

## **APPENDIX F**

### **TABLES SUMMARIZING CHEMICAL CONSTITUENTS TYPICALLY ASSOCIATED WITH FORMER MGP SITES AND NYSDEC SCGS**

**Table F-1**  
**Sag Harbor Former MGP Site**  
**Summary of Chemical Constituents Typically Associated with Former MGP Sites and Comparison to NYSDEC SCGs**

**On-Site Soil**

MEDIA	CLASS	CHEMICAL CONSTITUENT	CONCENTRATION RANGE (PPM)	FREQUENCY OF EXCEEDING SCG	SCGs (PPM)	LOCATION OF MAXIMUM CONCENTRATION		
Surface Soil	PAHs	Benzo(a)pyrene *	0.13 to 100	13 of 13	0.061	SHSS-12 (0-6")		
		Dibenzo(a,h)anthracene *	ND to 15	11 of 13	0.014	SHSS-12 (0-6")		
		Benzo(a)anthracene *	0.09 to 82	11 of 13	0.224	SHSS-12 (0-6")		
		Indeno(1,2,3-cd)pyrene *	0.14 to 97	11 of 13	3.2	SHSS-12 (0-6")		
		Benzo(b)fluoranthene *	0.18 to 97	11 of 13	1.1	SHSS-12 (0-6")		
		Benzo(k)fluoranthene *	0.082 to 50	11 of 13	1.1	SHSS-12 (0-6")		
		Chrysene *	0.11 to 75	11 of 13	0.4	SHSS-12 (0-6")		
		Naphthalene	ND to 8	0 of 13	13	SHSS-12 (0-6")		
		2-Methylnaphthalene	ND to 3.2	0 of 13	36.4	SHSS-12 (0-6")		
		Acenaphthylene	ND to 21	0 of 13	41	SHSS-10 (0-6")		
		Acenaphthene	ND to 4.2	0 of 13	50	SHSS-12 (0-6")		
		Dibenzofuran	ND to 0.42	0 of 13	6.2	SHSS-03 (0-6")		
		Fluorene	ND to 3.1	0 of 13	50	SHSS-12 (0-6")		
		Phenanthrene	0.044 to 15	0 of 13	50	SHSS-03 (0-6")		
		Anthracene	ND to 12	0 of 13	50	SHSS-12 (0-6")		
		Fluoranthene	0.14 to 120	2 of 13	50	SHSS-12 (0-6")		
		Pyrene	0.25 to 140	4 of 13	50	SHSS-12 (0-6")		
		Benzo(ghi)perylene	0.15 to 110	2 of 13	50	SHSS-12 (0-6")		
		Total CaPAHs	0.732 to 516	11 of 13	10	SHSS-12 (0-6")		
		Total PAHs	1.393 to 950.79	2 of 13	500 <sup>1</sup>	SHSS-12 (0-6")		
	Metals	Arsenic	ND to 9.8	5 of 13	7.5	SHSS-10 (0-6")		
		Barium	7.9 to 675	1 of 13	300	SHSS-07 (0-6")		
		Cadmium	0.074 to 7.2	0 of 13	10 <sup>2</sup>	SHSS-07 (0-6")		
		Chromium	1.9 to 62.3	1 of 13	50 <sup>2</sup>	SHSS-07 (0-6")		
		Lead	4 to 3390	4 of 13	500	SHSS-07 (0-6")		
		Mercury	ND to 6.3	11 of 13	0.1	SHSS-12 (0-6")		
		Selenium	ND to 2.6	2 of 13	2	SHSS-07 (0-6")		
		Silver	ND to 1.4	NA	SB	SHSS-01 and 07 (0-6")		
		Cyanide	ND to 12.6	NA	NA	SHSS-07 (0-6")		
		Subsurface Soil	VOCs	Benzene	ND to 140	12 of 48	0.06	SHSB-02 (6'-7')
				Toluene	ND to 370	6 of 48	1.5	SHSB-02 (6'-7')
				Ethylbenzene	ND to 380	10 of 48	5.5	SHSB-02 (6'-7')
Total Xylenes	ND to 500			15 of 48	1.2	SHSB-02 (6'-7')		
PAHs	Benzo(a)pyrene *		ND to 130	32 of 48	0.061	SHSB-05 (4'-8')		
	Dibenzo(a,h)anthracene *		ND to 14	18 of 48	0.014	SHSB-05 (0.5'-0.7' and 4'-8')		
	Benzo(a)anthracene *		ND to 180	28 of 48	0.224	SHSB-05 (4'-8')		
	Indeno(1,2,3-cd)pyrene *		ND to 58	15 of 48	3.2	SHSB-05 (0.5'-0.7')		
	Benzo(b)fluoranthene *		ND to 110	24 of 48	1.1	SHSB-05 (4'-8')		
	Benzo(k)fluoranthene *		ND to 32	20 of 48	1.1	SHSB-05 (4'-8')		
	Chrysene *		ND to 160	28 of 48	0.4	SHSB-05 (4'-8')		
	Naphthalene		ND to 1600	19 of 48	13	SHSB-02 (6'-7')		
	2-Methylnaphthalene		ND to 600	10 of 48	36.4	SHSB-10 (2'-4')		
	Acenaphthylene		ND to 73	4 of 48	41	SHSB-02 (6'-7')		
	Acenaphthene		ND to 520	8 of 48	50	SHSB-05 (4'-8')		
	Dibenzofuran		ND to 24	3 of 48	6.2	SHSB-10 (2'-4')		
	Fluorene		ND to 270	6 of 48	50	SHSB-05 (4'-8')		
	Phenanthrene		ND to 960	11 of 48	50	SHSB-05 (4'-8')		
	Anthracene		ND to 270	8 of 48	50	SHSB-10 (2'-4')		
	Fluoranthene		ND to 380	12 of 48	50	SHSB-05 (4'-8')		
Pyrene	ND to 490	13 of 48	50	SHSB-05 (4'-8')				
Benzo(ghi)perylene	ND to 76	5 of 48	50	SHSB-05 (0.5'-0.7')				
Total CaPAHs	0.00 to 679	23 of 48	10	SHSB-05 (4'-8')				
Total PAHs	0.00 to 5347	14 of 48	500 <sup>1</sup>	SHSB-10 (2'-4')				

