

February 10, 2020

Mr. Trevor Moen  
SER Wastewater Program  
Wisconsin Department of Natural Resources  
2300 North Dr. Martin Luther King, Jr. Drive  
Milwaukee, Wisconsin 53212-3128

**RE: *Discharge Monitoring Report for January 2020***  
***WPDES Permit Number WI-0046566-07-0***  
***BRRTS #: 02-41-576336 & 02-41-579429***  
***FID #: 241828620***  
***FIN #: 63340***  
***Sunrise Shopping Center***  
***2410-2424 10<sup>th</sup> Avenue & 1009 Marquette Avenue***  
***South Milwaukee, Wisconsin 53172***

Mr. Moen:

Wisconsin Department of Natural Resources (WDNR) granted coverage under WPDES Permit Number WI-0046566-07-0 in a letter dated January 2, 2019, for full-scale chemical injection remedial activities at the above-referenced facility. In the January 2019 letter, WDNR approved continued coverage for the proposed chemical injection of RemOx® (Potassium permanganate). Following the January 2019 approval, 35 injection wells were installed and the gravity feed infiltration “system” was constructed and prepared.

After construction, a small volume test injection was performed on February 4, 2019, to evaluate for leakage, verify suitable infiltration, etc. No additional injection activities were performed during the month or in March-April 2019. Full-scale injection activities were initiated in May 2019.

The modified method of RemOx® introduction to the impacted soils, in-situ chemical mixing, was continued during the month of January 2020. During the month, chemical mixing was performed on two (2) of the five “cells” within the 2410 tenant space, specifically cells 3 and 5 (most closely representing the highest soil concentrations and historical dry cleaning machines). An excavator was used to mix RemOx® granulated powder and water manually applied into the shallow subsurface soil. Mixing was performed on January 7<sup>th</sup> and January 17<sup>th</sup>, with 55-lbs of RemOx® added to each cell on each day (i.e., 110-lbs of chemical were applied during both of the mixing events). A total of 62.5-gallons of water were utilized on January 7<sup>th</sup>, with 107.5-gallons used for mixing on January 17<sup>th</sup>. No gravity feed infiltration was performed during the month.

In order to meet the requirements of Section 2 of the WPDES Permit Number WI-0046566-07-0, DAI Environmental, Inc., (DAI) is submitting this Discharge Monitoring Report (DMR) on behalf of Carol Investment Corporation, owner and Responsible Party for the Sunrise Shopping Center site located in South Milwaukee, Wisconsin. The completed DMR form with all required information for the month of January 2020 is included in Attachment A. The form is signed by Mr. Christopher Cailles of DAI as "Person Completing Form" and as "Authorized Agent" to the "Principal Exec. Officer" of Carol Investment Corporation.

DMRs will continue to be submitted as required, even for months in which no chemical injections activities are performed, until such time as all injections activities are completed and closure termination of coverage under the WPDES Permit is requested using Form 3400-221. As directed, the submission of any future DMRs with "no discharge" will be temporarily withheld until being submitted concurrent to a DMR documenting actual injection activities.

If you have any questions or require additional information in regards to this submission, please contact me at 847-573-8900 extension 580. Thank you for your time.

Sincerely,  
**DAI Environmental, Inc.**

A handwritten signature in blue ink that reads "Christopher Cailles".

Christopher Cailles, P.E.  
Project Engineer

Attachment

cc: Steven Dukatt – Carol Investment Corporation (w/enclosure electronically)  
Riley Neuman – WDNR RR Program (w/enclosure electronically)

**ATTACHMENT A**  
**DISCHARGE MONITORING REPORT**



**Wastewater Discharge Monitoring Long Report**

**For DNR Use Only**

Facility Name: CAROL INVESTMENT CORPORATION  
 Contact Address: 27834 N Irma Lee Circle  
 Lake Forest, IL 60045  
 Facility Contact: Cristopher Cailles, Project Engineer  
 Phone Number: 847-573-8900  
 Reporting Period: 01/01/2020 - 01/31/2020  
 Form Due Date: 02/21/2020  
 Permit Number: 0046566

