

QUARTERLY GROUNDWATER MONITORING REPORT

Prepared for

**BLACK & DECKER (U.S.) INC.
Hampstead, Maryland**

April 2000

Prepared by

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SECTION 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; and 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.

SECTION 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 2000.

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. At the time the water level measurements were collected, the extraction wells were pumping at an average combined rate of approximately 143 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 2000 are included in Appendix B

2.3 GROUNDWATER QUALITY DATA

For the reporting period of January through March 2000, approximately 78 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) (74 %) and tetrachlorethene (PCE) (26 %). Analytical results of the groundwater collected at the inlet to the air stripper for the period of January through March 2000 are included in Appendix C.

A summary of the analytical results from the first quarter (February 2000) groundwater sampling round of the extraction and monitor wells is included in Table 2-4. The complete 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-2, and the highest concentration of PCE was detected in the groundwater sample collected from extraction well EW-9. Lower concentrations of 1,2-dichloroethene were also detected. The remainder of VOCs present were detected at levels well below the Federal Maximum Contaminant Levels (MCL).

Table 2-1
Treatment System Pumping Records - 1st Quarter 2000
Black & Decker
Hampstead, Maryland

Date	Water Pumped (gallons)
January 2000	5,958,741
February 2000	5,594,258
March 2000	5,998,728

Table 2-2
Groundwater Elevation Data - 1st Quarter 2000
Black & Decker
Hampstead, Maryland

WELL NO.	TOC ELEV	TOTAL DEPTH	1/28/00		2/15/00		3/23/00	
			DTW	ELEV	DTW	ELEV	DTW	ELEV
EW-1	847.21	55	DRY	--	DRY	--	DRY	--
EW-2	849.21	110	106.00	743.21	106.00	743.21	106.00	743.21
EW-3	846.64	118	88.43	758.21	93.53	753.11	90.13	756.51
EW-4	858.01	97.5	89.66	768.35	89.63	768.38	88.77	769.24
EW-5	864.17	98	88.22	775.95	87.94	776.23	88.23	775.94
EW-6	831.98	115	64.34	767.64	65.08	766.90	65.44	766.54
EW-7	818.38	78	51.36	767.02	51.21	767.17	48.77	769.61
EW-8	811.13	98	76.48	734.65	77.03	734.10	77.49	733.64
EW-9	811.35	141	104.00	707.35	104.98	706.37	105.36	705.99
EW-10	807.74	NA	56.74	751.00	57.41	750.33	57.87	749.87
RFW-1A	864.37	78	51.94	812.43	51.43	812.94	50.96	813.41
RFW-1B	864.23	200	51.96	812.27	51.42	812.81	50.99	813.24
RFW-2A	857.41	35	14.68	842.73	13.94	843.47	13.43	843.98
RFW-2B	857.73	75	15.13	842.60	14.65	843.08	13.71	844.02
RFW-3B	839.21	153	33.98	805.23	33.84	805.37	33.23	805.98
RFW-4A	830.37	62	38.69	791.68	38.47	791.90	38.41	791.96
RFW-4B	830.37	120	38.50	791.87	38.31	792.06	38.21	792.16
RFW-5A	817.50	30	DRY	--	DRY	--	DRY	--
RFW-6	785.04	120	1.22	783.82	2.63	782.41	1.74	783.30
RFW-7	805.14	29	7.14	798.00	7.61	797.53	6.94	798.20
RFW-8	860.07	56	DRY	--	DRY	--	DRY	--
RFW-9	862.02	49	26.38	835.64	27.09	834.93	27.31	834.71
RFW-10	852.06	58	DRY	--	DRY	--	DRY	--
RFW-11A	849.32	72	72.08	777.24	72.31	777.01	71.99	777.33
RFW-11B	849.62	116	78.46	771.16	78.16	771.46	78.37	771.25
RFW-12B	844.87	264	54.81	790.06	54.46	790.41	55.11	789.76
RFW-13	849.11	150	63.09	786.02	62.55	786.56	62.42	786.69
RFW-14B	812.39	281	48.90	763.49	48.84	763.55	47.99	764.40
RFW-16	856.14	41	DRY	--	DRY	--	DRY	--
RFW-17	834.66	60.5	27.98	806.68	28.23	806.43	27.87	806.79
RFW-20	842.49	142	36.99	805.50	37.15	805.34	36.47	806.02
RFW-21	832.65	102	22.95	809.70	22.79	809.86	23.41	809.24
PH-7	805.94	89	34.84	771.10	34.94	771.00	33.87	772.07
PH-9	814.94	98	43.01	771.93	43.47	771.47	42.83	772.11
PH-11	820.68	78	38.08	782.60	39.46	781.22	37.91	782.77
PH-12	828.35	87	47.84	780.51	48.61	779.74	47.39	780.96
B-3	803.02	83	7.89	795.13	7.63	795.39	6.81	796.21
Amoco	842.29	NA	28.43	813.86	29.77	812.52	28.57	813.72
Hamp. Town #22	804.96	NA	0.74	804.22	1.73	803.23	0.69	804.27
Pembroke #1	NA	NA	11.48	--	12.18	--	11.37	--
Pembroke #2	NA	NA	NA	--	NA	--	NA	--
N. Houcks. Rd.	NA	NA	10.36	--	9.83	--	8.81	--
E. Century St.	NA	NA	11.27	--	11.23	--	11.19	--
Lwr. Beckleys. Rd.	NA	NA	53.61	--	54.83	--	54.08	--

