NR 216 Related Activities 2021

Background

Public Health Madison and Dane County (PHMDC) engages in several activities related to storm water quality. Two City ordinances, promulgated circa 1975, direct these efforts, Madison General Ordinance (MGO) 7.46 and MGO 7.47. MGO 7.46 "is designed to prevent any potentially polluting substance from reaching lakes or streams where it can create hazard to health, a nuisance, or produce ecological damage, and to assess responsibility and costs of clean-up to the responsible party". It prohibits releases, discharges, and unsecure storage of potentially polluting substances. Further, the ordinance provides for penalties and assigns enforcement responsibility to PHMDC.

MGO 7.47 requires a discharge license from PHMDC for point-source discharges to the storm sewer system within the City. Its goal is to ensure permitted discharges are of suitable quantity and quality to prevent degradation of surface and groundwater within the City's jurisdiction.

More recent programs and additions to the code of ordinances further address non-point source pollution. MGO 7.48 regulates or prohibits the sale or use of phosphorus containing fertilizer and Dane County Code of Ordinances Chapter 80.0 prohibits the application of coal tar sealcoats.

Illicit Discharge Detection and Elimination

The Illicit Discharge Detection and Elimination (IDDE) program inspects all 590 major outfalls in the city on a four-year rotation. City of Madison Engineering surveys one quarter of the outfalls once each year. They notify PHMDC whenever standing water with unusual characteristics or flowing water is found. We sample, analyze the water, and determine if the quality indicates the presence of an inappropriate source. There were no issues found in the sewer structures surveyed in 2021. All flowing water found was traced back to detention ponds and sump discharges.

Date	Address	Issue	Outcome	Source
2/1/21	1910 Scott Ln	Discharge of automotive fluid	Nothing evident	Website
2/23/21	2450 E Mifflin St	Excessive deicing salt	No violation	Email
3/9/21	5117 Loruth Ter	Hydraulic oil leak	RP clean up	Website
3/10/21	**5326 Betlach Rd**	Auto fluid dumping	No violation evident	Direct
4/6/21	**105 S Thompson Rd**	Discharge of wastewater	RP changed procedures	Direct
4/19/21	1406 Emil St	Dumpster leachate	Verbal warning	Direct
5/17/21	512 S Park St	Wastewater discharge	Foundation dewatering	Website
5/17/21	2605 Mission Cir	Discharge of concrete waste	Verbal warning	Direct
5/24/21	411 State St	Discharge of cooking oil	Unresolved	Inter-D referral
5/25/21	3618 University Ave	Discharge of wastewater	RP corrected	Inter-D referral
5/26/21	3113 Syene Rd	Discharge of wastewater	Unresolved	Website
6/2/21	5102 Manor Cross	Discharge of concrete waste	No violation	Website
6/3/21	26 Marsh Ct	Improper salt storage	Referred to Wi DOT	Inter-D referral
6/8/21	1804 E Main St	Waste dumping	Nothing evident	Direct
6/14/21	601 Merryturn Rd	Discharge of wastewater	No violation	Website

Date	Address	Issue	Outcome	Source
6/14/21	1330 Sherman Ave	Surface water quality	No violation	Inter-D referral
6/28/21	106 W Wilson St	Discharge of concrete waste	Referred for prosecution	Direct
6/28/21	130 Rustic Dr	Surface water oil sheen	No violation	Inter-D referral
6/28/21	2029 Fish Hatchery Rd	Motor oil discharge	Referred to DNR	Inter-D referral
6/30/21	110 S Paterson St	Discharge of wastewater	Verbal warning	Inter-D referral
7/6/21	355 John Nolen Dr	Discharge of concrete waste	$630 citation	Inter-D referral
7/8/21	944 E Gorham St	Coal tar	No violation	Inter-D referral
7/15/21	437 N Francis St	Discharge of dumpster leachate	RP corrected	Inter-D referral
7/19/21	502 Leonard St	Discharge of concrete waste	Referred for prosecution	Inter-D referral
7/19/21	2221 Daniels St	Ice cream spill	$313 citation	Inter-D referral
7/20/21	1423 Monroe St	Solid waste dumping	Unresolved	Inter-D referral
7/21/21	217 Karen Ct	Dumpster leachate	Nothing evident	Direct
7/22/21	201 State St	Discharge of concrete waste	Verbal warning	Website
7/26/21	675 S Whitney Way	Discharge of cooking oil	RP corrected	Inter-D referral
7/27/21	2126 N Sherman Ave	Discharge of wastewater	No violation	Direct
7/28/21	2701 Atwood Ave	Infectious waste dumping	Property owner corrected	Direct
7/30/21	1133 E Wilson St	Dumpster leachate	No further violations	Direct
8/2/21	216 S Pinckney St	Discharge of automotive fluids	No violation evident	Direct
8/16/21	517 State St	Discharge of cooking oil	$1321 citation	Direct
9/13/21	833 Stewart St	Discharge of motor oil	Verbal warning	Inter-D referral
9/14/21	4222 Mandan Cres	Discharge of concrete waste	Verbal warning	Inter-D referral
9/16/21	113 Alton Dr	Fertilizer dumping	Verbal warning	Website
9/20/21	222 Acewood Blvd	Discharge of concrete waste	Verbal warning	Field observation
10/2/21	2506 McDivitt Rd	Carpet cleaning discharge	Verbal warning	Website
10/7/21	5702 Sheboygan Ave	Discharge of sediment	Referred to Engineering	Direct
10/15/21	648 S Whitney Way	Improper storage	RP corrected	Inter-D referral
11/5/21	909 E Dayton St	Deposit of leaves in street	No violation	Website
11/2/21	5109 Hammersley Rd	Discharge of wastewater	No violation	Website
11/18/21	**3036 Laura Ln**	Discharge of wastewater	Verbal warning	Inter-D referral
11/22/21	5015 Sheboygan Ave	Discharge of automotive fluide	Info given	Website
12/8/21	5201 Knightsbridge Rd	Discharge of concrete waste	Verbal warning	Field Observation
12/8/21	5222 Kingsbridge Rd	Discharge of cutting slurry	Verbal warning	Inter-D referral
12/9/21	**109 S Thompson Rd**	Discharge of waste water	No violation	Direct
12/16/21	622 University Ave	Improper storage	RP corrected	Inter-D referral

