Wisconsin Public Service Corporation
700 North Adams Street
P.O. Box 19001
Green Bay, WI 54307-9001
www.wisconsinpublicservice.com

July 12, 2019

Ms. Sarah Rolfes
Remedial Project Manager
United States Environmental Protection Agency
77 W. Jackson Boulevard
Chicago, Illinois 60604-3590

RE: June 2019 Monthly Progress Report
Green Bay Former Manufactured Gas Plant
Green Bay, Wisconsin
Wisconsin Public Services Corporation
CERCLA Docket No. V-W-06-C-847, CERCLIS ID – WIN000509948

Dear Ms. Rolfes:

Wisconsin Public Services Corporation (WPSC) is providing this monthly progress report for the WPSC Former Green Bay Manufactured Gas Plant (MGP) Site.

1) PROGRESS MADE DURING THE PAST MONTH

- Prepared and submitted May 2019 Monthly Progress Report to United States Environmental Protection Agency (USEPA) by June 15, 2019.
- Participated in North Focus Area (NFA) Design Work Groups.
- Initiated mechanical dredging of Stage 2 dense non-aqueous phase liquid (DNAPL) impacted areas of the NFA on June 4, 2019.
- Submitted South Focus Area (SFA) Remedial Action (RA) Summary Report, Revision 1 on June 5, 2019.
- Submitted "Documenting DNAPL while Dredging in NFA" memorandum to the Agency Oversight Team (AOT) on June 28, 2019.

2) ANALYTICAL AND OTHER TESTING RESULTS RECEIVED

- May semi-annual groundwater monitoring.
- NFA baseline air monitoring.
- NFA weekly performance air monitoring.

3) PROJECTED WORK

WPSC Actions

- Submit monthly progress report to USEPA by the 15th of the month.
- Perform NFA quality control (QC) visual core and visual bucket observations.
- Perform NFA quality assurance (QA) confirmation core collection and analytical laboratory analyses.

- Prepare to revise and respond to comments on Draft SFA RA Summary Report received on April 2, 2019.
- Participate in work group meetings with USEPA to discuss the NFA Design and RA activities.
- Prepare a Site-Specific Work Plan (SSWP) Addendum for replacement of MW402R, which was inaccessible during the November 2018 semi-annual groundwater monitoring event due to asphalt pavement covering the top of the flush mount well.
- Prepare for completion of a Remedial Investigation/Feasibility Study (RI/FS) report.

USEPA Actions

- Participate in work group meetings to discuss NFA RA.
- Participate in NFA QC observation and QA core collection activities.
- Prepare for completion of RI/FS report.

4) PROBLEMS OR POTENTIAL PROBLEMS ENCOUNTERED

- None.

5) ACTUAL OR PLANNED RESOLUTION OF PROBLEMS OR POTENTIAL PROBLEMS

- None.

If you have any questions, please don't hesitate to contact me at (414) 221-2156 or via email at frank.dombrowski@wecenergygroup.com.

Sincerely,

Frank Dombrowski
Principal Environmental Consultant
WEC Business Services – Environmental Dept.

Enclosures:
Table 1. May 2019 Groundwater Sample Results
Table 2. May 2019 Groundwater Sample Results Compared to VISLs
Table 3. Baseline Air Monitoring Table
Table 4. Performance Air Monitoring Table

For distribution to:
Ms. Cheryl Bougie, WDNR (via email)
Ms. Jennifer Knoepfle, Jacobs (via email)
Mr. William Fitzpatrick, WDNR (via email)
Ms. Sarah Krueger, WDNR (via US Mail and email)
WDNR Northeast Region (via email to DNRRRNER@wisconsin.gov)
Ms. Staci Goetz, OBG, Part of Ramboll (via email)

Table 1 - May 2019 Groundwater Sample Results

Wisconsin Public Service Corporation

Green Bay Former Manufactured Gas Plant Site 700 N Adams St, Green Bay, Wisconsin