NA - Not Available/Not Accessible

Table 2-3
Effluent Characteristics Summary - 1st Quarter 2000
Black & Decker
Hampstead, Maryland

Discharge Number	Parameter	Units	Permit Limits	DMR DATE			
				January 2000	February 2000	March 2000	
001	FLOW	average	MGD	NA	0.197	0.156	0.198
		maximum	MGD	NA	0.349	0.243	0.706
	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	6.29	6.10	6.32
		maximum	STD	8.5	6.90	6.91	7.34
	BOD		mg/l	15	9	4	5
TSS	maximum	mg/l	30	19	7	12	
	quarterly average	mg/l	20	NR	NR	10	
101 (Monitoring Point)	FLOW	average	MGD	NA	0.519	0.437	0.481
		maximum	MGD	NA	0.536	0.551	0.503
	Fecal Coliform	MPN/100ml	200	< 2	< 2	< 2	
201 (Monitoring Point)	FLOW	average	MGD	NA	0.192	0.193	0.194
		maximum	MGD	NA	0.201	0.209	0.206
	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 - February 2000
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	RFW-1A	RFW-1B	RFW-2A
			(20)	(5)	(20)	(10)			(2)	(5)	(5)				
Chloromethane	ug/L	NS	23 JB	27 JB	180 JB	63 JB	2 JB	2 JB	4 JB	15 JB	19 JB	6 JB	4 J	4 J	3 J
Bromomethane	ug/L	NS	200 U	50 U	200 U	100 U	10 U	10 U	20 U	50 U	50 U	10 U	10 U	10 U	10 U
Vinyl Chloride	ug/L	NS	200 U	50 U	200 U	100 U	10 U	10 U	20 U	50 U	50 U	10 U	10 U	10 U	10 U
Chloroethane	ug/L	NS	200 U	50 U	200 U	100 U	10 U	10 U	20 U	50 U	50 U	10 U	10 U	10 U	10 U
Methylene Chloride	ug/L	NS	140 B	26 B	140 B	72 B	4 JB	4 JB	9 JB	26 B	40 B	4 JB	6 B	6 B	6 B
Acetone	ug/L	NS	63 JB	16 JB	72 JB	34 JB	5 JB	3 JB	7 JB	28 JB	20 JB	3 JB	3 JB	5 JB	4 JB
Carbon Disulfide	ug/L	NS	100 U	25 U	100 U	50 U	5 U	5 U	10 U	25 U	25 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	ug/L	NS	100 U	25 U	100 U	50 U	5 U	5 U	10 U	25 U	25 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	ug/L	NS	100 U	25 U	100 U	50 U	5 U	2 J	10 U	25 U	25 U	5 U	5 U	5 U	5 U
1,2-Dichloroethene (total)	ug/L	NS	100 U	25 U	100 U	50 U	1 J	8	33	25 U	5 J	5 U	5 U	5 U	5 U
Chloroform	ug/L	NS	100 U	25 U	100 U	50 U	5 U	5 U	10 U	25 U	25 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	ug/L	NS	100 U	25 U	100 U	50 U	5 U	5 U	10 U	25 U	25 U	5 U	5 U	5 U	5 U
2-Butanone	ug/L	NS	200 U	50 U	200 U	100 U	10 U	10 U	3 JB	10 JB	50 U	10 U	10 U	10 U	10 U