Letters are sent annually summarizing proper wastewater disposal or product application procedures to all business types that have a history of illicit discharges (concrete contractors, carpet cleaning, pressure washing, and lawn care companies). The letters are sent in late winter to ensure all contractors are informed before the start of the construction season. Guidance documents and recipient tables appear at the end of this report.

Non-storm water discharges

There are 162 licensed discharges comprised mostly of swimming pool and non-contact cooling waters. The number of licenses in each of the six discharge volume categories is:

Gallons per year	Number of discharges
< 50,000	95
50,000-100,000	32
100,001-1,000,000	21
1,000,001-10,000,000	8
10,000,001-100,000,000	5
>100,000,000	1

Discharges were not monitored in 2021 due to the Covid-19 outbreak.

Monthly road salt monitoring

Samples are normally collected at the outlets of the Yahara Lakes and Dunn's Marsh and at the Yahara River upstream from Lake Mendota and the Nakoma Road spring each month to monitor long-term effects of road salt use. Additional long-term water quality monitoring is achieved through analysis of the some metals and nutrients. The Covid-19 outbreak restricted our ability to monitor chloride concentrations this year. Thirty-one samples were collected for road salt monitoring in 2020.

Water quality monitoring of Starkweather Creek

Water quality monitoring of Starkweather Creek was started in 2008 to assess trends in water quality, document the impact of road salt, and detect illicit discharges to the creek. Sampling sites were established to isolate the different sections of the stream. Both branches (west and east) are sampled as near to the headwaters as practical. The west branch is sampled downstream of the airport to detect changes in water quality caused by airport operations. Both branches are sampled again before they merge and a final sample point is near the mouth of the creek at Lake Monona. The creek is monitored for common metals, nutrients, road salt, and dissolved oxygen.

In 2019, a collaborative effort to assess the effectiveness of road salt reduction strategies was started in the Starkweather Creek watershed. The effort was initiated and is led by the Capital Area Regional Planning Commission (CARPC). Members include: Public Health Madison and Dane County (PHMDC); Friends of Starkweather Creek; the City of Madison; Madison Metropolitan Sewerage District (MMSD); Wisconsin Department of Natural Resources (DNR); Barnes Inc., and American Family Insurance. Data collection started in December of 2020. Monthly monitoring data collected by PHMDC will also be utilized.

