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March 7, 2017

Mr. Michael Schmoller Wisconsin Department of Natural Resources South Central Region 3911 Fish Hatchery Road Fitchburg, WI 53711

Subject: Proposed Modification to Performance Monitoring Program

Madison-Kipp Corporation, 201 Waubesa Street, Madison, WI

WDNR BRRTS #02-13-558625

Dear Mr. Schmoller:

TRC Environmental Corp. (TRC) is writing on behalf of Madison-Kipp Corporation (MKC) with regard to the groundwater monitoring being conducted at MKC's facility at 201 Waubesa Street, Madison, Wisconsin (the Site). The groundwater monitoring program is part of the active remediation of Wisconsin Department of Natural Resources (WDNR) BRRTS #02-13-558625.

As part of the active remediation of this Site, MKC has operated a Groundwater Extraction and Treatment System (GETS) since July 2015. In addition to operation of the GETS, MKC currently conducts quarterly groundwater monitoring at the Site as summarized in the attached Table 1. Figure 1 includes a well location map for reference. Generally, the first three quarterly events include gauging of 56 well intervals and sampling of 17 well intervals. The fourth quarterly event includes the gauging of 56 well intervals and sampling of 43 well intervals. The wells in the performance monitoring network have been sampled since at least 2013, and some wells have been sampled since 2010. In January 2017, TRC completed the WDNR-approved Performance Monitoring Plan.

Over the past three or more years, MKC has collected sufficient samples to characterize the spatial and temporal variations and extents of impacts from historic operations at the facility. In addition, the GETS is now operating as an active remedial system at the Site. During operation up to six rounds of groundwater monitoring have been completed to assess the effectiveness of the GETS. Therefore, TRC proposes to reduce the Performance Monitoring Plan program from quarterly to semi-annual. The first semi-annual monitoring event would be conducted in April of each year, and would include the gauging of 58 well intervals and sampling of 17 well intervals (similar to the first three quarters in the current

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plan). The second semi-annual monitoring event would be conducted in October of each year, and would include the gauging of 58 well intervals and sampling of 43 well intervals (similar to the fourth quarter in the current plan). The proposed changes to the Performance Monitoring Plan are shown on Table 2. The new semi-annual sampling program will provide sufficient information to continue to monitor the GETS operation and to monitor the extent of impacts at and adjacent the Site.

TRC requests WDNR review and approve the proposed Performance Monitoring Plan. If acceptable, the monitoring program as described would begin in 2017 with the April and October events. The January 2017 data which was already collected will be reported in the first semi-annual report in 2017, anticipated to be submitted in July or August 2017.

If you have any questions or comments related to this request, please contact Andrew Stehn (608-826-3665) or Katherine Vater (608-826-3663) of TRC or Mark Sheppard of MKC (608 242-5207). We appreciate your assistance and look forward to discussing this modification as needed.

Sincerely,

TRC Environmental Corporation

Andrew Stehn

Project Engineer

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Katherine Vater, P.E.

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Project Manger

Attachments: Table 1: WDNR-Approved Performance Monitoring Plan

Table 2: Proposed Performance Monitoring Plan

Figure 1: Well Locations Map

cc: Mark Sheppard – MKC (electronic)



Table 1 WDNR-Approved Performance Monitoring Plan Madison-Kipp Corporation 201 Waubesa Street Madison, Wisconsin

WELL/ POINT ID	BEDROCK UNIT	SCREENED INTERVAL (ft bgs)	QUARTERLY GAUGING	QUARTERLY VOC SAMPLING (1)	OCTOBER VOC SAMPLING ⁽¹⁾	PUMP TYPE
GWE-1*	Lone Rock/ Wonewoc	55-175	х	Х	Х	NA
MW-1	Unconsolidated	14-24	х		х	Peristaltic
MW-2S	Unconsolidated	19-29	х			NA
MW-2D	Upper Lone Rock	39-44	х	х	х	Peristaltic
MW-3S	Unconsolidated	19-29	х		х	Peristaltic
MW-3D	Upper Lone Rock	48-53	х	х	х	Peristaltic
MW-3D2	Lower Lone Rock	76-81	х	х	х	Peristaltic
MW-3D3	Lower Wonewoc/ Upper Eau Claire	214-224	х		х	GeoSub
MW-4D	Lower Lone Rock	65-70	х			NA
MW-4D2	Lower Lone Rock	91-96	х	х	х	Bladder
MW-5S	Upper Lone Rock	34-44	х		х	Peristaltic
MW-5D	Lower Lone Rock	75-80	х	Х	х	Peristaltic
MW-5D2	Lower Wonewoc	166-171	х	Х	х	Bladder
MW-5D3	Lower Wonewoc/ Upper Eau Claire	225-235	х	х	х	GeoSub
MW-6S	Unconsolidated/ Upper Lone Rock	32-42	х		х	Bladder
MW-6D	Lower Lone Rock	66-71	х	х	х	Bladder
MW-7	Unconsolidated	25-35	х			NA
MW-8	Unconsolidated	24-34	Х			NA
MW-9D	Upper Lone Rock	44-49	х		х	Peristaltic
MW-9D2	Lower Lone Rock	64-69	х	х	х	Peristaltic
MW-10S	Unconsolidated	11-21	х			NA
MW-11S	Unconsolidated	24-34	х			NA
MW-12S	Unconsolidated	3-13	х			NA
MW-17	Upper Wonewoc	160-170	x	х	х	Bladder
MW-18S	Unconsolidated	20-30	X			NA
MW-21D2	Upper Wonewoc	110-170	х			NA
MW-22S	Unconsolidated	25-35	X		Х	Peristaltic
MW-22D	Upper Lone Rock	45-50	х	х	X	Bladder
MW-23S	Unconsolidated	25-35	х		х	Peristaltic
MW-23D	Upper Lone Rock	45-50	Х	Х	Х	Bladder
MW-24	Upper Lone Rock	30-40	Х			NA
MW-25D	Upper Wonewoc	120-130	Х		X	Bladder
MW-25D2	Upper Wonewoc	160-170	Х	Х	X	Bladder
MW-26S	Unconsolidated	6.8-16.8	Х			NA
MW-27D	Lower Wonewoc	130-140	х	Х	х	Bladder
MW-27D2	Lower Wonewoc	170-180	Х		х	Bladder
MP-13 Port 1	Lower Wonewoc	163-167	Х		х	Westbay
MP-13 Port 2	Lower Wonewoc	135-139	Х		Х	Westbay
MP-13 Port 3	Upper Wonewoc	121-125	Х		Х	Westbay
MP-13 Port 4	Upper Wonewoc	102-106	Х		Х	Westbay
MP-13 Port 5	Lower Lone Rock	81-85	Х		Х	Westbay
MP-13 Port 6	Lower Lone Rock	67-71	Х		Х	Westbay
MP-13 Port 7	Upper Lone Rock	44-48	Х	-	Х	Westbay
MP-14 Port 1	Lower Wonewoc	170-178	Х	I .	Х	Westbay

