or Section 5 for a specialized agreement.
3. Include the fee payment that is listed in Section 3, 4, or 5, unless you are a "Voluntary Party" enrolled in the Voluntary Party Liability Exemption Program **and** the questions in Section 2 direct otherwise. Information on to whom and where to send the fee is found in Section 8 of this form.
4. Send the completed request, supporting materials and the fee to the appropriate DNR regional office where the Property is located. See the map on the last page of this form. A paper copy of the signed form and all reports and supporting materials shall be sent with an electronic copy of the form and supporting materials on a compact disk. For electronic document submittal requirements see: <http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf>

The time required for DNR's determination varies depending on the complexity of the site, and the clarity and completeness of the request and supporting documentation.

Technical Assistance, Environmental Liability Clarification or Post-Closure Modification Request

Form 4400-237 (R 9/15)

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Section 1. Contact and Recipient Information

Requester Information

This is the person requesting technical assistance or a post-closure modification review, that his or her liability be clarified or a specialized agreement and is identified as the requester in Section 7. DNR will address its response letter to this person.

Last Name Spigel	First Jon	MI	Organization/ Business Name Miller Compressing Company
Mailing Address 1640 West Bruce Street		City Milwaukee	State WI
		ZIP Code 53204	
Phone # (include area code) (414) 290-6520	Fax # (include area code)	Email Jon.Spigel@altertrading.com	

The requester listed above: (select all that apply)

- Is currently the owner
 Is considering selling the Property
 Is renting or leasing the Property
 Is considering acquiring the Property
 Is a lender with a mortgagee interest in the Property
 Other. Explain the status of the Property with respect to the applicant:

Miller Compressing Company is the Responsible Party for BRRTS Site 02-41-552940. Alter Trading Corporation is the owner of the 1640 West Bruce Street property.

Contact Information (to be contacted with questions about this request)

Select if same as requester

Contact Last Name Walter	First Mark	MI D	Organization/ Business Name O'Brien & Gere Engineers, Inc.
Mailing Address 234 W. Florida St., Fifth Floor		City Milwaukee	State WI
		ZIP Code 53204	
Phone # (include area code) (414) 837-3563	Fax # (include area code) (414) 837-3608	Email Mark.Walter@obg.com	

Environmental Consultant (if applicable)

Contact Last Name Walter	First Mark	MI D	Organization/ Business Name O'Brien & Gere Engineers, Inc.
Mailing Address 234 W. Florida St., Fifth Floor		City Milwaukee	State WI
		ZIP Code 53204	
Phone # (include area code) (414) 837-3563	Fax # (include area code) (414) 837-3608	Email Mark.Walter@obg.com	

Attorney (if applicable)

Contact Last Name Thimke	First Mark	MI A	Organization/ Business Name Foley & Lardner LLP
Mailing Address 777 East Wisconsin Avenue		City Milwaukee	State WI
		ZIP Code 53202	
Phone # (include area code) (414) 297-5832	Fax # (include area code) (414) 297-4900	Email mthimke@foley.com	

Property Owner (if different from requester)

Contact Last Name Schlichtholz	First Sarah	MI	Organization/ Business Name Alter Trading Corporation
Mailing Address 700 Office Parkway		City St. Louis	State MO
		ZIP Code 63141	
Phone # (include area code) (314) 872-2406	Fax # (include area code) (314) 872-2420	Email sarah.schlichtholz@altertrading.com	

Technical Assistance, Environmental Liability Clarification or Post-Closure Modification Request

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Section 2. Property Information

Property Name Burnham Canal		FID No. (if known) 241213720	
BRRTS No. (if known) 02-41-552940	Parcel Identification Number 4269988110		
Street Address 1640 West Bruce Street	City Milwaukee	State WI	ZIP Code 53204
County Milwaukee	Municipality where the Property is located <input checked="" type="radio"/> City <input type="radio"/> Town <input type="radio"/> Village of	Property is composed of: <input checked="" type="radio"/> Single tax parcel <input type="radio"/> Multiple tax parcels	Property Size Acres 13

1. Is a response needed by a specific date? (e.g., Property closing date) Note: Most requests are completed within 60 days. Please plan accordingly.

No Yes

Date requested by: _____

Reason: _____

2. Is the "Requester" enrolled as a Voluntary Party in the Voluntary Party Liability Exemption (VPLE) program?

No. **Include the fee that is required for your request in Section 3, 4 or 5.**

Yes. **Do not include a separate fee.** This request will be billed separately through the VPLE Program.

Fill out the information in Section 3, 4 or 5 which corresponds with the type of request:

Section 3. Technical Assistance or Post-Closure Modifications;

Section 4. Liability Clarification; or Section 5. Specialized Agreement.