BRRTS#: 02-05-000254 UPSEPA#: WIN000509948

			PAH		PAH		PAH		PAH		PAH		PAH		PAH		PAH		PAH		PAH		PAH		PAH		PAH		PAH		PAH	
9-digit Code	Sample Location	Sample Date	1-Methylnaphthalene		2-Methylnaphthalene		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		Naphthalene		Phenanthrene		Pyrene	
			µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
			Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
		Groundwater SL:	**NS**		**NS**		**NS**		**NS**		**3,000**		**NS**		**0.2**		**0.2**		**NS**		**NS**		**0.2**		**NS**		**400**		**400**		**NS**		**100**		**3,000**		**250**	
		WI Groundwater PAL:	NS		NS		NS		NS		600		NS		0.02		0.02		NS		NS		0.02		NS		80		80		NS		10		NS		50	
		Tap Water RSL:	*1.1*		*36*		*530*		*530*		*1,800*		*0.03*		*0.025*		*0.25*		*120*		*2.5*		*25*		*0.025*		*800*		*290*		*0.25*		*0.17*		*1,800*		*120*	
052819001	MW-418	05/28/2019	0.0077	J	0.0095	J	<0.0067	U	<0.0055	U	<0.012	U	*0.038*	J	<0.012	U	0.015	J	0.0096	J	0.014	J	0.017	J	<0.011	U	0.026	J	<0.0089	U	<0.020	U	<0.020	U	0.026	J	0.027	J
052819002	MW-417	05/28/2019	0.0076	J	0.0069	J	<0.0065	U	<0.0053	U	<0.011	U	<0.0080	U	<0.011	U	0.0071	J	<0.0072	U	<0.0080	U	<0.014	U	<0.011	U	<0.011	U	<0.0085	U	<0.019	U	<0.020	U	0.016	J	0.013	J
052819003	MW-407	05/28/2019	0.0077	J	0.0090	J	<0.0071	U	<0.0058	U	<0.012	U	<0.0088	U	<0.012	U	0.0095	J	<0.0079	U	0.011	J	<0.015	U	<0.012	U	0.016	J	<0.0093	U	<0.021	U	<0.021	U	0.022	J	0.021	J
052819004	MW-412	05/28/2019	<0.0069	U	0.011	J	<0.0071	U	<0.0058	U	0.018	J	*0.042*	J	<0.012	U	0.0094	J	0.012	J	0.015	J	<0.015	U	<0.012	U	<0.012	U	<0.0093	U	<0.021	U	<0.021	U	0.024	J	<0.0089	U
052819005	MW-413	05/28/2019	<0.0064	U	<0.0053	U	<0.0066	U	<0.0054	U	<0.011	U	<0.0082	U	<0.011	U	<0.0062	U	<0.0074	U	<0.0082	U	<0.014	U	<0.011	U	<0.012	U	<0.0087	U	<0.019	U	<0.020	U	<0.015	U	<0.0083	U
052819006	MW-411AR	05/28/2019	*3.2*		0.72		0.98		0.52		0.17		*0.048*		*0.038*	J	0.068		0.044		0.038	J	0.059	J	<0.011	U	0.16		0.58		0.030	J	*4.9*		0.71		0.21	
052819007	MW-410R	05/28/2019	<0.0063	U	<0.0053	U	<0.0065	U	<0.0054	U	<0.011	U	<0.0081	U	<0.011	U	0.012	J	0.0092	J	0.016	J	0.015	J	<0.011	U	0.015	J	<0.0086	U	<0.019	U	<0.020	U	<0.015	U	0.017	J
052919009	MW-401BR	05/29/2019	0.12		0.027	J	<0.025	U	0.050	J	0.24		*0.23*		*0.10*	J	**0.23**		0.17		0.14	J	**0.24**	J	<0.042	U	0.43		0.051	J	0.10	J	<0.076	U	0.17	J	0.89	
052919010/052919011 (N)	MW-408	05/29/2019	0.011	J	0.0081	J	0.038		0.023	J	0.26		*1.4*		***1.4***		***2.8***		1.6		1.2		**1.7**		*0.20*		4.9		0.10		*1.2*		<0.019	U	1.6		4.0	
052919012	MW-406	05/29/2019	<0.0066	U	<0.0054	U	0.018	J	0.022	J	0.14		*0.88*		***0.95***		***2.2***		1.3		0.89		**1.1**		*0.15*		2.6		0.028	J	*0.98*		0.039	J	0.80		2.1	
052919013	MW-409B	05/29/2019	<0.0066	U	<0.0054	U	<0.0067	U	<0.0055	U	0.037	J	*0.14*		*0.19*		***0.44***		0.33		0.28		**0.30**		*0.034*	J	0.54		<0.0089	U	0.24		<0.020	U	0.14		0.45	
052919014	MW-409A	05/29/2019	0.0094	J	<0.0053	U	<0.0066	U	0.0065	J	0.075		*0.18*		***0.25***		***0.56***		0.37		0.31		**0.38**		*0.047*	J	0.67		<0.0087	U	*0.27*		0.084	J	0.19		0.60	
052919015	MW-414	05/29/2019	<0.0069	U	<0.0057	U	<0.0071	U	<0.0058	U	<0.012	U	<0.0088	U	<0.012	U	0.014	J	0.014	J	0.015	J	<0.015	U	<0.012	U	<0.012	U	<0.0093	U	<0.021	U	<0.021	U	<0.016	U	0.012	J
052919016	MW-415B	05/29/2019	<0.0060	U	<0.0049	U	0.0096	J	<0.0050	U	0.021	J	*0.061*		*0.040*	J	0.099		0.052		0.072		0.10		<0.010	U	0.19		0.012	J	0.041	J	<0.019	U	0.16		0.14	
052919017	MW-415A	05/29/2019	<0.0064	U	<0.0053	U	<0.0066	U	<0.0054	U	<0.011	U	*0.039*	J	*0.031*	J	0.076		0.064		0.074		0.072		<0.011	U	0.11		<0.0087	U	0.046	J	<0.020	U	0.043	J	0.094	
052919018	MW-416	05/29/2019	<0.0064	U	<0.0053	U	<0.0066	U	<0.0054	U	0.024	J	*0.089*		*0.11*		***0.28***		0.14		0.16		**0.25**		0.022	J	0.46		<0.0087	U	0.11		<0.020	U	0.20		0.36	
052919019	MW-405B	05/29/2019	<0.0063	U	<0.0052	U	0.016	J	<0.0053	U	0.15		*0.63*		***0.82***		***1.8***		1.1		0.76		**0.92**		*0.14*		2.1		0.032	J	*0.81*		<0.020	U	0.75		1.8	
052919020/052919021 (N)	MW-404	05/29/2019	*188*		0.13	J	12.3		8.6		3.5		<0.16	U	<0.22	U	<0.12	U	<0.14	U	<0.16	U	<0.27	U	<0.21	U	0.78	J	3.5		<0.37	U	*11.8*		9.5		0.93	
052919022	MW-403R	05/29/2019	*47.9*		16.6		12.0		1.4	J	4.1	J	<0.84	U	<1.2	U	<0.64	U	<0.75	U	<0.84	U	<1.4	U	<1.1	U	1.5	J	7.9		<2.0	U	***922***		13.2		1.9	J
053019024	MW-411B	05/30/2019	<0.0063	U	<0.0052	U	<0.0065	U	0.0066	J	0.042	J	*0.19*		*0.16*		***0.52***		0.31		0.21		**0.32**		*0.045*	J	0.58		<0.0085	U	0.23		<0.020	U	0.18		0.54	
052819008	EB01	05/28/2019	<0.0056	U	<0.0047	U	<0.0058	U	<0.0047	U	<0.010	U	<0.0072	U	<0.010	U	<0.0055	U	<0.0065	U	<0.0072	U	<0.012	U	<0.0095	U	<0.010	U	<0.0076	U	<0.017	U	<0.017	U	0.031	J	<0.0073	U
052919023	EB02	05/29/2019	<0.0056	U	<0.0047	U	<0.0058	U	<0.0047	U	<0.010	U	<0.0072	U	<0.010	U	0.0057	J	0.0076	J	0.0096	J	<0.012	U	<0.0095	U	<0.010	U	<0.0076	U	<0.017	U	<0.017	U	<0.013	U	0.0073	J
053019025	EB03	05/30/2019	<0.0057	U	<0.0048	U	<0.0059	U	<0.0048	U	<0.010	U	<0.0073	U	<0.010	U	0.010	J	<0.0066	U	<0.0073	U	<0.013	U	<0.0097	U	<0.010	U	<0.0077	U	<0.017	U	<0.018	U	<0.013	U	<0.0074	U
053019026	TB01	05/30/2019	--		--		--		--		--		--		--		--		--		--		--		--		--		--		--		--		--		--	