**Table F-1**  
**Sag Harbor Former MGP Site**  
**Summary of Chemical Constituents Typically Associated with Former MGP Sites and Comparison to NYSDEC SCGs**

**On-Site Soil**

<b>MEDIA</b>	<b>CLASS</b>	<b>CHEMICAL CONSTITUENT</b>	<b>CONCENTRATION RANGE (PPM)</b>	<b>FREQUENCY OF EXCEEDING SCG</b>	<b>SCGs (PPM)</b>	<b>LOCATION OF MAXIMUM CONCENTRATION</b>
Subsurface Soil (cont.)	Metals	Arsenic	ND to 13.6	4 of 48	7.5	SHSB-03 (1'-3')
		Barium	1.7 to 180	0 of 48	300	SHSB-03 (1'-3')
		Cadmium	ND to 1.4	0 of 48	10 <sup>2</sup>	SHSB-13 (2'-4')
		Chromium	0.86 to 41.9	0 of 48	50 <sup>2</sup>	SHSB-05 (0.5'-1.5')
		Lead	ND to 485	0 of 48	500	SHSB-06 (0.5'-1.5')
		Mercury	ND to 4.9	9 of 48	0.1	SHSB-06 (0.5'-1.5')
		Selenium	ND to 6.4	6 of 48	2	SHSB-13 (2'-4')
		Silver	ND to 1.4	NA	SB	SHSB-02 (0.5'-1.5')
		Cyanide	ND to 4.8	NA	NA	SHSB-10 (2'-4')

Notes:

SCGs: NYSDEC TAGM 4046 dated January 1994.

NA: Not applicable.

ND: Non-detect.

SB: Site Background

\* Carcinogenic PAH (CaPAH).