1,1,1-Trichloroethane	ug/L	NS	100 U	25 U	100 U	50 U	5 U	2 J	10 U	25 U	25 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	ug/L	NS	100 U	25 U	100 U	50 U	5 U	5 U	10 U	25 U	25 U	5 U	5 U	5 U	5 U
Bromodichloromethane	ug/L	NS	100 U	25 U	100 U	50 U	5 U	5 U	10 U	25 U	25 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	ug/L	NS	100 U	25 U	100 U	50 U	5 U	5 U	10 U	25 U	25 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	ug/L	NS	100 U	25 U	100 U	50 U	5 U	5 U	10 U	25 U	25 U	5 U	5 U	5 U	5 U
Trichloroethene	ug/L	NS	1700	670	1500	720	24	15	20	9 J	8 J	5 U	5 U	5 U	2 J
Dibromochloromethane	ug/L	NS	100 U	25 U	100 U	50 U	5 U	5 U	10 U	25 U	25 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	ug/L	NS	100 U	25 U	100 U	50 U	5 U	5 U	10 U	25 U	25 U	5 U	5 U	5 U	5 U
Benzene	ug/L	NS	100 U	25 U	100 U	50 U	5 U	5 U	10 U	25 U	25 U	5 U	5 U	5 U	5 U
Trans-1,3-Dichloropropene	ug/L	NS	100 U	25 U	100 U	50 U	5 U	5 U	10 U	25 U	25 U	5 U	5 U	5 U	5 U
Bromoform	ug/L	NS	100 U	25 U	100 U	50 U	5 U	5 U	10 U	25 U	25 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	ug/L	NS	200 U	50 U	200 U	100 U	10 U	10 U	20 U	50 U	50 U	10 U	10 U	10 U	10 U
2-Hexanone	ug/L	NS	200 U	50 U	200 U	100 U	10 U	10 U	20 U	50 U	50 U	10 U	10 U	10 U	10 U
Tetrachloroethene	ug/L	NS	94 J	13 J	32 J	18 J	69	40	210	760	710	15	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	ug/L	NS	100 U	25 U	100 U	50 U	5 U	5 U	10 U	25 U	25 U	5 U	5 U	5 U	5 U
Toluene	ug/L	NS	100 U	25 U	100 U	50 U	5 U	5 U	10 U	25 U	25 U	5 U	5 U	5 U	5 U
Chlorobenzene	ug/L	NS	100 U	25 U	100 U	50 U	5 U	5 U	10 U	25 U	25 U	5 U	5 U	5 U	5 U
Ethylbenzene	ug/L	NS	100 U	25 U	100 U	50 U	5 U	5 U	10 U	25 U	25 U	5 U	5 U	5 U	5 U
Styrene	ug/L	NS	100 U	25 U	100 U	50 U	5 U	5 U	10 U	25 U	25 U	5 U	5 U	5 U	5 U
Xylene (total)	ug/L	NS	100 U	25 U	100 U	50 U	5 U	5 U	10 U	25 U	25 U	5 U	5 U	5 U	5 U

Notes: U = Compound was analyzed for but not detected. Value shown is the method detection limit for quantification.
 J = Indicates an estimated value.
 B = Indicates that the analyte was found in the associated blank as well as in the sample.

DUP = Duplicate sample
 NS = Not sampled
 (2.5) = Dilution factor.

