

Quarterly Groundwater Monitoring Report

Prepared for

Black & Decker (U.S.) Inc.

Hampstead, Maryland

April 2012

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 January through March 2012.

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 January through March 2012, the extraction wells were pumping at an average combined rate of approximately 186 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 January through March 2012 are included in Appendix B.

2.3 GROUNDWATER QUALITY DATA

For the reporting period of January through March 2012, approximately 12.7 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) (83.8%) and tetrachloroethene (PCE) (16.2%). Analytical results of the groundwater collected from the air stripper for the period of January through March 2012 are included in Appendix C.

A summary of the analytical results from the third quarter (February 2012) groundwater sampling round of the extraction and monitor wells is included in Table 2-4. The complete

Table 2-1
Treatment System Pumping Records - 1st Quarter 2012
Black & Decker
Hampstead, Maryland

Date	Water Pumped (gallons)
January 2012	7,785,318
February 2012	7,319,653
March 2012	7,752,273

Table 2-2
Groundwater Elevation Data - 1st Quarter 2012
Black & Decker
Hampstead, Maryland

WELL NO.	TOC ELEV.	TOTAL DEPTH	1/23/2012		2/16/2012		3/23/2012	
			DTW	ELEV	DTW	ELEV	DTW	ELEV
EW-1	847.21	55	DRY	NC	DRY	NC	DRY	NC
EW-2	849.21	110	91.58	757.63	90.78	758.43	91.10	758.11
EW-3	846.64	118	81.70	764.94	86.11	760.53	87.42	759.22
EW-4	858.01	97.5	PC	NC	PC	NC	PC	NC
EW-5	864.17	98	90.36	773.81	90.26	773.91	90.31	773.86
EW-6	831.98	115	94.27	737.71	101.74	730.24	102.02	729.96
EW-7	818.38	78	62.43	755.95	71.00	747.38	71.00	747.38
EW-8	811.13	98	91.42	719.71	93.00	718.13	93.00	718.13
EW-9	811.35	141	103.00	708.35	104.00	707.35	103.50	707.85
EW-10	807.74	INA	44.76	762.98	74.08	733.66	73.98	733.76
RFW-1A	864.37	78	50.11	814.26	47.51	816.86	48.19	816.18
RFW-1B	864.23	200	50.18	814.05	47.61	816.62	48.23	816.00
RFW-2A	857.41	35	12.37	845.04	12.59	844.82	13.12	844.29
RFW-2B	857.73	75	12.88	844.85	13.33	844.40	13.71	844.02
RFW-3B	839.21	153	29.79	809.42	29.36	809.85	29.70	809.51
RFW-4A	830.37	62	35.15	795.22	36.17	794.20	36.43	793.94
RFW-4B	830.37	120	35.03	795.34	35.83	794.54	36.19	794.18
RFW-5A	817.50	30	DRY	NC	DRY	NC	DRY	NC
RFW-6	785.04	120	2.84	782.20	3.08	781.96	4.11	780.93
RFW-7	805.14	29	6.13	799.01	5.09	800.05	7.57	797.57
RFW-8	860.07	56	DRY	NC	DRY	NC	DRY	NC
RFW-9	862.02	49	24.80	837.22	24.38	837.64	25.67	836.35
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	62.09	787.53	63.36	786.26	63.40	786.22
RFW-12B	844.87	264	50.26	794.61	50.89	793.98	50.49	794.38
RFW-13	849.11	150	63.02	786.09	62.27	786.84	64.73	784.38
RFW-14B	812.39	281	52.94	759.45	53.61	758.78	52.91	759.48
RFW-16	856.14	41	DRY	NC	DRY	NC	DRY	NC
RFW-17	834.66	60.5	26.31	808.35	24.55	810.11	26.51	808.15
RFW-20	842.49	142	32.47	810.02	31.58	810.91	32.39	810.10
RFW-21	832.65	102	20.47	812.18	19.81	812.84	21.74	810.91
PH-7	805.94	89	21.31	784.63	20.61	785.33	25.17	780.77
PH-9	814.94	98	50.42	764.52	50.60	764.34	50.70	764.24
PH-11	820.68	78	50.21	770.47	50.42	770.26	51.53	769.15
PH-12	828.35	87	42.47	785.88	43.59	784.76	46.41	781.94
B-3	803.02	83	10.12	792.90	9.96	793.06	9.83	793.19
Amoco	842.29	INA	NA	NC	NA	NC	NA	NC
Hamp. Town #22	804.96	INA	2.12	802.84	1.92	803.04	1.48	803.48
Pembroke #1	INA	INA	10.43	NC	10.89	NC	11.08	NC
Pembroke #2	INA	INA	Damaged	NC	Damaged	NC	Damaged	NC
N. Houcks. Rd.	INA	INA	10.07	NC	10.58	NC	10.41	NC
E. Century St.	INA	INA	19.23	NC	19.21	NC	19.26	NC
Lwr. Beckleys. Rd.	INA	INA	54.89	NC	54.80	NC	55.23	NC

