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December 6, 2018

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

Subject: WPDES Discharge Monitoring Report – Request for Change to Groundwater
Extraction and Treatment System Monitoring Frequency
Madison Kipp Corporation, Madison, Wisconsin

Dear Mr. Hopfensperger:

Madison-Kipp Corporation (MKC) is currently operating a groundwater extraction and treatment system (GETS) to remediate groundwater contaminated with volatile organic compounds, predominately tetrachloroethene (PCE). On January 12, 2015, MKC was issued a Wisconsin Pollutant Discharge Elimination System (WPDES) permit WI-0046566-06 (updated to WI-0046566-07-0 in July 2018) for Discharge of Contaminated Groundwater from Remediation Action Operations (General Permit). As of October 2018, the GETS has been in continuous operation for approximately thirty-four (34) months with system start-up being completed during the first six months (July 2015 – January 2016) of operation, and regular operation beginning in approximately January 2016. As part of the requirements for the WPDES permit, monthly samples are collected from the influent and effluent of the treatment system for volatile organic compounds (VOCs) and visual monitoring is conducted to verify potassium permanganate neutralization during treatment. In addition to VOCs, Oil and grease, biological oxygen demand (BOD), chloride, total suspended solids (TSS), and select polycyclic aromatic hydrocarbons (PAHs), are currently sampled on a quarterly basis. A discharge monitoring report, including results of the sampling, is submitted monthly online through the Wisconsin Department of Natural Resources' (WDNR) Web Access Management System.

TRC reviewed the updated July 2018 General Permit and discussed multiple parameters and sampling frequencies with the WDNR. Per Section 4.2.1.2 of the General Permit, the frequency of monitoring can be reduced from monthly to quarterly if select conditions are met. Specifically, Section 4.2.1.2 states: "If the discharge continues after the first 4 weeks, the permittee shall sample the discharge monthly. If the discharge continues beyond one year

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since the start date and the monitoring results have not exceeded any permit discharge limitations the department may approve in writing, a quarterly monitoring frequency.”

Based on the review of the current monitoring plan and the General Permit that has been implemented for the GETS system, TRC Environmental Corporation (TRC) on behalf of MKC, requests concurrence to modify the GETS discharge monitoring program as described in the below sections and outlined in Table 1.

Volatile Organic Compounds

MKC has monitored the VOC concentrations present in the discharge from the GETS for close to three years during continuous operation, at least 34 samples have been collected, and these parameters have not been reported at concentrations higher than their corresponding effluent limits (Table 1). In addition, results from the effluent monitoring have been consistent and indicate that during normal operation, the GETS is capable of treating groundwater and discharging well below the permit limitations. Based on these results, TRC requests that VOC monitoring be reduced from monthly to quarterly.

Oil and Grease

Table 1 shows that Oil and Grease has not been detected above its corresponding effluent limits of 10 milligrams per liter (mg/L) since the start of the system. The General Permit has limited context as to the requirements for sampling this parameter. Currently this parameter is sampled on a quarterly basis but TRC requests removing this parameter from the list based on results reported from the influent and effluent sampling. Over the past 34 months, both the influent and effluent concentrations for this parameter are generally reported: below the laboratory method detection limit; as an estimated value as the concentration is equal to or greater than the limit of detection, but less than the limit of quantitation; and/or noted in the method blank. The only anomaly was the influent sample collected in September 2017 which reported a concentration of 95.4 mg/L. However, the effluent concentration during that event was reported at a concentration of 2.2 mg/L with a qualifier noting that the concentration was equal to or greater than the limit of detection, but less than the limit of quantitation.

Biochemical Oxygen Demand and Chloride

Per a discussion and approval from the WDNR (Attachment A), biochemical oxygen demand (BOD) and chloride will no longer be included as part of MKC’s discharge monitoring plan. Table 1 shows that neither parameter within the influent or effluent sample have been detected above the corresponding effluent limit of 395 mg/L.



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Total Suspended Solids

Total suspended solids (TSS) has never been reported above its discharge limit of 40 mg/L. Section 4.2.1.3 of the General Permit states, "The total suspended solids monitoring, and limitations provided in Section 4.2.1 are only required at sites where there is a discharge of equipment cleaning wastewaters, or when groundwater is pumped from construction pits or trenches". For these reasons, TRC proposes to reduce the monitoring of TSS to occur only after system cleaning events because groundwater is not being pumped from construction pits or trenches at MKC. The sample to be analyzed will only be collected from the effluent side of the system following equipment cleaning events.

Polyaromatic hydrocarbons

Polyaromatic hydrocarbons (PAHs) will continue to be monitored quarterly per approval from the WDNR (Attachment A).

Potassium Permanganate and Total Flow

Potassium permanganate neutralization (visual inspection) will continue to be monitored monthly and total flow will be monitored daily per the WPDES permit requirements.

If you have any questions or comments related to this request, please contact Andrew Stehn at 608-826-3665 or at astehn@trcsolutions.com. We appreciate your assistance and look forward to discussing this modification as needed.

Sincerely,

TRC Environmental Corporation



Andrew Stehn, P.E.
Senior Project Engineer



Katherine Vater, P.E.
Project Manger

Tables:

Table 1: GETS WPDES Compliance Sample Results

Table 2: Modified GETS Monitoring Plan

Attachments:

A. WDNR Correspondence



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cc: Tony Koblinski – MKC (electronic)
Matt Sill – MKC (electronic)
Mike Schmoller – WDNR (electronic)
Wendy Weihemuller – WDNR (electronic)
Trevor Moen – WDNR (electronic)
George Parrino – Madison Department of Health (electronic)



Table 1
Proposed GETS WPDES Compliance Sample Plan
Madison-Kipp Corporation Site
201 Waubesa Street, Madison, Wisconsin

PARAMETER	DISCHARGE LIMIT	SAMPLE FREQUENCY ⁽¹⁾	SAMPLE TYPE
Flow	gal/day ⁽⁴⁾	Daily	Total Daily
Potassium Permanganate	mg/L ⁽⁴⁾	Monthly	Grab
VOCs	µg/L ⁽⁵⁾	Quarterly	Grab
Benzene	50 µg/L	Quarterly	Grab
Total BTEX ⁽²⁾	750 µg/L	Quarterly	Grab
Bromoform	120 µg/L	Quarterly	Grab
Carbon Tetrachloride	150 µg/L	Quarterly	Grab
Chloroform	120 µg/L	Quarterly	Grab
Dichlorobromomethane	120 µg/L	Quarterly	Grab
1,2-Dichloroethane	180 µg/L	Quarterly	Grab
1,1-Dichloroethylene	50 µg/L	Quarterly	Grab
Methyl Bromide	120 µg/L	Quarterly	Grab
Chlormethane	120 µg/L	Quarterly	Grab
1,1,2,2-Tetrachloroethane	50 µg/L	Quarterly	Grab
Tetrachloroethene	50 µg/L	Quarterly	Grab
1,1,2-Trichloroethane	50 µg/L	Quarterly	Grab
1,1,1-Trichloroethane	50 µg/L	Quarterly	Grab
Trichloroethylene	50 µg/L	Quarterly	Grab
Vinyl Chloride	10 µg/L	Quarterly	Grab
Benzo(a)pyrene	0.1 µg/L	Quarterly	Grab
Naphthalene	70 µg/L	Quarterly	Grab
PAHs Group of 10 ⁽³⁾	0.1 µg/L	Quarterly	Grab
Total Suspended Solids (TSS) ⁽⁶⁾	40 mg/L	Post Cleaning Event	Grab

Notes:

µg/L = Micrograms per liter

mg/L = Milligrams per liter

PAHs = Polynuclear Aromatic Hydrocarbons

VOCs = Volatile Organic Compounds

Updated by: A.Stehn 11/25/2018

Checked by: B. Wachholz 11/26/2018

Footnotes:

⁽¹⁾ The sampling frequency noted applies to both pre- and post-treatment for the GETS with the exception of TSS.