Table 2-4 (Continued)
Summary of Groundwater Analytical Results - February 2000
Black & Decker
Hampstead, Maryland

PARAMETER	Units	RFW-2B	RFW-3B	RFW-4A	RFW-4A (DUP)	RFW-4B	RFW-5A	RFW-6	RFW-7	RFW-8	RFW-9	RFW-10	RFW-11A	RFW-11B	RFW-12B (10)
Chloromethane	ug/L	2 J	5 JB	7 JB	4 JB	3 JB	NS	2 JB	2 JB	NS	3 JB	NS	5 JB	3 JB	53 JB
Bromomethane	ug/L	10 U	10 U	10 U	10 U	10 U	NS	10 U	10 U	NS	10 U	NS	10 U	10 U	100 U
Vinyl Chloride	ug/L	10 U	10 U	10 U	10 U	10 U	NS	10 U	10 U	NS	10 U	NS	10 U	10 U	100 U
Chloroethane	ug/L	10 U	10 U	10 U	10 U	10 U	NS	10 U	10 U	NS	10 U	NS	10 U	10 U	100 U
Methylene Chloride	ug/L	6 B	9 B	4 JB	4 JB	4 JB	NS	4 JB	8 B	NS	5 JB	NS	4 JB	4 JB	78 B
Acetone	ug/L	5 JB	9 JB	3 JB	4 JB	4 JB	NS	5 JB	7 JB	NS	3 JB	NS	3 JB	3 JB	60 JB
Carbon Disulfide	ug/L	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS	5 U	5 U	50 U
1,1-Dichloroethene	ug/L	5 U	1 J	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS	5 U	5 U	50 U
1,1-Dichloroethane	ug/L	5 U	2 J	5 U	5 U	5 U	NS	5 U	5 U	NS	1 J	NS	5 U	5 U	50 U
1,2-Dichloroethene (total)	ug/L	5 U	33	2 J	2 J	6	NS	2 J	2 J	NS	4 J	NS	5 U	5 U	19 J
Chloroform	ug/L	5 U	5 U	2 J	2 J	2 J	NS	5 U	5 U	NS	5 U	NS	5 U	5 U	50 U
1,2-Dichloroethane	ug/L	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS	5 U	5 U	50 U
2-Butanone	ug/L	10 U	10 U	10 U	10 U	10 U	NS	10 U	10 U	NS	10 U	NS	10 U	10 U	100 U
1,1,1-Trichloroethane	ug/L	5 U	3 J	5 U	5 U	5 U	NS	5 U	5 U	NS	2 J	NS	5 U	5 U	50 U
Carbon Tetrachloride	ug/L	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS	5 U	5 U	50 U
Bromodichloromethane	ug/L	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS	5 U	5 U	50 U
1,2-Dichloropropane	ug/L	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS	5 U	5 U	50 U
cis-1,3-Dichloropropene	ug/L	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS	5 U	5 U	50 U
Trichloroethene	ug/L	5 U	21	86	88	37	NS	10	11	NS	18	NS	120	190	850
Dibromochloromethane	ug/L	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS	5 U	5 U	50 U
1,1,2-Trichloroethane	ug/L	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS	5 U	5 U	50 U
Benzene	ug/L	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS	5 U	5 U	50 U
Trans-1,3-Dichloropropene	ug/L	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS	5 U	5 U	50 U
Bromoform	ug/L	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS	5 U	5 U	50 U
4-Methyl-2-pentanone	ug/L	10 U	10 U	10 U	10 U	10 U	NS	10 U	10 U	NS	10 U	NS	10 U	10 U	100 U
2-Hexanone	ug/L	10 U	10 U	10 U	10 U	10 U	NS	10 U	10 U	NS	10 U	NS	10 U	10 U	100 U
Tetrachloroethene	ug/L	5 U	22	100	100	130	NS	10	5 U	NS	6	NS	2 J	3 J	37 J
1,1,2,2-Tetrachloroethane	ug/L	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS	5 U	5 U	50 U
Toluene	ug/L	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS	5 U	5 U	50 U
Chlorobenzene	ug/L	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS	5 U	5 U	50 U
Ethylbenzene	ug/L	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS	5 U	5 U	50 U
Styrene	ug/L	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS	5 U	5 U	50 U
Xylene (total)	ug/L	5 U	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	NS	5 U	5 U	50 U

Notes: U = Compound was analyzed for but not detected. Value shown is the method detection limit for quantification.
 J = Indicates an estimated value.
 B = Indicates that the analyte was found in the associated blank as well as in the sample.