Total Number of Samples Analyzed:	20		20		20		20		20		20		20		20		20		20		20		20		20		20		20		20	
Number of Detections:	9		9		7		8		13		13		11		17		15		16		13		7		16		8		11		5		17		18	
Min:	0.0076		0.0069		0.0096		0.0065		0.018		0.038		0.031		0.0071		0.0092		0.011		0.015		0.022		0.015		0.012		0.03		0.039		0.016		0.012	
Max:	188		16.6		12.3		8.6		4.1		1.4		1.4		2.8		1.6		1.2		1.7		0.2		4.9		7.9		1.2		922		13.2		4	
Groundwater SL:	NS		NS		NS		NS		3,000		NS		0.2		0.2		NS		NS		0.2		NS		400		400		NS		100		3,000		250	
Number of Samples that Exceed Groundwater SL:	0		0		0		0		0		0		4		8		0		0		8		0		0		0		0		1		0		0	
WI Groundwater PAL:	NS		NS		NS		NS		600		NS		0.02		0.02		NS		NS		0.02		NS		80		80		NS		10		NS		50	
Number of Samples that Exceed WI Groundwater PAL:	0		0		0		0		0		0		11		11		0		0		11		0		0		0		0		2		0		0	
Tap Water RSL:	1.1		36		530		530		1,800		0.03		0.025		0.25		120		2.5		25		0.025		800		290		0.25		0.17		1,800		120	
Number of Samples that Exceed Tap Water RSL:	3		0		0		0		0		13		11		7		0		0		0		6		0		0		4		3		0		0	

Table 1 - May 2019 Groundwater Sample Results

Wisconsin Public Service Corporation

Green Bay Former Manufactured Gas Plant Site 700 N Adams St, Green Bay, Wisconsin