1. SCG is for Total SVOCs.
2. Proposed NYSDEC TAGM criteria.

**Table F- 2**  
**Sag Harbor Former MGP Site**  
**Summary of Chemical Constituents Typically Associated with Former MGP Sites and Comparison to NYSDEC SCGs**  
**On-Site Groundwater**

MEDIA	CLASS	CHEMICAL CONSTITUENT	CONCENTRATION RANGE (PPB)	FREQUENCY OF EXCEEDING SCG	SCGs (PPB)	LOCATION OF MAXIMUM CONCENTRATION	
Groundwater	VOCs	Benzene	ND to 8700	38 of 51	1	SHGP-02 (32-34)	
		Toluene	ND to 7900	17 of 51	5	SHGP-02 (32-34)	
		Ethylbenzene	ND to 4700	31 of 51	5	MW-02 (3/17/00)	
		Total Xylenes	ND to 4600	35 of 51	5	SHGP-06 (0.5-4.5)	
	PAHs	Benzo(a)pyrene *	ND to 56000	33 of 51	ND	ND	SHGP-05 (30-32)
		Dibenzo(a,h)anthracene *	ND to 65	NA	NA	NA	SHGP-05 (0-4)
		Benzo(a)anthracene *	ND to 72000	37 of 51	0.002	0.002	SHGP-05 (30-32)
		Indeno(1,2,3-cd)pyrene *	ND to 23000	25 of 51	0.002	0.002	SHGP-05 (30-32)
		Benzo(b)fluoranthene *	ND to 44000	34 of 51	0.002	0.002	SHGP-05 (30-32)
		Benzo(k)fluoranthene *	ND to 14000	24 of 51	0.002	0.002	SHGP-05 (30-32)
		Chrysene *	ND to 63000	38 of 51	0.002	0.002	SHGP-05 (30-32)
		Naphthalene	ND to 790000	45 of 51	10	10	SHGP-05 (30-32)
		2-Methylnaphthalene	ND to 270000	NA	NA	NA	SHGP-05 (30-32)
		Acenaphthylene	ND to 220000	NA	NA	NA	SHGP-05 (30-32)
		Acenaphthene	ND to 3300	32 of 51	20	20	SHGP-04 (0-4)
		Dibenzofuran	ND to 11000	NA	NA	NA	SHGP-05 (30-32)
		Fluorene	ND to 100000	20 of 51	50	50	SHGP-05 (30-32)
		Phenanthrene	ND to 38000	27 of 51	50	50	SHGP-05 (30-32)
		Anthracene	ND to 110000	18 of 51	50	50	SHGP-05 (30-32)
		Fluoranthene	ND to 140000	20 of 51	50	50	SHGP-05 (30-32)
		Pyrene	ND to 200000	22 of 51	50	50	SHGP-05 (30-32)
		Benzo(ghi)perylene	ND to 25000	NA	NA	NA	SHGP-05 (30-32)
		Total CaPAHs	0.00 to 272000	NA	NA	NA	SHGP-05 (30-32)
		Total PAHs	0.00 to 2518000	NA	NA	NA	SHGP-05 (30-32)
	Metals	Arsenic	ND	NA	NA	25	NA
		Barium	15.8 to 483	0 of 9	1,000	1,000	MW-02 (4/19/00)
		Cadmium	ND to 2.2	0 of 9	5	5	MW-03 (4/20/00)
		Chromium	ND to 4.7	0 of 9	50	50	MW-01 (4/19/00)
		Lead	ND to 98.2	2 of 9	25	25	SHMW-02I (4/24/00)
		Mercury	ND to 0.14	0 of 9	0.7	0.7	SHMW-02D (4/24/00)
		Selenium	ND	NA	NA	10	NA
		Silver	ND to 2.1	0 of 9	50	50	SHMW-01S AND I (4/26/00)
	Cyanide	ND to 92.2	0 of 9	200	200	MW-02 (3/17/00)	

Notes:

SCGs: NYSDEC Class GA Groundwater Standards/Guidelines.

NA: Not applicable.

ND: Non-detect.

\*: Carcinogenic PAH (CaPAH).