DUP = Duplicate sample
 NS = Not sampled
 (2.5) = Dilution factor.

Table 2-4 (Continued)
 Summary of Groundwater Analytical Results - February 2000
 Black & Decker
 Hampstead, Maryland

PARAMETER	Units	RFW-13	RFW-16	RFW-17	RFW-20	RFW-21	Town #22	Town #23	Leister Dairy	Leister Res. #1	Leister Res. #2	Field Blank	Trip Blank
Chloromethane	ug/L	4 JB	NS	5 JB	6 JB	3 JB	4 J	NS	6 J	4 J	NS	4 J	10 U
Bromomethane	ug/L	10 U	NS	10 U	10 U	10 U	10 U	NS	10 U	10 U	NS	10 U	10 U
Vinyl Chloride	ug/L	10 U	NS	10 U	10 U	10 U	10 U	NS	10 U	10 U	NS	10 U	10 U
Chloroethane	ug/L	10 U	NS	10 U	10 U	10 U	10 U	NS	10 U	10 U	NS	10 U	10 U
Methylene Chloride	ug/L	9 B	NS	9 B	9 B	9 B	6 B	NS	1 JB	6 B	NS	6 B	9 B
Acetone	ug/L	6 JB	NS	4 JB	3 JB	64 B	4 JB	NS	5 JB	5 JB	NS	5 JB	6 JB
Carbon Disulfide	ug/L	5 U	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	5 U
1,1-Dichloroethene	ug/L	5 U	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	5 U
1,1-Dichloroethane	ug/L	5 U	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	5 U
1,2-Dichloroethene (total)	ug/L	5 U	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	5 U
Chloroform	ug/L	5 U	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	9	5 U
1,2-Dichloroethane	ug/L	5 U	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	5 U
2-Butanone	ug/L	10 U	NS	10 U	10 U	10 U	10 U	NS	10 U	10 U	NS	10 U	10 U
1,1,1-Trichloroethane	ug/L	5 U	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	5 U
Carbon Tetrachloride	ug/L	5 U	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	5 U
Bromodichloromethane	ug/L	5 U	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	5 U
1,2-Dichloropropane	ug/L	5 U	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	5 U
cis-1,3-Dichloropropene	ug/L	5 U	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	5 U
Trichloroethene	ug/L	15	NS	5 U	3 J	5 U	5 U	NS	5 U	5 U	NS	5 U	5 U
Dibromochloromethane	ug/L	5 U	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	5 U
1,1,2-Trichloroethane	ug/L	5 U	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	5 U
Benzene	ug/L	5 U	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	5 U
Trans-1,3-Dichloropropene	ug/L	5 U	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	5 U
Bromoform	ug/L	5 U	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	5 U
4-Methyl-2-pentanone	ug/L	10 U	NS	10 U	10 U	10 U	10 U	NS	10 U	10 U	NS	10 U	10 U
2-Hexanone	ug/L	10 U	NS	10 U	10 U	10 U	10 U	NS	10 U	10 U	NS	10 U	10 U
Tetrachloroethene	ug/L	78	NS	5 U	5 U	5 U	5 U	NS	1 J	5 U	NS	5 U	5 U
1,1,2,2-Tetrachloroethane	ug/L	5 U	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	5 U
Toluene	ug/L	5 U	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	5 U
Chlorobenzene	ug/L	5 U	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	5 U
Ethylbenzene	ug/L	5 U	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	5 U
Styrene	ug/L	5 U	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	5 U
Xylene (total)	ug/L	5 U	NS	5 U	5 U	5 U	5 U	NS	5 U	5 U	NS	5 U	5 U

Notes: U = Compound was analyzed for but not detected. Value shown is the method detection limit for quantification. DUP = Duplicate sample
 J = Indicates an estimated value. NS = Not sampled
 B = Indicates that the analyte was found in the associated blank as well as in the sample. (2.5) = Dilution factor.