BRRTS#: 02-05-000254 UPSEPA#: WIN000509948

9-digit Code	Sample Location	Sample Date	BTEX Benzene		BTEX Ethylbenzene		BTEX Toluene		BTEX Xylene, o		BTEX Xylenes, m + p		BTEX Xylenes, Total		VOC 1,2,4-Trimethylbenzene		VOC 1,3,5-Trimethylbenzene		VOC Trimethylbenzene, Total[1]		Metal Arsenic, Dissolved		Metal Barium, Dissolved		Metal Cadmium, Dissolved		Metal Chromium, Dissolved		Metal Iron, Dissolved		Metal Lead, Dissolved		Metal Manganese, Dissolved		Metal Mercury, Dissolved		Metal Selenium, Dissolved		Metal Silver, Dissolved	
			µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
			Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
		Groundwater SL:	**5**		**700**		**800**		**NS**		**NS**		**2,000**		**NS**		**NS**		**480**		**10**		**2,000**		**5**		**100**		**NS**		**15**		**300**		**2**		**50**		**50**	
		WI Groundwater PAL:	0.5		140		160		NS		NS		400		NS		NS		96		1		400		0.5		10		150		1.5		25		0.2		10		10	
		Tap Water RSL:	*0.46*		*1.5*		*1,100*		*190*		*190*		*190*		*56*		*60*		*NS*		*0.052*		*3,800*		*9.2*		*22,000*		*14,000*		*15*		*430*		*5.7*		*100*		*94*	
052819001	MW-418	05/28/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<1.71	U	*0.44*	J	227		<0.15	U	<1.0	U	<111	U	<0.24	U	185		<0.084	U	10.7		<0.10	U
052819002	MW-417	05/28/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<1.71	U	*3.1*	J	469		<1.5	U	<10.2	U	6,580		<2.4	U	***590***		<0.084	U	<3.2	U	<1.0	U
052819003	MW-407	05/28/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<1.71	U	<2.8	U	412		<1.5	U	<10.2	U	6,220		<2.4	U	***342***		<0.084	U	<3.2	U	<1.0	U
052819004	MW-412	05/28/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<1.71	U	<5.6	U	865		<3.0	U	<20.4	U	*27,300*		<4.7	U	***989***		<0.084	U	<6.3	U	<2.0	U
052819005	MW-413	05/28/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<1.71	U	*2.8*		49.6		1.2	J	<2.0	U	5,200		<0.47	U	179		<0.084	U	1.5	J	0.67	J
052819006	MW-411AR	05/28/2019	***857***		*71.5*		1.9	J	2.2		1.3	J	3.6		4.4		<0.87	U	4.4		***12.1***	J	102		<3.0	U	<20.4	U	<2,210	U	<4.7	U	107	J	<0.084	U	<6.3	U	<2.0	U
052819007	MW-410R	05/28/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<1.71	U	*3.3*	J	71.3		<1.5	U	<10.2	U	<1,110	U	<2.4	U	154		<0.084	U	<3.2	U	<1.0	U
052919009	MW-401BR	05/29/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<1.71	U	<2.8	U	35.7	J	<1.5	U	<10.2	U	1,420	J	<2.4	U	***366***		<0.084	U	<3.2	U	<1.0	U
052919010/052919011 (N)	MW-408	05/29/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<1.71	U	<5.6	U	488		<3.0	U	<20.4	U	*45,400*		<4.7	U	***5,110***		<0.084	U	<6.3	U	<2.0	U
052919012	MW-406	05/29/2019	*0.74*	J	0.34	J	0.17	J	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<1.71	U	<5.6	U	419		<3.0	U	<20.4	U	<2,210	U	<4.7	U	***1,300***		<0.084	U	<6.3	U	<2.0	U
052919013	MW-409B	05/29/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<1.71	U	*0.72*	J	23.4		<0.30	U	<2.0	U	<221	U	<0.47	U	8.0	J	<0.084	U	<0.63	U	<0.20	U
052919014	MW-409A	05/29/2019	0.41	J	*6.2*		0.53	J	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<1.71	U	<5.6	U	180		<3.0	U	<20.4	U	<2,210	U	<4.7	U	***323***		<0.084	U	<6.3	U	<2.0	U
052919015	MW-414	05/29/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<1.71	U	<2.8	U	419		<1.5	U	<10.2	U	<1,110	U	<2.4	U	***538***		<0.084	U	<3.2	U	<1.0	U
052919016	MW-415B	05/29/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<1.71	U	*1.2*	J	22.8		0.65	J	<2.0	U	<221	U	<0.47	U	<5.4	U	<0.084	U	0.73	J	<0.20	U
052919017	MW-415A	05/29/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<1.71	U	*0.65*	J	104		<0.30	U	<2.0	U	<221	U	<0.47	U	<5.4	U	<0.084	U	<0.63	U	<0.20	U
052919018	MW-416	05/29/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<1.71	U	<5.6	U	440		<3.0	U	<20.4	U	9,320		<4.7	U	***3,550***		<0.084	U	<6.3	U	<2.0	U
052919019	MW-405B	05/29/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<1.71	U	<2.8	U	43.7	J	<1.5	U	<10.2	U	<1,110	U	<2.4	U	43.8	J	<0.084	U	<3.2	U	<1.0	U
052919020/052919021 (N)	MW-404	05/29/2019	***206***		*248*		1.5	J	33.4		25.1		58.5		26.5		2.8	J	29.3		<2.8	U	192		<1.5	U	<10.2	U	7,480		<2.4	U	***379***		<0.084	U	<3.2	U	<1.0	U
052919022	MW-403R	05/29/2019	***645***		*69.3*		43.8		62.5		79.5		142		21.6		<4.4	U	21.6		<5.6	U	138		<3.0	U	<20.4	U	<2,210	U	<4.7	U	103	J	<0.084	U	<6.3	U	<2.0	U
053019024	MW-411B	05/30/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<1.71	U	<5.6	U	75.2	J	<3.0	U	<20.4	U	<2,210	U	<4.7	U	236		<0.084	U	<6.3	U	<2.0	U
052819008	EB01	05/28/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	--		--		--		<0.28	U	<1.5	U	<0.15	U	<1.0	U	<111	U	<0.24	U	<2.7	U	<0.084	U	<0.32	U	<0.10	U
052919023	EB02	05/29/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<1.71	U	<0.28	U	<1.5	U	<0.15	U	<1.0	U	<111	U	<0.24	U	<2.7	U	<0.084	U	<0.32	U	<0.10	U
053019025	EB03	05/30/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<1.71	U	<0.28	U	<1.5	U	<0.15	U	1.2	J	<111	U	<0.24	U	<2.7	U	<0.084	U	<0.32	U	<0.10	U
053019026	TB01	05/30/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<1.71	U	--		--		--		--		--		--		--		--		--		--		--	