Section 3. Request for Technical Assistance or Post-Closure Modification

Select the type of technical assistance requested: **[Numbers in brackets are for WI DNR Use]**

- No Further Action Letter (NFA) (Immediate Actions) - NR 708.09, [183] - **Include a fee of \$350.** Use for a written response to an immediate action after a discharge of a hazardous substance occurs. Generally, these are for a one-time spill event.
- Review of Site Investigation Work Plan - NR 716.09, [135] - **Include a fee of \$700.**
- Review of Site Investigation Report - NR 716.15, [137] - **Include a fee of \$1050.**
- Approval of a Site-Specific Soil Cleanup Standard - NR 720.10 or 12, [67] - **Include a fee of \$1050.**
- Review of a Remedial Action Options Report - NR 722.13, [143] - **Include a fee of \$1050.**
- Review of a Remedial Action Design Report - NR 724.09, [148] - **Include a fee of \$1050.**
- Review of a Remedial Action Documentation Report - NR 724.15, [152] - **Include a fee of \$350**
- Review of a Long-term Monitoring Plan - NR 724.17, [25] - **Include a fee of \$425.**
- Review of an Operation and Maintenance Plan - NR 724.13, [192] - **Include a fee of \$425.**

Other Technical Assistance - s. 292.55, Wis. Stats. [97] (For request to build on an abandoned landfill use Form 4400-226)

- Schedule a Technical Assistance Meeting - **Include a fee of \$700.**
- Hazardous Waste Determination - **Include a fee of \$700.**
- Other Technical Assistance - **Include a fee of \$700.** Explain your request in an attachment.

Post-Closure Modifications - NR 727, [181]

- Post-Closure Modifications: Modification to Property boundaries and/or continuing obligations of a closed site or Property; sites may be on the GIS Registry. This also includes removal of a site or Property from the GIS Registry. **Include a fee of \$1050, and:**
 - Include a fee of \$300 for sites with residual soil contamination; and
 - Include a fee of \$350 for sites with residual groundwater contamination, monitoring wells or for vapor intrusion continuing obligations.

Attach a description of the changes you are proposing, and documentation as to why the changes are needed (if the change to a Property, site or continuing obligation will result in revised maps, maintenance plans or photographs, those documents may be submitted later in the approval process, on a case-by-case basis).

Technical Assistance, Environmental Liability Clarification or Post-Closure Modification Request

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Skip Sections 4 and 5 if the technical assistance you are requesting is listed above and complete Sections 6 and 7 of this form.

Section 5. Request for a Specialized Agreement

Select the type of agreement needed. Include the appropriate draft agreements and supporting materials. Complete Sections 6 and 7 of this form. More information and model draft agreements are available at: dnr.wi.gov/topic/Brownfields/Igu.html#tabx4.

Tax cancellation agreement - s. 75.105(2)(d), Wis. Stats. [654]

❖ Include a fee of \$700, and the information listed below:

- (1) Phase I and II Environmental Site Assessment Reports,
- (2) a copy of the Property deed with the correct legal description; and,
- (3) a draft 75.105 agreement based on the DNR's model (dnr.wi.gov/topic/brownfields/documents/mod75-105agrmt.pdf).

Agreement for assignment of tax foreclosure judgement - s.75.106, Wis. Stats. [666]

❖ Include a fee of \$700, and the information listed below:

- (1) Phase I and II Environmental Site Assessment Reports,
- (2) a copy of the Property deed with the correct legal description; and,
- (3) a draft 75.105 agreement based on the DNR's model (dnr.wi.gov/topic/brownfields/documents/mod75-106agrmt.pdf).

Negotiated agreement - Enforceable contract for non-emergency remediation - s. 292.11(7)(d) and (e), Wis. Stats. [630]

❖ Include a fee of \$1400, and the information listed below:

- (1) a draft schedule for remediation; and,
- (2) the name, mailing address, phone and email for each party to the agreement.

Section 6. Other Information Submitted

Identify all materials that are included with this request.

Include one copy of any document from any state agency files that you want the Department to review as part of this request. The person submitting this request is responsible for contacting other state agencies to obtain appropriate reports or information.

Phase I Environmental Site Assessment Report - Date: _____

Phase II Environmental Site Assessment Report - Date: _____

Legal Description of Property (required for all liability requests and specialized agreements)

Map of the Property (required for all liability requests and specialized agreements)

Analytical results of the following sampled media: Select all that apply and include date of collection.

Groundwater Soil Sediment Other medium - Describe: _____

Date of Collection: 12/11/2017

A copy of the closure letter and submittal materials

Draft tax cancellation agreement

Draft agreement for assignment of tax foreclosure judgment

Other report(s) or information - Describe: Groundwater Sampling Report

For Property with newly identified discharges of hazardous substances only: Has a notification of a discharge of a hazardous substance been sent to the DNR as required by s. NR 706.05(1)(b), Wis. Adm. Code?

Yes - Date (if known): _____

No

Note: The Notification for Hazardous Substance Discharge (non-emergency) form is available at: dnr.wi.gov/files/PDF/forms/4400/4400-225.pdf.

**Technical Assistance, Environmental Liability
Clarification or Post-Closure Modification Request**

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Section 7. Certification by the Person who completed this form

I am the person submitting this request (requester)

I prepared this request for: Jon Spigel

Requester Name

I certify that I am familiar with the information submitted on this request, and that the information on and included with this request is true, accurate and complete to the best of my knowledge. I also certify I have the legal authority and the applicant's permission to make this request.