SECTION 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 2000) 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 2000
Black & Decker
Hampstead, Maryland

Date	Event/Corrective Action
January - March 2000	NO MAINTENANCE ACTIVITIES REPORTED FOR THE 1st QUARTER

SECTION 4
RECOMMENDATIONS

For the reporting period of January through March 2000, the treatment system continued to create a hydraulic boundary preventing off-site migration of groundwater. Operation of the extraction system as currently configured will continue, adjusting pumping rates as necessary according to the amount of groundwater recharge. Operation of the treatment system as currently configured will also continue, because the treatment system is fully effective in removing VOCs from the extracted groundwater.

APPENDIX A
GROUNDWATER TREATMENT SYSTEM PUMPING RECORDS
(JANUARY – MARCH 2000)

MONTH / YEAR

Jan. 2000

BLACK DECKER
AIR STRIPPER # 2
OPERATING RECORD

PAST MONTH READING

453662814

Date	Day	Time	Integ. Reading	GPD	Pump # 11	Pump # 12
1				↑		
2				393034		
3	M	1020	454645400	188033	1923	1892
4	T	0950	454833433	196809	1946	1892
5	W	1030	455030242	184948	1970	1892
6	T	0930	455215190	201215	1993	1892
7	F	1025	455416405	↑	2018	1892
8						
9				582868		
10	M	1040	455999273	184802	2091	1892
11	T	0935	456184075	201129	2091	1915
12	W	1030	456385204	189481	2091	1940
13	T	1010	456574685	194207	2091	1963
14	F	1015	456768892	↑	2091	1987
15						
16				574535		
17	M	0930	457343427	200589	2091	2059
18	T	1025	457544016	182164	2114	2059
19	W	0850	457726180	193772	2138	2059
20	T	0900	457919952	↑	2162	2059
21	F					
22						
23				718250		
24	M	0935	458638202	197230	2259	2059
25	T	0945	458835432	↑	2259	2083
26	W			397553		
27	T		459232985	184166	2259	2131
28	F	0850	459417151	↑	2259	2154
29						
30				600606		
31	M	1050	460017157	193350	2259	2228
Total				5958741		
Average				192217		

NEXT MONTH READING 460211107

DATE Feb. 1

MONTH / YEAR

Feb. 2000

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

PAST MONTH READING

460 017 757

Date	Day	Time	Integ. Reading	GPD	Pump # 11	Pump # 12
1	T	1045	460211107	200274	2283	2228
2	W	1125	460411381	189554	2308	2228
3	T	1050	460600935	196811	2331	2228
4	F	1115	460797746	↑	2355	2228
5						
6				575817		
7	M	1040	461373563	185075	2427	2228
8	T	0940	461558638	199500	2427	2251
9	W	1020	461758138	195556	2427	2276
10	T	1035	461953694	189737	2427	2300
11	F	1010	462143425	↑	2427	2324
12						
13				578723		
14	M	1005	462722148	196268	2427	2395
15	T	1030	462918416	195982	2451	2395
16	W	1100	463114398	185505	2475	2395
17	T	1005	463299903	202099	2499	2395
18	F	1115	463502602	↑	2524	2395
19						
20				578315		
21	M	1000	464070317	209330	2595	2395
22	T	1215	464279647	182601	2595	2422
23	W	1100	464462348	189155	2595	2444
24	T	1040	464652003	188544	2595	2468
25	F	1005	464840547	↑	2595	2491
26						
27				578756		
28	M	1010	465419303	195607	2595	2563
29	T	1025	465614910	190455	2619	2563
30						
31						
Total				5594258		
Average				192905		

NEXT MONTH READING 465805365

DATE 3-1-00