

Quarterly Groundwater Monitoring Report

Prepared for

Stanley Black & Decker Inc.

Hampstead, Maryland

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Prepared by

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1. INTRODUCTION

This Groundwater Monitoring Report has been prepared to meet the requirements of Condition IV.G of the Administrative Consent Order between the State of Maryland Department of the Environment (MDE) and Black & Decker (U.S.) Inc. (April 1995) (Consent Order). Specifically, Condition IV.G calls for preparation of a Groundwater Monitoring Report containing the following information for each reporting period:

- The quantities of groundwater pumped, treated, and discharged.
- The calculation of quantities of contaminants removed from groundwater.
- A summary of all sampling analyses.
- An explanation of all operational or other problems encountered, and the manner in which each problem was resolved.
- Copies of all reports submitted to the Department of Natural Resources in conjunction with the Groundwater Appropriations Permit.
- Recommendations for changes to the Interim Groundwater Treatment System.

This document is one of several which are being prepared in response to the Consent Order; each of these documents are to be submitted to the MDE in accordance with the schedule outlined in the Consent Order. This document will become part of the Administrative Record for the site, which is maintained at the Hampstead Public Library.

2. SITE CHARACTERISTICS

2.1 HYDRAULIC PROPERTIES

In accordance with the Consent Order and the Water Appropriation Permit issued to the Black and Decker (U.S.) Inc. Hampstead, Maryland, facility, the following pumping and water level information is included for the period of October through December 2014.

Pumping records showing the total gallons pumped per month of treatment system operation are presented in Table 2-1. The complete groundwater treatment system pumping records are included in Appendix A.

Monthly water levels for wells included in the water level monitoring plan are presented in Table 2-2. For the reporting period of October through December 2014, the extraction wells were pumping at an average combined rate of approximately 171 gallons per minute (gpm).

2.2 EFFLUENT CHARACTERISTICS

Effluent characteristics of the NPDES discharge points are recorded monthly on Discharge Monitoring Reports (DMRs) and are submitted to MDE, Water Management Administration, on a quarterly basis. A summary of the sample results from the DMRs is presented in Table 2-3. DMRs for the period of October through December 2014 are included in Appendix B.

2.3 GROUNDWATER QUALITY DATA

For the reporting period of October through December 2014, approximately 11.97 pounds of total volatile organic compounds (VOCs) were removed from the groundwater by the extraction and treatment system. In general, the total VOCs removed from the groundwater were comprised primarily of trichloroethene (TCE) (76.8 %) and tetrachloroethene (PCE) (23.2 %). Analytical results of the groundwater collected from the air stripper for the period of October through December 2014 are included in Appendix C.

A summary of the analytical results from the fourth quarter (November 2014) groundwater sampling round of the extraction and monitor wells is included in Table 2-4. The complete

Table 2-1
Treatment System Pumping Records - 4th Quarter 2014
Stanley Black & Decker
Hampstead, Maryland

Date	Water Pumped (gallons)
October 2014	7,657,996
November 2014	7,136,612
December 2014	7,189,909

Table 2-2
Groundwater Elevation Data - 4th Quarter 2014
Stanley Black & Decker
Hampstead, Maryland