MONITORING DATA

	Door Creek		Dorn Creek	Dunn's Marsh	
	6/17/21	**6/17/21**	**7/22/21**	**7/22/21**	**9/23/21**
Al (µg/L)	839	13.8	60.8	180	459
As (µg/L)	<4.3	<4.3	<4.3	4.8	<4.3
Ba (µg/L)	65.5	55.6	55.6	49.7	35.6
Cd (µg/L)	0.20	<0.20	<0.20	<0.20	<0.20
Ca (mg/L)	82.5	78.9	83.0	22.5	20.8
Cl (mg/L)	26.1	57.3	59.1	111	60.1
Cr (µg/L)	2.5	<0.30	<0.30	<0.30	0.51
Conductivity (µmhos/cm)	747	864	799	555	388
Cu (µg/L)	<1.1	<1.1	<1.1	<1.1	1.2
Hardness (mg/L)	392	390	395	101	97.5
Fe (mg/L)	1.17	0.136	0.305	1.59	0.855
Pb (µg/L)	<2.8	<2.8	<2.8	<2.8	<2.8
Mg (mg/L)	45.2	47.0	45.6	10.91	11.1
Mn (µg/L)	109	19.8	53.6	486	81.6
Mo (µg/L)	<1.2	<1.2	<1.2	<1.2	1.81
Ni (µg/L)	<2.3	<2.3	<2.3	<2.3	<2.3
Total Nitrate & Nitrite (mg/L)	8.7	4.5	4.2	<0.28	<0.28
pH	8.39	7.76	7.63	6.92	6.96
Total P (mg/L)	0.172	0.066	0.101	0.411	0.088
K (mg/L)	1.6	1.7	1.8	1.9	1.5
Na (mg/L)	13.0	29.1	27.6	67.1	33.3
Sr (µg/L)	87.6	78.1	83.1	61.0	51.6
Total SO_4 (mg/L)	22.8	25.4	23.3	<3.0	5.3
Zn (µg/L)	4.8	<0.30	0.46	1.4	3.1

	Lake Kegonsa			
	5/13/21	**6/17/21**	**7/22/21**	**9/23/21**
Al (µg/L)	<7.5	<7.5	<7.5	20.6
As (µg/L)	<4.3	<4.3	<4.3	<4.3
Ba (µg/L)	28.6	31.1	35.4	34.2
Cd (µg/L)	<0.20	<0.20	<0.20	<0.20
Ca (mg/L)	43.4	37.9	41.6	34.0
Cl (mg/L)	63.8	62.8	64.9	65.1
Cr (µg/L)	<0.30	<0.30	<0.30	<0.30
Conductivity (µmhos/cm)	596	590	608	580
Cu (µg/L)	<1.1	<1.1	<1.1	<1.1
Hardness (mg/L)	241	231	237	216
Fe (mg/L)	0.018	0.013	0.017	0.025
Pb (µg/L)	<2.8	<2.8	<2.8	<2.8
Mg (mg/L	32.2	33.1	32.3	31.7
Mn (µg/L)	12.8	28.3	62.5	35.0
Mo (µg/L)	<1.2	<1.2	5.2	<1.2
Ni (µg/L)	<2.3	<2.3	<2.3	<2.3
Total Nitrate & Nitrite (mg/L)	0.4	<0.28	<0.28	<0.28
pH	8.27	8.62	8.57	8.71
Total P (mg/L)	0.030	0.023	0.100	0.119
K (mg/L)	2.6	2.6	2.5	2.5
Na (mg/L)	31.2	32.5	31.2	30.9
Sr (µg/L)	61.0	58.6	61.7	56.3
Total SO4 (mg/L)	18.1	16.0	13.3	12.3
Zn (µg/L)	0.8	0.3	0.6	<0.3

	Lower Mud Lake		Lake Mendota		
	6/17/21	**7/22/21**	**5/13/21**	**6/17/21**	**9/23/21**
Al (µg/L)	<7.50	11.3	<7.5	<7.5	26.7
As (µg/L)	<4.3	<4.3	<4.3	<4.3	<4.3
Ba (µg/L)	54.0	49.2	21.5	54.4	26.3
Cd (µg/L)	<0.20	<0.20	<0.20	<0.20	<0.20
Ca (mg/L)	36.9	32.2	39.3	26.1	25.8
Cl (mg/L)	74.0	72.3	52.3	51.4	51.8
Cr (µg/L)	<0.30	<0.30	<0.30	<0.30	<0.30
Conductivity (µmhos/cm)	617	601	547	493	
Cu (µg/L)	<1.1	<1.1	<1.1	<1.1	<1.1
Hardness (mg/L)	228	213	230	201	195
Fe (mg/L)	0.019	0.030	0.012	0.024	0.050
Pb (µg/L)	<2.8	<2.8	<2.8	<2.8	<2.8
Mg (mg/L)	32.9	32.2	32.1	33.0	31.8
Mn (µg/L)	166	45.3	16.4	30.7	15.1
Mo (µg/L)	<1.2	<1.2	<1.2	<1.2	<1.2
Ni (µg/L)	<2.3	<2.3	<2.3	<2.3	<2.3
Total Nitrate & Nitrite (mg/L)	<0.28	<0.28	1.0	<0.28	<0.28
pH	8.56	8.55	8.53	9.20	
Total P (mg/L)	0.122	0.064	0.068	0.076	0.056
K (mg/L)	2.9	2.5	2.9	2.6	2.9
Na (mg/L)	37.0	35.0	25.3	26.1	24.3
Sr (µg/L)	58.2	57.0	58.8	44.6	52.0
Total SO_4 (mg/L)	15.3	14.4	16.8	14.3	15.7
Zn (µg/L)	0.8	<0.3	0.5	2.0	0.7