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

Table 2-3
Effluent Characteristics Summary - 1st Quarter 2012
Black & Decker
Hampstead, Maryland

Discharge Number	Parameter	Units	Permit Limits	DMR DATE			
				January 2012	February 2012	March 2012	
001	FLOW	average	MGD	NA	0.187	0.140	0.222
		maximum	MGD	NA	0.668	0.238	0.703
	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	6.4	6.20	6.60
		maximum	STD	8.5	6.9	8.00	7.50
	BOD		mg/l	15	3.0	< 2	2.0
TSS	maximum	mg/l	30	< 4	4.0	4.0	
	monthly average	mg/l	20	< 4	4.0	4.0	
101 (Monitoring Point)	FLOW	average	MGD	NA	0.308	0.286	0.363
		maximum	MGD	NA	0.382	0.407	0.452
	Fecal Coliform	MPN/100ml	200	2.0	2.0	< 1.8	
201 (Monitoring Point)	FLOW	average	MGD	NA	NR	NR	0.251
		maximum	MGD	NA	NR	NR	0.297
	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 - February 2012
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 U	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	0.8 J	1 U	1 U	1 U
1,2-Dichloroethene (total)	ug/L	NS	3.5	2	1 U	1 U	1 U	5.5	23	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	210	57	730	110	6.5	3.8	7.4	0.7	0.6	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	48	1.8	21	3.3	11	8.1	52	83	84	0.6 J
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 - February 2012
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	0.9 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	1.2	NS
1,2-Dichloroethene (total)	ug/L	1 U	1 U	1 U	1 U	2.5	0.9 J	1	3.6	NS	1 U	1 U	NS	24	NS
Chloroform	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.6	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	1 U	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	0.4 J	0.4 J	0.5	31	30	44	NS	0.6	2.1	NS	10	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	0.3 J	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 J	22	22	66	NS	0.7 J	1 U	NS	6.6	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 - February 2012
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	5 U	NS	5 U	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	2.4	1.1	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	0.5 U	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	3.8	82	3	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	0.3 J	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	6.1	16	NS	1 U	ABD	ABD	ABD	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-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	0.3 J	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 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 EW-2 and EW-4 and the highest concentration of PCE was detected in the groundwater sample collected from well 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 (January through March 2012) 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 - 1st Quarter 2012
Black & Decker
Hampstead, Maryland

Date	Event/Corrective Action
Jan-12	Alarm at air stripper due to high wet well. System reset everything okay.
Jan-12	Alarm at air stripper due to a low hydro tank. An electrical problem was found in old well house #2 that feeds the alarms and the hydro tank. Repairs were made to the electrical system. System is back online.
Jan-12	A leak was detected in EW-6. Wells EW-6 through EW-10 were shut down for two hours while the leak was repaired. All wells back online.
Feb-12	Alarm at stripper, EW-9 went down due to a faulty heater. A temporary heater was installed and the well is back online.
Feb-12	The heating elements were replaced in EW-9.

4. RECOMMENDATIONS

For the reporting period of January through March 2012, 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
(JANUARY – MARCH 2012)

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

Operated By:

Facility: BTR Capital Group

Permit Number: 02-DP-0022

Month: January

Maryland Environmental Service

Address: 626 Hanover Pike, Hampstead Maryland

Superintendent: Earle Villarreal

Certification # 1017

Year: 2012

259 Najoles Road, Millersville MD

Additional Op's & cert # - Dorrance Jones 0763, Gary Dickerson 0782, Philip Pitts 2999, Brian Musselman 2775, Martin Whitt 0666, David Smith 9153