Table 1 WDNR-Approved Performance Monitoring Plan Madison-Kipp Corporation 201 Waubesa Street Madison, Wisconsin

WELL/ POINT ID	BEDROCK UNIT	SCREENED INTERVAL (ft bgs)	QUARTERLY GAUGING	QUARTERLY VOC SAMPLING (1)	OCTOBER VOC SAMPLING ⁽¹⁾	PUMP TYPE
MP-14 Port 2	Lower Wonewoc	135-140	Х	х	х	Westbay
MP-14 Port 3	Upper Wonewoc	100-105	Х		Х	Westbay
MP-14 Port 4	Lower Lone Rock	70-75	Х			NA
MP-15 Port 1	Lower Wonewoc	177-187	Х		Х	Westbay
MP-15 Port 2	Lower Wonewoc	142-146	Х		Х	Westbay
MP-15 Port 3	Lower Wonewoc	120-125	Х		Х	Westbay
MP-15 Port 4	Upper Wonewoc	100-105	Х		Х	Westbay
MP-15 Port 5	Upper Wonewoc	88-92	Х		Х	Westbay
MP-16 Port 1	Lower Wonewoc	175-179	Х		Х	Westbay
MP-16 Port 2	Lower Wonewoc	140-144	Х	Х	Х	Westbay
MP-16 Port 3	Upper Wonewoc	106-116	Х		Х	Westbay
MP-16 Port 4	Lower Lone Rock	80-84	Х			NA
Total Sample Points:			56	17	43	

Notes:

Footnotes:

1. Quarterly sampling for 2016 consists of monitoring in January, April, July and October. Additional wells are sampled during the October monitoring event as indicated.

Created By: W. Braga (8/9/2016) Checked By: A. Stehn (8/11/2016)

 $^{^{\}star}$ = The GWE-1 influent sample results from the month of the sampling event will be used.

Table 2
Proposed Performance Monitoring Plan
Madison-Kipp Corporation
201 Waubesa Street
Madison, Wisconsin

WELL/ POINT ID	BEDROCK UNIT	SCREENED INTERVAL (ft bgs)	APRIL & OCTOBER GAUGING	APRIL VOC SAMPLING	OCTOBER VOC SAMPLING	PUMP TYPE
GWE-1*	Lone Rock/ Wonewoc	55-175	Х	Х	Х	NA
MW-1	Unconsolidated	14-24	Х		Х	Peristaltic
MW-2S	Unconsolidated	19-29	Х			NA
MW-2D	Upper Lone Rock	39-44	Х	Х	Х	Peristaltic
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MW-3D2	Lower Lone Rock	76-81	х	х	Х	Peristaltic
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MW-4S**	Upper Eau Claire Unconsolidated/ Upper Lone Rock	35-50	Х			NA
MW-4D	Lower Lone Rock	65-70	х			NA
MW-4D2	Lower Lone Rock	91-96	X	Х	Х	Bladder
MW-5S	Upper Lone Rock	34-44	X	<u> </u>	X	Peristaltic
MW-5D	Lower Lone Rock	75-80	×	х	X	Peristaltic
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Table 2 Proposed Performance Monitoring Plan Madison-Kipp Corporation 201 Waubesa Street Madison, Wisconsin

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MP-16 Port 4	Lower Lone Rock	80-84	Х			NA
	Total Sample Points:			17	43	

Notes:

Created By: K. Vater 2/17/17 Checked By: A. Stehn 2/20/17

 $^{^*}$ = The GWE-1 influent sample results from the month of the sampling event will be used.

 $^{^{\}star\star}$ = MW-4S and MW-28 will be gauged during each semi-annual event.