⁽²⁾ Total BTEX is the sum of the benzene, toluene, ethylbenzene and xylene concentrations. If all compounds are below their corresponding laboratory detection limits, then the highest detection limit of the BTEX compounds was noted.

⁽³⁾ PAH group of 10 (Polynuclear Aromatic Hydrocarbons) includes the sum of the following individual compounds: benzo(a)anthracene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene. If all compounds were below their corresponding laboratory detection limits, then the highest detection limit of the PAH group compounds was noted.

⁽⁴⁾ Madison Kipp/TRC will conduct visual monitoring for this compound.

⁽⁵⁾ No effluent limit is established, refer to section 4 of the permit.

⁽⁶⁾ Only effluent sample will be collected and analyzed for TSS.

Table 2
GETS WPDES Compliance Sample Results
Madison-Kipp Corporation Site
201 Waubesa Street, Madison, Wisconsin

PARAMETER ⁽³⁾	PERMIT DISCHARGE LIMITS	UNIT	LOCATION SAMPLE DATE																											
			INFLUENT 1/18/2016	EFFLUENT 1/18/2016	INFLUENT 2/8/2016	EFFLUENT 2/8/2016	INFLUENT 3/7/2016	EFFLUENT 3/7/2016	INFLUENT 4/6/2016	EFFLUENT 4/6/2016	INFLUENT 5/4/2016	EFFLUENT 5/4/2016	INFLUENT 6/7/2016	EFFLUENT 6/7/2016	INFLUENT 7/20/2016	EFFLUENT 7/20/2016	INFLUENT 8/8/2016	EFFLUENT 8/8/2016	INFLUENT 9/9/2016	EFFLUENT 9/9/2016	INFLUENT 10/10/2016	EFFLUENT 10/10/2016	INFLUENT 11/7/2016	EFFLUENT 11/7/2016	INFLUENT 12/7/2016	EFFLUENT 12/7/2016	INFLUENT 1/12/2017	EFFLUENT 1/12/2017		
Miscellaneous																														
Oil & Grease	10	mg/L	1.7 JB	2.5 JB	0.68 JB	<0.57	1.6 J B	0.87 J B F1	1.3 J	0.86 J	1.0 J B	1.1 J B	<1.5	<1.4	1.8 J	1.6 J F1	2.4 J B	1.5 J F1 B	<1.4	<1.4	<1.4	<1.4	2.4 J	<1.4	<1.4	<1.4	2.6 J B	3.1 J B		
Chloride	395	mg/L	110	140	100	110	100	100	100	100	100	100	100	98	100	70	110	110	110	110	110 B	110 B	120	120	110 B	100 B	110 B	110 B		
Total Suspended Solids	40	mg/L	<1.6	<1.6	<1.6	<1.6	2.0 J	<1.6	<1.6	5.0	<1.6	<1.6	<2.5	5.5	2.5 J	2.5 J	19	<2.5	<2.5	4.0 J	2.5 J	15	5.0	3.0 J	<2.5	<2.5	<2.5	<2.5		
Biological Oxygen Demand	20	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0		
VOCs																														
1,1,1-Trichloroethane	50	µg/L	<1.9	<0.38	<1.9	<0.38	<1.9	<0.38	<1.9	<0.38	<1.9	<0.38	<0.76	<0.38	<1.9	<0.38	<0.76	<0.38	<1.9	<0.38	<1.9	<0.38	<0.76	<0.38	<0.76	<0.38	<0.76	<0.38		
1,1,2,2-Tetrachloroethane	50	µg/L	<2.0	<0.40	<2.0	<0.40	<2.0	<0.40	<2.0	<0.40	<2.0	<0.40	<0.80	<0.40	<2.0	<0.40	<0.80	<0.40	<2.0	<0.40	<2.0	<0.40	<0.80	<0.40	<0.80	<0.40	<0.80	<0.40		
1,1,2-Trichloroethane	50	µg/L	<1.8	<0.35	<1.8	<0.35	<1.8	<0.35	<1.8	<0.35	<1.8	<0.35	<0.70	<0.35	<1.8	<0.35	<0.70	<0.35	<1.8	<0.35	<1.8	<0.35	<0.70	<0.35	<0.70	<0.35	<0.70	<0.35		
1,1-Dichloroethene	50	µg/L	<2.0	<0.39	<2.0	<0.39	<2.0	<0.39	<2.0	<0.39	<2.0	<0.39	<0.78	<0.39	<2.0	<0.39	<0.78	<0.39	<2.0	<0.39	<2.0	<0.39	<0.78	<0.39	<0.78	<0.39	<0.78	<0.39		
1,2-Dichloroethane	180	µg/L	<2.0	<0.39	<2.0	<0.39	<2.0	<0.39	<2.0	<0.39	<2.0	<0.39	<0.78	<0.39	<2.0	<0.39	<0.78	<0.39	<2.0	<0.39	<2.0	<0.39	<0.78	<0.39	<0.78	<0.39	<0.78	<0.39		
Benzene	50	µg/L	<0.73	<0.15	<0.73	<0.15	<0.73	<0.15	<0.73	<0.15	<0.73	<0.15	<0.29	<0.15	<0.73	<0.15	<0.29	<0.15	<0.73	<0.15	<0.73	<0.15	<0.29	<0.15	<0.29	<0.15	<0.29	<0.15		
Bromodichloromethane	120	µg/L	<1.9	<0.37	<1.9	<0.37	<1.9	<0.37	<1.9	<0.37	<1.9	<0.37	<0.74	<0.37	<1.9	<0.37	<0.74	<0.37	<1.9	<0.37	<1.9	<0.37	<0.74	<0.37	<0.74	<0.37	<0.74	<0.37		
Bromoform	120	µg/L	<2.2	<0.45	<2.2	<0.45	<2.2	<0.45	<2.2	<0.45	<2.2	<0.45	<0.89	<0.45	<2.2	<0.45	<0.89	<0.45	<2.2	<0.45	<2.2	<0.45	<0.89	<0.45	<0.89	<0.45	<0.89	<0.45		
Bromomethane	NE	µg/L	<3.2	<0.65	<3.2	<0.65	<3.2	<0.65	<3.2	<0.65	<3.2	<0.65	<1.3	<0.65	<3.2	<0.65	<1.3	<0.65	<3.2	<0.65	<3.2	<0.65	<1.3	<0.65	<1.3	<0.65	<1.3	<0.65		
Carbon Tetrachloride	150	µg/L	<1.9	<0.38	<1.9	<0.38	<1.9	<0.38	<1.9	<0.38	<1.9	<0.38	<0.77	<0.38	<1.9	<0.38	<0.77	<0.38	<1.9	<0.38	<1.9	<0.38	<0.77	<0.38	<0.77	<0.38	<0.77	<0.38		