Total Number of Samples Analyzed:	20		20		20		20		20		20		20		20		20		20		20		20		20		20		20		20		20		20		20	
Number of Detections:	5		5		5		3		3		3		3		1		3		8		20		2		0		8		0		18		0		3		1	
Min:	0.41		0.34		0.17		2.2		1.3		3.6		4.4		2.8		4.4		0.44		22.8		0.65		0		1,420		0		8		0		0.73		0.67	
Max:	857		248		43.8		62.5		79.5		142		26.5		2.8		29.3		12.1		865		1.2		0		45,400		0		5,110		0		10.7		0.67	
Groundwater SL:	5		700		800		NS		NS		2,000		NS		NS		480		10		2,000		5		100		NS		15		300		2		50		50	
Number of Samples that Exceed Groundwater SL:	3		0		0		0		0		0		0		0		0		1		0		0		0		0		0		10		0		0		0	
WI Groundwater PAL:	0.5		140		160		NS		NS		400		NS		NS		96		1		400		0.5		10		150		1.5		25		0.2		10		10	
Number of Samples that Exceed WI Groundwater PAL:	4		1		0		0		0		0		0		0		0		5		7		2		0		8		0		17		0		1		0	
Tap Water RSL:	0.46		1.5		1,100		190		190		190		56		60		NS		0.052		3,800		9.2		22,000		14,000		15		430		5.7		100		94	
Number of Samples that Exceed Tap Water RSL:	4		4		0		0		0		0		0		0		0		8		0		0		0		2		0		6		0		0		0	

Table 1 - May 2019 Groundwater Sample Results

Wisconsin Public Service Corporation

Green Bay Former Manufactured Gas Plant Site 700 N Adams St, Green Bay, Wisconsin

BRRTS#: 02-05-000254 UPSEPA#: WIN000509948

			Inorganic		Inorganic		RNA		RNA		RNA		RNA		RNA		RNA	
9-digit Code	Sample Location	Sample Date	Nitrogen, NO2 + NO3, Total		Sulfate, Total		Dissolved oxygen		Groundwater, depth to		Oxidation Reduction Potential		pH, Field		Specific Conductance, Field		Temperature, Water		Turbidity, Quantitative	
			µg/L		µg/L		mg/L		feet		millivolts		s.u.		µS/cm		Deg C		NTUs	
			Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
		Groundwater SL:	**NS**		**NS**		**NS**		**NS**		**NS**		**NS**		**NS**		**NS**		**NS**	
		WI Groundwater PAL:	2,000		125,000		NS		NS		NS		NS		NS		NS		NS	
		Tap Water RSL:	*NS*		*NS*		*NS*		*NS*		*NS*		*NS*		*NS*		*NS*		*NS*	
052819001	MW-418	05/28/2019	5,600		86,800		0.24		5.13		248.3		6.75		5,596		12.70		5.28	
052819002	MW-417	05/28/2019	2,000		108,000		3.47		4.22		-5.4		6.89		9,988		12.10		11.87	
052819003	MW-407	05/28/2019	<95	U	165,000		0.21		3.51		-48.3		7.00		8711.1		13.01		25.07	
052819004	MW-412	05/28/2019	<95	U	128,000		0.21		5.06		-63.0		6.78		16920.8		14.41		21.29	
052819005	MW-413	05/28/2019	<95	U	15,700		0.22		2.42		-59.3		6.77		537.0		9.50		5.74	
052819006	MW-411AR	05/28/2019	<95	U	202,000		0.30		1.38		-206.3		8.29		11759.6		12.31		117.56	
052819007	MW-410R	05/28/2019	<95	U	1,140,000		0.11		1.29		-98.2		7.24		4162.1		16.55		8.91	
052919009	MW-401BR	05/29/2019	<95	U	842,000		0.17		7.16		-150.0		8.74		8069.6		12.79		24.91	
052919010/052919011 (N)	MW-408	05/29/2019	<95	U	179,000		0.17		0.31		-54.4		6.71		13536.6		14.98		20.96	
052919012	MW-406	05/29/2019	<95	U	201,000		0.21		1.58		-51.6		7.13		18,638		15.11		18.39	
052919013	MW-409B	05/29/2019	140	J	563,000		1.46		8.10		5.3		7.59		2511.9		15.28		4.71	
052919014	MW-409A	05/29/2019	<95	U	577,000		0.17		0.89		-36.4		7.26		16580.9		16.07		13.95	
052919015	MW-414	05/29/2019	1,300		94,300		0.65		4.01		50.1		7.17		10635.9		16.17		7.33	
052919016	MW-415B	05/29/2019	270		1,650,000		2.11		6.90		72.9		7.61		2310.8		16.64		6.42	
052919017	MW-415A	05/29/2019	<95	U	308,000		0.93		2.19		92.5		7.05		5357.8		16.59		2.93	
052919018	MW-416	05/29/2019	<95	U	312,000		0.23		3.04		36.7		6.66		31824.4		15.53		4.75	
052919019	MW-405B	05/29/2019	1,100		176,000		4.56		7.18		102.5		7.71		6191.2		15.85		11.03	
052919020/052919021 (N)	MW-404	05/29/2019	<95	U	260,000		0.15		0.86		8.2		6.39		9277.5		16.09		25.03	
052919022	MW-403R	05/29/2019	<95	U	1,410,000		0.05		0.88		-196.5		8.58		21566.1		15.75		3.25	
053019024	MW-411B	05/30/2019	110	J	309,000		0.29		0.40		-60.4		8.22		19350.1		14.94		0.00	
052819008	EB01	05/28/2019	--		--		--		--		--		--		--		--		--	
052919023	EB02	05/29/2019	--		--		--		--		--		--		--		--		--	
053019025	EB03	05/30/2019	--		--		--		--		--		--		--		--		--	
053019026	TB01	05/30/2019	--		--		--		--		--		--		--		--		--	
Total Number of Samples Analyzed:			20		20		20		20		20		20		20		20		20	
Number of Detections:			7		20		20		20		20		20		20		20		20	
Min:			110		15,700		0.05		0.31		-206.3		6.39		537		9.5		2.93	
Max:			5,600		1,650,000		4.56		8.1		248.3		8.74		31,824		16.64		117.56	
Groundwater SL:			NS		NS		NS		NS		NS		NS		NS		NS		NS	
Number of Samples that Exceed Groundwater SL:			0		0		0		0		0		0		0		0		0	
WI Groundwater PAL:			2,000		125,000		NS		NS		NS		NS		NS		NS		NS	
Number of Samples that Exceed WI Groundwater PAL:			2		16		0		0		0		0		0		0		0	
Tap Water RSL:			NS		NS		NS		NS		NS		NS		NS		NS		NS	
Number of Samples that Exceed Tap Water RSL:			0		0		0		0		0		0		0		0		0	

