AMC Engineering PLLC
18-36 42nd Street
Astoria, NY 11105
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Date: 03/19/2025

Christopher H. Allan
Project Manager
NYSDEC, Region 2 Office
47-20 21st Street
Long Island City, NY 11101

Ref.: NYSDEC Site No. 203039
3035 White Plains Road
The Bronx, NY 10467
Block 4545 Lot 14
Remedial System Optimization (RSO) Plan - Revised

Dear Mr. Allan,

AMC Engineering (AMC), on behalf of the property owner, is submitting the following revised Remedial System Optimization (RSO) Work Plan to address the persistent presence of petroleum volatile organic compounds found in IRMW-14 at the above referenced Site.

Please contact me if you have any questions or require additional information regarding this RSO Plan.

Thanks,

Ariel Czemerinski, P.E.
AMC Engineering, PLLC

cc: A. Arker, Bedford Park Associates LLC
J. O' Connell, NYSDEC

Enclosures

FORMER DICO G AUTO & TRUCK REPAIR
NYSDEC BCP Number 203039
Remedial Systems Optimization (RSO) Work Plan

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Previous Sampling Events

As of October 7th, 2024, the sampling frequency for wells IRMW-7, IRMW-10, and IRMW-11 has been reduced from quarterly to yearly. These monitoring wells have exhibited an asymptotic reduction in volatile organic compound (VOC) and BTEX concentrations, as shown in the previous quarterly sampling events. However, the low levels of petroleum VOCs in well IRMW-14 still exist.

Proposed Remedy to IRMW-14

The RSO Work Plan to reduce the VOC concentrations in well IRMW-14 is proposed as follows:

1) Install a Regenesis ORC Advanced® Filter Sock into IRMW-14. Four (4) 12" socks will be laced together to create a total length of 48", which is approximately the column of water in IRMW-14.

2) Continue sampling IRMW-14 on a quarterly basis to monitor VOC concentrations.

3) Filter socks will be replaced on an annual basis, or when they become visibly clogged or discolored. Any deviation to this frequency will be made in consultation with the NYSDEC PM.

4) If this method is found to be ineffective, a more aggressive approach will be proposed to reduce petroleum VOCs.

Regenesis ORC Advanced® Filter Socks are used to enhance bioremediation of petroleum hydrocarbons in groundwater. The filter sock contains ORC Advanced® and an inert carrier matrix. ORC Advanced® is an engineered, oxygen release compound designed specifically for enhanced, *in situ* aerobic bioremediation of petroleum hydrocarbons in groundwater and saturated soils. Upon contact with groundwater, this calcium peroxide-based material becomes hydrated producing a controlled release of molecular oxygen (17% by weight) for periods of up to 12 months on a single application. The socks come in one-foot sections. They are laced together to vertically span the polluted saturated zone in monitoring wells. Once the socks are laced together and lowered into the wells, they become hydrated and begin releasing oxygen.

Sock Removal and Disposal

Filter socks will be removed and replaced once a year, or as directed to by the NYSDEC PM. The sock retrieval line used to remove the socks from the well will be tied to the well cap. This retrieval line will be used to lift used socks, and to lower new socks into the well. When temporarily removing a sock that must be returned to the well, drying should be prevented as this causes a crust to form on the outside of the sock and prevents further function. After the socks are lifted out of the well, they will be wrapped in a garbage bag with water to maintain hydration.

ORC filter socks that are being permanently removed from the well may be disposed of in conventional dumpsters designated for Class III landfill. Following its application, the ORC product will have formed magnesium hydroxide and sand matrix. MSDS disposal requirements for magnesium hydroxide indicate that it is non-toxic and may be disposed of in a container, such as a plastic bag. The filter socks may have absorbed minor amounts of target hydrocarbons during exposure to contaminated groundwater, but these levels are not expected to be greater than the actionable standards for solid waste disposal. The specifications for removal and disposal of ORC filter socks made by Regenesis have been attached in **Appendix A**.

Quarterly Sampling for IRMW-14

IRMW-14 will continue to be monitored on a quarterly basis as per the Site Management Plan. The socks may be removed from the well for a few hours to allow for sampling. Socks will be lifted out of the well using the retrieval line prior to the start of sampling, and they will be stored in a garbage bag with water to prevent drying. After all samples have been collected, the socks will be removed from the garbage bag and placed back into the well.

CERTIFICATION

I, __Ariel Czemerinski__, certify that I am currently a NYS registered professional engineer as defined in 6 NYCRR Part 375, and that this Remedial Systems Optimization Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

Name (Printed): Ariel Czemerinski

Signature:

Date: 03/18/2025

Tables

TABLE 1
3035 White Plains Road, Bronx, NY
Volatile Organic Compounds
IRMW-14

COMPOUND	NYSDEC Ambient Water Quality Standards	IRMW-14															
		6/4/2010	10/1/2010	12/15/2010	3/29/2011	7/29/2011	9/28/2011	12/12/2011	3/29/2012	6/29/2012	10/31/2012	1/29/2013	3/29/2013	6/3/2013	9/19/2013	11/4/2013	11/30/2013
	µg/L	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
1,1,1,2-Tetrachloroethane	5	ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1	ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	**1.6**	ND	ND	ND	ND	ND
1,1,2-Trichlorotrifluoroethane	5	NR	NR	NR	NR	NR	NR	NR	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	NS	NS	ND	ND	1.2	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	NR	NR	NR	NR	NR	NR	NR	NS	NR	NR	NR	NR	NR	NR	NR	NR
1,1-Dichloroethylene		ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloropropylene		ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene		ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.04	ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene		ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	5	**4,700**	NS	NS	**2,000**	**1,800**	ND	**1,200**	NS	**1,100**	**860**	**600**	**790**	**1,400**	**1,800**	**99**	**1,000**
1,2-Dibromo-3-Chloropropane	0.04	ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	**31**	ND	ND	ND	ND	ND
1,2-Dibromoethane		ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5	ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.6	ND	NS	NS	ND	ND	**14**	**29**	NS	ND	ND	**13**	ND	ND	ND	ND	ND
1,2-Dichloroethylene (Total)		ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1	ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5	**1,100**	NS	NS	**470**	**430**	ND	**330**	NS	**250**	**200**	**160**	**150**	**320**	**460**	ND	**150**
1,3-Dichlorobenzene		ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	5	ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	5	ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND
1,4-dioxane		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,2-Dichloropropane	5	ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone		NR	NR	NR	NR	NR	NR	NR	NS	150	280	52	32	220	130	100	21
2-Chlorotoluene	5	ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	100	ND	ND	ND	ND	ND
2-Hexanone		NR	NR	NR	NR	NR	NR	NR	NS	NR	NR	NR	NR	NR	NR	NR	NR
2-Isopropyltoluene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Chlorotoluene	5	ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	**34**	ND	ND	ND	ND	ND
4-Methyl-2-Pentanone		NR	NR	NR	NR	NR	NR	NR	NS	NR	NR	NR	NR	NR	NR	NR	NR
Acetone		NR	NR	NR	NR	NR	NR	NR	NS	11	420	80	38	570	230	140	37
Acrolein	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acrylonitrile	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	1	**1,000**	NS	NS	**1,200**	**690**	**220**	**710**	NS	**680**	**280**	**400**	**130**	**620**	**930**	**230**	**170**
Bromobenzene	5	ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	**17**	ND	ND	ND	ND	ND
Bromochloromethane	5	ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane		ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	1.7	ND	ND	ND	ND	ND
Bromoform		ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	5	ND	NS	NS	ND	ND	**7.2**	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	60	NR	NR	NR	NR	NR	NR	NR	NS	NR	NR	NR	NR	NR	NR	NR	NR
Carbon Tetrachloride	5	ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	NS	NS	ND	ND	0.85	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5	ND	NS	NS	ND	ND	**23**	ND	NS	**23**	ND	2.8	ND	ND	ND	ND	ND
Chloroform	7	ND	NS	NS	ND	ND	1.2	ND	NS	ND	ND	2.5	ND	ND	ND	ND	ND
Chloromethane	60	ND	NS	NS	ND	ND	**110**	**110**	NS	ND	**45**	3.3	ND	ND	ND	ND	2.9
cis-1,2-Dichloroethene	5	NR	NR	NR	NR	NR	NR	NR	NS	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethylene		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene		ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropylene		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyclohexane		NR	NR	NR	NR	NR	NR	NR	NS	NR	NR	NR	NR	NR	NR	NR	NR
Dibromochloromethane	5	ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	5	ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	5	ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND
Ethyl Benzene	5	**3,300**	NS	NS	**1,600**	**1,200**	ND	**1,100**	NS	**1,000**	**570**	**530**	**480**	**920**	**1,000**	**200**	**300**
Hexachlorobutadiene	0.5	ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5	**170**	NS	NS	**74**	**64**	ND	**53**	NS	**38**	**28**	**46**	**17**	ND	**50**	ND	**13**
m/p-Xylenes	5	**11,000**	NS	NS	**6,000**	**67**	**68**	**3,100**	NS	**3,500**	**2700**	**1,600**	**1,700**	**3,600**	**4,000**	**320**	**1,400**
Methyl Acetate		NR	NR	NR	NR	NR	NR	NR	NS	NR	NR	NR	NR	NR	NR	NR	NR
Methyl Cyclohexane		NR	NR	NR	NR	NR	NR	NR	NS	NR	NR	NR	NR	NR	NR	NR	NR
Methyl ethyl ketone		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl tert-butyl Ether	10	ND	NS	NS	**66**	**13**	**20**	**100**	NS	**150**	**100**	**53**	**41**	ND	**110**	**39**	**26**
Methylene Chloride	5	**260**	NS	NS	**5.1**	**510**	**36**	**60**	NS	**8.2**	ND	ND	ND	**460**	ND	ND	ND
Naphthalene	10	**910**	NS	NS	**610**	**36**	ND	**470**	NS	**410**	**310**	**200**	**180**	**460**	**500**	**350**	**170**
n-Butylbenzene	5	**210**	NS	NS	**41**	**150**	ND	**25**	NS	ND	ND	**29**	ND	ND	ND	ND	ND
n-Propylbenzene	5	**500**	NS	NS	**160**	**530**	ND	**130**	NS	**94**	**63**	**110**	**43**	ND	**110**	**27**	**30**
o-Xylene	5	**4,100**	NS	NS	**2,000**	**3,900**	ND	**1,100**	NS	**690**	**580**	**480**	**530**	**940**	**980**	**110**	**360**
p-Isopropyltoluene		ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	5.6	2.9	ND	ND	ND	**2.6**
sec-Butylbenzene	5	ND	NS	NS	ND	**9.9**	ND	ND	NS	ND	ND	**8.0**	ND	ND	ND	ND	**3.2**
Styrene	5	ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	**18**	ND	ND	ND	ND	ND
t-1,3-Dichloropropene	0.4	NR	NR	NR	NR	NR	NR	NR	NS	ND	ND	ND	ND	ND	ND	ND	ND
Tert-butyl alcohol		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
tert-Butylbenzene	5	ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	**73**	ND	ND	ND	ND	ND
Tetrachloroethene	5	ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrahydrofuran (THF)			-	-	-		-										
Toluene	5	**7,900**	NS	NS	**3,800**	**810**	0.96	**1,300**	NS	**980**	**580**	**600**	**640**	**1,600**	**1,500**	**320**	**590**
trans-1,2-Dichloroethene	5	NR	NR	NR	NR	NR	NR	NR	NS	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethylene		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropylene		ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,4-dichloro-2-butene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	5	ND	NS	NS	ND	ND	ND	**8.2**	NS	ND	ND	**7.8**	ND	ND	ND	ND	ND
Trichloroethylene		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane	5	ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorotrifluoroethane		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl Acetate		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl Chloride	2	ND	NS	NS	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND
Total BTEX Concentration		**27,300.00**	**0.00**	**0.00**	**14,600.00**	**6,667**	**288.96**	**7,310.00**	**0.00**	**6,850.00**	**4,710.00**	**3,610.00**	**3,480.00**	**7,680.00**	**8,410.00**	**1,180.00**	**2,820**
Total Chlorinated VOC Concentration		**260.00**	**0.00**	**0.00**	**5.10**	**510.00**	**186.35**	**207.20**	**0.00**	**31.20**	**45.00**	**163.70**	**0.00**	**460.00**	**0.00**	**0.00**	**2.90**
Total VOCs		**35,150.00**	**0.00**	**0.00**	**18,026.10**	**10,209.90**	**502.51**	**9,825.20**	**0.00**	**9,084.20**	**7,016.00**	**5,259.30**	**4,773.90**	**11,110.00**	**11,800.00**	**1,935.00**	**4,275.70**
Ferrous Iron			-	-	-	-											
Persulfate			ND	-	-	ND											