cis-1,2-Dichloroethene	NE	µg/L	14	18	<2.0	19	<2.0	19	<2.0	18	<2.0	17	<0.82	16	<2.0	18	<0.82	19	<2.0	19	<2.0	17	<2.0	22	<0.82	18	<0.82	14		
Chloromethane	NE	µg/L	<1.6	<0.32	<1.6	<0.32	<1.6	<0.32	<1.6	<0.32	<1.6	<0.32	<0.64	<0.32	<1.6	<0.32	<0.64	<0.32	<1.6	<0.32	<1.6	<0.32	<0.64	<0.32	<0.64	<0.32	<0.64	<0.32		
Ethylbenzene	NE	µg/L	<0.92	<0.18	<0.92	<0.18	<0.92	<0.18	<0.92	<0.18	<0.92	<0.18	<0.37	<0.18	<0.92	<0.18	<0.37	<0.18	<0.92	<0.18	<0.92	<0.18	<0.37	<0.18	<0.37	<0.18	<0.37	<0.18		
Tetrachloroethene	50	µg/L	2500	46	2300	43	2500	40	2000	34	1700	38	1500	36	1600	37	1200	35	1600	39	1600	32	1600	35	1700	28	1300	21		
Toluene	NE	µg/L	<0.76	<0.15	<0.76	<0.15	<0.76	<0.15	<0.76	<0.15	<0.76	<0.15	<0.30	<0.15	<0.76	<0.15	<0.30	<0.15	<0.76	<0.15	<0.76	<0.15	0.93	<0.30	<0.15	<0.30	<0.15			
Total Xylenes	NE	µg/L	<2.0	<0.40	<2.0	<0.40	<2.0	<0.40	<2.0	0.61 J	<2.0	<0.40	<0.80	<0.40	<2.0	<0.40	<0.80	<0.40	<2.0	<0.40	<2.0	<0.40	<2.0	<0.40	<0.80	<0.40	<0.80	<0.40		
trans-1,2-Dichloroethene	NE	µg/L	<1.7	<0.35	<1.7	<0.35	<1.7	<0.35	<1.7	<0.35	<1.7	<0.35	<0.70	<0.35	<1.7	<0.35	<0.70	<0.35	<1.7	<0.35	<1.7	<0.35	<0.70	<0.35	<0.70	<0.35	<0.70	<0.35		
Trichloroethene	50	µg/L	41	5.7	<0.82	6.4	<0.82	6.3	<0.82	5.6	<0.82	5.9	<0.33	5.4	<0.82	8.3	<0.33	7.2	<0.82	9.2	<0.82	5.8	<0.82	8.8	<0.33	6.5	0.68 J	5.5		
Vinyl chloride	10	µg/L	<1.0	<0.20	<1.0	<0.20	<1.0	<0.20	<1.0	<0.20	<1.0	<0.20	<0.41	<0.20	<1.0	<0.20	<0.41	<0.20	<1.0	<0.20	<1.0	<0.20	<0.41	<0.20	<0.41	<0.20	<0.41	<0.20		
Total BTEX ⁽¹⁾	750	µg/L	<2.0	<0.40	<2.0	<0.40	<2.0	<0.40	<2.0	0.61 J	<2.0	<0.40	<0.80	<0.40	<2.0	<0.40	<0.80	<0.40	<2.0	<0.40	<2.0	<0.40	0.93	<0.80	<0.40	<0.80	<0.40			
Total VOCs (includes BTEX)	NE	µg/L	2555	69.7	2300	68.4	2500	65.3	2000	58.21	1700	60.9	1500	57.4	1600	63.3	1200	61.2	1600	67.2	1600	54.8	1600	66.7	1700	52.5	1300.68	40.5		
PAHs																														
Benzo(a)anthracene	NE	µg/L	<0.024	<0.026	<0.024	<0.024	<0.024	<0.024	<0.024	<0.023	<0.025 *	<0.023 *	<0.027	<0.026 *	<0.025 *	<0.024 *	<0.024 *	<0.025 *	<0.024	<0.024	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.024	<0.025	
Benzo(a)pyrene	0.1	µg/L	<0.024	<0.026	<0.024	<0.024	<0.024	<0.024	<0.024	<0.023	<0.025	<0.023	<0.027	<0.026	<0.025	<0.024	<0.024	<0.025	<0.024	<0.024	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.024	<0.025	
Benzo(b)fluoranthene	NE	µg/L	<0.024	<0.026	<0.024	<0.024	<0.024	<0.024	<0.024	<0.023	<0.025	<0.023	<0.027	<0.026	<0.025	<0.024	<0.024	<0.025	<0.024	<0.024	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.024	<0.025	
Benzo(g,h,i)perylene	NE	µg/L	<0.048	<0.052	<0.048	<0.048	<0.048	<0.048	<0.047	<0.046	<0.050	<0.046	<0.054	<0.052	<0.050	<0.048	<0.048	<0.050	<0.048	<0.048	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.048	<0.050		
Benzo(k)fluoranthene	NE	µg/L	<0.048	<0.052	<0.048	<0.048	<0.048	<0.048	<0.047	<0.046	<0.050	<0.046	<0.054	<0.052	<0.050	<0.048	<0.048	<0.050	<0.048	<0.048	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.048	<0.050		
Chrysene	NE	µg/L	<0.048	<0.052	<0.048	<0.048	<0.048	<0.048	<0.047	<0.046	<0.050 *	<0.046 *	<0.054	<0.052 *	<0.050 *	<0.048 *	<0.048 *	<0.050 *	<0.048	<0.048	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.048	<0.050		
Dibenzo(a,h)anthracene	NE	µg/L	<0.024	<0.026	<0.024	<0.024	<0.024	<0.024	<0.023	<0.025	<0.023	<0.027	<0.026	<0.025	<0.024	<0.024	<0.025	<0.024	<0.024	<0.024	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.024	<0.025		
Fluoranthene	NE	µg/L	<0.048	<0.052	<0.048	<0.048	<0.048	<0.048	<0.047	<0.046	<0.050	<0.046	<0.054	<0.052	<0.050	<0.048	<0.048	<0.050	<0.048	<0.048	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.048	<0.050		
Indeno(1,2,3-cd)pyrene	NE	µg/L	<0.024	<0.026	<0.024	<0.024	<0.024	<0.024	<0.024	<0.023	<0.025	<0.023	<0.027	<0.026	<0.025	<0.024	<0.024	<0.025	<0.024	<0.024	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.024	<0.025		
Naphthalene	70	µg/L	<0.048	<0																										

Table 2
GETS WPDES Compliance Sample Results
Madison-Kipp Corporation Site
201 Waubesa Street, Madison, Wisconsin

PARAMETER ⁽³⁾	PERMIT DISCHARGE LIMITS	UNIT	LOCATION SAMPLE DATE																							
			INFLUENT 2/8/2017	EFFLUENT 2/8/2017	INFLUENT 3/7/2017	EFFLUENT 3/7/2017	INFLUENT 4/6/2017	EFFLUENT 4/6/2017	INFLUENT 5/10/2017	EFFLUENT 5/10/2017	INFLUENT 6/7/2017	EFFLUENT 6/7/2017	INFLUENT 7/11/2017	EFFLUENT 7/11/2017	INFLUENT 8/15/2017	EFFLUENT 8/15/2017	INFLUENT 9/11/2017	EFFLUENT 9/11/2017	INFLUENT 10/5/2017	EFFLUENT 10/5/2017	INFLUENT 11/13/2017	EFFLUENT 11/13/2017	INFLUENT 12/8/2017	EFFLUENT 12/8/2017		
Miscellaneous																										
Oil & Grease	10	mg/L	3.0 J B	2.3 J B	2.2 J B	2.7 J B	<1.5	3.4 J B	--	--	3.0 J	2.6 J	--	--	--	--	95.4	2.2 J	--	--	--	--	2.7 J	2.3 J		
Chloride	395	mg/L	120	110	120	120	130	130	--	--	130	190	--	--	--	--	120	120	--	--	--	--	130	130		
Total Suspended Solids	40	mg/L	<2.5	<2.5	<2.5	<2.5	20	3.0 J	--	--	<1.9	3.5 J	--	--	--	--	<1.9	<1.9	--	--	--	2.0 J	<1.9	2.0 J		
Biological Oxygen Demand	20	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	--	--	<2.0	<2.0	--	--	--	--	<2.0	<2.0	--	--	--	--	<2.0	<2.0		
VOCs																										
1,1,1-Trichloroethane	50	µg/L	<1.9	<0.38	<0.76	<0.38	<1.9	<0.38	<1.9	<0.38	<1.9	<0.38	<1.9	<0.38	<1.9	<0.38	<1.9	<0.38	<1.9	<0.38	<1.9	<0.38	<1.9	<0.38		
1,1,2,2-Tetrachloroethane	50	µg/L	<2.0	<0.40	<0.80	<0.40	<2.0	<0.40	<2.0	<0.40	<2.0	<0.40	<2.0	<0.40	<2.0	<0.40	<2.0	<0.40	<2.0	<0.40	<2.0	<0.40	<2.0	<0.40		
1,1,2-Trichloroethane	50	µg/L	<1.8	<0.35	<0.70	<0.35	<1.8	<0.35	<1.8	<0.35	<1.8	<0.35	<1.8	<0.35	<1.8	<0.35	<1.8	<0.35	<1.8	<0.35	<1.8	<0.35	<1.8	<0.35		
1,1-Dichloroethene	50	µg/L	<2.0	<0.39	<0.78	<0.39	<2.0	<0.39	<2.0	<0.39	<2.0	<0.39	<2.0	<0.39	<2.0	<0.39	<2.0	<0.39	<2.0	<0.39	<2.0	<0.39	<2.0	<0.39		
1,2-Dichloroethane	180	µg/L	<2.0	<0.39	<0.78	<0.39	<2.0	<0.39	<2.0	<0.39	<2.0	<0.39	<2.0	<0.39	<2.0	<0.39	<2.0	<0.39	<2.0	<0.39	<2.0	<0.39	<2.0	<0.39		
Benzene	50	µg/L	<0.73	<0.15	<0.29	<0.15	<0.73	<0.15	<0.73	0.25 J	<0.73	<0.15	<0.73	<0.15	<0.73	<0.15	<0.73	<0.15	<0.73	<0.15	<0.73	<0.15	<0.73	<0.15		
Bromodichloromethane	120	µg/L	<1.9	<0.37	<0.74	<0.37	<1.9	<0.37	<1.9	<0.37	<1.9	<0.37	<1.9	<0.37	<1.9	<0.37	<1.9	<0.37	<1.9	<0.37	<1.9	<0.37	<1.9	<0.37		
Bromoform	120	µg/L	<2.2	<0.45	<0.89	<0.45	<2.2	<0.45	<2.2	<0.45	<2.2	<0.45	<2.2	<0.45	<2.2	<0.45	<2.2	<0.45	<2.2	<0.45	<2.2	<0.45	<2.2	<0.45		
Bromomethane	NE	µg/L	<3.2	<0.65	<1.3	<0.65	<3.2	<0.65	<3.2	<0.65	<3.2	<0.65	<3.2	<0.65	<3.2	<0.65	<3.2	<0.65	<3.2	<0.65	<3.2	<0.65	<3.2	<0.65		
Carbon Tetrachloride	150	µg/L	<1.9	<0.38	<0.77	<0.38	<1.9	<0.38	<1.9	<0.38	<1.9	<0.38	<1.9	<0.38	<1.9	<0.38	<1.9	<0.38	<1.9	<0.38	<1.9	<0.38	<1.9	<0.38		
cis-1,2-Dichloroethene	NE	µg/L	<2.0	18	3.0	19	<2.0	18	<2.0	18	11	26	49	22	62	20	22	17	190	18	450	18	83	16		
Chloromethane	NE	µg/L	<1.6	<0.32	<0.64	<0.32	<1.6	<0.32	<1.6	<0.32	<1.6	<0.32	<1.6	<0.32	<1.6	<0.32	<1.6	<0.32	<1.6	<0.32	<1.6	<0.32	<1.6	<0.32		
Ethylbenzene	NE	µg/L	<0.92	<0.18	<0.37	<0.18	<0.92	<0.18	<0.92	<0.18	<0.92	<0.18	<0.92	<0.18	<0.92	<0.18	<0.92	<0.18	<0.92	<0.18	<0.92	<0.18	<0.92	<0.18		
Tetrachloroethene	50	µg/L	1500	29	1400	29	1600	26	1700	21	2200	31	1700	34	1800	32	1700	25	1700	23	1600	14	1600	26		
Toluene	NE	µg/L	<0.76	<0.15	<0.30	<0.15	<0.76	0.18 J	<0.76	<0.15	<0.76	<0.15	<0.76	<0.15	<0.76	<0.15	<0.76	<0.15	<0.76	<0.15	<0.76	<0.15	<0.76	<0.15		
Total Xylenes	NE	µg/L	<2.0	<0.40	<0.80	<0.40	<2.0	<0.40	<2.0	<0.40	<2.0	<0.40	<2.0	<0.40	<2.0	<0.40	<2.0	<0.40	<2.0	<0.40	<2.0	<0.40	<2.0	<0.40		
trans-1,2-Dichloroethene	NE	µg/L	<1.7	<0.35	<0.70	<0.35	<1.7	<0.35	<1.7	<0.35	<1.7	<0.35	<1.7	<0.35	<1.7	<0.35	<1.7	<0.35	<1.7	<0.35	4.6 J	<0.35	<1.7	<0.35		
Trichloroethene	50	µg/L	<0.82	7.9	20	7.7	2.5	7.5	2.3 J	7.2	45	9.7	110	9.7	130	8.9	66	8.1	240	7.2	370	5.4	130	6.7		
Vinyl chloride	10	µg/L	<1.0	<0.20	<0.41	<0.20	<1.0	<0.20	<1.0	<0.20	<1.0	<0.20	<1.0	<0.20	<1.0	<0.20	<1.0	<0.20	<1.0	<0.20	3.2	<0.20	<1.0	<0.20		
Total BTEX ⁽¹⁾	750	µg/L	<2.0	<0.40	<0.80	<0.40	<2.0	0.18 J	<2.0	0.25 J	<2.0	<0.40	<2.0	<0.40	<2.0	<0.40	<2.0	<0.40	<2.0	<0.40	<2.0	<0.40	<2.0	<0.40		
Total VOCs (includes BTEX)	NE	µg/L	1500	54.9	1423	55.7	1602.5	51.68	1702.3	46.45	2256	66.7	1859	66	1992	61	1788	50.1	2130	48	2423.2	37.4	1813	48.7		
PAHs																										
Benzo(a)anthracene	NE	µg/L	<0.024	<0.024	<0.024	<0.024	<0.024	<0.025	--	--	<0.025	<0.025	--	--	--	--	<0.028	<0.026	--	--	--	--	<0.022	<0.025		
Benzo(a)pyrene	0.1	µg/L	<0.024	<0.024	<0.024	<0.024	<0.024	<0.025	<0.026	<0.025	<0.025	<0.025	--	--	--	--	<0.028	<0.026	--	--	--	--	0.056	<0.025		
Benzo(b)fluoranthene	NE	µg/L	<0.024	<0.024	<0.024	<0.024	<0.024	<0.025	--	--	<0.025	<0.025	--	--	--	--	<0.028	<0.026	--	--	--	--	0.063	<0.025		
Benzo(g,h,i)perylene	NE	µg/L	<0.048	<0.048	<0.048	<0.048	<0.048	<0.050	--	--	<0.050	<0.050	--	--	--	--	<0.056	<0.052	--	--	--	--	0.059 J	<0.050		
Benzo(k)fluoranthene	NE	µg/L	<0.048	<0.048	<0.048	<0.048	<0.048	<0.050	--	--	<0.050	<0.050	--	--	--	--	<0.056	<0.052	--	--	--	--	<0.045	<0.050		
Chrysene	NE	µg/L	<0.048	<0.048	<0.048	<0.048	<0.048	<0.050	--	--	<0.050	<0.050	--	--	--	--	<0.056	<0.052	--	--	--	--	<0.045	<0.050		
Dibenzo(a,h)anthracene	NE	µg/L	<0.024	<0.024	<0.024	<0.024	<0.024	<0.025	--	--	<0.025	<0.025	--	--	--	--	<0.028	<0.026	--	--	--	--	<0.022	<0.025		
Fluoranthene	NE	µg/L	<0.048	<0.048	<0.048	<0.048	<0.048	<0.050	--	--	<0.050	<0.050	--	--	--	--	<0.056	<0.052	--	--	--	--	0.087 J	0.058 J		
Indeno(1,2,3-cd)pyrene	NE	µg/L	<0.024	<0.024	<0.024	<0.024	<0.024	<0.025	--	--	<0.025	<0.025	--	--	--	--	<0.028	<0.026	--	--	--	--	0.044 J	<0.025		
Naphthalene	70	µg/L	<0.048	<0.048	<0.048	<0.048	0.12	<0.050	--	--	<0.050	0.14	--	--	--	--	<0.056	<0.052	--	--	--	--	0.054 J	0.073 J		
Phenanthrene	NE	µg/L	<0.048	<0.048	<0.048	<0.048	<0.048	<0.050	--	--	<0.050	<0.050	--	--	--	--	<0.056	<0.052	--	--	--	--	0.26	0.41		
Pyrene	NE	µg/L	<0.048	<0.048	<0.048	<0.048	<0.048	<0.050	--	--	<0.050	<0.050	--	--	--	--	<0.056	<0.052	--	--	--	--	0.052 J	<0.050		
PAHs Group of 10 Total ⁽²⁾	0.1	µg/L	<0.048	<0.048	<0.048	<0.048	<0.048	<0.050	--	--	<0.050	<0.050	--	--	--	--	<0.056	<0.052	--	--	--	--	0.565	0.468		