Date Received:  
 DOC: 437448  
 FIN: 63340  
 FID: 241828620  
 Region: Southeast Region  
 Permit Drafter: Drafter not set  
 Reviewer: Christopher A Dietrich  
 Office: Milwaukee

Sample Point	002	002	002	002	002	
Description	Prior to Storm Sewer Discharge	Prior to Storm Sewer Discharge	Prior to Storm Sewer Discharge	Prior to Storm Sewer Discharge	Prior to Storm Sewer Discharge	
Parameter	211	377	40	54	393	
Description	Flow Rate	pH Field	Benzene	BETX, Total	PAHs	
Units	gpd	su	ug/L	ug/L	ug/L	
Sample Type	ESTIMATED	GRAB	GRAB	GRAB	GRAB	
Frequency	DAILY	MONTHLY	MONTHLY	MONTHLY	MONTHLY	
Sample Results	Day 1	237.10				
	2	237.10				
	3	237.10				
	4	237.10				
	5	237.10				
	6	237.10				
	7	265.40	6.15	<0.25	<1.37	<0.012
	8	265.40				
	9	265.40				
	10	265.40				
	11	265.40				
	12	265.40				
	13	265.40				
	14	265.40				
	15	265.40				
	16	265.40				
	17	265.40				
	18	265.40				
	19	265.40				
	20	265.40				
	21	265.40				
	22	265.40				
	23	265.40				
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	25	265.40				
	26	265.40				
	27	265.40				
	28	265.40				
	29	265.40				
	30	265.40				
	31	265.40				

	Sample Point	002		002		002		002	
	Description	Prior to Storm Sewer Discharge		Prior to Storm Sewer Discharge		Prior to Storm Sewer Discharge		Prior to Storm Sewer Discharge	
	Parameter	211		377		40		54	
	Description	Flow Rate		pH Field		Benzene		BETX, Total	
	Units	gpd		su		ug/L		ug/L	
<b>Summary Values</b>	<b>Monthly Avg</b>	259.922580645		6.15		0		0	
	<b>Daily Max</b>	265.4		6.15		<0.25		<1.37	
	<b>Daily Min</b>	237.1		6.15		<0.25		<1.37	
<b>Limit(s) in Effect</b>	<b>Monthly Avg</b>					50	0	750	0
	<b>Daily Max</b>			9	0				
	<b>Daily Min</b>			6	0				
<b>QA/QC Information</b>	<b>LOD</b>					0.25			
	<b>LOQ</b>					1			
	<b>QC Exceedance</b>	N		N		N		N	
	<b>Lab Certification</b>					405132750		405132750	

	<b>Sample Point</b>	002	002	002	002	002
	<b>Description</b>	Prior to Storm Sewer Discharge	Prior to Storm Sewer Discharge	Prior to Storm Sewer Discharge	Prior to Storm Sewer Discharge	Prior to Storm Sewer Discharge
	<b>Parameter</b>	44	307	80	93	118
	<b>Description</b>	Benzo(a)pyrene	Naphthalene	Bromoform	Carbon tetrachloride	Chloroform
	<b>Units</b>	ug/L	ug/L	ug/L	ug/L	ug/L
	<b>Sample Type</b>	GRAB	GRAB	GRAB	GRAB	GRAB
	<b>Frequency</b>	MONTHLY	MONTHLY	MONTHLY	MONTHLY	MONTHLY
<b>Sample Results</b>	<b>Day 1</b>					
	<b>2</b>					
	<b>3</b>					
	<b>4</b>					
	<b>5</b>					
	<b>6</b>					
	<b>7</b>	<0.0096	<0.017	<4.0	<0.17	<1.3
	<b>8</b>					
	<b>9</b>					
	<b>10</b>					
	<b>11</b>					
	<b>12</b>					
	<b>13</b>					
	<b>14</b>					
	<b>15</b>					
	<b>16</b>					
	<b>17</b>					
	<b>18</b>					
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	<b>29</b>					
	<b>30</b>					
	<b>31</b>					