[O:MGP 6/24/19, C:SGW 6/26/19, QA:JLG 6/28/19]

Sorted by 9-digit Code

Analyte concentration exceeds the standard for:

BOLD	**Groundwater SL**
Underline	WI Groundwater PAL
Italic	*Tap Water RSL*

Yellow Highlighting in Statistics = detected Exceedances

Pink highlighting in the table= a GW SL exceedance; results only exceeding the PAL and/or Tap Water criteria are not highlighted.

Statistics exclude the quality control samples (Field and Trip Blanks)

-- = Analysis not performed

(N) = Normalized sample locations created from combining parent and field duplicate samples following EPA protocol

< = Concentration is less than reported limit

µg/L = micrograms per liter

µS/cm = microsiemens per centimeter (aka micromhos per centimeter)

BRRTS = Bureau for Remediation and Redevelopment Tracking System (Wisconsin Dept of Natural Resources (WDNR))

BTEX = Benzene, Toluene, Ethylbenzene and Xylene

Deg C = degrees Celsius

J = Estimated Concentration

mg/L = milligrams per liter

MGP = Manufactured Gas Plant

NS = No Screening Level

NTU = Nephelometric Turbidity Unit

PAH = Polycyclic Aromatic Hydrocarbon

PAL = Preventive Action Limit; results that attain or exceed this criteria are considered in exceedance of the PAL

RNA = Remediation by Natural Attenuation (lab and field)

RSL = Regional Screening Level

s.u. = standard units

SL = Screening Level

U = Concentration was not detected above the reported limit

VOC = Volatile Organic Compound

Lab comments and definitions can be found in associated laboratory reports.

1. Total trimethylbenzenes were calculated by OBG as follows:
   a. Where no detections were observed, the sum of the reporting limits is presented.
   b. Where detections were observed, only the detected results were added together for the total summation.
   c. Analytes used for the calculation are 1,2,4-Trimethylbenzene and 1,3,5-Trimethylbenzene.

Groundwater and Tap Water Screening Levels used on this table were presented in the Multi-Site Risk Assessment Framework (RAF) Addendum Revision 6, issued in August 2017. Since that time, four (4) revisions of the RSLs have been published by the EPA through May 2019. As a result of these revisions, there were no updates to the RSLs necessary for the MGP-related constituents evaluated in this table.

WI Groundwater PAL from Chapter NR 140 for Groundwater Quality from Wisconsin Admin Code (Feb 2017)

Table 2 - May 2019 Groundwater Sample Results Compared to VISLs

Wisconsin Public Service Corporation

Green Bay Former Manufactured Gas Plant Site 700 N Adams St, Green Bay, Wisconsin

BRRTS#: 02-05-000254 UPSEPA#: WIN000509948

9-digit Code	Sample Location	Sample Date	BTEX Benzene		BTEX Ethylbenzene		BTEX Toluene		BTEX Xylene, o		BTEX Xylenes, m + p		BTEX Xylenes, Total		VOC 1,2,4-Trimethylbenzene		VOC 1,3,5-Trimethylbenzene		PAH Naphthalene	
			µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
			Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Groundwater VISL, Industrial:			**6.9**		**15**		**80,700**		**2,070**		**1,490**		**1,620**		**1,040**		**733**		**20**	
Groundwater VISL, Residential:			1.6		3.5		19,200		492		355		385		248		175		4.6	
052819001	MW-418	05/28/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<0.020	U
052819002	MW-417	05/28/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<0.020	U
052819003	MW-407	05/28/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<0.021	U
052819004	MW-412	05/28/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<0.021	U
052819005	MW-413	05/28/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<0.020	U
052819006	MW-411AR	05/28/2019	**857**		**71.5**		1.9	J	2.2		1.3	J	3.6		4.4		<0.87	U	4.9	
052819007	MW-410R	05/28/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<0.020	U
052919009	MW-401BR	05/29/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<0.076	U
052919010/052919011 (N)	MW-408	05/29/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<0.019	U
052919012	MW-406	05/29/2019	0.74	J	0.34	J	0.17	J	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	0.039	J
052919013	MW-409B	05/29/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<0.020	U
052919014	MW-409A	05/29/2019	0.41	J	6.2		0.53	J	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	0.084	J
052919015	MW-414	05/29/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<0.021	U
052919016	MW-415B	05/29/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<0.019	U
052919017	MW-415A	05/29/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<0.020	U
052919018	MW-416	05/29/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<0.020	U
052919019	MW-405B	05/29/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<0.020	U
052919020/052919021 (N)	MW-404	05/29/2019	**206**		**248**		1.5	J	33.4		25.1		58.5		26.5		2.8	J	11.8	
052919022	MW-403R	05/29/2019	**645**		**69.3**		43.8		62.5		79.5		142		21.6		<4.4	U	**922**	
053019024	MW-411B	05/30/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<0.020	U
052819008	EB01	05/28/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	--		--		<0.017	U
052919023	EB02	05/29/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<0.017	U
053019025	EB03	05/30/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	<0.018	U
053019026	TB01	05/30/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.84	U	<0.87	U	--	