Date	Appearance	Final Effluent outfall 001									Outfall 101					Outfall 201			Operator		
		Discharge MGD	pH su	Cl2 mg/l	Tetrachloroethylene ug/l	1,1,1-Trichloroethane ug/l	Trichloroethene ug/l	BOD ₅ mg/l	TSS mg/l	O&G mg/l	Flow MGD	Fecal mpn	Basin Inches	Alum Gpd	Hypochlorite Gpd	Post Cl2 mg/l	Tetrachloroethylene ug/l	1,1,1-Trichloroethane ug/l		Trichloroethene ug/l	Discharge mgd
1	Clear	0.14100								0.309000		0.0	1.0	0.5	5.0				0.252240	Djones	
2	Clear	0.15900								0.306000		0.0	2.0	0.5	5.0				0.260924	Gdickerson	
3	Clear	0.18500	6.79	0.00						0.244000		0.0	2.0	0.5	5.0				0.267564	Bmusselman	
4	Clear	0.09800			< 1.00	< 1.00	< 1.00	3.0	< 4.0	< 5.5	0.351000	< 1.8	0.0	2.0	0.5	5.0				0.255232	Djones
5	Clear	0.14800	6.58	0.00							0.331000		0.0	2.0	0.5	5.0				0.244455	Djones
6	Clear	0.14300									0.327000		0.0	2.0	0.5	5.0				0.254510	Ppitts
7	Clear	0.13500									0.317000		0.0	2.0	0.5	5.0				0.241096	Ppitts
8	Clear	0.13100									0.296000		0.0	2.0	0.5	5.0				0.243321	Ppitts
9	Clear	0.12200	6.50	0.00							0.306000		0.0	2.0	0.5	5.0				0.244875	Djones
10	Clear	0.10600									0.336000	< 1.8	0.0	2.0	0.5	5.0				0.248435	Bmusselman
11	Clear	0.13500									0.333000		0.0	2.0	0.5	5.0				0.244680	Djones
12	Clear	0.66800	6.41	0.00							0.332000		0.0	2.0	0.5	5.0				0.253566	Djones
13	Clear	0.45700									0.352000		0.0	2.0	0.5	5.0				0.267927	Djones
14	Clear	0.16700									0.297000		0.0	2.0	0.5	5.0				0.254307	APhillips
15	Clear	0.11700									0.318000		0.0	2.0	0.5	5.0				0.231372	APhillips
16	Clear	0.12300									0.307000		0.0	2.0	0.5	5.0				0.263090	Ppitts
17	Clear	0.16800	6.48	0.00							0.332000		0.0	1.0	0.5	5.0				0.245636	Djones
18	Clear	0.27000									0.344000	< 1.8	0.0	1.0	0.5	5.0	< 1.0	< 1.0	< 1.0	0.261352	Djones
19	Clear	0.12000	6.47	0.00							0.329000		0.0	1.0	0.5	5.0				0.236707	Gdickerson
20	Clear	0.12000									0.297000		0.0	1.0	0.5	5.0				0.249492	Gdickerson
21	Clear	0.17400									0.382000		0.0	1.0	0.5	5.0				0.211604	Dsmith
22	Clear	0.20400									0.346000		0.0	1.0	0.5	5.0				0.296633	APhillips
23	Clear	0.15400									0.244000		0.0	1.0	0.5	5.0				0.261332	Bmusselman
24	Clear	0.35700	6.42	0.00							0.351000	2.0	0.0	1.0	0.5	5.0				0.251477	Djones
25	Clear	0.17200									0.276000		0.0	1.0	0.5	5.0				0.249165	Djones
26	Clear	0.13300	6.89	0.00							0.263000		0.0	2.0	0.5	5.0				0.235015	Djones
27	Clear	0.24800									0.277000		0.0	2.0	0.5	5.0				0.250955	Djones
28	Clear	0.24900									0.255000		0.0	2.0	0.5	5.0				0.257309	Djones
29	Clear	0.13200									0.271000		0.0	2.0	0.5	5.0				0.248291	Djones
30	Clear	0.13800									0.227000		0.0	2.0	0.5	5.0				0.254247	Mwhitt
31	Clear	0.12700	6.54	0.00							0.287000	< 1.8	0.0	2.0	0.5	5.0				0.248509	Gdickerson
Total		5.80100									9.543000									7.785318	
Average		0.18713	6.6	<0.10	0	0	0	3	0	0	0.307839	1	0.0	1.7	0.5	5.0	0	0	0	0.251139	
Minimum		0.09800	6.4	0.00	0	0	0	3	0	0	0.227000	1	0.0	1.0	0.5	5.0	0	0	0	0.211604	
Maximum		0.66800	6.9	<0.10	0	0	0	3	0	0	0.382000	2	0.0	2.0	0.5	5.0	0	0	0	0.296633	MOR 5-11-09

COMMENTS: