

Quarterly Groundwater Monitoring Report

Prepared for
Black & Decker (U.S.) 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 2006.

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 2006, the extraction wells were pumping at an average combined rate of approximately 162 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 2006 are included in Appendix B.

2.3 GROUNDWATER QUALITY DATA

For the reporting period of October through December 2006, approximately 24 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) (58 %) and tetrachloroethene (PCE) (42 %). Analytical results of the groundwater collected at the inlet to the air stripper for the period of October through December 2006 are included in Appendix C.

A summary of the analytical results from the fourth quarter (November 2006) 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 2006
Black & Decker
Hampstead, Maryland

Date	Water Pumped (gallons)
October 2006	6,331,362
November 2006	6,299,879
December 2006	6,160,966

Table 2-2
Groundwater Elevation Data - 4th Quarter 2006
Black & Decker
Hampstead, Maryland

WELL NO.	TOC ELEV	TOTAL DEPTH	10/18/2006		11/20/2006		12/15/2006	
			DTW	ELEV	DTW	ELEV	DTW	ELEV
EW-1	847.21	55	DRY	NA	DRY	NA	DRY	NA
EW-2	849.21	110	94.12	755.09	93.06	756.15	74.71	774.50
EW-3	846.64	118	88.91	757.73	87.47	759.17	88.04	758.60
EW-4	858.01	97.5	NA	NA	NA	NA	NA	NA
EW-5	864.17	98	71.13	793.04	70.57	793.60	96.00	768.17
EW-6	831.98	115	98.90	733.08	95.95	736.03	97.11	734.87
EW-7	818.38	78	48.46	769.92	46.80	771.58	55.29	763.09
EW-8	811.13	98	47.11	764.02	91.70	719.43	68.08	743.05
EW-9	811.35	141	102.00	709.35	101.50	709.85	98.96	712.39
EW-10	807.74	NA	58.74	749.00	55.22	752.52	61.22	746.52
RFW-1A	864.37	78	51.33	813.04	51.11	813.26	50.96	813.41
RFW-1B	864.23	200	51.35	812.88	51.15	813.08	51.00	813.23
RFW-2A	857.41	35	15.67	841.74	15.82	841.59	14.91	842.50
RFW-2B	857.73	75	16.28	841.45	16.62	841.11	15.43	842.30
RFW-3B	839.21	153	34.17	805.04	35.62	803.59	36.41	802.80
RFW-4A	830.37	62	40.83	789.54	38.87	791.50	39.94	790.43
RFW-4B	830.37	120	40.76	789.61	38.69	791.68	39.88	790.49
RFW-5A	817.50	30	DRY	NA	DRY	NA	DRY	NA
RFW-6	785.04	120	3.61	781.43	3.86	781.18	2.94	782.10
RFW-7	805.14	29	7.43	797.71	6.35	798.79	7.87	797.27
RFW-8	860.07	56	DRY	NA	DRY	NA	DRY	NA
RFW-9	862.02	49	29.46	832.56	27.00	835.02	30.27	831.75
RFW-10	852.06	58	DRY	NA	DRY	NA	DRY	NA
RFW-11A	849.32	72	NA	NA	NA	NA	NA	NA
RFW-11B	849.62	116	71.40	778.22	69.48	780.14	73.14	776.48
RFW-12B	844.87	264	54.65	790.22	52.37	792.50	62.06	782.81
RFW-13	849.11	150	63.60	785.51	64.08	785.03	63.81	785.30
RFW-14B	812.39	281	48.27	764.12	50.10	762.29	52.62	759.77
RFW-16	856.14	41	DRY	NA	DRY	NA	DRY	NA
RFW-17	834.66	60.5	30.17	804.49	28.61	806.05	30.43	804.23
RFW-20	842.49	142	37.08	805.41	36.65	805.84	37.61	804.88
RFW-21	832.65	102	22.94	809.71	23.33	809.32	23.67	808.98
PH-7	805.94	89	32.16	773.78	33.77	772.17	34.03	771.91
PH-9	814.94	98	40.58	774.36	40.51	774.43	40.63	774.31
PH-11	820.68	78	45.43	775.25	42.96	777.72	46.81	773.87
PH-12	828.35	87	48.87	779.48	47.89	780.46	49.03	779.32
B-3	803.02	83	NA	NA	NA	NA	NA	NA
Amoco	842.29	NA	NA	NA	NA	NA	NA	NA
Hamp. Town #22	804.96	NA	29.56	775.40	27.11	777.85	27.43	777.53
Pembroke #1	NA	NA	NA	NA	11.93	NA	12.13	NA
Pembroke #2	NA	NA	NA	NA	NA	NA	NA	NA
N. Houcks. Rd.	NA	NA	8.49	NA	9.17	NA	10.08	NA
E. Century St.	NA	NA	12.99	NA	22.61	NA	28.11	NA
Lwr. Beckleys. Rd.	NA	NA	56.41	NA	55.86	NA	55.06	NA