Notes:
 < = Less than
 µg/L = Micrograms per liter
 mg/L = Milligrams per liter
 B = Compound was found in the blank and in the sample.
 J = Estimated value. Analyte detected at a level less than the reporting limit and greater than or equal to the detection limit.
 F1 = MS and/or MSD Recovery is outside acceptance limits.
 * = ISTD response or retention time outside of acceptable limits.
 ND = Not Detected
 NE = Not Established
 -- = Not analyzed
 PAHs = Polynuclear Aromatic Hydrocarbons
 VOCs = Volatile Organic Compounds

Footnotes:
⁽¹⁾ Total BTEX is the sum of the benzene, toluene, ethylbenzene and xylene concentrations. If all compounds were below their corresponding laboratory detection limits, then the highest detection limit of the BTEX compounds was noted.
⁽²⁾ PAH group of 10 (Polynuclear Aromatic Hydrocarbons) include the sum of the following individual compounds: benzo(a)anthracene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene. If all compounds were below their corresponding laboratory detection limits, then the highest detection limit of the PAH group compounds was noted.
⁽³⁾ The WDNR approved a modification to the GETS monitoring program for select constituents on April 27, 2017 and June 23, 2017. Following the approval, VOCs will be monitored on a monthly basis and all other constituents previously monitored will be completed on a quarterly basis.
⁽⁴⁾ Effluent sample was collected on 7/26/2018 after groundwater extraction well was replaced.

Table 2
GETS WPDES Compliance Sample Results
Madison-Kipp Corporation Site
201 Waubesa Street, Madison, Wisconsin