Notes:
ND - Non-Detect
NR - Not Analyzed
NS - Not Sampled
RL - Reporting Level
Bold/highlighted- Indicated exceedance of the NYSDEC Groundwater Standard

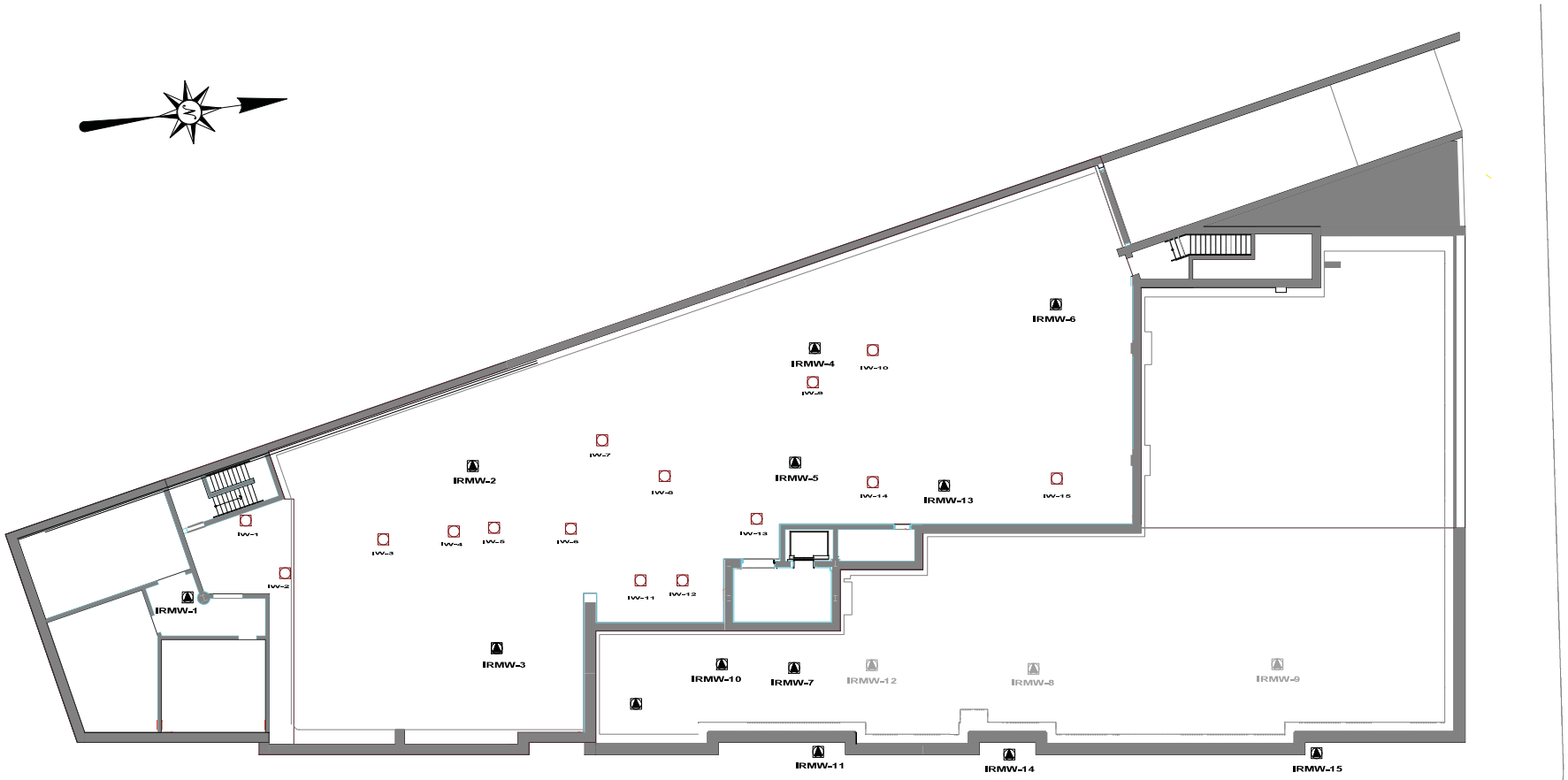
TABLE 1
3035 White Plains Road, Bronx, NY
Volatile Organic Compounds
IRMW-14