5/21/2018

Signature

Environmental Engineer

Date Signed

(414) 837-3563

Title

Telephone Number (include area code)

Technical Assistance, Environmental Liability Clarification or Post-Closure Modification Request

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Section 8. DNR Contacts and Addresses for Request Submittals

Send or deliver one paper copy and one electronic copy on a compact disk of the completed request, supporting materials, and fee to the region where the property is located to the address below. Contact a [DNR regional brownfields specialist](#) with any questions about this form or a specific situation involving a contaminated property. For electronic document submittal requirements see: <http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf>.

DNR NORTHERN REGION

Attn: RR Program Assistant
Department of Natural Resources
223 E Steinfest Rd Antigo, WI 54409

DNR NORTHEAST REGION

Attn: RR Program Assistant
Department of Natural Resources
2984 Shawano Avenue
Green Bay WI 54313

DNR SOUTH CENTRAL REGION

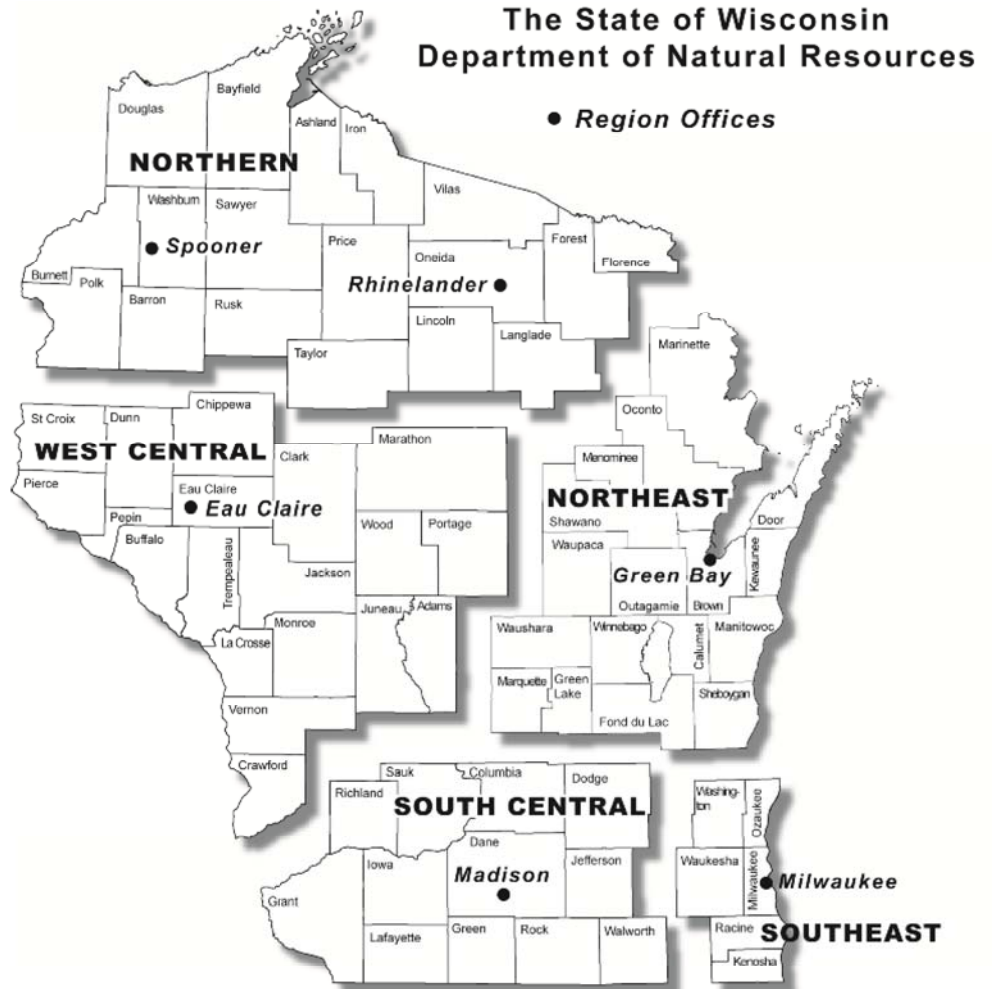
Attn: RR Program Assistant
Department of Natural Resources
3911 Fish Hatchery Road
Fitchburg WI 53711

DNR SOUTHEAST REGION

Attn: RR Program Assistant
Department of Natural Resources
2300 North Martin Luther King Drive
Milwaukee WI 53212

DNR WEST CENTRAL REGION

Attn: RR Program Assistant
Department of Natural Resources
1300 Clairemont Ave.
Eau Claire WI 54702



Note: These are the Remediation and Redevelopment Program's designated regions. Other DNR program regional boundaries may be different.

DNR Use Only			
Date Received	Date Assigned	BRRTS Activity Code	BRRTS No. (if used)
DNR Reviewer		Comments	
Fee Enclosed? <input type="radio"/> Yes <input type="radio"/> No	Fee Amount \$	Date Additional Information Requested	Date Requested for DNR Response Letter
Date Approved	Final Determination		