WELL NO.	TOC ELEV.	TOTAL DEPTH	10/14/2014		11/24/2014		12/12/2014	
			DTW	ELEV	DTW	ELEV	DTW	ELEV
EW-1	847.21	55	DRY	NC	DRY	NC	DRY	NC
EW-2	849.21	110	79.40	769.81	81.03	768.18	83.50	765.71
EW-3	846.64	118	85.60	761.04	89.26	757.38	90.10	756.54
EW-4	858.01	97.5	PC	NC	PC	NC	PC	NC
EW-5	864.17	98	90.10	774.07	89.91	774.26	90.25	773.92
EW-6	831.98	115	84.21	747.77	78.00	753.98	83.24	748.74
EW-7	818.38	78	59.77	758.61	55.43	762.95	58.71	759.67
EW-8	811.13	98	91.53	719.60	93.00	718.13	93.00	718.13
EW-9	811.35	141	97.00	714.35	95.44	715.91	100.30	711.05
EW-10	807.74	INA	55.71	752.03	54.57	753.17	55.84	751.90
RFW-1A	864.37	78	48.36	816.01	51.87	812.50	52.01	812.36
RFW-1B	864.23	200	48.41	815.82	51.91	812.32	52.03	812.20
RFW-2A	857.41	35	14.81	842.60	16.73	840.68	16.81	840.60
RFW-2B	857.73	75	15.40	842.33	17.40	840.33	17.52	840.21
RFW-3B	839.21	153	31.02	808.19	31.36	807.85	32.40	806.81
RFW-4A	830.37	62	36.22	794.15	37.83	792.54	38.19	792.18
RFW-4B	830.37	120	36.41	793.96	37.71	792.66	37.94	792.43
RFW-5A	817.50	30	DRY	NC	DRY	NC	DRY	NC
RFW-6	785.04	120	4.11	780.93	4.03	781.01	5.10	779.94
RFW-7	805.14	29	7.53	797.61	6.74	798.40	7.47	797.67
RFW-8	860.07	56	DRY	NC	DRY	NC	DRY	NC
RFW-9	862.02	49	26.12	835.90	26.94	835.08	27.02	835.00
RFW-10	852.06	58	DRY	NC	DRY	NC	DRY	NC
RFW-11A	849.32	72	Damaged	NC	Damaged	NC	Damaged	NC
RFW-11B	849.62	116	59.13	790.49	59.22	790.40	60.83	788.79
RFW-12B	844.87	264	48.98	795.89	50.89	793.98	51.01	793.86
RFW-13	849.11	150	59.21	789.90	60.90	788.21	59.41	789.70
RFW-14B	812.39	281	51.87	760.52	52.35	760.04	52.44	759.95
RFW-16	856.14	41	DRY	NC	DRY	NC	DRY	NC
RFW-17	834.66	60.5	30.26	804.40	29.26	805.40	27.41	807.25
RFW-20	842.49	142	32.43	810.06	34.38	808.11	34.61	807.88
RFW-21	832.65	102	20.36	812.29	21.77	810.88	22.01	810.64
PH-7	805.94	89	29.74	776.20	28.68	777.26	29.43	776.51
PH-9	814.94	98	45.15	769.79	50.80	764.14	50.57	764.37
PH-11	820.68	78	48.71	771.97	50.96	769.72	50.89	769.79
PH-12	828.35	87	49.36	778.99	51.52	776.83	51.43	776.92
B-3	803.02	83	10.24	792.78	10.69	792.33	10.28	792.74
Amoco	842.29	INA	NA	NC	NA	NC	NA	NC
Hamp. Town #22	804.96	INA	1.19	803.77	1.12	803.84	1.62	803.34
Pembroke #1	INA	INA	11.80	NC	11.59	NC	11.56	NC
Pembroke #2	INA	INA	Damaged	NC	Damaged	NC	Damaged	NC
N. Houcks. Rd.	INA	INA	9.98	NC	10.09	NC	10.34	NC
E. Century St.	INA	INA	19.26	NC	19.27	NC	19.26	NC
Lwr. Beckleys. Rd.	INA	INA	55.47	NC	56.73	NC	55.89	NC

NA - Not Available/Not Accessible
NC - Not Calculable
INA - Information not available
PC - Pump Cycles

Table 2-3
Effluent Characteristics Summary - 4th Quarter 2014
Black & Decker
Hampstead, Maryland

Discharge Number	Parameter	Units	Permit Limits	DMR DATE			
				October 2014	November 2014	December 2014	
001	FLOW	average	MGD	NA	0.220	0.203	0.238
		maximum	MGD	NA	0.855	0.609	0.684
	1,1,1-Trichloroethane	ug/l	5	< 1	< 1	< 1	
	Tetrachloroethylene	ug/l	5	< 1	< 1	< 1	
	Trichloroethylene	ug/l	5	< 1	< 1	< 1	
	Total Residual Chlorine	mg/l	< 0.1	< 0.1	< 0.1	< 0.1	
	Oil & Grease	maximum	mg/l	15	< 5	< 5	< 5
		monthly average	mg/l	10	< 5	< 5	< 5
	pH	minimum	STD	6.0	7.1	7.2	6.8
		maximum	STD	8.5	8.3	7.6	8.2
	BOD		mg/l	15	7.0	< 1	3.0
TSS	maximum	mg/l	30	6.0	< 1	< 1	
	monthly average	mg/l	20	6.0	< 1	< 1	
101 (Monitoring Point)	FLOW	average	MGD	NA	0.142	0.118	0.125
		maximum	MGD	NA	0.246	0.174	0.311
	Fecal Coliform	MPN/100ml	200	1.0	1.0	1.0	
201 (Monitoring Point)	FLOW	average	MGD	NA	NR	NR	0.239
		maximum	MGD	NA	NR	NR	0.289
	1,1,1-Trichloroethane	ug/l	NA	NR	NR	< 1	
	Tetrachloroethylene	ug/l	NA	NR	NR	< 1	
	Trichloroethylene	ug/l	NA	NR	NR	< 1	