COMPOUND	NYSDEC Ambient Water Quality Standards	IRMW-14																								
		12/22/2013	1/30/2014	9/21/2016	12/30/2016	3/24/2017	6/27/2017	9/19/2017	12/12/2017	3/21/2018	6/18/2018	9/17/2018	12/12/2018	3/26/2019	6/26/2019	9/30/2019	12/10/2019	3/27/2020	6/30/2020	9/28/2020	6/30/2022	11/10/2022	12/8/2023	2/22/2024	7/17/2024	9/25/2024	12/18/2024
	µg/L	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
1,1,1,2-Tetrachloroethane	5	ND	ND	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	< 63	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 20	< 1.0	< 1.0	< 5.0
1,1,1-Trichloroethane	5	ND	ND	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 63	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 100	< 1.0	< 5.0	< 25
1,1,2,2-Tetrachloroethane	5	ND	ND	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 63	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 20	< 0.50	< 1.0	< 5.0
1,1,2-Trichloroethane	1	ND	ND	< 5.0	< 2.5	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 2.5	< 63	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 20	< 1.0	< 1.0	< 5.0
1,1,2-Trichlorotrifluoroethane	5	ND	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	5	ND	ND	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 63	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 100	< 1.0	< 5.0	< 25
1,1-Dichloroethene	5	NR	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 63	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 20	< 1.0	< 1.0	< 5.0
1,1-Dichloroethylene		ND	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 5.0
1,1-Dichloropropene	5	-	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 63	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 20	< 1.0	< 1.0	
1,1-Dichloropropylene		ND	ND	-					-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1,2,3-Trichlorobenzene		ND	ND	< 20	< 10	< 20	< 20	< 20	< 20	-	< 20	< 20	< 20	< 20	< 10	< 250	< 1.0	< 20	< 20	< 20	< 5.0	< 1.0	< 1.0	< 20	< 1.0	< 1.0	< 5.0
1,2,3-Trichloropropane	0.04	ND	ND	< 20	< 2.5	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	< 2.5	< 63	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 0.25	< 20	< 0.25	< 1.0	< 5.0
1,2,4-Trichlorobenzene		ND	ND	< 20	< 10	< 20	< 20	< 20	< 20	-	< 20	< 20	< 20	< 20	< 10	< 250	< 1.0	< 20	< 20	< 20	< 5.0	< 1.0	< 1.0	< 20	< 1.0	< 1.0	< 5.0
1,2,4-Trimethylbenzene	5	**360**	**1100**	**2,300**	**2,400**	**3,300**	**2,900**	**1,000**	**1,700**	-	**2,600**	**2,500**	**2,500**	**3,300**	**1,500**	**1,400**	**14**	**2,600**	**2,100**	**640**	**280**	380	**1,200**	2,400	**640**	**110**	870
1,2-Dibromo-3-Chloropropane	0.04	ND	ND	< 20	< 5.0	< 10	< 10	< 10	< 10	-	< 10	< 10	< 10	< 10	< 5.0	< 130	< 0.50	< 10	< 10	< 10	< 5.0	< 1.0	< 0.50	< 20	< 0.50	< 1.0	< 5.0
1,2-Dibromoethane		ND	ND	< 20	< 2.5	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	< 2.5	< 63	< 0.25	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 0.25	< 20	< 0.25	< 1.0	< 5.0
1,2-Dichlorobenzene	5	ND	ND	< 5.0	< 4.7	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	< 4.7	< 63	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 20	< 1.0	< 1.0	< 5.0
1,2-Dichloroethane	0.6	ND	ND	< 10	< 5.0	< 10	< 10	< 10	< 10	-	< 10	< 10	< 10	< 10	<5.0	< 130	< 0.60	< 10	< 10	< 10	< 3.0	< 0.60	< 0.60	< 12	< 0.60	< 0.60	< 3.0
1,2-Dichloroethylene (Total)		ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1,2-Dichloropropane	1	ND	ND	< 5.0	< 2.5	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	< 2.5	< 63	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 20	< 1.0	< 1.0	< 5.0
1,3,5-Trimethylbenzene	5	**28**	**290**	**310**	**630**	**850**	**730**	**270**	**570**	-	**690**	**500**	**570**	**560**	**230**	**200**	1.1	**340**	**520**	**220**	**33**	57	**140**	590	**150**	**11**	75
1,3-Dichlorobenzene		ND	ND	< 5.0	< 3.0	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	< 3.0	< 63	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 20	< 1.0	< 1.0	< 5.0
1,3-Dichloropropane	5	ND	ND	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 63	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 20	< 1.0	< 1.0	< 5.0
1,4-Dichlorobenzene	5	ND	ND	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 63	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 20	< 1.0	< 1.0	< 5.0
1,4-dioxane		-	-	-	-	-	-	-	-	-	< 2000	< 2000	< 2000	< 2000	<2000	< 25000	< 100	< 2000	< 2000	< 2000	< 500	< 0.57	-	-	-		
2,2-Dichloropropane	5	ND	ND	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	< 63	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 20	< 1.0	< 1.0	< 5.0
2-Butanone		ND	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2-Chlorotoluene	5	ND	ND	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 63	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 20	< 1.0	< 1.0	< 5.0
2-Hexanone		NR	-	< 50	< 25	< 50	< 50	< 50	< 50	-	< 50	< 5.0	< 50	< 50	< 25	< 130	< 2.5	< 50	< 50	< 50	< 13	< 2.5	< 2.5	< 50	< 5.0	< 2.5	< 13
2-Isopropyltoluene	5	-	-	< 5.0	3.9	< 5.0	5	< 5.0	< 50	-	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 63	**1.5**	< 5.0	< 5.0	< 5.0	< 5.0	0.3	**5.6**	5.4	1.6	0.29	< 5.0
4-Chlorotoluene	5	ND	ND	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 63	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 20	< 1.0	< 1.0	< 5.0
4-Methyl-2-Pentanone		NR	-	< 50	< 25	< 50	< 50	< 50	< 50	-	< 50	< 50	< 50	< 50	< 25	< 130	< 2.5	< 50	< 50	< 50	< 13	< 2.5	< 2.5	< 50	< 5.0	< 2.5	< 13
Acetone		ND	490	200	95	77	< 50	66	< 50	-	< 50	< 50	< 50	< 50	< 50	< 500	< 5.0	< 50	< 50	< 50	< 25	12	< 5.0	< 100	< 25	8.6	< 25
Acrolein	5	-	-	< 50	< 25	< 50	< 50	< 50	< 50	-	< 50	< 50	< 50	< 50	<50	< 630	< 5.0	< 50	< 50	< 50	< 25	< 5.0	< 5.0	< 100	-	< 5.0	< 25
Acrylonitrile	5	-	-	< 50	< 25	< 50	< 50	< 50	< 50	-	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	< 130	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 100	< 1.0	< 5.0	< 25
Benzene	1	**4.3**	**160**	**460**	**510**	**800**	**580**	**160**	**440**	-	**380**	**390**	**340**	**140**	**89**	**130**	**2**	**94**	**75**	**76**	**9.6**	17	**32**	48	**10**	**5.3**	46
Bromobenzene	5	ND	ND	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 63	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 20	< 1.0	< 1.0	< 5.0
Bromochloromethane	5	ND	ND	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 63	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 20	< 1.0	< 1.0	< 5.0
Bromodichloromethane		ND	ND	< 20	< 10	< 20	< 20	< 20	< 20	-	< 20	< 20	< 20	< 20	< 10	< 63	< 1.0	< 20	< 20	< 20	< 5.0	< 1.0	< 1.0	< 20	< 0.50	< 1.0	< 5.0
Bromoform		ND	ND	< 50	< 50	< 50	< 50	< 50	< 50	-	< 50	< 50	< 50	< 50	< 50	< 63	< 5.0	< 50	< 50	< 50	< 25	< 5.0	< 5.0	< 100	< 1.0	< 5.0	< 25
Bromomethane	5	ND	ND	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**91**	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 100	< 1.0	< 5.0	< 25
Carbon Disulfide	60	NR	-	34	20	19	13	10	11	-	< 20	< 20	< 20	< 20	< 10	< 63	< 1.0	< 20	< 20	< 20	< 5.0	< 1.0	< 1.0	< 20	< 5.0	< 1.0	< 5.0
Carbon Tetrachloride	5	ND	ND	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 63	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 20	< 1.0	< 1.0	< 5.0
Chlorobenzene	5	ND	ND	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 63	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 100	< 1.0	< 5.0	< 25
Chloroethane	5	ND	ND	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 63	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 100	< 1.0	< 5.0	< 25
Chloroform	7	ND	ND	< 5.0	< 7.0	< 7.0	< 7.0	< 7.0	< 7.0	-	< 7.0	< 7.0	< 7.0	< 7.0	< 7.0	< 63	< 5.0	< 7.0	< 7.0	< 7.0	< 25	< 5.0	< 5.0	< 100	< 1.0	< 5.0	< 25
