ENVIRONMENTAL

Environmental Engineers, Geologists and Scientists

Tel 847.573.8900
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Polo Park Business Center
27834 N. Irma Lee Circle
Lake Forest, Illinois 60045-5130

January 9, 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 December 2019
WPDES Permit Number WI-0046566-07-0
BRRTS #: 02-41-576336 & 02-41-579429
FID #: 241828620
FIN #: 63340
Sunrise Shopping Center
2410-2424 10th 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.

Minimal gravity feed infiltration was performed in December 2019, with 5-gallons of infiltration into three (3) shallow depth injection wells within the 2410 tenant space. During the month, gravity feed infiltration was performed on December 3, 2019. No pressure injection at depth was performed during the month.

The modified method of RemOx® introduction to the impacted soils, in-situ chemical mixing, was continued during the month of December 2019. During the month, chemical mixing was performed within both the 2410 and 2412 tenant spaces. An excavator was used to mix RemOx® granulated powder and water manually applied into the shallow subsurface soil. For the 2410 tenant space, a total of 110-lbs of chemical were applied along with 241.25-gallons of water into

approximately 2/3 of the soil mixing area (21.75-ft by 9.25-ft by 3.5-ft). For the 2412 tenant space, a total of 165-lbs of chemical were applied along with 227.5-gallons of water across the soil mixing area (21.67-ft by 6.42-ft by 3.5-ft).

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 December 2019 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.

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

DISCHARGE MONITORING REPORT FORM - Contaminated Groundwater

PERMITTEE NAME: Sunrise Shopping Center
FIN: 63340
BRRTS #'s: 02-41-576336 & 02-41-579429
SITE ADDRESS: 2410-2424 10th Ave & 1009 Marquette Ave., South Milwaukee, WI

WPDES PERMIT NO. WI-0046566-07 **YEAR:** 2019

DMR-In-situ Contaminants Revised 7/2018

Outfall Number	**001**		
Sample Point Description	**8 Injection Borings**		
Parameter Name	RemOx® (potassium permanganate)		
Parameter Units	**Gallons**		
Sample Date Below (mm/dd/year)			
December 3, 2019	5(IW-10, IW-12, IW-14)		
December 3, 2019	55-lbs/123.75-gal water (in-situ soil mixing, 2410 tenant space, cells 2 & 3)		
December 5, 2019	27.5-lbs/55-gal water (in-situ soil mixing, 2410 tenant space, cell 4)		
December 10, 2019	27.5-lbs/62.5-gal water (in-situ soil mixing, 2410 tenant space, cell 5)		
December 17, 2019	41.25-lbs/55-gal water (in-situ soil mixing, 2412 tenant space, cell 6)		
December 20, 2019	27.5-lbs/55-gal water (in-situ soil mixing, 2412 tenant space, cell 7)		
December 27, 2019	41.25-lbs/57.5-gal water (in-situ soil mixing, 2412 tenant space, cell 8)		
December 31, 2019	55-lbs/60-gal water (in-situ soil mixing, 2412 tenant space, cell 9)		
December 31, 2019	5(top of cells 6-9)		
Sample Type	Total		
Frequency of Sampling	Daily		

Unless noted under parameter name, each daily value entered must be the highest value of all sample types analyzed for that day.

Authorized per WISCONSIN STATUTE 283.55

PLEASE ATTACH NOTES AND/OR ADDRESS-NAME CORRECTIONS ON A SEPARATE SHEET

RETURN REPORT NO LATER THAN: The 15th of the following month after injection, for the remainder of the remediation project.

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.

SEND TO: **ATTN: Chris Dietrich**
2300 N. Dr. Martin Luther King Jr. Drive
Milwaukee, WI 53212-3128

Signature of Person Completing Form — Date

Christopher Cailles — 1/9/2020

Signature of Principal Exec. Officer or Authorized Agent — Title — Date

Christopher Cailles, DAJ as authorized agent to Cairo Investment Group — Project Engineer — 1/9/2020

Wastewater Discharge Monitoring Long Report

For DNR Use Only

Facility Name: SUNRISE SHOPPING CENTER
Contact Address: 27834 N Irma Lee Circle
Lake Forest, IL 60045
Facility Contact: Cristopher Cailles, Project Engineer
Phone Number: 847-573-8900
Reporting Period: 12/01/2019 - 12/31/2019
Form Due Date: 01/21/2020
Permit Number: 0046566

Date Received:	
DOC:	432439
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	339.21				
	2	339.21				
	3	237.10	6.12	<0.25	<1.37	<0.012
	4	237.10				
	5	237.10				
	6	237.10				
	7	237.10				
	8	237.10				
	9	237.10				
	10	237.10				
	11	237.10				
	12	237.10				
	13	237.10				
	14	237.10				
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	29	237.10				
	30	237.10				
	31	237.10				