DMR - Discharge Monitoring Report

NA - Not Applicable

NR - Not Reported

Table 2-4
Summary of Groundwater Analytical Results - November 2014
Stanley Black & Decker
Hampstead, Maryland

PARAMETER	Units	EW-1	EW-2	EW-3	EW-4	EW-5	EW-6	EW-7	EW-8	EW-9	EW-9 (DUP)	EW-10
Chloromethane	ug/L	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	ug/L	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	ug/L	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	ug/L	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	ug/L	NS	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Acetone	ug/L	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Disulfide	ug/L	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.4	5 U	5 U
1,1-Dichloroethene	ug/L	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	ug/L	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene (total)	ug/L	NS	3.8	2.2	1 U	1 U	1 U	3.9	18	1 U	1 U	1 U
Chloroform	ug/L	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	ug/L	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	ug/L	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	ug/L	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	ug/L	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	ug/L	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	ug/L	NS	140	43	660	110	6.4	2.7	5.9	0.6	0.5 J	1 U
Dibromochloromethane	ug/L	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	ug/L	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzene	ug/L	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trans-1,3-Dichloropropene	ug/L	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	ug/L	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
4-Methyl-2-pentanone	ug/L	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	ug/L	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	ug/L	NS	57	1.9	13	3.2	13	6.3	57	120	110	3.2
1,1,2,2-Tetrachloroethane	ug/L	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	ug/L	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	ug/L	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	ug/L	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	ug/L	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylene (total)	ug/L	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Notes: U = Compound was analyzed for but not detected. Value shown is the method detection limit for quantification.
J = Indicates an estimated value.
NS = Not Sampled

Table 2-4
Summary of Groundwater Analytical Results - November 2014
Stanley Black & Decker
Hampstead, Maryland

PARAMETER	Units	RFW-1A	RFW-1B	RFW-2A	RFW-2B	RFW-3B	RFW-4A	RFW-4A (DUP)	RFW-4B	RFW-5A	RFW-6	RFW-7	RFW-8	RFW-9	RFW-10
Chloromethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	NS	1 U	NS
Bromomethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	NS	1 U	NS
Vinyl Chloride	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	NS	1 U	NS
Chloroethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	NS	1 U	NS
Methylene Chloride	ug/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	NS	2 U	2 U	NS	2 U	NS
Acetone	ug/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS
Carbon Disulfide	ug/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS
1,1-Dichloroethene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	NS	0.7 J	NS
1,1-Dichloroethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	NS	1 U	NS
1,2-Dichloroethene (total)	ug/L	1 U	1 U	1 U	1 U	1.2	0.7 J	0.6 J	3	NS	0.6 J	1 U	NS	12	NS
Chloroform	ug/L	1 U	1 U	1 U	1 U	1 U	0.6 J	0.6 J	1.2	NS	1 U	1 U	NS	1 U	NS
1,2-Dichloroethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	NS	1 U	NS
2-Butanone	ug/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS
1,1,1-Trichloroethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	NS	0.6 J	NS
Carbon Tetrachloride	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	NS	1 U	NS
Bromodichloromethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	NS	1 U	NS
1,2-Dichloropropane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	NS	1 U	NS
cis-1,3-Dichloropropene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	NS	1 U	NS
Trichloroethene	ug/L	1 U	1 U	1 U	1 U	1 U	27	27	46	NS	1.2	1.1	NS	7.9	NS
Dibromochloromethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	NS	1 U	NS
1,1,2-Trichloroethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	NS	1 U	NS
Benzene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	NS	1 U	NS
Trans-1,3-Dichloropropene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	NS	1 U	NS
Bromoform	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	NS	1 U	NS
4-Methyl-2-pentanone	ug/L	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS
2-Hexanone	ug/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS
Tetrachloroethene	ug/L	1 U	1 U	1 U	1 U	1 U	21	22	78	NS	1.7	1 U	NS	3.5	NS
1,1,2,2-Tetrachloroethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	NS	1 U	NS
Toluene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	NS	1 U	NS
Chlorobenzene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	NS	1 U	NS
Ethylbenzene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	NS	1 U	NS
Styrene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	NS	1 U	NS
Xylene (total)	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NS	1 U	1 U	NS	1 U	NS