Chloromethane	60	6.2	ND	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 63	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 100	< 1.0	< 5.0	< 25
cis-1,2-Dichloroethene	5	ND	-	**6**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 63	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 20	< 1.0	< 1.0	< 5.0
cis-1,2-Dichloroethylene		-	ND	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
cis-1,3-Dichloropropene		ND	-	< 5.0	< 2.5	< 5.0	< 5.0	< 5.0	-	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 2.5	< 63	< 0.40	< 5.0	< 5.0	< 5.0	< 2.0	< 0.40	< 0.40	< 8.0	< 0.40	< 0.40	< 2.0
cis-1,3-Dichloropropylene		-	ND	-	-	-	-	-	< 20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cyclohexane		NR	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Dibromochloromethane	5	ND	ND	< 20	< 10	< 20	< 20	< 20	< 5.0	-	< 20	< 20	< 20	< 20	< 10	< 63	< 1.0	< 20	< 20	< 20	< 5.0	< 1.0	< 1.0	< 20	< 0.50	< 1.0	< 5.0
Dibromomethane	5	ND	ND	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	-	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 63	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 20	< 1.0	< 1.0	< 5.0
Dichlorodifluoromethane	5	ND	ND	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	-	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 63	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 20	< 1.0	< 1.0	< 5.0
Ethyl Benzene	5	**120**	**680**	**1,300**	**1,400**	**1,900**	**1,700**	**580**	**830**	-	**1,400**	**1,600**	**1,600**	**2,200**	**1,000**	**900**	**6.7**	**1,500**	**1,400**	**490**	**100**	140	**440**	**1,800**	**440**	**74**	**400**
Hexachlorobutadiene	0.5	ND	ND	< 4.0	< 2.0	< 4.0	< 4.0	< 4.0	< 4.0	-	< 4.0	< 4.0	**< 4.0**	< 4.0	< 2.0	< 50	< 0.50	< 4.0	< 4.0	< 4.0	< 2.5	< 0.50	< 0.50	< 10	< 0.40	< 0.50	< 2.5
Isopropylbenzene	5	**22**	ND	**34**	**82**	**80**	**96**	**25**	**68**	-	**78**	**67**	**77**	**89**	**53**	< 63	**7.4**	**60**	**80**	**41**	**5.2**	7.7	81	130	**28**	32	22
m/p-Xylenes	5	**87**	**2400**	**6,800**	**5,500**	**8,600**	**7,200**	**3,200**	**3,800**	-	**6,100**	**7,400**	**6100**	**6800**	**2,800**	**2,800**	**6.6**	**4,400**	**3,600**	**1,200**	**280**	**390**	**750**	**5,500**	1,200	**120**	**680**
Methyl Acetate		NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Methyl Cyclohexane		NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Methyl ethyl ketone		-	-	< 50	< 25	< 50	< 50	< 50	< 50	-	< 50	< 50	< 50	< 50	< 25	< 500	< 2.5	< 50	< 50	< 50	< 13	4.5	< 2.5	< 50	< 5.0	< 2.5	< 13
Methyl tert-butyl Ether	10	**34**	ND	**74**	**94**	**120**	**77**	**49**	**91**	-	**32**	**29**	**13**	5.2	**7.7**	< 250	0.87	7.5	**6.6**	**13**	4.5	15	2.3	< 20	5.1	3.6	16
Methylene Chloride	5	ND	**73**	< 20	< 10	< 20	< 20	< 20	< 20	-	< 10	< 10	< 10	< 10	< 5.0	< 130	< 3.0	< 10	< 10	< 10	< 15	< 3.0	< 3.0	< 60	< 1.0	< 3.0	< 2.5
Naphthalene	10	**140**	**280**	**480**	**560**	**760**	**680**	**200**	**550**	-	**590**	**470**	**560**	**900**	**480**	**440**	3.1	**600**	**720**	**400**	**150**	**170**	**190**	**460**	**120**	**74**	**220**
n-Butylbenzene	5	**10**	ND	**8**	**18**	**20**	**29**	**9.2**	**17**	-	**24**	**15**	**16**	**18**	**13**	< 63	1.2	**10**	**19**	**7.2**	2.6	2	**28**	32	**5.4**	1.1	2.1
n-Propylbenzene	5	**57**	**130**	**81**	**210**	**210**	**270**	**59**	**150**	-	**190**	**150**	**190**	**240**	**120**	**86**	**5.6**	**140**	**220**	**92**	**14**	22	**150**	330	**90**	**8.2**	51
o-Xylene	5	**7.7**	**850**	**1,500**	**1,500**	**2,300**	**1,900**	**790**	**1,100**	-	**1,400**	**1,400**	**1,200**	**730**	**300**	**350**	0.7	**500**	**480**	**330**	**66**	**100**	**210**	**1,700**	**460**	< 5.0	**250**
p-Isopropyltoluene		ND	ND	< 5.0	**9**	**10**	**10**	< 5.0	**9.8**	-	**11**	**6.2**	**8.4**	**9.8**	**7.5**	< 63	0.95	< 5.0	**7.9**	< 5.0	< 5.0	0.83	**12**	10	2.6	< 1.0	< 5.0
sec-Butylbenzene	5	**5.4**	ND	< 5.0	**18**	**17**	**21**	**7.4**	**16**	-	**16**	**12**	**14**	**15**	**8.6**	< 63	**6.2**	**8.6**	**14**	< 5.0	< 5.0	< 1.0	**19**	21	**6.1**	0.82	< 5.0
Styrene	5	ND	ND	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 63	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 20	< 1.0	< 1.0	< 5.0
t-1,3-Dichloropropene	0.4	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Tert-butyl alcohol		-	-	-	-	-	-	-	-	-	< 1000	< 1000	< 1000	< 1000	<1000	< 13000	< 50	< 1000	< 1000	< 1000	53	< 50	-	-	-	-	
tert-Butylbenzene	5	ND	ND	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 63	0.5	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 20	< 1.0	< 1.0	< 5.0
Tetrachloroethene	5	**19**	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	-	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 63	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 20	< 1.0	< 1.0	< 5.0
Tetrachloroethylene		-	ND	-	-	-	-	-	< 5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Tetrahydrofuran (THF)		-	-	< 50	< 50	< 50	< 50	< 50	< 50	-	< 50	< 50	< 50	< 50	< 50	<310	< 5.0	< 50	< 50	< 50	< 25	< 5.0	< 5.0	< 100	< 2.5	< 5.0	< 25
Toluene	5	ND	**980**	**2,300**	**2,200**	**3,800**	**2,900**	**1,100**	**1,900**	-	**1,400**	**1,500**	**1,400**	**790**	**250**	**370**	0.57	**360**	**260**	**260**	**36**	**57**	**200**	**1,000**	**120**	**38**	**210**
trans-1,2-Dichloroethene	5	ND	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 63	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 100	< 1.0	< 5.0	< 25
trans-1,2-Dichloroethylene		-	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
trans-1,3-Dichloropropene	0.4	-	-	< 5.0	< 2.5	< 2.5	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	< 2.5	< 63	< 0.40	< 5.0	< 5.0	< 5.0	< 2.0	< 0.40	< 0.40	< 8.0	< 0.40	< 0.40	< 2.0
trans-1,3-Dichloropropylene		ND	ND	-	-	-	-	-	-	-	-	< 5.0	< 50	< 50	< 25	-	-	-	-	-	-	-	-	-	-	-	
trans-1,4-dichloro-2-butene	5	-	-	< 50	< 25	< 25	< 50	< 50	< 50	-	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 630	< 2.5	< 50	< 50	< 50	< 13	< 2.5	< 2.5	< 50	< 5.0	< 2.5	< 13
Trichloroethene	5	ND	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 63	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 20	< 1.0	< 1.0	< 5.0
Trichloroethylene		-	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Trichlorofluoromethane	5	ND	ND	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 63	< 1.0	< 5.0	< 5.0	-	< 5.0	< 1.0	< 1.0	< 20	< 1.0	< 1.0	< 5.0
Trichlorotrifluoroethane		-	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	-	< 5.0	-	< 5.0	< 5.0	<5.0	< 63	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 20	< 1.0	< 1.0	< 5.0
Vinyl Acetate		-	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 5.0	-	-	-	-	-	-	
Vinyl Chloride	2	ND	ND	< 5.0	< 2.5	< 2.5	< 5.0	< 5.0	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	<2.5	< 63	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 20	< 1.0	< 1.0	< 5.0
Total BTEX Concentration		**219.00**	**5,070.00**	**12,360.00**	**11,110.00**	**17,400.00**	**14,280.00**	**5,830.00**	**8,070.00**	**0.00**	**10,680.00**	**12,290.00**	**10,640.00**	**10,660.00**	**4,439.00**	**4,550.00**	**16.57**	**6854.00**	**5815.00**	**2356.00**	**491.60**	**704.00**	**1632.00**	**10048.00**	**2230.00**	**237.30**	**1586.00**
Total Chlorinated VOC Concentration		**25.20**	**73.00**	**6.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Total VOCs		**900.60**	**7,433.00**	**15,887.00**	**15,249.90**	**22,863.00**	**19,111.00**	**7,525.60**	**11,252.80**		**14,911.00**	**16,039.20**	**14,588.40**	**15,797.00**	**6,858.80**	**6,767.00**	**58.99**	**10620.10**	**9502.50**	**3769.20**	**1033.90**	**1375.33**	**3459.90**	**14026.40**	**3278.80**	**458.41**	**2844.70**