Total Number of Samples Analyzed:	20	20	20	20	20	20	20	20	20	
Number of Detections:	5	5	5	3	3	3	3	1	5	
Min:	0.41	0.34	0.17	2.2	1.3	3.6	4.4	2.8	0.039	
Max:	857	248	43.8	62.5	79.5	142	26.5	2.8	922	
Groundwater VISL, Industrial:	6.9	15	80,700	2,070	1,490	1,620	1,040	733	20	
Number of Samples that Exceed Groundwater VISL, Industrial:	3	3	0	0	0	0	0	0	1	
Groundwater VISL, Residential:	1.6	3.5	19,200	492	355	385	248	175	4.6	
Number of Samples that Exceed Groundwater VISL, Residential:	3	4	0	0	0	0	0	0	3	

[O:MGP 6/25/19, C:SGW 6/26/19, QA:JLG 7/1/19]

Only parameters with VISL will be presented; please refer to Table 1 for results for other parameters.
Sorted by 9-digit Code

Analyte concentration exceeds the standard for:

BOLD	**Groundwater VISL, Industrial**
Underline	Groundwater VISL, Residential

Yellow Highlighting in Statistics = detected Exceedances

Pink highlighting in result table = result exceeds one or more screening criteria

Statistics exclude the quality control samples (Field and Trip Blanks)

-- = Analysis not performed

(N) = Normalized sample locations created from combining parent and field duplicate samples following EPA protocol

< = Concentration is less than reported limit

µg/L = micrograms per liter

BRRTS = Bureau for Remediation and Redevelopment Tracking System (Wisconsin Dept of Natural Resources (WDNR))

BTEX = benzene, toluene, ethylbenzene and xylenes

J = Estimated Concentration

MGP = Manufactured Gas Plant

PAH = Polycyclic Aromatic Hydrocarbon

RAF = Risk Assessment Framework

RSL = Regional Screening Level

U = Concentration was not detected above the reported limit

VISLs = Vapor Intrusion Screening Levels

VOC = Volatile Organic Compound

Lab comments and definitions can be found in associated laboratory reports.

Screening Levels used on this table were presented in the Multi-Site Risk Assessment Framework (RAF) Addendum Revision 6, issued in August 2017. Since that time, four (4) revisions of the RSLs have been published by EPA. As a result of these four revisions through May 2019, there were no updates to the RSLs necessary for the MGP-related constituents evaluated in this table.

VISLs for groundwater vapor were obtained using the USEPA's on-line VISL calculator (USEPA May 2018).

Table 3. Baseline Air Monitoring Results Summary

Monthly Progress Report - Air Monitoring 2019 NFA
Former Green Bay MGP Sediment
Green Bay, WI
BRRTS#: 02-05-000254 USEPA#: WIN000509948

9-digit Code	Sample Location	Orientation	Field Sample ID	Sample Date	VOC Benzene		VOC Ethylbenzene		VOC Naphthalene		VOC Toluene		VOC Xylenes, Total	
				Reporting Units:	µg/m³		µg/m³		µg/m³		µg/m³		µg/m³	
					Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
				Acceptable 24-hour Average Air Concentration:	31.95		998.71		104.85		354.24		99.87	
050619001	AMS-4	Crosswind	AMS-4-20190507	05/07/2019	0.23	U	0.32	U	1.6	U	0.26	U	0.61	U
050719007	AMS-4	Crosswind	AMS-4-20190508	05/08/2019	0.23	U	0.32	U	1.6	U	3.0		0.61	U
050819010	AMS-4	Crosswind	AMS-4-20190509	05/09/2019	0.23	U	0.32	U	1.6	U	0.26	U	0.61	U
050919012-A	AMS-4	Upwind	AMS-4-20190510	05/10/2019	0.23	U	0.32	U	1.6	U	0.26	U	0.61	U
050619003	AMS-5	Upwind	AMS-5-20190507	05/07/2019	0.33	J	0.32	U	1.6	U	6.0		0.69	J
050819009	AMS-5	Upwind	AMS-5-20190509	05/09/2019	0.23	U	0.32	U	1.6	U	0.26	U	0.61	U
050919011	AMS-5	Upwind	AMS-5-20190510	05/10/2019	0.23	U	0.32	U	1.6	U	0.26	U	0.61	U
050619004	AMS-6	Downwind	AMS-6-20190507	05/07/2019	0.23	U	0.32	U	1.6	U	0.26	U	0.61	U
050719006	AMS-6	Downwind	AMS-6-20190508	05/08/2019	0.23	U	0.32	U	1.6	U	1.1		0.61	U
050819008	AMS-6	Downwind	AMS-6-20190509	05/09/2019	0.23	U	0.32	U	1.6	U	0.26	U	0.61	U
050919013	AMS-6	Downwind	AMS-6-20190510	05/10/2019	0.23	U	0.32	U	1.6	U	0.31	J	0.61	U
				Total Number of Samples Analyzed:	11		11		11		11		11	
				Number of Detections:	1		0		0		4		1	
				Min:	0.33		0		0		0.31		0.69	
				Max:	0.33		0		0		6		0.69	
				Average:	0.33		0		0		2.6		0.69	

[O:MGP 6/27/19, C:SGW 6/28/19, Q: JQW 6/28/19, U: JQW 7/3/19]

Notes:
µg/m³ = micrograms per cubic meter
J = Estimated concentration
MGP = manufactured gas plant
U = Concentration was not detected above the reported limit
VOC = Volatile Organic Compound

Lab comments and definitions can be found in associated laboratory reports.