	Lake Monona	Murphy's Creek	
	9/23/21	**6/17/21**	**7/22/21**
Al (µg/L)	<7.5	470	386
As (µg/L)	<4.3	<4.3	<4.3
Ba (µg/L)	27.0	63.4	63.4
Cd (µg/L)	<0.20	<0.20	<0.20
Ca (mg/L)	26.2	80.6	80.7
Cl (mg/L)	72.1	31.5	33.9
Cr (µg/L)	<0.30	1.5	1.3
Conductivity (µmhos/cm)	568	777	768
Cu (µg/L)	<1.1	<1.1	<1.1
Hardness (mg/L)	191	370	370
Fe (mg/L)	0.009	0.885	0.740
Pb (µg/L)	<2.8	<2.8	<2.8
Mg (mg/L)	30.5	41.0	40.8
Mn (µg/L)	11.6	144	115
Mo (µg/L)	<1.2	<1.2	<1.2
Ni (µg/L)	<2.3	<2.3	<2.3
Total Nitrate & Nitrite (mg/L)	<0.28	7.9	7.6
pH	8.46	8.01	7.93
Total P (mg/L)	0.031	0.109	0.096
K (mg/L)	2.6	1.1	1.1
Na (mg/L)	33.8	16.0	16.5
Sr (µg/L)	53.6	65.1	69.2
Total SO_4 (mg/L)	15.5	20.0	19.8
Zn (µg/L)	0.8	2.8	2.5

	Nine Springs Creek			Swan Creek	
	5/13/21	**6/17/21**	**7/22/21**	**6/17/21**	**7/22/21**
Al (µg/L)	28.8	746	19.0	1260	705
As (µg/L)	<4.3	<4.3	<4.3	<4.3	<4.3
Ba (µg/L)	50.7	63.0	52.9	73.2	70.2
Cd (µg/L)	<0.20	<0.20	<0.20	<0.20	<0.20
Ca (mg/L)	84.0	88.6	85.8	90.3	89.6
Cl (mg/L)	96.6	86.1	96.2	52.4	54.9
Cr (µg/L)	1.13	3.43	0.40	2.9	1.7
Conductivity (µmhos/cm)	928	950	944	906	890
Cu (µg/L)	<1.1	1.3	<1.1	<1.1	<1.1
Hardness (mg/L)	394	411	398	411	405
Fe (mg/L)	0.221	1.35	0.107	1.40	0.803
Pb (µg/L)	<2.8	<2.8	<2.8	<2.8	<2.8
Mg (mg/L)	44.7	46.1	44.6	45.0	44.1
Mn (µg/L)	46.9	75.6	12.9	171	115
Mo (µg/L)	<1.2	<1.2	<1.2	<1.2	<1.2
Ni (µg/L)	<2.3	<2.3	<2.3	<2.3	<2.3
Total Nitrate & Nitrite (mg/L)	5.0	4.6	3.2	7.7	7.0
pH	7.54	7.92	7.81	7.96	7.82
Total P (mg/L)	0.019	0.124	0.007	0.106	0.080
K (mg/L)	1.3	1.4	1.0	1.5	1.4
Na (mg/L)	37.5	37.1	37.2	29.1	29.1
Sr (µg/L)	79.6	80.8	81.5	87.9	90.9
Total SO_4 (mg/L)	21.9	24.2	19.7	20.0	19.5
Zn (µg/L)	1.3	7.0	0.3	6.5	3.7

	Token Creek	Lake Waubesa	
	6/17/21	**5/13/21**	**9/23/21**
Al (µg/L)	72.6	<7.5	8.1
As (µg/L)	<4.3	<4.3	<4.3
Ba (µg/L)	39.4	18.2	35.7
Cd (µg/L)	<0.20	<0.20	<0.20
Ca (mg/L)	82.1	41.9	30.1
Cl (mg/L)	45.3	73.4	70.6
Cr (µg/L)	0.86	<0.30	<0.30
Conductivity (µmhos/cm)	833	613	582
Cu (µg/L)	<1.1	<1.1	<1.1
Hardness (mg/L)	390	234	205
Fe (mg/L)	0.120	0.025	0.018
Pb (µg/L)	<2.8	<2.8	<2.8
Mg (mg/L)	44.9	31.3	31.5
Mn (µg/L)	29.9	21.8	32.1
Mo (µg/L)	<1.2	<1.2	<1.2
Ni (µg/L)	<2.3	<2.3	<2.3
Total Nitrate & Nitrite (mg/L)	9.4	0.3	<0.28
pH	8.06	8.20	8.35
Total P (mg/L)	0.028	0.050	0.064
K (mg/L)	1.4	2.6	2.5
Na (mg/L)	20.8	34.5	33.7
Sr (µg/L)	80.7	60.1	54.8
Total SO_4 (mg/L)	21.5	17.3	14.0
Zn (µg/L)	1.7	1.3	<0.30