Notes: DUP = Duplicate sample
NS = Not sampled

U = Compound was analyzed for but not detected. Value shown is the method detection limit for quantification.
J = Indicates an estimated value.

Table 2-4
Summary of Groundwater Analytical Results - November 2014
Stanley Black & Decker
Hampstead, Maryland

PARAMETER	Units	RFW-11A	RFW-11B	RFW-12B	RFW-13	RFW-16	RFW-17	Leister Dairy	Leister Res. #1	Leister Res. #2	Trip Blank	RFW-20	RFW-21	Town #22	Town #23	Trip Blank
		USEPA drinking water method 524.2														
Chloromethane	ug/L	NS	1 U	1 U	1 U	NS	1 U	ABD	ABD	ABD	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane	ug/L	NS	1 U	1 U	1 U	NS	1 U	ABD	ABD	ABD	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	ug/L	NS	1 U	1 U	1 U	NS	1 U	ABD	ABD	ABD	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	NS	1 U	1 U	1 U	NS	1 U	ABD	ABD	ABD	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	ug/L	NS	2 U	2 U	2 U	NS	2 U	ABD	ABD	ABD	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	NS	5 U	5 U	9.9	NS	5.6	ABD	ABD	ABD	5 U	10 U	10 U	10 U	10 U	10 U
Carbon Disulfide	ug/L	NS	5 U	5 U	5 U	NS	5 U	ABD	ABD	ABD	5 U	NA	NA	NA	NA	NA
1,1-Dichloroethene	ug/L	NS	1 U	1 U	1 U	NS	1 U	ABD	ABD	ABD	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	ug/L	NS	1 U	1 U	1 U	NS	1 U	ABD	ABD	ABD	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethene (total)	ug/L	NS	1 U	0.7 J	0.8 J	NS	1 U	ABD	ABD	ABD	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	NS	1 U	1 U	1 U	NS	1 U	ABD	ABD	ABD	1 U	0.5 U	0.5 U	0.29 J	0.5 U	0.5 U
1,2-Dichloroethane	ug/L	NS	1 U	1 U	1 U	NS	1 U	ABD	ABD	ABD	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Butanone	ug/L	NS	5 U	5 U	5 U	NS	5 U	ABD	ABD	ABD	5 U	10 U	10 U	10 U	10 U	10 U
1,1,1-Trichloroethane	ug/L	NS	1 U	1 U	1 U	NS	1 U	ABD	ABD	ABD	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon Tetrachloride	ug/L	NS	1 U	1 U	1 U	NS	1 U	ABD	ABD	ABD	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	ug/L	NS	1 U	1 U	1 U	NS	1 U	ABD	ABD	ABD	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	NS	1 U	1 U	1 U	NS	1 U	ABD	ABD	ABD	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	NS	1 U	1 U	1 U	NS	1 U	ABD	ABD	ABD	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	ug/L	NS	2.7	170	2.9	NS	1 U	ABD	ABD	ABD	1 U	0.5	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	ug/L	NS	1 U	1 U	1 U	NS	1 U	ABD	ABD	ABD	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	NS	1 U	1 U	1 U	NS	1 U	ABD	ABD	ABD	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	ug/L	NS	1 U	1 U	1 U	NS	0.6	ABD	ABD	ABD	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,3-Dichloropropene	ug/L	NS	1 U	1 U	1 U	NS	1 U	ABD	ABD	ABD	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	NS	1 U	1 U	1 U	NS	1 U	ABD	ABD	ABD	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methyl-2-pentanone	ug/L	NS	5 U	5 U	5 U	NS	5 U	ABD	ABD	ABD	5 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	ug/L	NS	5 U	5 U	5 U	NS	5 U	ABD	ABD	ABD	5 U	10 U	10 U	10 U	10 U	10 U
Tetrachloroethene	ug/L	NS	1 U	10	17	NS	1 U	ABD	ABD	ABD	1 U	0.5 U	0.5 U	0.58	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	NS	1 U	1 U	1 U	NS	1 U	ABD	ABD	ABD	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	NS	1 U	1 U	1 U	NS	1 U	ABD	ABD	ABD	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	NS	1 U	1 U	1 U	NS	1 U	ABD	ABD	ABD	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	ug/L	NS	1 U	1 U	1 U	NS	1 U	ABD	ABD	ABD	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Styrene	ug/L	NS	1 U	1 U	1 U	NS	1 U	ABD	ABD	ABD	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	NS	1 U	1 U	1 U	NS	1 U	ABD	ABD	ABD	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Notes: Samples from wells RFW-20 & 21, Town-22&23 are analyzed with the USEPA drinking water method 524.2 at the request of the MDE Source Protection and Appropriation Division.
 Samples from all of the other wells are analyzed with USEPA Method 8260.
 NS = Not sampled
 U = Compound was analyzed but not detected.
 ABD = Well has been abandoned

analytical data package is included in Appendix D.

As found in earlier sampling events at the Stanley Black & Decker facility, TCE and PCE were the VOCs detected at the highest concentrations in the groundwater samples. The highest concentration of TCE was detected in the groundwater samples collected from wells RFW-12B and EW-4 and the highest concentration of PCE was detected in the groundwater sample collected from wells RFW-4B and EW-9. The remainder of VOCs present were detected at levels below the Federal Maximum Contaminant Levels (MCL).

3. OPERATION AND MAINTENANCE OF THE TREATMENT SYSTEM

A summary of the maintenance activities which were undertaken with the extraction and treatment system during the reporting period (October through December 2014) is provided in Table 3-1. This table is comprehensive in summarizing significant maintenance events or activities, while not including those activities considered unworthy of note (such as replacement of light bulbs, lubrication of moving parts as appropriate or other routine activities).

Table 3-1
Treatment System Maintenance Activities - 4th Quarter 2014
Stanley Black & Decker
Hampstead, Maryland

Date	Event/Corrective Action
Dec-14	There was a power outage at the site caused by a local automobile accident, the system was reset and is back online.

4. RECOMMENDATIONS

For the reporting period of October through December 2014, the treatment system continued to create a hydraulic boundary preventing off-site migration of groundwater. The extraction system will continue to operate as currently configured to pump and treat contaminated groundwater. Depth-to-water measurements will continue to be collected on a monthly basis in all site monitor wells to construct a groundwater elevation contour map for the site. The groundwater elevation contour map will be used to verify that the required area of groundwater capture is being maintained. If necessary, pumping rates will be adjusted to maintain groundwater capture due to seasonal fluctuations in groundwater elevations. The treatment system will also continue to operate as currently configured, as data collected have proven that the treatment system is fully effective in removing VOCs from the extracted groundwater.

APPENDIX A
GROUNDWATER TREATMENT SYSTEM PUMPING RECORDS
(OCTOBER – DECEMBER 2014)

MARYLAND DEPARTMENT of the ENVIRONMENT, WATER MANAGEMENT ADMINISTRATION, 1800 WASHINGTON BLVD, BALTIMORE, MD 21230

Operated By: Maryland Environmental Service
259 Najoles Road, Millersville MD

Facility: BTR Capital Group
Address: 627 Hanover Pike, Hampstead Maryland
Additional O Dorrance Jones 0763, James Elliott 3738, Chris Dallas 6202, Ryan Thomas 0781, Anthony Phillips 3001

