

APPENDIX B

STIPULATION # 10

AIR SPARGE/SOIL VAPOR EXTRACTION (AS/SVE #2) SYSTEM – SOUTHERN BOUNDARY OF SITE

General

Elevated concentrations of volatile organic compounds (VOCs) were detected in previously collected soil vapor and sub-slab vapor samples in and around Building 3. Based on previous investigations at the Site, a VOC source area is believed to have been located at the eastern portion of the building. A Site-wide investigation of the groundwater resulted in the discovery of a PCE/ TCE plume present under the Site. The original air sparge / soil vapor extraction (AS/SVE #1) system is installed in Building 3, as discussed in Section 3.13, to target the core of the groundwater plume.

The focus of this section is a second AS/SVE system (AS/SVE #2) which will serve to intercept the potential offsite migration of residual contaminants in groundwater and soil vapor.

Conceptual Remedial Process

The mechanism of contaminant removal by this technology consists of stripping (induced volatilization by sub-surface air injection) and vapor capture via a vacuum throughout the contaminated zone. During air sparging, air is released into the saturated zone through a series of air sparge wells. The released air causes bubbles to form, which allows VOCs in the groundwater to diffuse into the rising bubbles. When the bubbles reach the vadose zone, the contaminants are removed via vapor extraction wells installed in the unsaturated zone. The location and distribution of sparging and extraction wells were determined based on a 40-foot radius of influence (ROI) per air sparge well and 75 foot ROI per soil vapor extraction well. ROIs were determined upon completion of an AS/SVE Pilot Test Study conducted at the Site.

General System Components and Layout

The main system components include:

- Six air sparge injection wells constructed of two-inch diameter schedule 80 PVC, with a 10-slot screen, 10 feet in length, set approximately 80 feet below grade;

- Four vapor extraction wells constructed of two-inch diameter schedule 40 PVC, with a 20-slot screen, 10 feet in length, set approximately 35 feet below grade;
- Three air sparge monitor wells constructed of two-inch diameter schedule 80 PVC, with a 10-slot screen, 10 feet in length, set approximately 70 feet below grade. Three existing groundwater monitoring wells will be used to also monitor the ROI of the air sparge component of the system;
- three vapor extraction monitoring wells constructed of two-inch diameter schedule 40 PVC, with a 20-slot screen, 10 feet in length, set approximately 35 feet below grade;
- An air sparge system that will include a compressor rated for a pressure of 25 pounds per square inch (psi); and
- A soil vapor extraction system that will include a:
 - Vacuum blower rated for a flow of 100 scfm at 200 inches of water column vacuum;
 - A moisture separator to protect the vacuum blower from moisture damage; and
 - Two vapor-phase granular-coal activated carbon (VGAC) vessels connected in series.

The air sparge, soil vapor extraction, and monitoring wells will be located along the southern Site boundary, and will act as a treatment wall to intercept potential offsite migration of the groundwater plume. The AS/SVE blower, compressor, and treatment system will be located next to Building 29, adjacent to the LIRR ROW and will be connected to the AS/SVE wells via 2 4 inch PVC header pipes. The well array, compressor selection, and vacuum blower selection were based on the results of the AS/SVE Pilot Test conducted at the Site. Final design documents and as-builts will be provided along with the Final Engineering Report (FER) for Parcel B.

Operation, Maintenance, and Monitoring

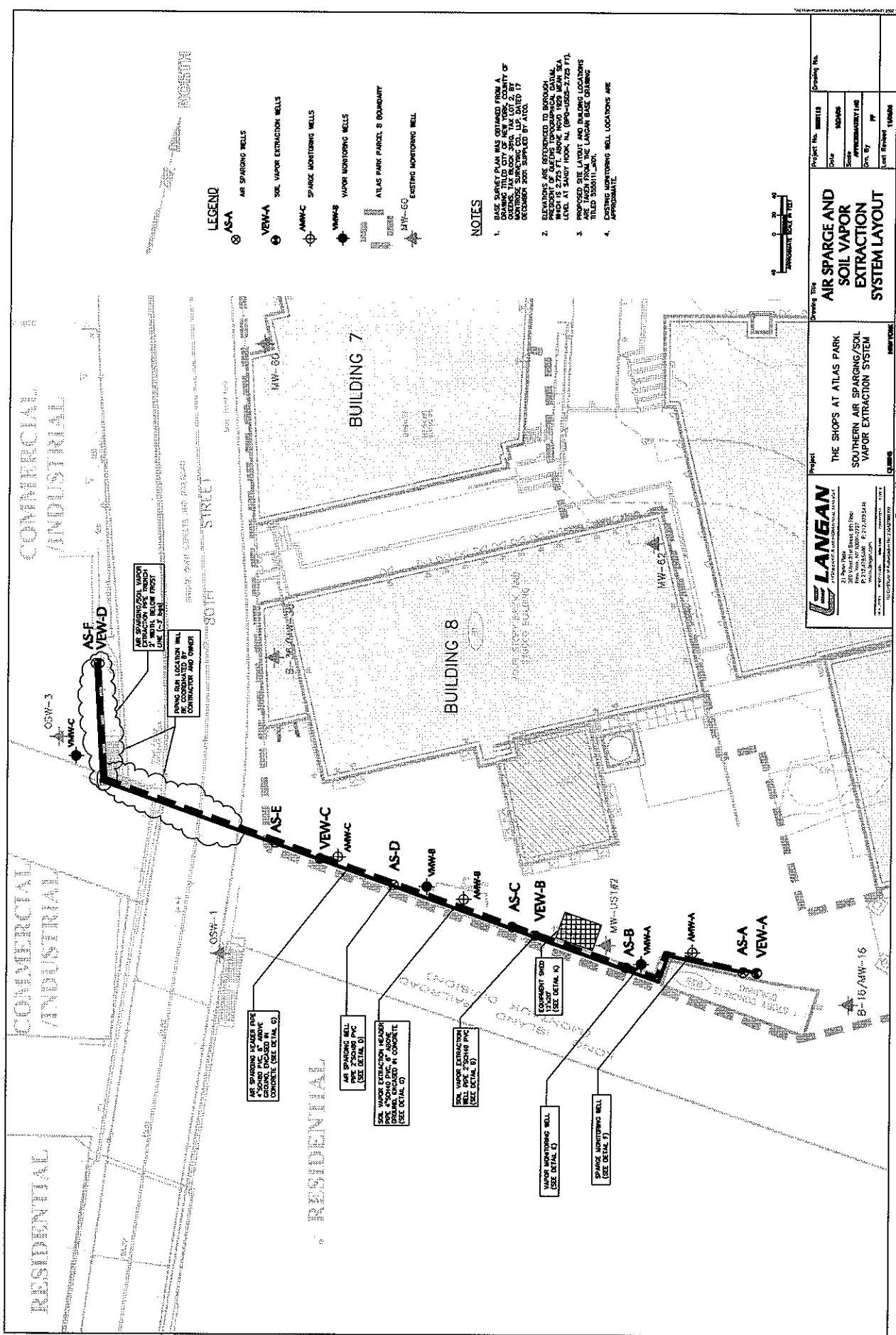
The procedures for operating, maintaining, and monitoring the AS/SVE system will be documented in the SMP (to be submitted along with the FER for Parcel B). Maintenance will start 18 months following AS/SVE system start-up and will be performed every 12 to 18

months thereafter. Maintenance will consist of visual inspection of all components of the system (including all pressure, vacuum, and/or flow gauges), identification and repair of any leaks, changing of blower and compressor system filters, and inspection of the exhaust or discharge point to verify that there are no nearby air intakes. As necessary, system components that are worn, damaged, or do not adequately perform the task for which they were designed will be replaced. Non-routine maintenance may also be required during the operation of the AS/SVE system, such as when an alarm notification indicates the AS/SVE system is not operating properly. Activities conducted during non-routine maintenance visits will vary depending upon the reason for the visit. Repairs or adjustments will be made to the system as appropriate.

Ground water, soil vapor, and system performance sampling events will be conducted as specified in the SMP. The integrity of the monitoring wells will be evaluated during each groundwater sampling event.

Remedial Goal

The overall remedial goal for the project is to substantially reduce the concentrations of constituents of concern in the contaminated zone until either New York State Department of Environmental Conservation (NYSDEC) levels or asymptotic contaminant concentrations are achieved at the Site. Once the AS/SVE system reaches either the applicable cleanup levels or the limit of its effectiveness, the AS/SVE system will be dismantled and allow natural attenuation to remediate any remaining contaminants. This decision will be made with NYSDEC and NYSDOH.



