

From: Hatfield, Chris <Chris.Hatfield@stantec.com>
Sent: Wednesday, May 25, 2016 2:36 PM
To: Hnat, John J - DNR
Subject: Whitefish Bay Cleaners DERF Site (BRRTS #02-41-550821)
Attachments: GoogleEarth_Image.jpg; Water Level Data Master.pdf; GW VOC Master.pdf; Soilmaster VOCs.pdf

John,

RE: Project Update - Whitefish Bay Cleaners DERF Site, 419 West Silver Spring Drive, Glendale, WI

Stantec completed the soil and first round of groundwater sampling outlined in the April 23, 2013 workplan that was approved by the WDNR. After incurring the cost of soil borehole and groundwater monitoring well installation and sampling, my client encountered financial hardship that delayed invoice payment and caused additional work to be slightly delayed. Whitefish Bay Cleaners would now like to move forward with continuing the investigation of released PCE at their site.

I have attached draft copies of the soil and groundwater data and a map showing borehole/well locations. Sampling results indicated that PCE in soil is the highest at the southwest portion of the site building (location of the dry cleaning machine); PCE in groundwater is highest at MW4; Groundwater flow is generally to the south across the site.

Before conducting any additional groundwater monitoring, I feel it would be better to further investigate the extent of groundwater contamination to the north, south, and west. Installation of additional wells will require a change order that is approved by the WDNR. On the site map provided I have added the yellow dots representing tentative locations of additional monitoring wells. These locations are based on previous results and accessibility.

Since this is a DERF project, I request your input regarding the next steps as I will need WDNR approval for any work to be completed.

Let me know if you would like to discuss or have any suggestions moving forward.

Thanks

Chris Hatfield, PG

Senior Geologist
 Stantec
 12075 Corporate Parkway Suite 200 Mequon WI 53092-2649
 Phone: (262) 643-9171
 Cell: (414) 687-3640
 Fax: (262) 241-8222
 Chris.Hatfield@stantec.com



The content of this email is the confidential property of Stantec and should not be copied, modified, retransmitted, or used for any purpose except with Stantec's written authorization. If you are not the intended recipient, please delete all copies and notify us immediately.

Please consider the environment before printing this email.

From: Hatfield, Chris
Sent: Friday, December 05, 2014 10:26 AM
To: 'chasm5756@aol.com'
Subject: Whitefish Bay Cleaners Environmental Investigation Data

Charlie,

Attached is a map showing your site, where we installed soil boreholes (red squares) and groundwater monitoring wells (blue dots). The yellow dots representative tentative locations of additional monitoring wells. These locations were based on previous results and accessibility. Also attached are the summary tables of soil and groundwater sampling data. I will call you to discuss as I need your input regarding possible well locations.

Thanks

Chris Hatfield, PG

Senior Geologist

Stantec

12075 Corporate Parkway Suite 200 Mequon WI 53092-2649

Phone: (262) 643-9171

Cell: (414) 687-3640

Fax: (262) 241-8222

Chris.Hatfield@stantec.com



Celebrating 60 years of community, creativity, and client relationships.

The content of this email is the confidential property of Stantec and should not be copied, modified, retransmitted, or used for any purpose except with Stantec's written authorization. If you are not the intended recipient, please delete all copies and notify us immediately.

 Please consider the environment before printing this email.

Table 2 Water Level Data, Whitefish Bay Cleaners, Glendale, WI

Well I.D.	Ground Surface Elevation (msl)	Reference Point Elevation (msl)	Top / Bottom Well Screen Elevation (fbg)	Date	Depth to Water (feet)		Water Table Elevation (feet)
					Below Reference Point	Below Grade	
MW1	103.87	103.68	10/20	09/02/14	11.12	11.31	92.56
MW2	102.54	102.16	10/20	09/02/14	9.86	10.24	92.30
MW3	103.19	102.77	10/20	09/02/14	10.43	10.85	92.34
MW4	102.6	102.1	10/20	09/02/14	9.80	10.30	92.30
TW1	103.96	103.83	7/12	09/02/14	11.29	11.42	92.54

Table 3: Groundwater Laboratory Analysis Results - Volatile Organic Compounds

Whitefish Bay Cleaners, Glendale, WI

Well ID	Date Sampled	Relevant and Significant VOCs				
		cis 1,2-Dichloroethene	trans 1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl Chloride
NR 140 Preventative Action Limit		7	20	0.5	0.5	0.02
NR 140 Enforcement Standard		70	100	5.0	5	0.2
MW1	09/02/14	<0.12	<0.25	150	3.3	<0.10
MW2	09/02/14	<0.12	<0.25	2.5	<0.19	<0.10
MW3	09/02/14	0.96	<0.25	29	5.7	<0.10
MW4	09/02/14	12	<2.5	9000	20	<1.0
TW1	09/02/14	<0.12	<0.25	440	1.7	<0.10

Notes:

NE = Not Established

<x = Not Detected to a Detection Limit of X

- = Not Analyzed

xxx = detected concentrations exceeds NR 140 Preventative Action Limit

xxx = detected concentrations exceeds NR 140 Enforcement Standard

"J" = analyte present between laboratory method Limits of Detection (LOD) and Limit of Quantitation (LOQ)