Acceptable 24-hour Average Concentrations adopted from the Wisconsin Bureau of Environmental and Occupational Health Department of Health and Family Services "*Health-based Guidelines for Air Management, Public Participation, and Risk Communication During the Excavation of Former Manufactured Gas Plants* ." Naphthalene concentration is DHFS-derived for 14-day acute exposure, and all other parameters are U.S. EPA reference concentrations (RfC) for lifetime exposure.

Table 4. Performance Air Monitoring Results Summary

Monthly Progress Report - Air Monitoring 2019 NFA
Former Green Bay MGP Sediment
Green Bay, WI
BRRTS#: 02-05-000254 USEPA#: WIN000509948

9-digit Code	Sample Location	Orientation	Sample Date	VOC Benzene		VOC Ethylbenzene		VOC Naphthalene		VOC Toluene		VOC Xylenes, Total	
			Reporting Units:	µg/m³		µg/m³		µg/m³		µg/m³		µg/m³	
				Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
			Baseline Air Average Concentration[1]:	**0.33**		**0**		**0**		**2.6**		**0.69**	
			Acceptable 24-hour Average Air Concentration[2]:	31.95		998.71		104.85		354.24		99.87	
060419001	AMS-4	Crosswind	06/05/2019	**0.48**	J	0.32	U	1.6	U	1.2		0.61	U
060619005	AMS-4	Crosswind	06/07/2019	**1.1**		**0.33**	J	1.6	U	2.5		**1.5**	J
061119008	AMS-4	Downwind	06/12/2019	**0.53**	J	0.32	U	1.6	U	0.74		0.61	U
061319012/061319014 (N)	AMS-4	Upwind	06/14/2019	**0.56**	J	0.32	U	1.6	U	1.3		**1.2**	J
060419002/060419004 (N)	AMS-5	Crosswind	06/05/2019	**0.85**		0.32	U	1.6	U	1.2		0.65	J
060619006	AMS-5	Upwind	06/07/2019	**0.77**		0.32	U	1.6	U	1.7		0.61	J
061119009	AMS-5	Crosswind	06/12/2019	**0.38**	J	0.32	U	1.6	U	0.72	J	0.61	U
061319013	AMS-5	Crosswind	06/14/2019	**2.5**		**3.1**		**8.9**		**2.7**		**3.9**	
060419003	AMS-6	Upwind	06/05/2019	**0.39**	J	0.32	U	1.6	U	0.26	U	0.61	U
060619007	AMS-6	Crosswind	06/07/2019	**0.78**		0.32	U	1.6	U	2.0		**1.4**	J
061119010	AMS-6	Upwind	06/12/2019	**0.40**	J	0.32	U	1.6	U	0.83		0.61	U
061319011	AMS-6	Downwind	06/14/2019	**0.88**		**1.2**		1.6	U	**4.8**		**3.0**	
			Total Number of Samples Analyzed:	12		12		12		12		12	
			Number of Detections:	12		3		1		11		7	
			Min:	0.38		0.33		8.9		0.72		0.61	
			Max:	2.5		3.1		8.9		4.8		3.9	
			Baseline Air Average Concentration:	0.33		0		0		2.6		0.69	
			Number of Samples above Baseline Air Concentration:	12		3		1		2		5	
			Number of Samples above Upwind Values:	7		3		1		6		5	
			Acceptable 24-hour Average Air Concentration:	31.95		998.71		104.85		354.24		99.87	
			Number of Samples that Exceed Acceptable Air Concentration:	0		0		0		0		0	

[O:MGP 6/28/19, C: SGW 7/2/19, QC: JQW 7/2/19, U: JQW 7/3/19, QC: SJM 7/8/19, U: JQW 7/10/19]

	Sample Location	Acceptable 24-hour Average Concentration (µg/m³)				
		31.95	998.71	104.85	354.24	99.87
Average Concentration[3]:	AMS-4	0.67	0.20	0.80	1.44	0.83
	AMS-5	1.12	0.90	2.82	1.58	1.37
	AMS-6	0.61	0.42	0.80	1.94	1.25

Analyte concentration exceeds the standard for:
BOLD Value exceeds the Baseline Air Average Concentration
No Values Exceed the Acceptable 24-hour Average Concentration
Yellow highlighting in Statistics = detected concentrations above Baseline Average Concentration
Orange highlighting in Statistics = Samples above Upwind Values

(N) = Normalized sample locations created from combining parent and field duplicate samples following EPA protocol
µg/m³ = micrograms per cubic meter
J = Estimated concentration
MGP = manufactured gas plant
U = Concentration was not detected above the reported limit
VOC = Volatile Organic Compound

1. Baseline Air Average Concentrations derived from the average concentrations in Table 3.

2. Acceptable 24-hour Average Concentrations adopted from the Wisconsin Bureau of Environmental and Occupational Health Department of Health and Family Services "*Health-based Guidelines for Air Management, Public Participation, and Risk Communication During the Excavation of Former Manufactured Gas Plants* ." Naphthalene concentration is DHFS-derived for 14-day acute exposure, and all other parameters are U.S. EPA reference concentrations (RfC) for lifetime exposure.

3. Non-detections were treated as 1/2 the detection limit.

Lab comments and definitions can be found in associated laboratory reports.

AMS-5 was relocated on 6/13/2019 closer to the eastern perimeter of the site in order to obtain more representative data and to provide a safer working environment due to the heavy cement dust that was generated at its original location.