Appendix C

Track IV - Site Specific Soil Clean-Up Criteria Backup Data

TABLE 1
SUMMARY OF RI SRI TAGM EXCEEDANCES
THE SHOPS AT ATLAS PARK - PARCEL B
GLENDALE, NY

TABLE 1
SUMMARY OF RISK/TAGM EXCEDANCES
THE SHOPS AT ATLANTIS PARK - PARCEL B
GLENDALE, NV

10/27/2006

Sample ID	ZINC (50 mg/Kg)	MERCURY (0.2 mg/Kg)	MAGNESIUM (5000 mg/Kg)	NICKEL (26 mg/Kg)	LEAD (500 mg/Kg)	CHROMIUM (TOTAL) (40 mg/Kg)	COPPER (50 mg/Kg)	ARSENIC (12 mg/Kg)	DIBENZ(A,H)ANTHRACENE (14 ug/Kg)	INDENO (1, 2, 3- CD) PYRENE (3200 ug/Kg)	CHRYSENE (400 ug/Kg)	CHLOROFORM (300 ug/Kg)	BENZO(K)FLUORANTHENE (220 ug/Kg)	BENZO(B)FLUORANTHENE (220 ug/Kg)	BENZO(A)PYRENE (61 ug/Kg)	BENZO(A)ANTHRACENE (224 ug/Kg)	BENZENE (60 ug/Kg)	XYLENE (TOTAL)(1200 ug/Kg)	TRICHLOROETHYLENE(700 ug/Kg)	TETRACHLOROETHENE(1400 ug/Kg)	CARBON TETRACHLORIDE (600 ug/Kg)	2-BUTANONE (300 ug/Kg)	Total SVOCs (ug/Kg)	Total VOCs (ug/Kg)	TOTAL cPAH
BLDG28-T4B-041405	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BLDG28-T4C-041405	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BLDG28-T4D-041405	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BLDG28-T4E-041405	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BLDG28-T5A-041405	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BLDG28-T5C-041405	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BLDG28-T5D-041405	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BLDG28-T5E-041405	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CONED-BOT1-022305	6190	18	22620	0	0	4	0	0	0	1800	1700	1400	1600	0	2000	1100	380	10	68	0	143	37	3710	0	188
CONED-BOT2-022305	1440	19	4802	0	0	8	2	0	2	420	400	430	280	0	520	220	110	6	42	0	92	17	2000	0	85
CONED-SSW4-022305	1630	15	7778	0	0	2	0	0	0	610	450	490	340	0	900	220	130	16	53	0	286	18	1720	0	196
EP-B3F-1	311	22	684	0	0	5	0	0	0	87	91	90	68	0	96	43	20	2	13	13	12	10	1920	-	23
EP-B3F-2	208	40	707	0	0	16	8	0	0	57	58	68	46	0	71	35	0	4	72	15	57	12	2950	-	191
EP-B3F-4	205	111	988	0	0	3	1	0	0	71	56	54	64	0	99	32	0	14	26	11	12	6	24300	-	43
EP-B3F-5	228	112	1073	0	0	3	0	0	0	75	59	60	65	0	80	30	14	2	15	10	4	8	2440	-	29
EP-B3F-7	94	223	540	6	0	116	0	0	0	32	27	35	20	0	35	13	0	1	10	13	3	5	25900	-	23
EP-B3F-8	240	144	1634	0	0	3	0	2	0	90	67	76	66	0	97	30	0	2	26	12	22	10	3010	-	72
EP-B3F-11	336	30	2411	7	0	6	2	0	0	162	113	125	105	0	151	48	0	7	23	15	13	12	10300	-	36
EP-B3F-14	37	17	338	6	0	1	0	0	0	32	21	0	17	0	28	0	0	1	15	12	2	10	9100	-	18
EP-B3F-17	289	96	2009	9	0	1	0	0	0	110	87	114	65	0	120	43	0	2	18	11	4	9	10200	-	21
EP-B3F-18	238	61	1497	8	0	4	0	4	0	81	66	76	64	0	92	33	0	2	20	12	144	10	4040	-	52
EP-B3F-20	327	59	1640	9	0	27	1	0	0	134	93	98	69	0	127	47	0	2	17	13	8	9	12100	-	34
UST1-NSW4-023106	2330	709	41520	0	0	0	0	0	0	1200	0	2400	1600	0	400	3900	300	-	-	-	-	-	-	-	81
86(24)	387	6	1459	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
B6(9-61)	ND	8	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
B7(24)	87	161	353	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
B7(79)	ND	4	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

TABLE 1
SUMMARY OF RI SRI TAGME EXCEDANCES
THE SHOPS AT ATLAS PARK - PARCEL B
GLENDALE, NY

10/27/2006

Sample ID	ZINC (50 mg/Kg)	MERCURY (0.2 mg/Kg)	MAGNESIUM (5000 mg/Kg)	NICKEL (25 mg/Kg)	LEAD (500 mg/Kg)	CHROMIUM (TOTAL) (40 mg/Kg)	COPPER (50 mg/Kg)	ARSENIC (12 mg/Kg)	DIBENZ(A,H)ANTHRACENE (14 ug/Kg)	INDENO (1, 2, 3- CD) PYRENE (3200 ug/Kg)	CHRYSENE (400 ug/Kg)	CHLOROFORM (300 ug/Kg)	BENZO(K)FLUORANTHENE (220 ug/Kg)	BENZO(B)FLUORANTHENE (220 ug/Kg)	BENZO[A]PYRENE (61 ug/Kg)	BENZO(A)ANTHRACENE (224 ug/Kg)	BENZENE (60 ug/Kg)	XYLENE (TOTAL)(1200 ug/Kg)	TRICHLOROETHYLENE(700 ug/Kg)	TETRACHLOROETHENE(1400 ug/Kg)	CARBON TETRACHLORIDE (600 ug/Kg)	2-BUTANONE (300 ug/Kg)	Total SVOCs (ug/Kg)	Total VOCs (ug/Kg)	TOTAL cPAH
B91(1-3)	650	63	2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B91(3-5)	ND	4	ND	-	49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B91(8-10)	ND	0	ND	-	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B10(2-4)	ND	4	ND	-	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B10(8-10)	102	6	440	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B10(19-23)	ND	416	19030	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B16(5-7)	ND	0	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B39(6-7)	ND	0	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B39(57-58)	ND	0	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B45(2-4)	1694	76	4975	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B45(5-7)	3435	29	8900	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B46(4-6)	710	39	2200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B46(5-8)	268	23	984	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B47(2-4)	ND	47	329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B47(6-8)	ND	11	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B47(2-4)	3510	52	12352	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D1P1(BA(St-E-4))	467	70	1729	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B48(8-10)	S310	19	22090	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B49(2-4)	ND	8	1212	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B49(12-15)	107	52	739	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B51(6-8)	437	10	1554	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B55(0.5-5)	47	11	404	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B55(16-8)	ND	10	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B55(12-4)	76900	17	340100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B55(16-8)	6330	14	15760	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B55(8-12)	ND	10	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B55(0-5)	1262	18	3683	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B55(18-21)	812	1	2202	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B55(3-5)	ND	7	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B55(6-9)	ND	34	290	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ND	27	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 2A
RANKING TABLES FOR TOTAL cPAH, VOC SVOC
THE SHOPS AT ATLAS PARK - PARCEL B
GLENDALE, NY

11/13/2006

Sample ID	TOTAL cPAH
B51(2-4)	70800
B55(0.5-4.5)	6330
CONED-BOT1-022305	9990
B48(8-10)	5310
B48(2-4)	3510
B45(5-7)	3495
UST1-NSW-033105	8600
B45(2-4)	1694
CONED-SSW-022305	3140
CONED-BOT2-022305	2380
B58(0-5)	1262
B58(18-21)	812
B46(4-6)	710
B9(1-3)	650
DUP1 (B48(2-4))	467
B51(6-8)	437
B6(2-4)	387
EP-B3F-11	698.8
EP-B3F-20	587.7
EP-B3F-1	494
EP-B3F-17	528.8
B46(6-8)	258
EP-B3F-8	426.8
EP-B3F-18	410.8
EP-B3F-5	382.5
EP-B3F-4	377.8
EP-B3F-2	335.7
B49(12-15)	107
B10(8-10)	102
EP-B3F-7	160.6
B7(2-4)	87
B50(3-5)	47
EP-B3F-14	97.3
B6(59-61)	ND
B7(7-9)	ND
B9(3-5)	ND
B9(8-10)	ND
B10(2-4)	ND
B10(19-23)	ND
B16(5-7)	ND
B38(5-7)	ND
B38(57-58)	ND
B47(2-4)	ND
B47(6-8)	ND
B49(2-4)	ND

Sample ID	Total VOCs (ug/Kg)
B7-5E-9-9.5-110905	26613
B3-PIPE2-1-013106	7423.3
B3-PIPE3-0.5-013106	4996.3
B3-PIPE1-1-013106	1008.8
UST1-NSW-033105	708.6
B7-1-9.5-10-110805 (1)	627
B7-1N-9.5-10-110905	483.1
B10(19-23)	416
EP-B3F-7	233.2
B7(2-4)	161
EP-B3F-8	144.1
EP-B3F-5	111.5
EP-B3F-4	110.7
EP-B3F-17	95.5
B45(2-4)	76
DUP1 (B48(2-4))	70
B9(1-3)	63
EP-B3F-18	60.6
EP-B3F-20	59.1
B48(2-4)	51.8
B49(12-15)	51.6
B47(2-4)	47
EP-B3F-2	39.6
B46(4-6)	39
B59(3-5)	34
EP-B3F-11	30.3
B45(5-7)	29
B59(6-8)	27
B46(6-8)	23
EP-B3F-1	21.7
CONED-BOT2-022305	19.3
B48(8-10)	19
CONED-BOT1-022305	18.2
B58(0-5)	18
EP-B3F-14	16.9
B51(2-4)	16.8
CONED-SSW-022305	14.6
B55(0.5-4.5)	14
B47(6-8)	11
B50(3-5)	11
B50(6-8)	10
B51(6-8)	10
B55(8-12)	10
B6(59-61)	8
B10(8-10)	8

Sample ID	Total SVOCs (ug/Kg)
B51(2-4)	340100
UST1-NSW-033105	41520
CONED-BOT1-022305	22620
B48(8-10)	22090
B10(19-23)	19030
B55(0.5-4.5)	15760
B48(2-4)	12852
B45(5-7)	8900
CONED-SSW-022305	7779
B45(2-4)	4975
CONED-BOT2-022305	4802
B58(0-5)	3683
EP-B3F-11	2411.33
B58(18-21)	2202
B46(4-6)	2200
B9(1-3)	2002
EP-B3F-17	1999.5
EP-B3F-20	1840.03
DUP1 (B48(2-4))	1729
EP-B3F-8	1633.56
B51(6-8)	1554
EP-B3F-18	1496.91
B6(2-4)	1489
B49(2-4)	1212
EP-B3F-5	1072.78
EP-B3F-4	998.36
B46(6-8)	984
EP-B3F-1	884.28
B49(12-15)	739
EP-B3F-2	706.57
EP-B3F-7	540.02
B10(8-10)	440
B50(3-5)	404
B7(2-4)	353
EP-B3F-14	338.02
B47(2-4)	329
B59(3-5)	290
B9(8-10)	49
B6(59-61)	ND
B7(7-9)	ND
B9(3-5)	ND
B10(2-4)	ND
B16(5-7)	ND
B38(5-7)	ND
B38(57-58)	ND

TABLE 2A
RANKING TABLES FOR TOTAL cPAH, VOC SVOC
THE SHOPS AT ATLAS PARK - PARCEL B
GLENDALE, NY

11/13/2006

Sample ID	TOTAL cPAH
B50(6-8)	ND
B55(8-12)	ND
B58(73-75)	ND
B59(3-5)	ND
B59(6-8)	ND
B3-PIPE1-1-013106	-
B3-PIPE2-1-013106	-
B3-PIPE3-0.5-013106	-
B7-1-9.5-10-110805 (1)	-
B7-1-9.5-10-110805 (2)	-
B7-1N-9.5-10-110905	-
B7-5-9.5-110805	-
B7-5E-9-9.5-110905	-
BLDG28-GP1A-031805	-
BLDG28-GP2A-031805	-
BLDG28-GP3A-031805	-
BLDG28-GP4A-031805	-
BLDG28-GP5A-031805	-
BLDG28PIPETRENCH-CENT	-
BLDG28PIPETRENCH-NORT	-
BLDG28PIPETRENCH-SOUT	-
BLDG28-T1B-041405	-
BLDG28-T1D-041405	-
BLDG28-T1E-041405	-
BLDG28-T2A-041405	-
BLDG28-T2B-041405	-
BLDG28-T2D-041405	-
BLDG28-T2E-041405	-
BLDG28-T3A-041405	-
BLDG28-T3C-041405	-
BLDG28-T3D-041405	-
BLDG28-T3E-041405	-
BLDG28-T4A-041405	-
BLDG28-T4B-041405	-
BLDG28-T4C-041405	-
BLDG28-T4D-041405	-
BLDG28-T4E-041405	-
BLDG28-T5A-041405	-
BLDG28-T5C-041405	-
BLDG28-T5D-041405	-
BLDG28-T5E-041405	-

Sample ID	Total VOCs (ug/Kg)
B49(2-4)	8
B58(73-75)	7
B6(2-4)	6
B7(7-9)	4
B9(3-5)	4
B10(2-4)	4
B58(18-21)	1
B9(8-10)	0
B16(5-7)	0
B38(5-7)	0
B38(57-58)	0
B7-1-9.5-10-110805 (2)	-
B7-5-9.5-110805	-
BLDG28-GP1A-031805	-
BLDG28-GP2A-031805	-
BLDG28-GP3A-031805	-
BLDG28-GP4A-031805	-
BLDG28-GP5A-031805	-
BLDG28PIPETRENCH-CENT	-
BLDG28PIPETRENCH-NORT	-
BLDG28PIPETRENCH-SOUT	-
BLDG28-T1B-041405	-
BLDG28-T1D-041405	-
BLDG28-T1E-041405	-
BLDG28-T2A-041405	-
BLDG28-T2B-041405	-
BLDG28-T2D-041405	-
BLDG28-T2E-041405	-
BLDG28-T3A-041405	-
BLDG28-T3C-041405	-
BLDG28-T3D-041405	-
BLDG28-T3E-041405	-
BLDG28-T4A-041405	-
BLDG28-T4B-041405	-
BLDG28-T4C-041405	-
BLDG28-T4D-041405	-
BLDG28-T4E-041405	-
BLDG28-T5A-041405	-
BLDG28-T5C-041405	-
BLDG28-T5D-041405	-
BLDG28-T5E-041405	-

Sample ID	Total SVOCs (ug/Kg)
B47(6-8)	ND
B50(6-8)	ND
B55(8-12)	ND
B58(73-75)	ND
B59(6-8)	ND
B3-PIPE1-1-013106	-
B3-PIPE2-1-013106	-
B3-PIPE3-0.5-013106	-
B7-1-9.5-10-110805 (1)	-
B7-1-9.5-10-110805 (2)	-
B7-1N-9.5-10-110905	-
B7-5-9.5-110805	-
B7-5E-9-9.5-110905	-
BLDG28-GP1A-031805	-
BLDG28-GP2A-031805	-
BLDG28-GP3A-031805	-
BLDG28-GP4A-031805	-
BLDG28-GP5A-031805	-
BLDG28PIPETRENCH-CENT	-
BLDG28PIPETRENCH-NORT	-
BLDG28PIPETRENCH-SOUT	-
BLDG28-T1B-041405	-
BLDG28-T1D-041405	-
BLDG28-T1E-041405	-
BLDG28-T2A-041405	-
BLDG28-T2B-041405	-
BLDG28-T2D-041405	-
BLDG28-T2E-041405	-
BLDG28-T3A-041405	-
BLDG28-T3C-041405	-
BLDG28-T3D-041405	-
BLDG28-T3E-041405	-
BLDG28-T4A-041405	-
BLDG28-T4B-041405	-
BLDG28-T4C-041405	-
BLDG28-T4D-041405	-
BLDG28-T4E-041405	-
BLDG28-T5A-041405	-
BLDG28-T5C-041405	-
BLDG28-T5D-041405	-
BLDG28-T5E-041405	-

TABLE 2B
COMPOUND SPECIFIC RANKING TABLE
TAGM EXCEEDANCES
THE SHOPS AT ATLAS PARK - PARCEL B
GLENDALE, NY

10/27/2006

Sample ID	Times TAGM	Sample ID	Sample ID	Times TAGM	Sample ID	Times TAGM		
B3-PIPE3-0.5-013106	315	1.1	B3-PIPE2-1-013106	92	1.5	<i>B51(2-4)</i>	24000	107.1
B3-PIPE2-1-013106	308	1.0	B3-PIPE1-1-013106	88	1.5	<i>UST1-NSW-033105</i>	2400	10.7
B3-PIPE1-1-013106	238	0.8	B3-PIPE3-0.5-013106	44	0.7	<i>B48(8-10)</i>	1700	7.6
EP-B3F-17	9	0.0	CONED-BOT2-022305	2	0.0	<i>CONED-BOT1-022305</i>	1800	8.0
EP-B3F-20	9	0.0				<i>B57(0-5)</i>	1600	7.1
EP-B3F-7	6	0.0				<i>B55(0.5-4.5)</i>	1300	5.8
EP-B3F-18	8	0.0				<i>B48(2-4)</i>	870	3.9
EP-B3F-14	6	0.0				<i>CONED-SSW-022305</i>	610	2.7
EP-B3F-11	7	0.0				<i>B45(5-7)</i>	430	1.9
						<i>CONED-BOT2-022305</i>	420	1.9
						<i>EP-B3F-11</i>	162	0.7
						<i>EP-B3F-20</i>	134	0.6
						<i>B45(2-4)</i>	260	1.2

TABLE 2B
COMPOUND SPECIFIC RANKING TABLE
TAGM EXCEEDANCES
THE SHOPS AT ATLAS PARK - PARCEL B
GLENDALE, NY

10/27/2006

Sample ID	Times TAGM	Sample ID	Times TAGM	Sample ID	Times TAGM
B51(2-4)	16000	262.3	B51(2-4)	18000	81.8
B48(8-10)	1800	29.5	B57(0-5)	3100	14.1
B55(0.5-4.5)	1800	29.5	B48(8-10)	2700	12.3
B57(0-5)	1800	29.5	B55(0.5-4.5)	1500	6.8
CONED-BOT1-022305	1700	27.9	CONED-BOT1-022305	1400	6.4
UST1-NSW-033105	1600	26.2	B48(2-4)	850	3.9
B48(2-4)	990	16.2	B45(5-7)	650	3.0
B45(5-7)	970	15.9	CONED-SSW-022305	490	2.2
CONED-SSW-022305	450	7.4	CONED-BOT2-022305	430	2.0
B45(2-4)	430	7.0	B45(2-4)	320	1.5
CONED-BOT2-022305	400	6.6	B51(6-8)	270	1.2
B9(1-3)	180	3.0	B46(4-6)	230	1.0
B46(4-6)	180	3.0	EP-B3F-11	125	0.6
B6(2-4)	130	2.1	EP-B3F-17	114	0.5
EP-B3F-11	113	1.9			
EP-B3F-20	93	1.5			
EP-B3F-1	91	1.5			
B51(6-8)	89	1.5			
B46(6-8)	80	1.3			
EP-B3F-17	87	1.4			
EP-B3F-8	67	1.1			
EP-B3F-18	66	1.1			
EP-B3F-5	59	1.0			
EP-B3F-2	58	1.0			
EP-B3F-4	58	1.0			

**TABLE 2B
COMPOUND SPECIFIC RANKING TABLE
TAGM EXCEEDANCES
THE SHOPS AT ATLAS PARK - PARCEL B
GLENDALE, NY**

10/27/2006

Sample ID	Times TAGM	Sample ID	Times TAGM	Sample ID	CHRYSENE (400 ug/Kg)	CHRYSENE (400 ug/Kg)	Times TAGM	
B7-5E-9-9.5-110905	5460	9.1	B7-5E-9-9.5-110905	19300	64.3	B51(2-4)	26000	65.0
B7-1-9.5-10-110805 (1)	151	0.3	B7-5-9.5-110805	514	1.7	UST1-NSW-033105	3900	9.8
B7-1N-9.5-10-110905	86	0.1	B7-1-9.5-10-110805 (1)	476	1.6	B48(8-10)	2200	5.5
			B7-1-N-9.5-10-110905	342	1.1	CONED-BOT1-022305	2000	5.0
					B57(0-5)	1900	4.8	
					B55(0.5-4.5)	1700	4.3	
					B48(2-4)	980	2.5	
					CONED-SSW-022305	900	2.3	
					B10(19-23)	600	1.5	
					B45(6-7)	540	1.4	
					CONED-BOT2-022305	520	1.3	
					EP-B3F-11	151	0.4	
					EP-B3F-20	127	0.3	
					EP-B3F-17	120	0.3	
					EP-B3F-4	99	0.2	
					EP-B3F-8	97	0.2	
					EP-B3F-1	96	0.2	
					EP-B3F-18	92	0.2	
					EP-B3F-5	80	0.2	
					EP-B3F-2	71	0.2	
					EP-B3F-7	35	0.1	
					EP-B3F-14	28	0.1	