PARAMETER ⁽³⁾	PERMIT DISCHARGE LIMITS	UNIT	LOCATION SAMPLE DATE																			
			INFLUENT 1/8/2018	EFFLUENT 1/8/2018	INFLUENT 2/6/2018	EFFLUENT 2/6/2018	INFLUENT 3/8/2018	EFFLUENT 3/8/2018	INFLUENT 4/3/2018	EFFLUENT 4/3/2018	INFLUENT 5/1/2018	EFFLUENT 5/1/2018	INFLUENT 6/6/2018	EFFLUENT 6/6/2018	INFLUENT 7/9/2018	EFFLUENT 7/9/2018	INFLUENT 8/20/2018	EFFLUENT 8/20/2018	INFLUENT 9/4/2018	EFFLUENT 9/4/2018	INFLUENT 10/8/2018	EFFLUENT 10/8/2018
Miscellaneous																						
Oil & Grease	10	mg/L	--	--	--	--	<1.4	<1.4	--	--	--	--	<1.3	2.5 J B	--	--	--	--	<1.4	<1.4	--	--
Chloride	395	mg/L	--	--	--	--	130	160	--	--	--	--	130	120	--	--	--	--	260	260	--	--
Total Suspended Solids	40	mg/L	--	--	--	--	<1.9	<1.9	--	--	<1.9	<1.9	2.0 J	3.5 J	--	<1.9 ⁽⁴⁾	--	--	2.0 J	2.5 J	--	--
Biological Oxygen Demand	20	mg/L	--	--	--	--	<2.0	<2.0	--	--	--	--	<2.0	<2.0	--	--	--	--	<2.0	<2.0	--	--
VOCs																						
1,1,1-Trichloroethane	50	µg/L	<1.9	<0.38	<0.76	<0.38	<0.76	<0.38	<1.9	<0.38	<1.9	<0.38	<1.9	<0.38	<0.76	<0.38	<1.9	<0.38	<1.9	<0.38	<0.76	<0.38
1,1,2,2-Tetrachloroethane	50	µg/L	<2.0	<0.40	<0.80	<0.40	<0.80	<0.40	<2.0	<0.40	<2.0	<0.40	<2.0	<0.40	<0.80	<0.40	<2.0	<0.40	<2.0	<0.40	<0.80	<0.40
1,1,2-Trichloroethane	50	µg/L	<1.8	<0.35	<0.70	<0.35	<0.70	<0.35	<1.8	<0.35	<1.8	<0.35	<1.8	<0.35	<0.70	<0.35	<1.8	<0.35	<1.8	<0.35	<0.70	<0.35
1,1-Dichloroethene	50	µg/L	<2.0	<0.39	<0.78	<0.39	<0.78	<0.39	<2.0	<0.39	<2.0	<0.39	<2.0	<0.39	<0.78	<0.39	<2.0	<0.39	<2.0	<0.39	<0.78	<0.39
1,2-Dichloroethane	180	µg/L	<2.0	<0.39	<0.78	<0.39	<0.78	<0.39	<2.0	<0.39	<2.0	<0.39	<2.0	<0.39	<0.78	<0.39	<2.0	<0.39	<2.0	<0.39	<0.78	<0.39
Benzene	50	µg/L	<0.73	<0.15	<0.29	<0.15	<0.29	<0.15	<0.73	<0.15	<0.73	<0.15	<0.73	<0.15	<0.29	<0.15	<0.73	<0.15	<0.73	<0.15	<0.29	<0.15
Bromodichloromethane	120	µg/L	<1.9	<0.37	<0.74	<0.37	<0.74	<0.37	<1.9	<0.37	<1.9	<0.37	<1.9	<0.37	<0.74	<0.37	<1.9	<0.37	<1.9	<0.37	<0.74	<0.37
Bromoform	120	µg/L	<2.2	<0.45	<0.89	<0.45	<0.89	<0.45	<2.2	<0.45	<2.2	<0.45	<2.2	<0.45	<0.89	<0.45	<2.2	<0.45	<2.2	<0.45	<0.89	<0.45
Bromomethane	NE	µg/L	<3.2	<0.65	<1.3	<0.65	<1.3	<0.65	<3.2	<0.65	<3.2	<0.65	<3.2	<0.65	<1.3	<0.65	<3.2	<0.65	<3.2	<0.65	<1.3	<0.65
Carbon Tetrachloride	150	µg/L	<1.9	<0.38	<0.77	<0.38	<0.77	<0.38	<1.9	<0.38	<1.9	<0.38	<1.9	<0.38	<0.77	<0.38	<1.9	<0.38	<1.9	<0.38	<0.77	<0.38
cis-1,2-Dichloroethene	NE	µg/L	170	17	130	15	120	18	110	15	450	25	120	11	190	17	450	29	450	31	220	22
Chloromethane	NE	µg/L	<1.6	<0.32	<0.64	<0.32	<0.64	<0.32	<1.6	<0.32	<1.6	<0.32	<1.6	<0.32	<0.64	<0.32	<1.6	<0.32	<1.6	<0.32	<0.64	<0.32
Ethylbenzene	NE	µg/L	<0.92	<0.18	<0.37	<0.18	<0.37	<0.18	<0.92	<0.18	<0.92	<0.18	<0.92	<0.18	<0.37	<0.18	<0.92	<0.18	<0.92	<0.18	<0.37	<0.18
Tetrachloroethene	50	µg/L	1800	29	1700	21	1900	24	1700	20	1800	18	1700	15	1800	23	1500	18	1300	20	1800	31
Toluene	NE	µg/L	<0.76	<0.15	<0.30	<0.15	<0.30	0.16 J	<0.76	<0.15	<0.76	<0.15	<0.76	<0.15	<0.30	<0.15	2.3 J	0.28 J	<0.76	<0.15	<0.30	<0.15
Total Xylenes	NE	µg/L	<2.0	<0.40	<0.80	<0.40	<0.80	<0.40	<2.0	<0.40	<2.0	<0.40	<2.0	<0.40	<0.80	<0.40	<2.0	<0.40	<2.0	<0.40	<0.80	0.50 J
trans-1,2-Dichloroethene	NE	µg/L	<1.7	<0.35	<0.70	<0.35	<0.70	<0.35	<1.7	<0.35	5.8	<0.35	<1.7	<0.35	<0.70	<0.35	7.2	<0.35	7.2	<0.35	<0.70	<0.35
Trichloroethene	50	µg/L	210	6.8	180	5.3	180	7.0	160	5.4	370	7.3	170	4.2	210	5.7	300	7.4	290	7.6	220	7.7
Vinyl chloride	10	µg/L	<1.0	<0.20	<0.41	<0.20	<0.41	<0.20	<1.0	<0.20	3.6 J	<0.20	<1.0	<0.20	<0.41	<0.20	4.0 J	<0.20	2.9 J	<0.20	<0.41	<0.20
Total BTEX ⁽¹⁾	750	µg/L	<2.0	<0.40	<0.80	<0.40	<0.80	0.16 J	<2.0	<0.40	<2.0	<0.40	<2.0	<0.40	<0.80	<0.40	2.3 J	0.28 J	<2.0	<0.40	<0.80	0.50 J
Total VOCs (includes BTEX)	NE	µg/L	2180	52.8	2010	41.3	2200	49.16	1970	40.4	2629.4	50.3	1990	30.2	2200	45.7	2263.5	54.7	2050.1	58.6	2240	61.2
PAHs																						
Benzo(a)anthracene	NE	µg/L	<0.019	<0.020	--	--	<0.023	<0.026	--	--	--	--	<0.022	<0.022	--	--	--	--	<0.024	<0.024	--	--
Benzo(a)pyrene	0.1	µg/L	<0.019	<0.020	--	--	<0.023	<0.026	--	--	--	--	<0.022	<0.022	--	--	--	--	<0.024	<0.024	--	--
Benzo(b)fluoranthene	NE	µg/L	<0.019	<0.020	--	--	<0.023	<0.026	--	--	--	--	<0.022	<0.022	--	--	--	--	<0.024	<0.024	--	--
Benzo(g,h,i)perylene	NE	µg/L	<0.019	<0.020	--	--	<0.046	<0.052	--	--	--	--	<0.043	<0.043	--	--	--	--	<0.047	<0.049	--	--
Benzo(k)fluoranthene	NE	µg/L	<0.019	<0.020	--	--	<0.046	<0.052	--	--	--	--	<0.043	<0.043	--	--	--	--	<0.047	<0.049	--	--
Chrysene	NE	µg/L	<0.019	<0.020	--	--	<0.046	<0.052	--	--	--	--	<0.043	<0.043	--	--	--	--	<0.047	<0.049	--	--
Dibenzo(a,h)anthracene	NE	µg/L	<0.019	<0.020	--	--	<0.023	<0.026	--	--	--	--	<0.022	<0.022	--	--	--	--	<0.024	<0.024	--	--
Fluoranthene	NE	µg/L	<0.028	<0.030	--	--	<0.046	<0.052	--	--	--	--	<0.043	<0.043	--	--	--	--	<0.047	<0.049	--	--
Indeno(1,2,3-cd)pyrene	NE	µg/L	<0.019	<0.020	--	--	<0.023	<0.026	--	--	--	--	<0.022	<0.022	--	--	--	--	<0.024	<0.024	--	--
Naphthalene	70	µg/L	<0.019	<0.020	--	--	<0.046	0.15	--	--	--	--	0.045 J	0.067 J	--	--	--	--	<0.047	<0.049	--	--
Phenanthrene	NE	µg/L	<0.028	<0.030	--	--	<0.046	<0.052	--	--	--	--	0.12	0.20	--	--	--	--	0.092 J B	0.075 J B	--	--
Pyrene	NE	µg/L	<0.019	<0.020	--	--	<0.046	<0.052	--	--	--	--	<0.043	<0.043	--	--	--	--	<0.047	<0.049	--	--
PAHs Group of 10 Total ⁽²⁾	0.1	µg/L	<0.028	<0.030	--	--	<0.046	<0.052	--	--	--	--	0.12	0.20	--	--	--	--	0.092	0.075	--	--

Notes:

< = Less than

µg/L = Micrograms per liter

mg/L = Milligrams per liter

B = Compound was found in the blank and in the sample.

J = Estimated value. Analyte detected at a level less than the reporting limit and greater than or equal to the detection limit.

F1 = MS and/or MSD Recovery is outside acceptance limits.

* = ISTD response or retention time outside of acceptable limits.

ND = Not Detected

NE = Not Established

-- = Not analyzed

PAHs = Polynuclear Aromatic Hydrocarbons

VOCs = Volatile Organic Compounds

Footnotes:

⁽¹⁾ Total BTEX is the sum of the benzene, toluene, ethylbenzene and xylene concentrations. If all compounds were below their corresponding laboratory detection limits, then the highest detection limit of the BTEX compounds was noted.

⁽²⁾ PAH group of 10 (Polynuclear Aromatic Hydrocarbons) include the sum of the following individual compounds: benzo(a)anthracene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene. If all compounds were below their corresponding laboratory detection limits, then the highest detection limit of the PAH group compounds was noted.

⁽³⁾ The WDNR approved a modification to the GETS monitoring program for select constituents on April 27, 2017 and June 23, 2017. Following the approval, VOCs will be monitored on a monthly basis and all other constituents previously monitored will be completed on a quarterly basis.

⁽⁴⁾ Effluent sample was collected on 7/26/2018 after groundwater extraction well was replaced.

Updated by: B. Wachholz 11/7/2018

Checked by: L. Auner 11/26/2018

Attachment A
WDNR Correspondence

Stehn, Andrew

From: Moen, Trevor J - DNR <Trevor.Moen@wisconsin.gov>
Sent: Tuesday, October 16, 2018 12:37 PM
To: Stehn, Andrew
Cc: Hopfensperger, Alan A - DNR
Subject: RE: MKC - eDMR Submittal WPDES # FID#113125320

Andrew,

Methylene chloride has been changed to chloromethane (aka Methyl Chloride) in the eDMR for MKC for the month of September and moving forward.

Additionally, this message serves as confirmation that the information in your previous on August 21, 2018 is correct.