* = duplicate sample

**Table 1: Soil Sample Field Screening and Volatile Organic Compound Laboratory Results
Whitefish Bay Cleaners, Glendale, Wisconsin**

Borehole Number	Sample					Relevant and Significant VOCs					
	Number	Date	Depth (feet below grade)	PID Response (iui)	Description	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Naphthalene	Tetrachloroethene (PCE)	Trichloroethene (TCE)	Vinyl Chloride
Non-Industrial WDNR Direct Contact RCL						156,000	1.56E+06	5,150	30,700	1,260	67
WDNR RCL for Groundwater Protection**						41.2	58.8	658.2	4.5	3.6	0.10
B1	S101	08/27/14	0-2.5	<1	sand	-	-	-	-	-	-
	S102		2.5-5	<1	sand	<7.1	<14	<28	<9.6	<11	<6.0
	S103		5-7.5	<1	sand	-	-	-	-	-	-
	S104		7.5-10	2.1	sand	-	-	-	-	-	-
	S105		10-12.5	2.3	sand	<6.5	<13	64 "J"	33 "J"	<9.9	<5.5
	S106		12.5-15	2.6	sand	-	-	-	-	-	-
	S107		15-17.5	2.2	sand	-	-	-	-	-	-
	S108		17.5-20	17.3	silty clay	-	-	-	-	-	-
B2	S201	08/27/14	0-2.5	1.8	sand	-	-	-	-	-	-
	S202		2.5-5	1.9	sand	<7.1	<14	<28	88	<11	<6.0
	S203		5-7.5	2.4	sand	-	-	-	-	-	-
	S204		7.5-10	2.1	sand	<7.4	<15	<30	220	<11	<6.3
	S205		10-12.5	1.5	sand	-	-	-	-	-	-
	S206		12.5-15	1.2	sand	-	-	-	-	-	-
	S207		15-17.5	-	silty clay	-	-	-	-	-	-
	S208		17.5-20	-	silty clay	-	-	-	-	-	-
B3	S301	08/27/14	0-2.5	14.4	sand	-	-	-	-	-	-
	S302		2.5-5	23.2	sand	<6.7	<14	<27	5000	<10	<5.6
	S303		5-7.5	28.9	sand	<7.2	<15	<29	2900	<11	<6.1
	S304		7.5-10	14.5	sand	-	-	-	-	-	-
	S305		10-12.5	9.2	silty clay	-	-	-	-	-	-
	S306		12.5-15	3.1	silty clay	-	-	-	-	-	-
	S307		15-17.5	2	silty clay	-	-	-	-	-	-
	S308		17.5-20	1.2	silty clay	-	-	-	-	-	-
B4	S401	08/27/14	0-2.5	8.0	sand	<7.3	<15	<29	160	<11	<6.2
	S402		2.5-5	6.5	sand	-	-	-	-	-	-
	S403		5-7.5	27.1	sand	-	-	-	-	-	-
	S404		7.5-10	20.7	sand	<7.2	<15	<29	4400	<11	<6.1
	S405		10-12.5	78.1	silty clay	<7.5	<15	<30	10000	<11	<6.3
	S406		12.5-15	68.2	silty clay	-	-	-	-	-	-
	S407		15-17.5	64.2	silty clay	-	-	-	-	-	-
	S408		17.5-20	50.3	silty clay	-	-	-	-	-	-
B5	S501	08/27/14	0-1.5	7.5	sand	<6.6	<13	<26	800	<10	<5.6
	S502		1.5-3	3.2	sand	<6.9	<14	<28	1300	<10	<5.8
	S503		3-4.5	2.0	silty clay	-	-	-	-	-	-
B6	S601	08/27/14	0-2	1.3	sand	<6.9	<14	<28	130	<10	<5.8
	S602		2-4	1.4	sand	-	-	-	-	-	-
	S603		4-6	1.5	sand	<7.9	<16	<32	110	<12	<6.7
	S604		6-8	<1	sand	-	-	-	-	-	-
	S605		8-10	<1	sand	-	-	-	-	-	-
	S606		10-12	4.9	silty clay	-	-	-	-	-	-
B7	S701	08/27/14	0-2	7.5	sand	<6.0	<12	<24	1400	<9.1	<5.1
	S702		2-4	3.0	sand	-	-	-	-	-	-
	S703		4-6	7.0	sand	-	-	-	-	-	-
	S704		6-8	14.2	sand	-	-	-	-	-	-
	S705		8-10	9.5	sand	-	-	-	-	-	-
	S706		10-12	19.9	sand	<6.8	<14	<27	4900	<10	<5.8

Notes: WDNR soil RCL Summary table (June 2014) used to establish RCLs for groundwater protection and direct contact.

<x = compound not detected to a detection limit of x
- = not laboratory analyzed

XXX = exceeds WDNR RCL for direct contact risk
XXX = exceeds WDNR RCL for protection of groundwater