**Table F-3**  
**Sag Harbor Former MGP Site**  
**Summary of Chemical Constituents Typically Associated with Former MGP Sites and Comparison to NYSDEC SCGs**

**Off-Site Soil**

MEDIA	CLASS	CHEMICAL CONSTITUENT	CONCENTRATION RANGE (PPM)	FREQUENCY OF EXCEEDING SCG	SCGs (PPM)	LOCATION OF MAXIMUM CONCENTRATION
Subsurface Soil	VOCs	Benzene	ND	0 of 9	0.06	NA
		Toluene	ND	0 of 9	1.5	NA
		Ethylbenzene	ND to 22	3 of 9	5.5	SHSB-14(5'-7')
		Total Xylenes	ND to 42	3 of 9	1.2	SHSB-14(5'-7')
	PAHs	Benzo(a)pyrene *	ND to 19	4 of 9	0.061	SHSB-14(5'-7')
		Dibenzo(a,h)anthracene *	ND to 2	4 of 9	0.014	SHSB-14(5'-7')
		Benzo(a)anthracene *	ND to 29	4 of 9	0.224	SHSB-14(5'-7')
		Indeno(1,2,3-cd)pyrene *	ND to 7.3	1 of 9	3.2	SHSB-14(5'-7')
		Benzo(b)fluoranthene *	ND to 15	3 of 9	1.1	SHSB-14(5'-7')
		Benzo(k)fluoranthene *	ND to 5.3	1 of 9	1.1	SHSB-14(5'-7')
		Chrysene *	ND to 26	4 of 9	0.4	SHSB-14(5'-7')
		Naphthalene	ND to 100	3 of 9	13	SHSB-14(5'-7')
		2-Methylnaphthalene	ND to 77	1 of 9	36.4	SHSB-14(5'-7')
		Acenaphthylene	ND to 13	0 of 9	41	SHSB-15(26'-28')
		Acenaphthene	ND to 89	1 of 9	50	SHSB-14(5'-7')
		Dibenzofuran	ND to 2.6	0 of 9	6.2	SHSB-14(5'-7')
		Fluorene	ND to 43	0 of 9	50	SHSB-14(5'-7')
		Phenanthrene	ND to 130	1 of 9	50	SHSB-14(5'-7')
		Anthracene	ND to 44	0 of 9	50	SHSB-14(5'-7')
		Fluoranthene	ND to 57	1 of 9	50	SHSB-14(5'-7')
		Pyrene	ND to 75	1 of 9	50	SHSB-14(5'-7')
		Benzo(ghi)perylene	ND to 8.4	0 of 9	50	SHSB-14(5'-7')
		Total CaPAHs	0.00 to 103.60	3 of 9	10	SHSB-14(5'-7')
		Total PAHs	0.00 to 738.70	1 of 9	500 <sup>1</sup>	SHSB-14(5'-7')
	Metals	Arsenic	ND to 1	0 of 9	7.5	SHSB-16 (6'-8')
		Barium	1.7 to 27.3	0 of 9	300	SHSB-16 (50'-52')
		Cadmium	ND to 0.29	0 of 9	10 <sup>2</sup>	SHSB-14 (5'-7')
		Chromium	0.88 to 8.1	0 of 9	50 <sup>2</sup>	SHSB-16 (50'-52')
		Lead	0.43 to 14.9	0 of 9	500	SHSB-16 (6'-8')
		Mercury	ND to 0.11	1 of 9	0.1	SHSB-14 (5'-7')
		Selenium	ND to 0.7	0 of 9	2	SHSB-16 (50'-52')
		Silver	ND to 0.58	NA	SB	SHSB-14 (5'-7')
	Cyanide	ND	NA	NA	NA	

Notes:  
 SCGs: NYSDEC TAGM 4046 dated January 1994.  
 NA: Not applicable.  
 ND: Non-detect.  
 SB: Site Background  
 \* Carcinogenic PAH (CaPAH).  
 1. SCG is for Total SVOCs.  
 2. Proposed NYSDEC TAGM criteria.