Ferrous Iron
Persulfate

Notes:
ND - Non-Detect
NR - Not Analyzed
NS - Not Sampled
RL - Reporting Level
Bold/highlighted- Indicated exceedance of the NYSDEC Groundwater St

Figures



SIDEWALK

WHITE PLAINS ROAD

Note:

IRMW-X
Groundwater Monitoring Well

Note: IRM-W10, 11, 12 and 13 installed for LPH delineation.

Scale:

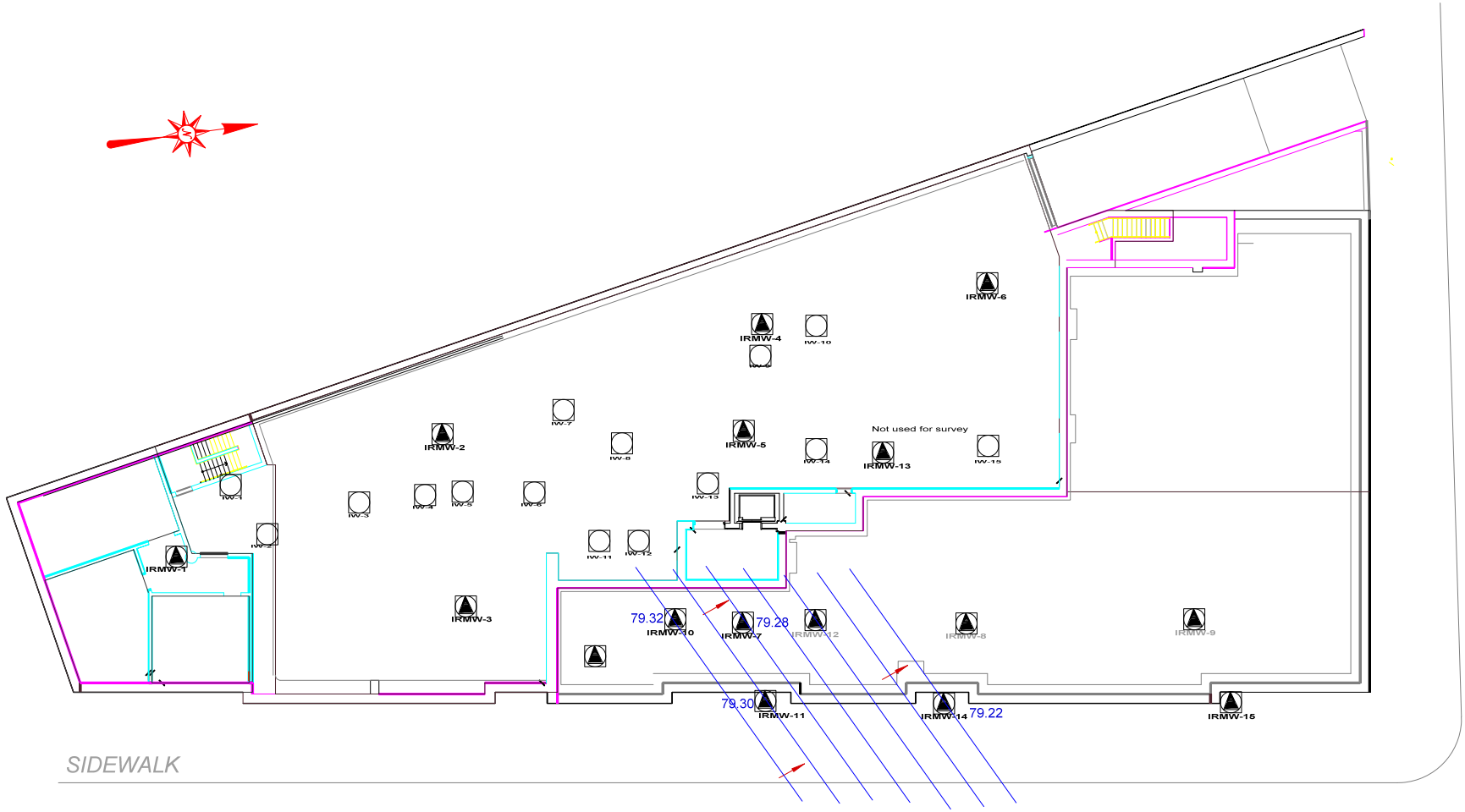
0 15 30

1 inch = 30 feet

EBC
Environmental Business Consultants
Phone 631.504.6000
Fax 631.924.2870

Former Dico G Auto & Truck Repair
3035 White Plains Road, Bronx, NY

FIGURE 1 Site Plan Map



Legend:

IRMW-X Groundwater Monitoring Well

Note: IRM-W10, 11, 12 and 13 installed for LPH delineation.

Groundwater Flow Direction

XX.XX Groundwater Survey Conducted 7/17/2024

Scale:

0 15 30

1 inch = 30 feet

AMC Engineering PLLC
18-36 42nd Street
Astoria, NY 11105
O: 718.545.0474

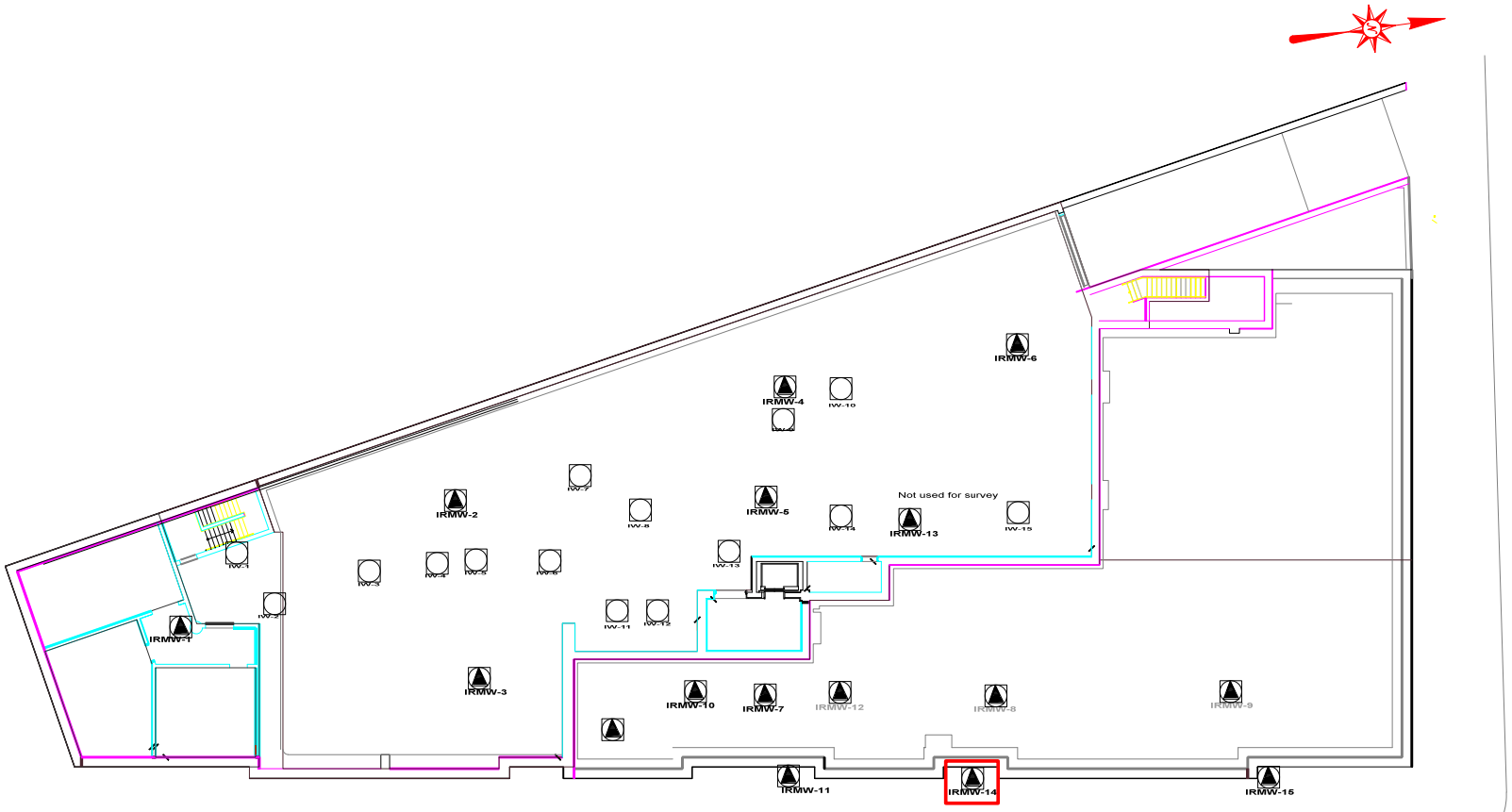
Figure No. **2**

Site Name: Former Dico G Auto & Truck Repair

Site Address: 3035 White Plains Road, Bronx, NY

Drawing Title: Groundwater Contour Map

Notes:
1. Filter socks (Regenesis ORC Advanced® Filter Socks or equivalent) with a total length of 48" will be installed in IRMW-14 to vertically span the polluted saturated zone.
2. IRMW-14 will continue to be monitored on a quarterly basis as per Site Management Plan.
3. The decision to replace the filter socks will be based on monitoring results and will be made in concurrence with the NYSDEC Project Manager.



Legend:

Groundwater Monitoring Well

Note: IRM-W10, 11, 12 and 13 installed for LPH delineation.

Filter Sock Location

WHITE PLAINS ROAD

Scale:

0 15 30

1 inch = 30 feet

AMC Engineering PLLC
18-36 42nd Street
Astoria, NY 11105
O: 718.545.0474

Figure No. **3**

Site Name: Former Dico G Auto & Truck Repair

Site Address: 3035 White Plains Road, Bronx, NY

Drawing Title: Filter Sock Plan

Appendix A: Specifications for Regenesis Filter Socks

REGENESIS®

Range of Treatable Contaminants

REGENESIS®

Range of Treatable Contaminants

REGENESIS® Products have been used to effectively treat a broad range of contaminants from petroleum hydrocarbons, to chlorinated solvents, pesticides, and metals. Contact us to discuss the treatability of your contaminant of concern and site details so that we can recommend the most effective REGENESIS solution.