NA - Not Available/Not Accessible

Table 2-3
 Effluent Characteristics Summary - 4th Quarter 2006
 Black & Decker
 Hampstead, Maryland

Discharge Number	Parameter	Units	Permit Limits	DMR DATE			
				October 2006	November 2006	December 2006	
001	FLOW	average	MGD	NA	0.182	0.251	0.219
		maximum	MGD	NA	0.657	0.988	0.630
	1,1,1-Trichloroethane		ug/l	5	< 5	< 5	< 5
	Tetrachloroethylene		ug/l	5	< 5	< 5	< 5
	Trichloroethylene		ug/l	5	< 5	< 5	< 5
	Total Residual Chlorine		mg/l	< 0.1	< 0.1	< 0.1	< 0.1
	Oil & Grease	maximum	mg/l	15	< 5	< 5	< 5
		quarterly average	mg/l	10	NR	NR	< 5
	pH	minimum	STD	6.0	6.00	6.10	6.10
		maximum	STD	8.5	6.40	6.40	6.40
	BOD		mg/l	15	5.3	6.0	< 2
TSS	maximum	mg/l	30	14.0	7.0	< 5	
	quarterly average	mg/l	20	NR	NR	< 5	
101 (Monitoring Point)	FLOW	average	MGD	NA	0.344	0.282	0.294
		maximum	MGD	NA	0.383	0.288	0.320
	Fecal Coliform		MPN/100ml	200	< 2	< 2	< 2
201 (Monitoring Point)	FLOW	average	MGD	NA	0.204	0.210	0.308
		maximum	MGD	NA	0.242	0.238	1.020
	1,1,1-Trichloroethane		ug/l	NA	< 5	< 5	< 5
	Tetrachloroethylene		ug/l	NA	< 5	< 5	< 5
	Trichloroethylene		ug/l	NA	< 5	< 5	< 5

DMR - Discharge Monitoring Report

NA - Not Applicable

NR - Not Reported

Table 2-4
 Summary of Groundwater Analytical Results - November 2006
 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	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.4
Acetone	ug/L	NS	5 U	6.4	5 U	5 U	5.7	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 J	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	3.6	2.2	1 U	1 U	1 U	8.8	35	1.4	1.4	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	420	180	840	230	11	6.9	16	2.1	1.9	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	56	4.6	16	10	21	14	100	230	220	5.4
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.

Table 2-4
 Summary of Groundwater Analytical Results - November 2006
 Black & Decker
 Hampstead, Maryland

PARAMETER	Units	RFW-1A	RFW-1B	RFW-2A	RFW-2B	RFW-3B	RFW-4A	RFW-4B	RFW-4B (DUP)	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	1.7	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	1 U	1 U	1 U	1 U	1.3	7.2	1	1 U	NS	1 U	1 U	NS	1 U	NS
Acetone	ug/L	5 U	5 U	5 U	5 U	5 U	5 U	5	8	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	1.1	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	NS
1,2-Dichloroethene (total)	ug/L	1 U	1 U	1 U	1 U	8.4	1.2	8.5	7.4	NS	1	1 U	NS	13	NS
Chloroform	ug/L	1 U	1 U	1 U	1 U	1 U	1.2	1 U	1 U	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	2.2	1.6	1 U	36	9	8.8	NS	4.9	3.4	NS	16	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 J	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	3	33	60	66	NS	4.1	1 U	NS	6.7	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 2006
 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	USEPA drinking water method 524.2				
												RFW-20	RFW-21	Town #22	Town #23	Trip Blank
Chloromethane	ug/L	NS	1 U	1 U	1 U	NS	1 U	1 U	1 U	NS	1 U	0.5 U	0.5 U	0.66	0.5 U	1.5
Bromomethane	ug/L	NS	1 U	1 U	1 U	NS	1 U	1 U	1 U	NS	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	1 U	1 U	NS	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	1 U	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	ug/L	NS	1 U	1 U	1 U	NS	1 U	1 U	1 U	NS	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	NS	5 U	5 U	8.2	NS	5 U	5 U	5 U	NS	5 U	40	48	71	73	10 U
Carbon Disulfide	ug/L	NS	5 U	5 U	5 U	NS	5 U	5 U	5 U	NS	5 U	NA	NA	NA	NA	NA
1,1-Dichloroethene	ug/L	NS	1 U	1 U	1 U	NS	1 U	1 U	1 U	NS	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	1 U	1 U	NS	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	3.7	1 U	NS	1 U	1 U	1 U	NS	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	1 U	1 U	NS	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	1 U	1 U	NS	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	5 U	5 U	NS	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	1 U	1 U	NS	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	1 U	1 U	NS	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	1 U	1 U	NS	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	1 U	1 U	NS	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	1 U	1 U	NS	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	ug/L	NS	19	560	3.3	NS	1 U	1 U	1 U	NS	1 U	0.6	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	1 U	1 U	NS	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	1 U	1 U	NS	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	1 U	1 U	1 U	NS	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	1 U	1 U	NS	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	1 U	1 U	NS	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1
4-Methyl-2-pentanone	ug/L	NS	5 U	5 U	5 U	NS	5 U	5 U	5 U	NS	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	5 U	5 U	NS	5 U	10 U	10 U	10 U	10 U	10 U
Tetrachloroethene	ug/L	NS	1 U	41	15	NS	1 U	1 U	1 U	NS	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	1 U	1 U	NS	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	1 U	1 U	NS	1 U	0.3 J	0.2 J	0.29 J	0.44 J	0.5 U
Chlorobenzene	ug/L	NS	1 U	1 U	1 U	NS	1 U	1 U	1 U	NS	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	1 U	1 U	NS	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	1 U	1 U	NS	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	1 U	1 U	NS	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.