Perm: 07-DP-0022
Super: Earle Villarreal

Certif: 1017

Month: Oct
Year: 2014

Date	Appearance	Discharge MGD	pH	Cl2 mg/l	Final Effluent outfall 001											Outfall 101					Outfall 201			Operator						
					Trichloroethylene ug/l	1-Trichloroethylene ug/l	Trichloroethylene ug/l	BOD ₅ mg/l	TSS mg/l	TKN mg/l	N+N mg/l	TP mg/l	TN mg/l	O&G mg/l	eColi mpn	Flow MGD	eColi mpn	Basin Inches	Alum Gpd	Hypochlorite Gpd	Post Cl ₂ mg/l	Trichloroethylene ug/l	1-Trichloroethylene ug/l		Trichloroethylene ug/l	Discharge mgd				
1	Clear	0.33400																0.117000	0.0	5.0	1.0	5.0							0.259318	Rthomas
2	Clear	0.08900	7.80	0.00														0.152000	5.0	5.0	1.0	5.0							0.208569	Djones
3	Clear	0.17300																0.141000	5.0	5.0	1.0	5.0							0.270058	Djones
4	Clear	0.55800																0.157000	5.0	5.0	1.0	5.0							0.278784	Rthomas
5	Clear	0.13300																0.145000	5.0	5.0	1.0	5.0							0.252390	Rthomas
6	Clear	0.12800																0.125000	4.0	5.0	1.0	5.0							0.251010	Cdallas
7	Clear	0.14000	7.29	0.00														0.157000	<1	1.0	5.0	1.0	5.0						0.252080	Cdallas
8	Clear	0.19000																0.145000	1.0	5.0	1.0	5.0							0.201808	Cdallas
9	Clear	0.14800	8.29	0.00														0.146000	1.0	5.0	1.0	5.0							0.260231	Cdallas
10	Clear	0.14000																0.147000	1.0	5.0	1.0	5.0							0.233472	phillips
11	Clear	0.36000																0.148000	0.0	5.0	1.0	5.0							0.258528	Djones
12	Clear	0.21200																0.152000	0.0	5.0	1.0	5.0							0.246089	Djones
13	Clear	0.16000																0.119000	0.0	5.0	1.0	5.0							0.251057	Jelliott
14	Clear	0.15300	7.69	0.00	<1	<1	<1	7.00	5.60	0.77	1.52	<0.05	2.3	<5	5.3		0.134000	<1	0.0	5.0	1.0	5.0							0.226421	Jelliott
15	Clear	0.22800																0.121000	0.0	5.0	1.0	5.0							0.281121	Jelliott
16	Clear	0.85500	7.07	0.00														0.155000	0.0	5.0	1.0	5.0							0.230798	Jelliott
17	Clear	0.20700																0.131000	0.0	5.0	1.0	5.0							0.268351	Jelliott
18	Clear	0.16700																0.141000	0.0	5.0	1.0	5.0							0.243201	Jelliott
19	Clear	0.12500																0.167000	0.0	5.0	1.0	5.0							0.231815	Jelliott
20	Clear	0.13300																0.128000	0.0	5.0	1.0	5.0							0.278858	Aphillips
21	Clear	0.13200																0.246000	0.0	5.0	1.0	5.0							0.243762	Cdallas
22	Clear	0.63200																0.135000	<1	0.0	5.0	1.0	5.0						0.253884	Jelliott
23	Clear	0.30100	7.47	0.00														0.128000	0.0	5.0	1.0	5.0							0.232287	Jelliott
24	Clear	0.13700	7.33	0.00														0.131000	0.0	5.0	1.0	5.0							0.228965	Jelliott
25	Clear	0.12600																0.117000	0.0	5.0	1.0	5.0							0.260212	Rthomas
26	Clear	0.12900																0.144000	0.0	5.0	1.0	5.0							0.237475	Rthomas
27	Clear	0.11300																0.126000	0.0	5.0	1.0	5.0							0.251951	Rthomas
28	Clear	0.11800	7.52	0.00														0.106000	<1	0.0	5.0	1.0	5.0						0.231541	Rthomas
29	Clear	0.14500																0.155000	0.0	5.0	1.0	5.0	<1	<1	<1				0.221745	Rthomas
30	Clear	0.20600	7.61	0.00														0.135000	0.0	5.0	1.0	5.0							0.271159	Jelliott
31	Clear	0.14900																0.141000	0.0	5.0	1.0	5.0							0.241056	Jelliott
Total		6.8210																4.392000											7.657996	
Average		0.2200	7.6	<0.10	0	0	0	7	6	1	2	0	2	0	5		0.141677	1.0	0.9	5.0	1.0	5.0	0	0	0			0.247032		
Minimum		0.0890	7.1	0.00	0	0	0	7	6	1	2	0	2	0	5		0.106000	0.0	0.0	5.0	1.0	5.0	0	0	0			0.201808		
Maximum		0.8550	8.3	<0.10	0	0	0	7	6	1	2	0	2	0	5		0.246000	0.0	5.0	5.0	1.0	5.0	0	0	0			0.281121	DR 01-3-	