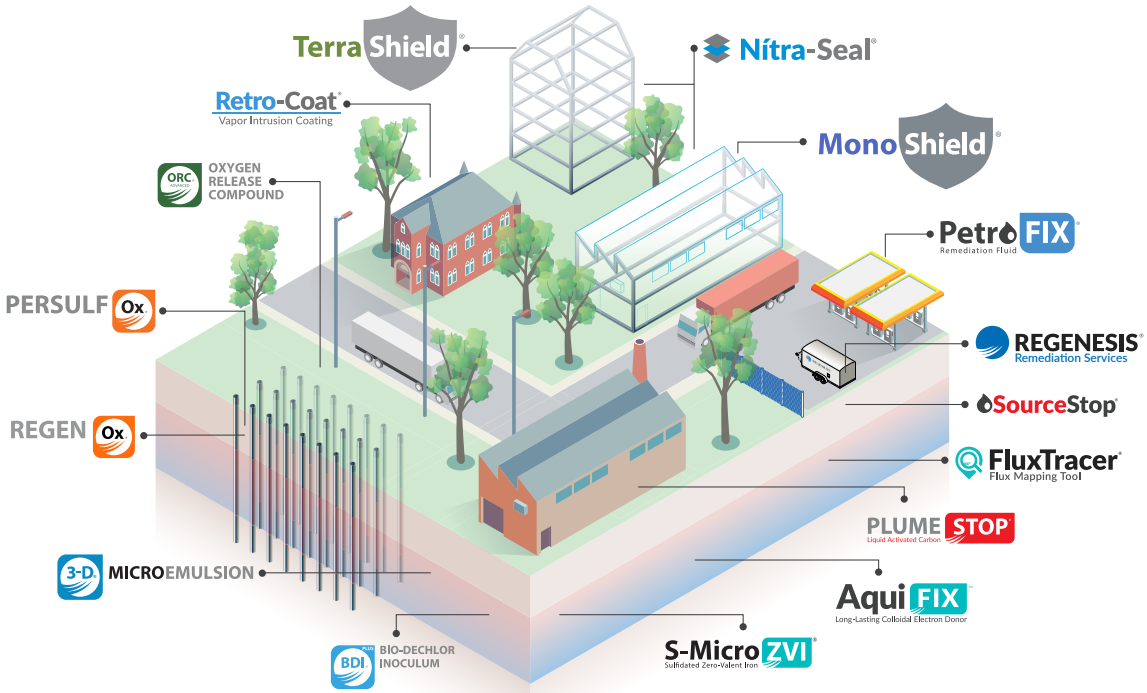
● = Contaminant treatable with REGENESIS Products

	Sorption			ISCO		Aerobic Bio	Anaerobic Bio			ISCR
Range of Treatable Contaminants	PlumeStop	SourceStop	PetroFix	RegenOx	PersulfOx	ORC Advanced	3DME	AquiFix	BDI Plus	S-MicroZVI
PFAS										
Perfluoroalkyl carboxylates (PFCAs)	●	●								
Perfluoroalkane sulfonates (PFSAs)	●	●								
Chlorinated Solvents										
Tetrachloroethylene (PCE)	●			●	●		●	●	●	●
Trichloroethene (TCE)	●			●	●		●	●	●	●
Dichloroethene (DCE)	●			●	●		●	●	●	●
Vinyl chloride (VC)	●			●	●	●	●	●	●	
Bis(2-chlorethoxy)methane	●			●	●		●	●		●
Bis(2-chloroethyl)ether	●			●	●		●	●		●
Carbon tetrachloride	●			●	●		●	●		●
Chloroethane	●			●	●	●	●	●		
Chloroform	●			●	●		●	●		●
Chloromethane	●			●	●		●	●		
Dichloroethane (DCA)	●			●	●	●	●	●	●	●*
Dichloropropane	●			●	●		●	●		
Dichloropropene	●			●	●		●	●		
Hexachlorobutadiene	●			●	●		●	●		●
Methylene chloride	●			●	●		●	●		
Tetrachloroethane	●			●	●		●	●	●	●
Trichloroethane (TCA)	●			●	●		●	●	●	●
Trichloropropane	●			●	●		●	●		
Petroleum Hydrocarbons										
Benzene	●		●	●	●	●				
Toluene	●		●	●	●	●				
Ethylbenzene	●		●	●	●	●				
Xylene	●		●	●	●	●				
Creosote (coal tar)	●		●	●	●	●				
Diesel range organics (DRO)	●		●	●	●	●				
Gasoline range organics (GRO)	●		●	●	●	●				
Oil range organics (ORO)	●		●	●	●	●				
Oxygenates										
Methyl tert butyl ether (MTBE)	●		●	●	●	●				
Tert-butyl alcohol (TBA)				●	●	●				

For additional questions or for a site review please call (949) 366-8000

	Sorption			ISCO		Aerobic Bio	Anaerobic Bio			ISCR
Range of Treatable Contaminants	PlumeStop	SourceStop	PetroFix	RegenOx	PersulfOx	ORC Advanced	3DME	AquiFix	BDI Plus	S-MicroZVI
Aromatics										
2-chlorophenol	●			●	●	●				
2,4-dichlorophenol	●			●	●	●				
2,4-dinitrophenol	●			●	●	●				
4-chloro-3-methyl phenol	●			●	●	●				
4-iso-propyltoluene	●			●	●	●				
4-nitrophenol	●			●	●	●				
Chlorobenzene	●			●	●	●				
Chlorotoluene	●			●	●	●	●	●		●
Dichlorobenzene	●			●	●	●				
N-butylbenzene	●			●	●	●				
Nitrobenzene	●			●	●	●				
Polycyclic aromatic hydrocarbons (PAHs)	●		●	●	●	●				
Pentachlorophenol	●				●	●	●	●		●
Phenol	●			●	●	●				
Propylbenzene	●			●	●	●				
Styrene	●			●	●	●				
Trichlorobenzene	●			●	●	●				
Trimethylbenzene	●			●	●	●				
Haloalkanes										
Dichlorodifluoromethane (Freon 12)	●						●	●		●
Trichlorofluoromethane (Freon 11)	●						●	●		●
Trichlorotrifluoroethane (Freon 113)	●						●	●		●
Pesticides and Herbicides										
2,4-D	●						●	●		●
2,4,5-T	●						●	●		●
Chlorodane	●						●	●		●
DDT, DDD, DDE	●						●	●		●
Dieldrin	●						●	●		●
Endrin	●						●	●		●
Heptachlor epoxide	●						●	●		●
Lindane (hexachlorocyclohexane)	●						●	●		●
Toxaphene	●						●	●		●
Energetics										
DNT	●			●			●	●		●
HMX	●			●			●	●		●
Nitroglycerine	●			●			●	●		●
RDX	●			●			●	●		●
TNT	●			●			●	●		●
Miscellaneous										
1,4-Dioxane					●					
4-methyl-2-pentanone	●			●	●	●				
Acetone	●			●	●	●				
Bis(2-ethylhexyl)phthalate	●			●	●	●				
Carbon disulfide (CS_2)				●	●		●	●		
Nitrates							●	●		●
Perchlorate							●	●		
Polychlorinated biphenyls (PCBs)	●						●	●		
Heavy Metals										
Chromium (VI)							●	●		●

Results will depend on specific site conditions, please discuss your site with a REGENESIS technical manager to determine which technology is most optimal for your site. The information provided is for guidance only. It is recommended that a pilot test or treatability study be performed to verify applicability to your specific contaminant and site conditions. REGENESIS makes no warranty or representation, expressed or inferred, and nothing herein should be construed as to guaranteeing actual results in field use, or permission or recommendation to infringe any patent.



PlumeStop® Liquid Activated Carbon™ is composed of very fine (1-2 micron-size) activated particles suspended in water through a unique, organic polymeric dispersion chemistry that resists clumping and allows permeation through aquifer materials. PlumeStop sorbs to the aquifer matrix soon after injection, rapidly removing contaminants from the groundwater to eliminate risk. It can be co-applied with electron donors, electron acceptors, or used as a stand-alone amendment to treat most organic groundwater contaminants.

SourceStop® prevents leaching of PFAS from soils and halts further migration in groundwater to eliminate the risk to downgradient receptors. Available in Liquid and Solid formulations, SourceStop's colloidal activated carbon (CAC) technology provides unsurpassed distribution, penetrating adn permanently coating impacted soils. Engineered for easy application, rapid results and long-term treatment, SourceStop is an adaptable and affordable solution for PFAS sites.

PetroFix® is a colloidal activated carbon technology used to remediate total petroleum hydrocarbons (TPHs) from contaminated environments. Petrofix uses a proprietary formula of activated carbon to adsorb total petroleum hydrocarbons. It then adds electron acceptors to stimulate hydrocarbon biodegradation.

RegenOx® is an *in situ* chemical oxidation (ISCO) reagent used to directly oxidize contaminants. Its unique catalytic component generates a range of highly oxidizing free radicals that rapidly and effectively destroy a range of target contaminants including both petroleum hydrocarbons and chlorinated compounds. RegenOx is an injectable, two-part ISCO reagent combining a solid sodium percarbonate based alkaline oxidant (Part A), with a liquid mixture of sodium silicates, silica gel and ferrous sulfate (Part B), resulting in a powerful contaminant destroying technology.

PersulfOx® is an advanced *in situ* chemical oxidation (ISCO) reagent that destroys organic contaminants found in groundwater and soil through abiotic chemical oxidation reactions. It is an all-in-one product with a built-in catalyst which activates the sodium persulfate component and generates contaminant-destroying free radicals without the costly and potentially hazardous addition of a separate activator.

ORC Advanced® is an engineered, oxygen-release compound developed for enhanced, *in situ* aerobic bioremediation of petroleum hydrocarbon contaminants in groundwater and saturated soils. Containing 17% by weight molecular oxygen, ORC Advanced provides a controlled release of molecular oxygen-an electron acceptor that optimizes microbial utilization in a treatment zone for up to 12 months post-application.

3-D Microemulsion® is an easy-to-apply remedial amendment for the *in situ* treatment of chlorinated solvent-contaminated aquifers. The patented technology, applied as a micellar suspension, provides a controlled, self-distributing hydrogen source to facilitate biologically mediated enhanced reductive dechlorination. 3-D Microemulsion's unique chemistry enables its distribution by naturally flowing groundwater while persisting for years after injection, resulting in much greater treatment coverage and faster degradation rates than other electron donor amendments.

AquiFix™ is a solid, colloidal remediation amendment for the *in situ* treatment of chlorinated solvent-contaminated aquifers, designed for direct mixing and co-application with PlumeStop. The novel formulation, patent-pending, includes a nutrient-enriched, solid-phase, fatty acid source that quickly establishes and sustains enhanced reductive dechlorination over long timeframes (e.g., ten years post-injection). AquiFix's optimized hydrogen release profile significantly improves remediation efficacy and reduces life-cycle costs to treat these contaminants.