	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	
Summary Values	**Monthly Avg**	243.687741935		6.12		0		0		0	
	Daily Max	339.21		6.12		<0.25		<1.37		<0.012	
	Daily Min	237.1		6.12		<0.25		<1.37		<0.012	
Limit(s) in Effect	**Monthly Avg**					50	0	750	0	0.10	0
	Daily Max			9	0						
	Daily Min			6	0						
QA/QC Information	**LOD**					0.25					
	LOQ					1					
	QC Exceedance	N		N		N		N		N	
	Lab Certification					405132750		405132750		405132750	

	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
	Sample Type	GRAB	GRAB	GRAB	GRAB	GRAB
	Frequency	MONTHLY	MONTHLY	MONTHLY	MONTHLY	MONTHLY
Sample Results	**Day 1**					
	2					
	3	<0.0094	<0.016	<4.0	<0.17	<1.3
	4					
	5					
	6					
	7					
	8					
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	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	
Summary Values	**Monthly Avg**	0		0		0		0		0	
	Daily Max	<0.0094		<0.016		<4		<0.17		<1.3	
	Daily Min	<0.0094		<0.016		<4		<0.17		<1.3	
Limit(s) in Effect	**Monthly Avg**	0.10	0	70	0	120	0	150	0	120	0
	Daily Max										
	Daily Min										
QA/QC Information	**LOD**	0.0094		0.016		4		0.17		1.3	
	LOQ	0.047		0.082		13.2		1		5	
	QC Exceedance	N		N		N		N		N	
	Lab Certification	405132750		405132750		405132750		405132750		405132750	

	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	Dichlorobromo-methane (bromo-dichloromethane)	1,2-Dichloro- ethane	1,1-Dichloro- ethylene	Methyl bromide	Chloromethane
	Units	ug/L	ug/L	ug/L	ug/L	ug/L
	Sample Type	GRAB	GRAB	GRAB	GRAB	GRAB
	Frequency	MONTHLY	MONTHLY	MONTHLY	MONTHLY	MONTHLY
Sample Results	**Day 1**					
	2					
	3	<0.36	<0.28	<0.24	<0.97	<2.2
	4					
	5					
	6					
	7					
	8					
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	10					
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	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	Dichlorobromo-methane (bromo-dichloromethane)		1,2-Dichloro- ethane		1,1-Dichloro- ethylene		Methyl bromide		Chloromethane	
	Units	ug/L		ug/L		ug/L		ug/L		ug/L	
Summary Values	**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	
Limit(s) in Effect	**Monthly Avg**	120	0	180	0	50	0	120	0	120	0
	Daily Max										
	Daily Min										
QA/QC Information	**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	

	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
	Sample Type	GRAB	GRAB	GRAB	GRAB	GRAB
	Frequency	MONTHLY	MONTHLY	MONTHLY	MONTHLY	MONTHLY
Sample Results	**Day 1**					
	2					
	3	<0.28	<0.33	<0.55	<0.24	<0.26
	4					
	5					
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	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	
Summary Values	**Monthly Avg**	0		0		0		0		0	
	Daily Max	<0.28		<0.33		<0.55		<0.24		<0.26	
	Daily Min	<0.28		<0.33		<0.55		<0.24		<0.26	
Limit(s) in Effect	**Monthly Avg**	50	0	50	0	50	0	50	0	50	0
	Daily Max										
	Daily Min										
QA/QC Information	**LOD**	0.28		0.33		0.55		0.24		0.26	
	LOQ	1		1.1		5		1		1	
	QC Exceedance	N		N		N		N		N	
	Lab Certification	405132750		405132750		405132750		405132750		405132750	

	Sample Point	002
	Description	Prior to Storm Sewer Discharge
	Parameter	517
	Description	Vinyl chloride
	Units	ug/L
	Sample Type	GRAB
	Frequency	MONTHLY
Sample Results	**Day 1**	
	2	
	3	<0.17
	4	
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	Sample Point	002	
	Description	Prior to Storm Sewer Discharge	
	Parameter	517	
	Description	Vinyl chloride	
	Units	ug/L	
Summary Values	**Monthly Avg**	0	
	Daily Max	<0.17	
	Daily Min	<0.17	
Limit(s) in Effect	**Monthly Avg**	10	0
	Daily Max		
	Daily Min		
QA/QC Information	**LOD**	0.17	
	LOQ	1	
	QC Exceedance	N	
	Lab Certification	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 1/9/2020 12:37:52 PM