	Sample Point	002		002		002		002		002	
	Description	Prior to Storm Sewer Discharge		Prior to Storm Sewer Discharge		Prior to Storm Sewer Discharge		Prior to Storm Sewer Discharge		Prior to Storm Sewer Discharge	
	Parameter	44		307		80		93		118	
	Description	Benzo(a)pyrene		Naphthalene		Bromoform		Carbon tetrachloride		Chloroform	
	Units	ug/L		ug/L		ug/L		ug/L		ug/L	
<b>Summary Values</b>	Monthly Avg	0		0		0		0		0	
	Daily Max	<0.0096		<0.017		<4		<0.17		<1.3	
	Daily Min	<0.0096		<0.017		<4		<0.17		<1.3	
<b>Limit(s) in Effect</b>	Monthly Avg	0.10	0	70	0	120	0	150	0	120	0
	Daily Max										
	Daily Min										
<b>QA/QC Information</b>	LOD	0.0096		0.017		4		0.1		1.3	
	LOQ	0.048		0.083		13.2		1		5	
	QC Exceedance	N		N		N		N		N	
	Lab Certification	405132750		405132750		405132750		405132750		405132750	



	<b>Sample Point</b>	002	002	002	002	002
	<b>Description</b>	Prior to Storm Sewer Discharge	Prior to Storm Sewer Discharge	Prior to Storm Sewer Discharge	Prior to Storm Sewer Discharge	Prior to Storm Sewer Discharge
	<b>Parameter</b>	174	570	558	82	120
	<b>Description</b>	Dichlorobromomethane (bromodichloromethane)	1,2-Dichloro- ethane	1,1-Dichloro- ethylene	Methyl bromide	Chloromethane
	<b>Units</b>	ug/L	ug/L	ug/L	ug/L	ug/L
	<b>Sample Type</b>	GRAB	GRAB	GRAB	GRAB	GRAB
	<b>Frequency</b>	MONTHLY	MONTHLY	MONTHLY	MONTHLY	MONTHLY
<b>Sample Results</b>	<b>Day 1</b>					
	<b>2</b>					
	<b>3</b>					
	<b>4</b>					
	<b>5</b>					
	<b>6</b>					
	<b>7</b>	<0.36	<0.28	<0.24	<0.97	<2.2
	<b>8</b>					
	<b>9</b>					
	<b>10</b>					
	<b>11</b>					
	<b>12</b>					
	<b>13</b>					
	<b>14</b>					
	<b>15</b>					
	<b>16</b>					
	<b>17</b>					
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	<b>27</b>					
	<b>28</b>					
	<b>29</b>					
	<b>30</b>					
	<b>31</b>					

	Sample Point	002		002		002		002		002	
	Description	Prior to Storm Sewer Discharge		Prior to Storm Sewer Discharge		Prior to Storm Sewer Discharge		Prior to Storm Sewer Discharge		Prior to Storm Sewer Discharge	
	Parameter	174		570		558		82		120	
	Description	Dichlorobromomethane (bromodichloromethane)		1,2-Dichloro- ethane		1,1-Dichloro- ethylene		Methyl bromide		Chloromethane	
	Units	ug/L		ug/L		ug/L		ug/L		ug/L	
<b>Summary Values</b>	Monthly Avg	0		0		0		0		0	
	Daily Max	<0.36		<0.28		<0.24		<0.97		<2.2	
	Daily Min	<0.36		<0.28		<0.24		<0.97		<2.2	
<b>Limit(s) in Effect</b>	Monthly Avg	120	0	180	0	50	0	120	0	120	0
	Daily Max										
	Daily Min										
<b>QA/QC Information</b>	LOD	0.36		0.28		0.24		0.97		2.2	
	LOQ	1.2		1		1		5		7.3	
	QC Exceedance	N		N		N		N		N	
	Lab Certification	405132750		405132750		405132750		405132750		405132750	