BDI PLUS® (Bio-Dechlor INOCULUM Plus) is an enriched natural consortium containing *Dehalococcoides sp.* and other dechlorinating microbes for biologically augmenting enhanced reductive dechlorination remedies. Co-applied with electron donor amendments such as 3-D Microemulsion and AquiFix, BDI PLUS has proven to improve chlorinated solvent remediation efficiency.

S-MicroZVI® is a colloidal suspension of sulfidated zero-valent iron that promotes the destruction of a wide range of organic pollutants including chlorinated solvents, pesticides, haloalkanes and energetics. S-MicroZVI is engineered to promote rapid contamination degradation through multiple pathways which leads to faster cleanup while minimizing daughter product formation. Compared to larger particle size ZVI products, S-MicroZVI's 2-3 micron-sized particles, suspended in a proprietary polymer, make it easy to handle and simple to inject, leading to significantly better reagent distribution.

REGENESIS®
www.REGENESIS.com

REGENESIS

Oxygen Release Compound (ORC®) Installation Instructions

(Replaceable Filter-Sock Application)

ORC Filter Socks are used to enhance bioremediation of petroleum hydrocarbons in groundwater. The filter sock contains ORC and an inert carrier matrix. The socks come in one foot sections. They are laced together to span the vertical polluted saturated zone in monitoring type wells. Once the socks are laced together and lowered into the wells, they become hydrated and begin releasing oxygen. The following instructions are vital to proper installation and subsequent removal of the socks.

SAFETY PRECAUTIONS:

- ORC is completely non-toxic, but is composed of ultra-fine particles.
- Wear dust masks and goggles to prevent soft tissue irritation
- Reference the Material Safety Data Sheet for specific technical and physical information.

CONDITION OF SOURCE WELL:

- Test for well deviation and smoothness before ORC installation.
- For the test, use a 5 foot section of pipe with an outside diameter 1/2 inch smaller than the source well's inside diameter.

KEY REQUIREMENTS FOR INSTALLATION:

- **SOCKS MUST BE INSTALLED WITH BLACK GROMMETS ON TOP**
- Wrap Socks as independent units (see page 3, figure 5)
- A maximum of **20** ea. 2-inch socks per section.
- A maximum of **8** ea. 4-inch socks per section.
- A maximum of **6** ea. 6-inch socks per section.
- Make sure each sock is properly shaped (cylindrical and without bends) to facilitate ease of installation and removal.

HELPFUL HINTS:

- ORC matrix hardens into a cement once hydrated
- Minimize slack between each sock, by periodically pulling up slack while lacing
- Tie off ORC retrieval lines to the well cap. Regenesis recommends the use of a 3/8" diameter x 6" long eyebolt.

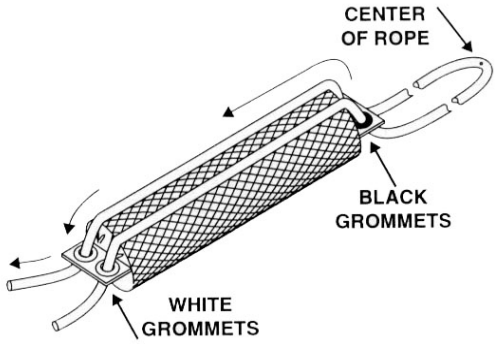
- The ORC Socks should be wetted to prevent excessive dusting prior to installation
- Make sure your work area is clean to avoid oil and dirt deposits on the socks.

FILTER-SOCK REMOVAL:

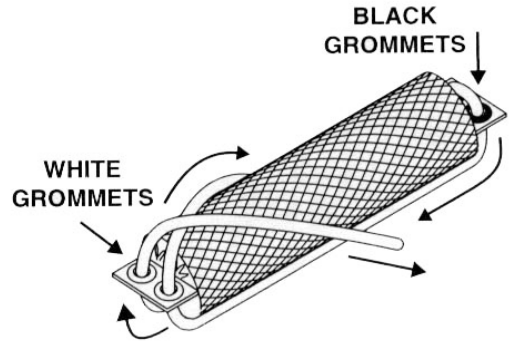
- ORC Socks will be approximately 20% heavier after water saturation
- Static friction from screened casing may cause difficulty in removal
- A winch and stanchion (or comparable equipment) may be necessary to help remove the socks due to increased weight, friction, etc.

LACING DIAGRAMS FOR SOCK INSTALLATION:

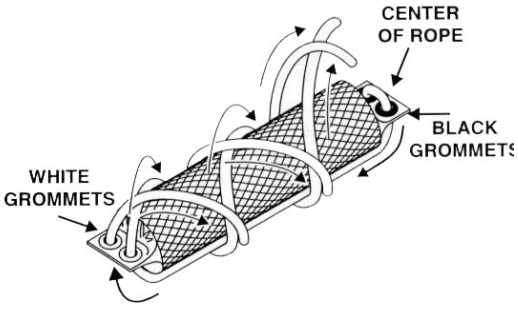
4 INCH AND 6 INCH SOCK LACING DIAGRAM:



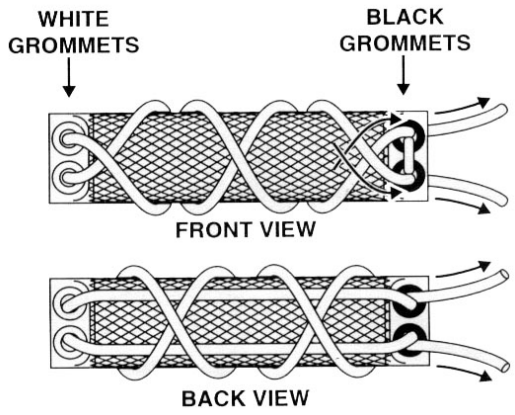
1. Find the center of the rope. Begin lacing the ORC Socks by threading the two ends of the installation rope through the black grommets and then through the white grommets at the bottom of the same side of the bottom sock



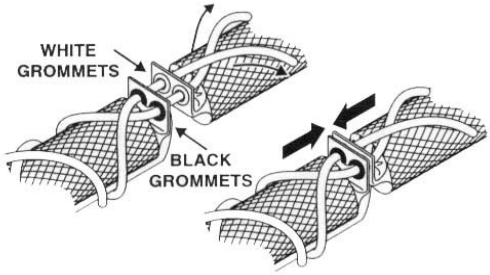
2. Pull the rope through the bottom sock, making sure the center of the rope is between the black grommets. Cross the ropes over each other.



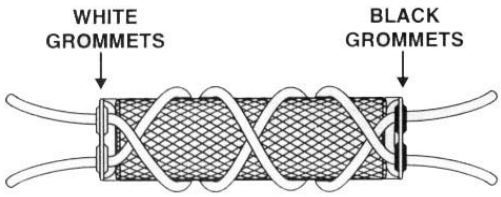
3. Loop the ends of the rope around the back of the sock and cross them. Repeat this step once again, so the rope is wrapped around the sock with two full turns.



4. Bring the ends of the rope around from the back, cross them, and thread them into the black grommets. The rope ends should be inserted into the black grommets diagonally from the white ones they started from. Threading the black grommets will be tight only on the bottom sock due to the unique lacing pattern.



5. To avoid the ORC Sock slipping past each other, the socks must be laced with the grommet flaps of the bottom sock and second sock butting against each other (as shown)

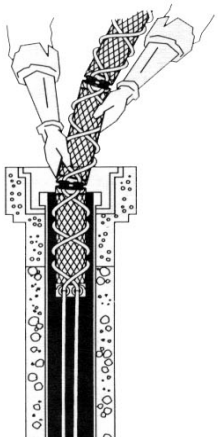


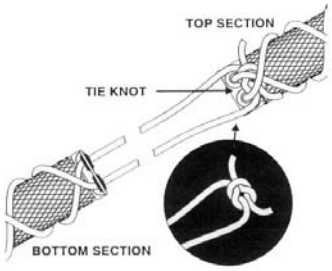
6. The remaining socks on the rope section are laced up according to Figure 6. Make sure that the rope is turned around the sock two full turns, with the grommets of each sock butting up against the next sock as shown in Figure 5.

7. Lace each subsequent ORC Sock exactly the same as in Figure 5 and 6.

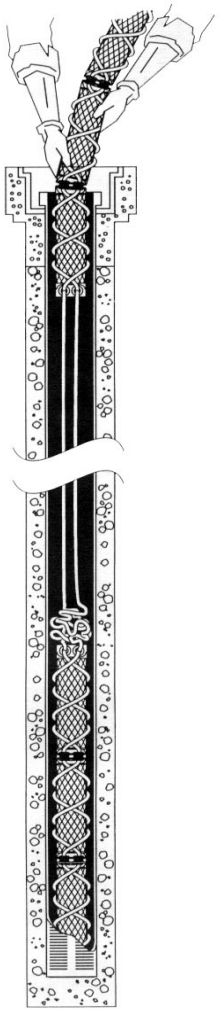
IMPORTANT: *Do not exceed the maximum number of socks per section (see "Key Requirements D & E" on page 1).*

Minimize the slack between the socks



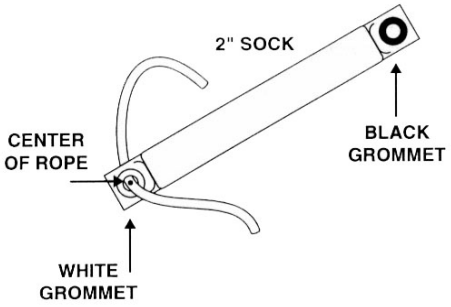


8. If you need to install more ORC Socks than the maximum allowed per well size (see "Key Requirements D & E on page 1), then multiple sections must be installed. Each section is laced exactly the same, but they should be tied off to each other. Tie the end of the rope from the lower section to the bottom sock of the upper section; this allows each section to be installed and removed independently (see well diagram)

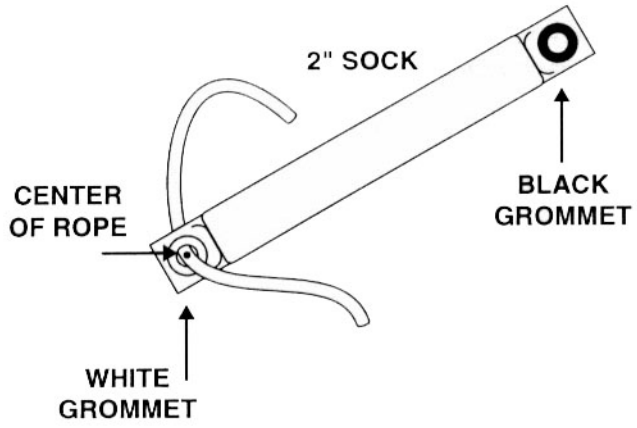


Well Diagram

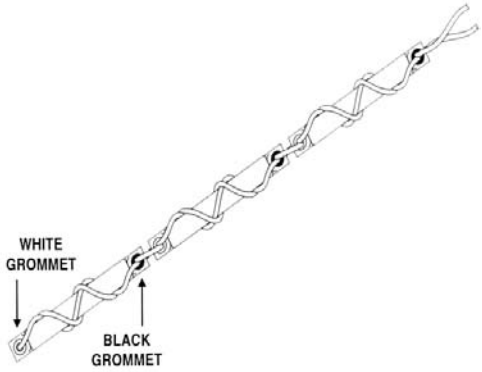
2 INCH SOCK LACING DIAGRAM:



9. Find the center of the rope. Begin lacing the ORC Socks by threading one end of the installation rope through the white grommet. Make sure that the center of the rope is pulled through to the center of the white grommet on the bottom sock.



10. Wrap each end of the installation rope around the sock twice and then cross them through the black grommet.



11. Lace each subsequent sock using the same method ad describe in Figure 2 above.

IMPORTANT:

Do not exceed the maximum number of socks per section (see "Key requirements B" on Page 1) Minimize the slack between socks

For direct assistance or answers to any questions you may have regarding these instructions, contact Regenesis Technical Services at 949-366-8000.

ORC Advanced Technical Description

ORC Advanced® is an engineered, oxygen release compound designed specifically for enhanced, *in situ* aerobic bioremediation of petroleum hydrocarbons in ground-water and saturated soils. Upon contact with groundwater, this calcium peroxide based material becomes hydrated producing a controlled release of molecular oxygen (17% by weight) for periods of up to 12 months on a single application.

Example of ORC Advanced

ORC Advanced decreases time to site closure and accelerates degradation rates up to 100 times faster than natural degradation rates. A single ORC Advanced application can support aerobic biodegradation for up to 12 months with minimal site disturbance, no permanent or emplaced above ground equipment, piping, tanks, power sources, etc are needed. There is no operation or maintenance required. ORC Advanced provides lower costs, greater efficiency and reliability compared to engineered mechanical systems, oxygen emitters and bubblers.

ORC Advanced provides remediation practitioners with a significantly faster and highly effective means of treating petroleum contaminated sites. Petroleum hydrocarbon contamination is often associated with retail petroleum service stations resulting from leaking underground storage tanks, piping and dispensers. As a result, ORC Advanced technology and applications have been tailored around the remediation needs of the retail petroleum industry and include: tank pit excavations, amending and mixing with backfill, direct-injection, bore-hole backfill, ORC Advanced Pellets for waterless and dustless application, combined ISCO and bioremediation applications, etc. For a list of treatable contaminants with the use of ORC Advanced, view the Range of Treatable Contaminants Guide

Chemical Composition

- Calcium peroxide
- Calcium hydroxide
- Dipotassium phosphate
- Monopotassium phosphate

Properties

Physical State	Solid
Form	Powder
Color	White to pale yellow
Odor	Odorless
pH	12.5 (3% suspension/water)

Storage and Handling Guidelines

Storage

- Store in a cool, dry place out of direct sunlight
- Store in original tightly closed container
- Store in a well-ventilated place
- Do not store near combustible materials
- Store away from incompatible materials
- Provide appropriate exhaust ventilation in places where dust is formed

Handling

- Minimize dust generation and accumulation
- Keep away from heat
- Routine housekeeping should be instituted to ensure that dust does not accumulate on surfaces
- Observe good industrial hygiene practices
- Take precaution to avoid mixing with combustibles
- Keep away from clothing and other combustible materials
- Avoid contact with water and moisture
- Avoid contact with eyes, skin, and clothing
- Avoid prolonged exposure
- Wear appropriate personal protective equipment

Applications

- Slurry mixture direct-push injection through hollow rods or direct-placement into boreholes
- *In Situ* or *ex situ* slurry mixture into contaminated backfill or contaminated soils in general
- Slurry mixture injections in conjunction with chemical oxidants like RegenOx® or PersulfOx®
- Filter sock applications in groundwater for highly localized treatment
- *Ex Situ* biopiles

Health and Safety

Wash thoroughly after handling. Wear protective gloves, eye protection, and face protection. Please review the ORC Advanced Safety Data Sheet for additional storage, usage, and handling requirements.

Disposal Issues

Upon the completion of a ORC Filter Sock application (usually about six months), disposal of the product will need to be addressed. Under most conditions, it will be possible to simply dispose of the ORC Filter Socks in conventional dumpsters designated for a Class III landfill.

By the time it is removed from its wells, the product will have formed a weakly-cemented magnesium hydroxide and sand matrix. This is essentially a solid block of Milk of Magnesia and sand in a 50:50 ratio. The MSDS on magnesium hydroxide, as prepared by Morton Thiokol (a major chemical company), is clear that magnesium hydroxide is non-toxic and in fact is classified GRAS (Generally Recognized as Safe) for consumption. This is of course substantiated by its use as an anti-acid.

MSDS disposal requirements simply state that it be disposed of in a container and does not further clarify those requirements; presumably this could be a plastic trash bag. As is indicative of any MSDS you are always instructed to contact local, state or federal EPA offices for a final decreed disposal method. Recent discussions with state and local agencies in several states have resulted in concurrence that non-hazardous disposal is acceptable.

Alternately, one may consider a hardened ORC and sand matrix to be a form of concrete - which it is, just as calcium hydroxide and sand has been from the time of the Romans. The dumping of concrete generally does not have to meet MSDS requirements for the individual components, such as calcium oxide and calcium silicate.

With regard to landfill requirements, TCLP measurements on the product show extractable pHs ranging from 8.2 to 10.8, averaging 9.5. Even considering the highest value of 10.8, this pH is significantly below a value of 12.5 which would classify it as a corrosive material in accordance with the Code of Federal Regulations. ORC meets the criteria, beyond the corrosivity standard, for being a non-hazardous waste in that it is non-ignitable, non-reactive, and non-toxic.

TCLP also resulted in measured magnesium concentrations from 180-1,500 mg/L in an active extraction test. In a non-advective situation, the magnesium levels are essentially unchanged since the ORC is virtually insoluble and elevated concentrations can only exist in the vicinity of the well. Actual field data from the University of Waterloo indicates the concentration of magnesium in the vicinity of the well only elevate to a few ppm above background concentrations.

The only remaining issue, relative to a Class III disposal, is whether or not the ORC Filter Socks have absorbed minor amounts of the target hydrocarbons during exposure to contaminated groundwater. This, however, is highly unlikely

since the surface of the sock would be in a very highly oxygenated zone where remediation is maximal. Even if a sock was dissipated of oxygen, unless the socks are placed in wells with free product, it is highly it would have hydrocarbon concentrations higher than those of groundwater in the well from which they are removed. These levels would generally be insignificant once the sock is intended for solid waste disposal where the actionable standards are much higher. Furthermore, it is clear that if the spent material was exposed to the air it would soon dissipate or be further remediated since it would retain moisture for a period. Spent product set on a tarp and exposed to air would most likely allow ND to be reached in a short period assuming hazardous compounds were present to start.

Should the disposal requirements become more rigorous than Class III, it is probably easiest to simply dispose of the spent filter socks in drums, in a similar manner as PPE used at the site, at a cost of approximately $100 per 55 gallon drum. For each of the REGENESIS ORC Filter Sock products there are the following approximate unit disposal charges.

Filter Sock Size	Number / 55 Gallon Drum	Unit Disposal Cost
6-Inch Diameter	15 to 20	$3.75 to $5.00
4-Inch Diameter	45 to 60	$1.25 to $1.66
2-Inch Diameter	110 to 150	$0.50 to $0.66

In a typical scenario, 150 socks would be used in a barrier, and would be changed out twice a year. A total of 300 socks would therefore cost between $150 and $1500 per year for disposal depending on size, not including drum cost and labor for retrieval and handling.