Lake Wingra				
	5/13/21	**6/17/21**	**7/22/21**	**9/23/21**
Al (µg/L)	<7.5	19.7	18.6	8.3
As (µg/L)	<4.3	<4.3	5.1	<4.3
Ba (µg/L)	30.5	17.5	26.7	43.4
Cd (µg/L)	<0.20	<0.20	<0.20	<0.20
Ca (mg/L)	48.1	23.9	27.1	45.9
Cl (mg/L)	125	119	122	115
Cr (µg/L)	<0.30	<0.30	<0.30	<0.30
Conductivity (µmhos/cm)	814	741	753	818
Cu (µg/L)	<1.1	<1.1	<1.1	<1.1
Hardness (mg/L)	280	225	226	274
Fe (mg/L)	0.018	0.039	0.029	0.022
Pb (µg/L)	<2.8	<2.8	<2.8	<2.8
Mg (mg/L)	38.8	40.1	38.5	38.7
Mn (µg/L)	25.8	63.8	24.7	31.2
Mo (µg/L)	<1.2	<1.2	<1.2	2.4
Ni (µg/L)	<2.3	<2.3	<2.3	<2.3
Total Nitrate & Nitrite (mg/L)	<0.14	<0.70	<0.14	<0.14
pH	7.84	8.82	8.47	7.83
Total P (mg/L)	0.028	0.102	0.022	0.034
K (mg/L)	1.6	1.1	1.4	1.9
Na (mg/L)	58.6	61.8	56.9	53.8
Sr (µg/L)	64.4	36.8	50.1	63.9
Total SO_4 (mg/L)	20.2	20.2	18.1	18.1
Zn (µg/L)	0.8	1.3	<0.3	0.5

Lake Wingra				
	5/13/21	**6/17/21**	**7/22/21**	**9/23/21**
Al (µg/L)	<7.5	19.7	18.6	8.3
As (µg/L)	<4.3	<4.3	5.1	<4.3
Ba (µg/L)	30.5	17.5	26.7	43.4
Cd (µg/L)	<0.20	<0.20	<0.20	<0.20
Ca (mg/L)	48.1	23.9	27.1	45.9
Cl (mg/L)	125	119	122	115
Cr (µg/L)	<0.30	<0.30	<0.30	<0.30
Conductivity (µmhos/cm)	814	741	753	818
Cu (µg/L)	<1.1	<1.1	<1.1	<1.1
Hardness (mg/L)	280	225	226	274
Fe (mg/L)	0.018	0.039	0.029	0.022
Pb (µg/L)	<2.8	<2.8	<2.8	<2.8
Mg (mg/L)	38.8	40.1	38.5	38.7
Mn (µg/L)	25.8	63.8	24.7	31.2
Mo (µg/L)	<1.2	<1.2	<1.2	2.4
Ni (µg/L)	<2.3	<2.3	<2.3	<2.3
Total Nitrate & Nitrite (mg/L)	<0.14	<0.70	<0.14	<0.14
pH	7.84	8.82	8.47	7.83
Total P (mg/L)	0.028	0.102	0.022	0.034
K (mg/L)	1.6	1.1	1.4	1.9
Na (mg/L)	58.6	61.8	56.9	53.8
Sr (µg/L)	64.4	36.8	50.1	63.9
Total SO_4 (mg/L)	20.2	20.2	18.1	18.1
Zn (µg/L)	0.8	1.3	<0.3	0.5

Yahara River @ Highway 19		
	5/13/21	**9/23/21**
Al (µg/L)	155	114
As (µg/L)	<4.3	<4.3
Ba (µg/L)	49.7	52.6
Cd (µg/L)	<0.20	<0.20
Ca (mg/L)	75.6	77.8
Cl (mg/L)	46.5	42.2
Cr (µg/L)	1.03	0.63
Conductivity (µmhos/cm)	781	802
Cu (µg/L)	<1.1	1.27
Hardness (mg/L)	370	365
Fe (mg/L)	0.289	0.214
Pb (µg/L)	<2.8	<2.8
Mg (mg/L)	44.1	41.4
Mn (µg/L)	71.1	64.1
Mo (µg/L)	<1.2	<1.2
Ni (µg/L)	<2.3	<2.3
Total Nitrate & Nitrite (mg/L)	8.41	7.64
pH	7.85	7.86
Total P (mg/L)	0.061	0.093
K (mg/L)	1.8	2.4
Na (mg/L)	20.3	18.9
Sr (µg/L)	84.9	84.5
Total SO_4 (mg/L)	24.4	25.5
Zn (µg/L)	1.4	1.3

Starkweather Creek				
	@ Anderson St		@ Atwood Ave	@ Fair Oaks Ave
	7/20/21	9/28/21	9/28/21	9/28/21
Al (µg/L)	<7.5	133	19.5	20.3
As (µg/L)	<4.3	<4.3	<4.3	<4.3
Ba (µg/L)	59.6	72.6	61.0	68.1
Cd (µg/L)	<0.20	<0.20	<0.20	<0.20
Ca (mg/L)	67.8	81.0	84.0	76.6
Cl (mg/L)	90.9	88.5	166	96.5
Cr (µg/L)	<0.30	<0.30	<0.30	<0.30
Conductivity (µmhos/cm)	841	928	1120	912
Cu (µg/L)	<1.1	<1.1	<1.1	<1.1
Hardness (mg/L)	332	381	392	364
Fe (mg/L)	0.308	0.743	0.239	0.350
Pb (µg/L)	<2.8	<2.8	<2.8	<2.8
Mg (mg/L)	39.4	43.3	44.2	41.8
Mn (µg/L)	40.3	145	81.0	132
Mo (µg/L)	4.28	3.41	<1.2	<1.2
Ni (µg/L)	<2.3	<2.3	<2.3	<2.3
Total Nitrate & Nitrite (mg/L)	0.39	1.05	1.51	0.95
Oxygen, Dissolved (mg/L)		11.2	9.0	4.8
pH	7.82	7.93	7.78	7.67
Total P (mg/L)	0.086	0.048	0.042	0.070
K (mg/L)	3.1	3.5	2.8	3.3
Na (mg/L)	42.7	41.7	75.4	43.3
Sr (µg/L)	84.9	96.1	98.7	95.7
Total SO_4 (mg/L)	18.9	25.6	25.7	28.2
Zn (µg/L)	0.9	2.5	0.9	0.6

Starkweather Creek			
	@ Hayes Rd	**@ Zeier Rd**	
	7/20/21	**7/20/21**	**9/28/21**
Al (µg/L)	1080	212	62.5
As (µg/L)	<4.3	<4.3	<4.3
Ba (µg/L)	27.6	53.5	55.0
Cd (µg/L)	<0.20	<0.20	<0.20
Ca (mg/L)	12.7	85.3	87.1
Cl (mg/L)	34.7	125	124
Cr (µg/L)	1.48	0.82	0.59
Conductivity (µmhos/cm)	260	1060	1070
Cu (µg/L)	4.53	1.29	<1.1
Hardness (mg/L)	48.1	386	395
Fe (mg/L)	1.71	0.504	0.178
Pb (µg/L)	<2.8	<2.8	<2.8
Mg (mg/L)	4.0	42.0	43.0
Mn (µg/L)	117	85.8	45.0
Mo (µg/L)	2.31	<1.2	2.76
Ni (µg/L)	3.03	<2.3	<2.3
Total Nitrate & Nitrite (mg/L)	<0.2	3.10	3.39
Oxygen, Dissolved (mg/L)			8.2
pH	6.63	7.24	7.57
Total P (mg/L)	0.246	0.050	0.018
K (mg/L)	1.9	1.5	1.5
Na (mg/L)	31.7	68.8	68.1
Sr (µg/L)	49.5	87.5	87.4
Total SO_4 (mg/L)	4.2	20.0	20.9
Zn (µg/L)	12.3	2.1	0.8

BMP NOTIFICATIONS

Public Health
MADISON & DANE COUNTY
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210 Martin Luther King, Jr. Boulevard
Madison, WI 53703

Phone (608) 266-4821
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7 Hills Striping

April 6, 2021

RE: Dane County Sealcoat Ban

Polycyclic aromatic hydrocarbons (PAHs) found in coal tar and other high-PAH sealants have been identified as human carcinogens. Dust in homes is an important pathway for human exposure to many contaminants, including PAHs. Household dust in homes adjacent to coal tar sealed pavement is 25 times higher in PAHs than homes near pavement sealed with other types of sealants or unsealed concrete.

Dane County Code of Ordinances Chapter 80.08 bans the commercial application of any pavement sealant containing **>0.1% PAHs** in Dane County. Any sealcoat product applicator that violates Chapter 80.08 shall be subject to a forfeiture of $500 for the first violation within a twelve month period, $1000 for the second violation within a twelve month period, and $2000 for the third and each subsequent violation within a twelve month period.

Asphaltic sealants typically contain 0.005% PAHs.
Coal tar sealants typically contain 5-20% PAHs.
Black Diamond by Gem Seal contains about 1.9% PAHs.

If a banned sealant is applied, each day the product remains on the property will be considered a separate offense until the material is removed and disposed of in a manner approved by the Department. HEPA filtration will likely be a required component of any approved removal procedure.

It is recommended to remove any residual high-PAH product from application equipment before filling with asphaltic sealant for work in Dane County, as a mixture of materials may result in a sealant that is over the 0.1% PAH ban.

If you have any question or require further information, please contact Rick Wenta, (608) 225-2396, of the Environmental Protection Unit, Public Health Madison and Dane County.

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March 7, 2018

A & E Concrete Construction

RE: Discharge/Disposal of Concrete Wash Water to the City Storm Sewer System.

Madison General Ordinance (MGO) 7.46 *Water Pollution Control* prohibits the discharge of any concrete, mortar, wash water, concrete cutting water or exposed aggregate wash to the City storm sewer system. This practice is also prohibited under State Statutes 29.601(3); *Deleterious Substances* and State Statues Chapter 283; *Pollution Discharge Elimination*.

Any concrete waste, including wash water or delivery truck chute clean out must be contained and collected for proper disposal. The contractor in control of the construction site is responsible for providing suitable concrete waste containment. Saw cutting slurry may be detained by sandbags in the curb at the first practical location down slope, but must be removed at the end of the workday or sooner if impending rain is forecast. It is illegal to allow concrete waste to flow unchecked on any paved surface. Detained slurry can be retrieved with a vacuum. Other retrieval methods may also be suitable. Best management practices for concrete wash out water are available from the US EPA.

http://www3.epa.gov/npdes/pubs/concretewashout.pdf

Businesses found in violation of MGO 7.46 will be referred to the City Attorney's office for prosecution or ticketed. Failure to comply with this ordinance may result in regulatory enforcement including a fine of not less than fifty dollars ($50.00) or more than two thousand dollars ($2000.00) per offense. Each day of a continuing violation is a separate offense. Clean-up costs may also be incurred.

If you have any questions or require further information, please contact Rick Wenta 225-2396 of the Environmental Protection Unit, Public Health Madison-Dane County.

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A Clean Carpet and Upholstery

March 31, 2021

RE: Discharge of Carpet Cleaning Waste Water to the City Storm Sewer System

Madison General Ordinance (MGO) 7.46 *"Water Pollution Control"* prohibits the discharge of waste water to the ground, or the storm sewer system. Carpet cleaning wastewater must be directed to an inside drain that is connected to the sanitary sewer for proper disposal. Screening the waste water at the time of disposal in order to capture carpet fibers, pet hair and grit is advisable. This captured debris can then be disposed of in the trash. Additionally, clean water discharges to the street, gutter or any storm water conveyance are prohibited under MGO 7.47

Any business found in violation of MGO 7.46 or MGO 7.47 will be immediately referred to the City Attorney's Office for prosecution or ticketed. Failure to comply may result in a fine of not less than fifty dollars ($50) or more than two thousand dollars ($2000) per offense. Clean-up costs may also be incurred.

If you have any questions concerning this matter, please contact Rick Wenta: (608) 225-2396 of the Environmental Protection Unit, Public Health and Madison and Dane County.

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www.publichealthmdc.com

April 15, 2021

Accurate Power Washing

RE: Discharge of Pressure Washing Wastewater to the Storm Sewer System.

Madison General Ordinance (MGO) 7.46(3) "Water Pollution Control" and MGO 7.47(3) "Regulation of Discharge of Non-storm Water", as well as State Statutes 29.601(3); "Deleterious Substances" and State Statutes Chapter 283; "Pollution Discharge Elimination" regulate the discharge of outdoor pressure washing wastewater to the storm sewer system.

Wastewater from any outdoor washing must be directed to a permeable surface or collected for proper disposal. For areas where this is not practical, these practices must be followed:

1. Detain the wash water long enough to allow suspended solids to settle, or filter suspended solids from the waste stream.
2. Properly dispose of settled or filtered solids.
3. Only biodegradable detergents containing less than 0.5% phosphate are permitted.
4. Use of detergents must be minimized. The waste stream shall be free of visible foam.
5. Oil and grease from kitchen ventilation systems must be removed before the wastewater reaches the storm sewer system.

Additional Best Management Practices (BMPs) are found at the Wisconsin Department of

Natural Resources website: http://dnr.wi.gov/topic/wastewater/documents/59153_fs.pdf

Removal of paint with power equipment, including power washing, is subject to further regulation. Contact Public Health Madison and Dane County at 608-243-0330 or http://www.publichealthmdc.com for more information.