**Table F- 4**  
**Sag Harbor Former MGP Site**  
**Summary of Chemical Constituents Typically Associated with Former MGP Sites and Comparison to NYSDEC SCGs**  
**Off-Site Groundwater**

MEDIA	CLASS	CHEMICAL CONSTITUENT	CONCENTRATION RANGE (PPB)	FREQUENCY OF EXCEEDING SCG	SCGs (PPB)	LOCATION OF MAXIMUM CONCENTRATION	
Groundwater	VOCs	Benzene	ND to 5300	26 of 47	1	SHMW-04S (4/20/00)	
		Toluene	ND to 92	7 of 47	5	SHMW-06S (4/19/00)	
		Ethylbenzene	ND to 890	21 of 47	5	SHMW-04S (4/20/00)	
		Total Xylenes	ND to 1300	22 of 47	5	SHMW-04S (4/20/00)	
	PAHs	Benzo(a)pyrene *	ND to 91	14 of 47	ND	ND	SHGP-19 (3-7)
		Dibenzo(a,h)anthracene *	ND to 8	NA	NA	NA	SHGP-14 (3-7)
		Benzo(a)anthracene *	ND to 130	15 of 47	0.002	0.002	SHGP-19 (3-7)
		Indeno(1,2,3-cd)pyrene *	ND to 31	9 of 47	0.002	0.002	SHGP-19 (3-7)
		Benzo(b)fluoranthene *	ND to 72	11 of 47	0.002	0.002	SHGP-19 (3-7)
		Benzo(k)fluoranthene *	ND to 21	7 of 47	0.002	0.002	SHGP-14 (3-7)
		Chrysene *	ND to 110	15 of 47	0.002	0.002	SHGP-19 (3-7)
		Naphthalene	ND to 5700	24 of 47	10	10	SHMW-07S (4/19/00)
		2-Methylnaphthalene	ND to 800	NA	NA	NA	SHGP-14 (3-7)
		Acenaphthylene	ND to 79	NA	NA	NA	SHMW-06S (4/19/00)
		Acenaphthene	ND to 580	22 of 47	20	20	SHGP-14 (3-7)
		Dibenzofuran	ND to 16	NA	NA	NA	SHGP-14 (3-7)
		Fluorene	ND to 230	8 of 47	50	50	SHGP-19 (3-7)
		Phenanthrene	ND to 790	10 of 47	50	50	SHGP-19 (3-7)
		Anthracene	ND to 210	5 of 47	50	50	SHGP-19 (3-7)
		Fluoranthene	ND to 240	5 of 47	50	50	SHGP-19 (3-7)
		Pyrene	ND to 350	8 of 47	50	50	SHGP-19 (3-7)
		Benzo(ghi)perylene	ND to 44	NA	NA	NA	SHGP-19 (3-7)
		Total CaPAHs	0.00 to 452	NA	NA	NA	SHGP-19 (3-7)
	Total PAHs	0.00 to 7211	NA	NA	NA	SHMW-07S (4/19/00)	
	Metals	Arsenic	ND to 19.9	0 of 14	25	25	SHMW-08S (4/19/00)
		Barium	15.8 to 157	0 of 14	1,000	1,000	SHMW-09S (4/18/00)
		Cadmium	ND to 1.4	0 of 14	5	5	SHMW-05I (4/20/00)
		Chromium	ND to 25.6	0 of 14	50	50	SHMW-04I (4/20/00)
		Lead	ND to 83	1 of 14	25	25	SHMW-04I (4/20/00)
		Mercury	ND to 0.22	0 of 14	0.7	0.7	SHMW-07S (4/19/00)
		Selenium	ND to 6.6	0 of 14	10	10	SHMW-05I (4/20/00)
		Silver	ND to 3.7	0 of 14	50	50	SHMW-09S (4/18/00)
		Cyanide	ND to 103	0 of 14	200	200	SHMW-07S (4/19/00)

Notes:  
 SCGs: NYSDEC Class GA Groundwater Standards/Guidelines.  
 NA: Not applicable.  
 ND: Non-detect.  
 \*: Carcinogenic PAH (CaPAH).