Please contact me if you have any questions.

Thanks,

Trevor Moen

Trevor Moen, E.I.T.
Phone: (920) 424-7883
Trevor.Moen@Wisconsin.gov

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From: Stehn, Andrew <AStehn@trcsolutions.com>
Sent: Tuesday, October 16, 2018 10:45 AM
To: Moen, Trevor J - DNR <Trevor.Moen@wisconsin.gov>
Subject: RE: MKC - eDMR Submittal WPDES # FID#113125320

Trevor,

As we continue to submit the eDMR for MKC (FID#113125320), I noticed that Methylene Chloride is a parameter listed on the eDMR. This is not a parameter we have historically analyzed for. Methyl Chloride however is monitored for and I was wondering if the eDMR form was incorrect based on our previous discussions. I will proceed with submitting the eDMR for the month of September with a note in the General Remarks section but wanted to bring this to your attention to see if the two parameters just needed to be adjusted on the form. In addition, can you confirm the below information based on our previous discussions is correct.

Thanks,

Andrew M Stehn, PE (WI)
Senior Project Engineer



708 Heartland Trail, Suite 3000, Madison, WI 53717
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From: Stehn, Andrew
Sent: Tuesday, August 21, 2018 6:17 PM
To: Trevor.Moen@wisconsin.gov
Cc: Vater, Katherine <KVater@trcsolutions.com>
Subject: RE: MKC - eDMR Submittal WPDES # FID#113125320

Trevor,

Thanks for the update today on the eDMR. I just wanted to provide a brief summary of our discussion for records. Please review the summary below and provide feedback as needed.

Based on our discussion:

- trans-1,2,-dichloroethene, 1,1-dichloroethene, and Cis-1,2-dichloroethene are only required for groundwater discharge permits and based on Madison Kipp Corporation (MKC) discharging to a surface water source, these parameters do not need to be listed in the eDMR submittals.
- The eDMR does not allow for you to include a total VOC parameter so you have listed the required parameters based on the VOCs previously sampled at MKC with respect to the permit requirements.
- BOD is not listed on the eDMR as it is not required to be monitored for under MKC's Contaminated Groundwater from Remedial Actions Operations Permit.
- Chloride is not listed on the eDMR as it is not required to be monitored for under MKC's Contaminated Groundwater from Remedial Actions Operations Permit.
- Sodium Permanganate is visually monitored on a monthly basis and comments will be included in the general remarks section for each eDMR submittal.

Thanks,

Andrew M Stehn, PE (WI)
Senior Project Engineer



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From: Stehn, Andrew
Sent: Monday, August 20, 2018 2:30 PM
To: Trevor.Moen@wisconsin.gov
Cc: Inna.Gurevic@wisconsin.gov; Vater, Katherine <KVater@trcsolutions.com>
Subject: MKC - eDMR Submittal WPDES # FID#113125320

Trevor,

I left you a voicemail in reference to the eDMR for Madison Kipp Corporation. It appears since we spoke last week that the forms have been updated but are still different than what we have previously submitted. It appears select parameters are missing from the eDMR. I have noted below the parameters that are monitored during the monthly and

quarterly events and those highlighted are missing from the eDMR. I have included the blank DMR form we have submitted in the past (PDF: MKC DMR 06232017) and my coordination with the WDNR in reference to the sampling parameters and frequency (PDF: 2017-03-14_WPDES DMR Request for Change to Groundwater Frequency and PDF: WDNR Follow up Benzo(a)pyrene).

In addition, I have attached the last monthly submittal (PDF: 2018-07-05_MKC – May DMR 2018) and the last quarterly submittal (2018-13-06_MKC – June 2018 DMR) for reference. I am looking to see if the online eDMR can be updated to reflect the specific parameters that we have been monitoring for. If you have any questions or need additional information, please feel free to contact me. I greatly appreciate the assistance with this and am available by phone to discuss.

The monthly DMR parameters at MKC are the following (highlighted have not been included with the eDMR):

- Flow
- Total BETX
- Sodium permanganate
- Benzene
- Total VOCs
- Vinyl chloride
- Trans-1,2-dichloroethene
- 1,1-dichloroethene
- Tetrachloroethene
- Cis-1,2-dichloroethene
- Trichloroethene

The quarterly DMR parameters at MKC are the following (highlighted have not been included with the eDMR):

- Oil & grease
- BOD₅
- PAHs (Group of 10)
- Benzo(a)pyrene
- Naphthalene
- TSS
- Chloride

*Note pH is listed and not a parameter we sample for.

Thanks,

Andrew M Stehn, PE (WI)

Senior Project Engineer



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Stehn, Andrew

From: Stehn, Andrew
Sent: Friday, June 23, 2017 8:36 AM
To: 'James, Emily M - DNR'
Subject: RE: Madison Kipp Corporation - WPDES Permit WI Modification Request

Emily,

Thank you very much for getting back to me on this. Going forward we will plan to monitor Benzo(a)pyrene on a quarterly basis as noted on the DMR form.

Thanks again,

Andrew M Stehn
Project Engineer



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From: James, Emily M - DNR [mailto:Emily.James@wisconsin.gov]
Sent: Friday, June 23, 2017 8:00 AM
To: Stehn, Andrew <AStehn@trcsolutions.com>
Subject: RE: Madison Kipp Corporation - WPDES Permit WI Modification Request

Hi Andrew,

I hope you are well. I had a moment to review; please see the attached revised DMR. Let me know if you have any questions. I apologize for the delay.

Regards,
Emily

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Emily James

Phone: (414) 263-8635

Emily.James@Wisconsin.gov

From: Stehn, Andrew [mailto:AStehn@trcsolutions.com]
Sent: Thursday, June 08, 2017 4:00 PM
To: James, Emily M - DNR
Cc: Vater, Katherine
Subject: RE: Madison Kipp Corporation - WPDES Permit WI Modification Request

Emily,

Hope all is well. I just wanted to follow up with you and see if you have had a chance to further look into the below request. If you recall, TRC on behalf of Madison Kipp Corporation (MKC) requested a reduction in monitoring for select

parameters for MKC's groundwater extraction and treatment system. Last month, approval was granted to reduce PAH monitoring from monthly to quarterly with the exception of Benzo(a)pyrene. We are just looking to determine if Benzo(a)pyrene can also be reduced to quarterly or if this parameter needs to continue to be sampled on a monthly basis. Please let me know if you need further information for this request and thanks in advance for your assistance with this project.

Thanks,

Andrew M Stehn
Project Engineer



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From: Stehn, Andrew
Sent: Friday, May 05, 2017 2:33 PM
To: 'James, Emily M - DNR' <Emily.James@wisconsin.gov>
Subject: RE: Madison Kipp Corporation - WPDES Permit WI Modification Request

Thanks Emily for getting back to me and updating the DMR form in such a timely manner, much appreciated. Feel free to contact me with any questions you have as you look further into the Benzo(a)pyrene request.

Thanks again.

Andrew M Stehn
Project Engineer



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From: James, Emily M - DNR [<mailto:Emily.James@wisconsin.gov>]
Sent: Friday, May 05, 2017 7:59 AM
To: Stehn, Andrew <AStehn@trcsolutions.com>
Subject: RE: Madison Kipp Corporation - WPDES Permit WI Modification Request

Andrew:

See revised DMR attached.