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 RFW-12B 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 (October through December 2006) 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 2006
Black & Decker
Hampstead, Maryland

Date	Event/Corrective Action
Oct-06	Replaced the pump in well EW-8. Bleached the well, the well is back in service.
Oct-06	Replaced the pump in well EW-7. Bleached the well, the well is back in service.
Dec-06	Low wet well alarm. Substation tripped out. Restored power to substation.
Dec-06	Pump in well EW-3 is surging between 0-30 GPM. A new pump is installed and the well is pumping 38 GPM. The well was down for two days.
Dec-06	Pump in well EW-2 went down. A new pump and motor was installed. The well was down for six days. The well is now back online.
Dec-06	Alarm at the air stripper. High column and blower failure. Switch blowers and the air stripper back online.

4. RECOMMENDATIONS

For the reporting period of October through December 2006, 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 2006)

MONTH / YEAR

Oct. 2006

**BLACK & DECKER
AIR STRIPPER # 2
OPERATING RECORD**

PAST MONTH READING

137457233

Date	Day	Time	Integ. Reading	GPD	Pump # 11	Pump # 12
1	S	1015	137854858	235449	31420	31386
2	M	1330	138090347	200987	31447	31386
3	T	1255	138291334	205857	31447	31410
4	W	1255	138497191	212907	31447	31434
5	T	1410	138710098	191366	31447	31459
6	F	1255	138901464	↑	31447	31482
7						
8				610493		
9	M	1320	139511957	205671	31447	31554
10	T	1340	139717628	202263	31472	31554
11	W	1345	139919891	207043	31496	31554
12	T	1420	140126934	192359	31520	31554
13	F	1310	140319293	↓	31543	31554
14						
15				600991		
16	M	1240	140920284	196172	31615	31554
17	T	1205	141116456	185350	31615	31578
18	W	1215	141301806	199789	31615	31600
19	T	1425	141501595	165019	31615	31626
20	F	1225	141666614	↑	31615	31648
21						
22				657069		
23	M	1240	142323683	213892	31615	31721
24	T	1220	142537575	219630	31638	31721
25	W	1245	142751205	187017	31663	31721
26	T	1220	142944222	187317	31686	31721
27	F	1140	143131539	↑	31710	31721
28						
29				579281		
30	M	1040	143710820	241705	31782	31721
31	T	1145	143952525	233735	31782	31746
Total				6331362		
Average				204237		

NEXT MONTH READING 144186260

DATE 11-1-06

MONTH / YEAR

Nov. 2006

**BLACK & DECKER
AIR STRIPPER # 2
OPERATING RECORD**

PAST MONTH READING

143952525

Date	Day	Time	Integ. Reading	GPD	Pump # 11	Pump # 12
1	W	1255	144186260	222243	31782	31771
2	T	1340	144408503	220122	31782	31796
3	F	1215	144608625	↑	31782	31818
4						
5				629015		
6	M	1230	145237640	187203	31782	31890
7	T	1020	145424843	220373	31782	31912
8	W	1040	145645216	237502	31806	31912
9	T	1330	145822778	211391	31833	31912
10	F	1330	146094169	↑	31857	31912
11						
12				617957		
13	M	1150	146712126	208965	31927	31912
14	T	1135	146921091	204727	31927	31936
15	W	1100	147125818	230341	31927	31959
16	T	1210	147356159	210729	31927	31985
17	F	1200	147566888	↑	31927	32008
18						
19				647569		
20	M	1335	148214457	211872	31927	32082
21	T	1250	148426329	200302	31950	32082
22	W	1120	148626629	↑	31913	32082
23	T	Thanksgiving				
24	F	"				
25						
26				1032859		
27	M	1045	149659488	233904	32092	32082
28	T	1405	149893392	183345	32092	32110
29	W	1145	150076737	220051	32092	32131
30	T	1210	150296788	183351	32092	32153
31						
Total				6299879		
Average				209996		

NEXT MONTH READING 150691956

DATE 12-2-06