Businesses found in violation of MGO 7.46/7.47 will be referred to the City Attorney for prosecution or ticketed. Failure to comply may result in a fine of not less than fifty dollars ($50) or more than two thousand dollars ($2000) per offense. Each day of a continuing violation is a separate offense. Violators will also be assessed for cleanup costs associated with the violation.

If you have any questions concerning this matter, please contact Rick Wenta: 225-2396, Environmental Protection Unit, Public Health-Madison and Dane Co.

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April 14, 2020

Hy-Vee

RE: Liquids leaking from garbage dumpsters.

Madison General Ordinance (MGO) 7.46 prohibits discharges from garbage containers. Allowing liquids to escape from your dumpster can result in a fine of $50-$2000.

When liquids are put in the garbage or a trash compactor, they can saturate the garbage and seep from the dumpster. This liquid, called leachate, is nutrient-rich and can become very acidic through bacterial decomposition. It can corrode metal dumpsters, weaken rubber seals, and dissolves concrete.

When leachate flows from a dumpster onto a hard surface, it is transported via the storm sewer system to our lakes. As bacteria break down the leachate they consume large amounts of oxygen that fish and other aquatic organisms need to survive. Through decomposition, the bacteria convert the leachate into useable nutrients that promote algae growth much like fertilizer spread on a lawn causes the grass to grow green and lush.

If the leachate has entered the City's storm sewer, the City will remove it at your expense. To prevent a leachate discharge, consider the following:

1. Ensure your dumpster has a plug installed. Contact your waste hauler to have a plug installed if it is missing.
2. Keep your dumpster covered. Rain water that collects in a dumpster will form leachate.
3. Consider dumping expired milk and juices down an interior drain. Liquids poured down the sink will be properly treated at the sewage plant and won't end up in our lakes.
4. If you see your dumpster leaking, catch the liquid in a container and dump it down an interior drain until the leak can be fixed.

If you have any questions concerning this matter, please contact Rick Wenta: 225-2396, Environmental Protection Unit, Public Health-Madison and Dane Co.

BMP RECIPIENTS

Dumpster Leachate	Outside Washing	Carpet Cleaning	Carpet Cleaning	Coal Tar
Capitol Centre Market	Accurate Power Washing & Pressure Washing Madison	A Clean Carpet & Upholstery	Property Services of Madison	7 Hills Striping
Hy-Vee	Action Professional Window Cleaning	AJ Specialty Services	Puresteam Carpet Care	Asphalt Maintenance Systems
Hy-Vee	AMD	AAA Carpet Cleaning	R & R Carpet Cleaning	Asphalt Reheat Systems
Jenifer Street Market	Badger Spray & Small Engine Repair	AMD	Raj Cleaning Service	Bartelt Enterprises
Metcalfe's Hilldale	BD Clean LLC	AMS Carpet Cleaning	ReNew Carpet Cleaning	Consolidated Asphalt Products
Metcalfe's West Towne	City Detail Center	Apex Carpet Care	Service Plus Carpet Cleaning	Davis Construction
Regent Market Coop	**Concrete**	Bernie's Carpet Cleaning	Ryan's Carpet Care LLC	Directional Striping
Whole Foods Market	A1 Concrete Masonry	Blue Green Carpet	Service Master DSI	DNS Asphalt
Willy Street Coop North	Advanced Concrete	Capital Cleaning & Concierge	Specialized Cleaning Services	Custom Sealcoating and Paving
Woodman's Food Market	A & E Concrete Construction	Carnation Chem-Dry	Stanley Steemer	Doctor Asphalt
	Affordable Concrete Construction	Chem-Dry of Madison	Steam Plus	DRS Asphalt & Paving
	Ageless Concrete	Classy Cleaners	Top Quality Carpet Cleaning	Fahrner Asphalt Sealer LLC
		Clean Carpet Professionals	White Knight Carpet Rescue	Driveway Man
		CMS of Madison	Zerorez Madison	Envirosealers LLC
		CTW Abbey Carpet & Floor		Fink's Paving & Excavating
		EC Carpet Solutions		General Asphalt
		ECSL Carpet & Cleaning		Hallman Asphalt Paving
		Integrity Cleaning		Johnson Asphalt
		John's Carpet Cleaning		Marks and Stripes
		Julie's Carpet Cleaning		NR Asphalt Pavement
		Mackesey Carpet Cleaning		Pickett's Paving
		Madison Apartment Turnovers		Merit Asphalt
		Mass Carpet Cleaning		PLM Paving & Concrete
		Maintenance Services		Precision Asphalt Sealers
		Moon's Cleaning Solutions		Renu Sealcoating
		Mr Steam Carpet & Upholstery Cleaners		RLK Sealcoating
		Oxifresh Carpet Cleaners		Tri-County Paving
		Phenomenal Carpet Care		United Paving
		Precision Cleaning and Restoration		Wells Paving & Sealcoating