Emily

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Emily James

Phone: (414) 263-8635

Emily.James@Wisconsin.gov

From: Stehn, Andrew [<mailto:AStehn@trcsolutions.com>]
Sent: Thursday, May 04, 2017 3:11 PM
To: James, Emily M - DNR
Cc: Alina Satkoski; Vater, Katherine
Subject: RE: Madison Kipp Corporation - WPDES Permit WI Modification Request

Emily,

As noted in the voicemail I left a few minutes ago, in review of the new DMR form that was provided following the GETS monitoring modification request, the following items were observed:

- The permit number listed on the new DMR form has changed from 'WI-0046566-6' to 'WI-0046531-05-0';
- An indication of the type of wastewater discharge has been added to the DMR form and none of the items available for selection apply to the site operation;
- The Oil & Grease Effluent Limit has been adjusted from 10 mg/L to 15 mg/L;
- The Chloride Effluent Limit has been adjusted from 395 mg/L to 0.25 mg/L; and
- The potassium permanganate neutralization is not listed in the new form (this is completed by visual observation of the water clarity).

I have attached the new DMR form and the previous one for comparison purposes. As you review the Benzo(a)pyrene request based on our previous discussion this week, could you also take a look at the above observations and provide comments. We really appreciate your assistance with this review and if you have any questions, feel free to contact me by phone or email.

Thanks,

Andrew M Stehn
Project Engineer



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From: James, Emily M - DNR [<mailto:Emily.James@wisconsin.gov>]
Sent: Monday, May 01, 2017 10:49 AM
To: Stehn, Andrew <AStehn@trcsolutions.com>
Subject: RE: Madison Kipp Corporation - WPDES Permit WI Modification Request

Andrew,

See my responses below in red. Feel free to call me with any questions. I am (slowly) but surely transitioning out of this role and into a new one within the Department. Feel free to contact me in the future with any questions regarding this site until this position is filled. Thanks.

Regards,
Emily

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Emily James

Phone: (414) 263-8635

Emily.James@Wisconsin.gov

From: Stehn, Andrew [<mailto:AStehn@trcsolutions.com>]
Sent: Monday, May 01, 2017 10:38 AM
To: James, Emily M - DNR
Cc: Alina Satkoski; Hopfensperger, Alan A - DNR; Vater, Katherine
Subject: RE: Madison Kipp Corporation - WPDES Permit WI Modification Request

Emily,

Thank you very much for reviewing the modified sampling for the GETS in operation at Madison-Kipp Corporation. I have two brief questions as we move forward with the new monitoring plan.

1. I just wanted to confirm that the WDNR is content with the quarterly sampling being completed during the months of March, June, September, and December each year going forward?
Yes.
2. In addition, I noticed that approval was granted for quarterly monitoring of PAHs and naphthalene but noticed Benzo(a)pyrene is listed on the updated DMR form as a monthly constituent. Benzo(a)pyrene was also requested to be reduced to quarterly monitoring, and I just wanted to double check before we move forward with the modified sampling plan. Can you confirm if this parameter will require monthly monitoring or can we also assume quarterly sampling for this constituent?

Oil and Grease, PAHs, BOD, Naphthalene, TSS, and Chloride have been reduced to quarterly sampling. Feel free to adjust you sampling plan as necessary. Benzo(a)pyrene sampling was not reduced.

When you have a moment, could you please review my two questions and reply as needed. We appreciate the assistance and if you need any further information, please do not hesitate to contact me.

Thanks,

Andrew M Stehn
Project Engineer



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----- Forwarded message -----

From: James, Emily M - DNR <Emily.James@wisconsin.gov>
Date: Thu, Apr 27, 2017 at 8:31 AM
Subject: RE: FW: Madison Kipp Corporation - WPDES Permit WI Modification Request
To: Alina Satkoski <asatkoski@madison-kipp.com>
Cc: "Hopfensperger, Alan A - DNR" <Alan.Hopfensperger@wisconsin.gov>

Good morning, Alina.

Upon review of the request for reduced sampling, the Department grants reduced sampling for the following parameters from monthly sampling to quarterly sampling:

- Oil & Grease
- BOD
- PAHs
- Naphthalene
- TSS
- Chloride

See the attached updated Discharge Monitoring Report (DMR). Please let me know if you have any questions.

Regards,

Emily

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Emily James

Phone: [\(414\) 263-8635](tel:(414)263-8635)

Emily.James@Wisconsin.gov

From: Alina Satkoski [mailto:asatkoski@madison-kipp.com]

Sent: Thursday, April 20, 2017 10:00 AM

To: James, Emily M - DNR; Stehn, Andrew

Subject: Fwd: FW: Madison Kipp Corporation - WPDES Permit WI Modification Request

Hi Emily,

I was wondering if you had a chance to review the proposal to modify the sampling frequency at the GETS operating at our facility.

Please let me or Andy Stehn know if you need any further clarification on the proposal.

We are scheduled to sample the first week of May. Can we expect a decision by then?

Thanks,

Alina

From: Stehn, Andrew

Sent: Tuesday, March 14, 2017 12:18 PM

To: 'Emily.James@Wisconsin.gov' <Emily.James@Wisconsin.gov>; Schmoller, Michael R - DNR <Michael.Schmoller@wisconsin.gov>; Weihemuller, Wendy - DNR <Wendy.Weihemuller@wisconsin.gov>; Parrino, George <gparrino@publichealthmdc.com>

Cc: 'Mark Sheppard' <msheppard@madison-kipp.com>; Krause, Tina <TKrause@trcsolutions.com>; Vater, Katherine <KVater@trcsolutions.com>

Subject: Madison Kipp Corporation - WPDES Permit WI Modification Request

Emily,

As discussed in our phone call today, TRC spoke with James Brodzeller a few months ago (WDNR WPDES Permit Contact for MKC at the time) in reference to reducing the sampling frequency of select parameters for the groundwater extraction and treatment system (GETS) at Madison Kipp Corporation (WPDES Permit WI-0046566-06). At the time James had asked that we put together a letter requesting a modification to the monitoring frequency for review. Attached is a letter for your review and a hard copy will be submitted in the mail today. Please feel free to contact me with any questions you may have.

Thanks and have a great day!

Andrew M Stehn
Project Engineer



TRC Environmental Corporation

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--

Alina Satkoski

Environmental and Safety Coordinator

Madison-Kipp Corporation

asatkoski@madison-kipp.com

Office: [608-242-5200](tel:608-242-5200)

Cell: [518-265-7183](tel:518-265-7183)

--

Alina Satkoski

Environmental and Safety Coordinator

Madison-Kipp Corporation

asatkoski@madison-kipp.com

Office: 608-242-5200

Cell: 518-265-7183

FOOTNOTES:

- (1) Total BETX is the sum of the benzene, ethylbenzene, toluene and xylene concentrations.
- (2) PAH group of 10 (Polynuclear Aromatic Hydrocarbons) include the sum of the following individual compounds: benzo(a)anthracene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene

DIRECTIONS:

- ☞ For "Outfall # and Description" enter the number of the outfall you are reporting (001 or 002, etc.) and the source of wastewater (petroleum contact, tank bottom water, scrap and waste storage area oily water, or secondary containment). Copy and use a new form for each outfall.
- ☞ Monitoring for a given parameter depends on if the discharge is to surface waters or groundwater, and petroleum category.
- ☞ The value entered must be the highest value of all samples analyzed for that day.
- ☞ For each quarter, indicate the month monitoring occurred next to "Month."
- ☞ Include as separate attachments to this form the annual reports for (a) waste oil and solids removed, and (b) tank bottom water disposal.

RETURN REPORT BY: **February 15, of the year following completion of monitoring**

RETURN TO: **Wastewater General Permits**
ATTN: Emily James
Department of Natural Resources
3911 Fish Hatchery Rd.
Fitchburg, WI 53711

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment, (40 CFR 122.5). I also certify that the values being submitted are the actual values found in the samples; no values have been modified or changed in any manner. Wherever I believe a value being reported is inaccurate, I have added an explanation indicating the reasons why the value is inaccurate.

Signature of Person Completing Form

Date

Signature of Principal Exec. or Authorized Agent

Date