	<b>Sample Point</b>	002	002	002	002	002
	<b>Description</b>	Prior to Storm Sewer Discharge	Prior to Storm Sewer Discharge	Prior to Storm Sewer Discharge	Prior to Storm Sewer Discharge	Prior to Storm Sewer Discharge
	<b>Parameter</b>	565	490	563	561	508
	<b>Description</b>	1,1,2,2-Tetrachloro-ethane	Tetrachloroethylene	1,1,2-Trichloro- ethane	1,1,1-Trichloro- ethane	Trichloro- ethylene
	<b>Units</b>	ug/L	ug/L	ug/L	ug/L	ug/L
	<b>Sample Type</b>	GRAB	GRAB	GRAB	GRAB	GRAB
	<b>Frequency</b>	MONTHLY	MONTHLY	MONTHLY	MONTHLY	MONTHLY
<b>Sample Results</b>	<b>Day 1</b>					
	<b>2</b>					
	<b>3</b>					
	<b>4</b>					
	<b>5</b>					
	<b>6</b>					
	<b>7</b>	<0.28	<0.33	<0.55	<0.24	<0.26
	<b>8</b>					
	<b>9</b>					
	<b>10</b>					
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	<b>13</b>					
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	<b>30</b>					
	<b>31</b>					

	Sample Point	002		002		002		002		002	
	Description	Prior to Storm Sewer Discharge		Prior to Storm Sewer Discharge		Prior to Storm Sewer Discharge		Prior to Storm Sewer Discharge		Prior to Storm Sewer Discharge	
	Parameter	565		490		563		561		508	
	Description	1,1,2,2-Tetrachloro-ethane		Tetrachloroethylene		1,1,2-Trichloro- ethane		1,1,1-Trichloro- ethane		Trichloro- ethylene	
	Units	ug/L		ug/L		ug/L		ug/L		ug/L	
<b>Summary Values</b>	<b>Monthly Avg</b>	0		0		0		0		0	
	<b>Daily Max</b>	<0.28		<0.33		<0.55		<0.24		<0.26	
	<b>Daily Min</b>	<0.28		<0.33		<0.55		<0.24		<0.26	
<b>Limit(s) in Effect</b>	<b>Monthly Avg</b>	50	0	50	0	50	0	50	0	50	0
	<b>Daily Max</b>										
	<b>Daily Min</b>										
<b>QA/QC Information</b>	<b>LOD</b>	0.28		0.33		0.55		0.24		0.26	
	<b>LOQ</b>	1		1.1		5		1		1	
	<b>QC Exceedance</b>	N		N		N		N		N	
	<b>Lab Certification</b>	405132750		405132750		405132750		405132750		405132750	

	<b>Sample Point</b>	002
	<b>Description</b>	Prior to Storm Sewer Discharge
	<b>Parameter</b>	517
	<b>Description</b>	Vinyl chloride
	<b>Units</b>	ug/L
	<b>Sample Type</b>	GRAB
	<b>Frequency</b>	MONTHLY
<b>Sample Results</b>	<b>Day 1</b>	
	<b>2</b>	
	<b>3</b>	
	<b>4</b>	
	<b>5</b>	
	<b>6</b>	
	<b>7</b>	<0.17
	<b>8</b>	
	<b>9</b>	
	<b>10</b>	
	<b>11</b>	
	<b>12</b>	
	<b>13</b>	
	<b>14</b>	
	<b>15</b>	
	<b>16</b>	
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	<b>22</b>	
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	<b>30</b>	
	<b>31</b>	

	<b>Sample Point</b>	002	
	<b>Description</b>	Prior to Storm Sewer Discharge	
	<b>Parameter</b>	517	
	<b>Description</b>	Vinyl chloride	
	<b>Units</b>	ug/L	
<b>Summary Values</b>	<b>Monthly Avg</b>	0	
	<b>Daily Max</b>	<0.17	
	<b>Daily Min</b>	<0.17	
<b>Limit(s) in Effect</b>	<b>Monthly Avg</b>	10	0
	<b>Daily Max</b>		
	<b>Daily Min</b>		
<b>QA/QC Information</b>	<b>LOD</b>	0.17	
	<b>LOQ</b>	1	
	<b>QC Exceedance</b>	N	
	<b>Lab Certification</b>	405132750	

Footnotes (DNR Use Only; Instructions for completing this form that are unique for your facility may be displayed here.)

General Remarks

Laboratory Quality Control Comments

Submitted by Cristopher Cailles(ccailles) on 2/10/2020 12:43:59 PM