TABLE 2B
COMPOUND SPECIFIC RANKING TABLE
TAGM EXCEEDANCES
THE SHOPS AT ATLAS PARK - PARCEL B
GLENDALE, NY

10/27/2006

Sample ID	DIBENZ(A,H)ANTHRACENE (14 ug/Kg)	Times TAGM	Sample ID	TETRACHLOROETHENE(1400 ug/Kg)	Times TAGM	Sample ID	Times TAGM	
B51(2-4)	4800	342.9	B7-1-9.5-10-110805 (2)	5640	4.0	B7-5E-9-9.5-110905	1370	2.0
B55(0.5-4.5)	430	30.7	B7-5-9.5-110805	3060	2.2	B3-PIPE2-1-013106	79	0.1
B57(0-5)	410	29.3	BLDG28-GP1A-031805	374	0.3	EP-B3F-2	8	0.0
CONED-BOT1-022305	390	27.9	BLDG28-GP2A-031805	211	0.2	CONED-BOT2-022305	2	0.0
B48(8-10)	260	18.6	BLDG28-GP3A-031805	116	0.1	EP-B3F-11	2	0.0
B48(2-4)	240	17.1	BLDG28-T3C-041405	1	0.0	EP-B3F-20	1	0.0
CONED-SSW-022305	130	9.3	BLDG28-T3A-041405	1	0.0	EP-B3F-4	1	0.0
CONED-BOT2-022305	110	7.9	BLDG28-T2D-041405	3	0.0			
B45(5-7)	95	6.8	BLDG28-T2E-041405	2	0.0			
B45(2-4)	84	6.0	BLDG28-GP4A-031805	55	0.0			
B58(0-5)	62	4.4	BLDG28-GP5A-031805	27	0.0			
B58(18-21)	52	3.7	BLDG28PIPE TRENCH-CENT	15	0.0			
EP-B3F-1	20	1.4	BLDG28PIPE TRENCH-NORT	8	0.0			
EP-B3F-5	14	1.0	BLDG28PIPE TRENCH-SOUT	6	0.0			
			BLDG28-T1B-041405	5	0.0			
			BLDG28-T1D-041405	4	0.0			
			BLDG28-T1E-041405	4	0.0			
			BLDG28-T2A-041405	3	0.0			
			BLDG28-T2B-041405	3	0.0			

TABLE 2B
COMPOUND SPECIFIC RANKING TABLE
TAGM EXCEEDANCES
THE SHOPS AT ATLAS PARK - PARCEL B
GLENDALE, NY

10/27/2006

Sample ID	XYLENE (TOTAL)(1200 ug/Kg)	Times TAGM	Sample ID	ZINC (50 mg/Kg)	Times TAGM (X-TAGM)	Sample ID	ARSENIC (12 mg/Kg)	Times TAGM
B7-5-9-9.5-110805	3470	2.9	B48(8-10)	2060	41.2	BLDG28-GP1A-031805	32	2.7
UST1-NSW-033105	1200	1.0	BLDG28-GP4A-031805	1250	25.0	BLDG28PIPETRENCH-CENT	22	1.9
B3-PIPE3-0.5-013106	797	0.7	B48(2-4)	647	12.9	BLDG28-T4D-041405	21	1.8
B3-PIPE2-1-013106	573	0.5	B58(0.5)	601	12.0	B10(8-10)	14	1.2
B3-PIPE1-1-013106	169	0.1	BLDG28-GP3A-031805	356	7.1	CONED-SSW-022305	16	1.3
B7-5E-9-9.5-110905	40	0.0	BLDG28-GP1A-031805	267	5.3	BLDG28-GP4A-031805	15	1.3
EP-B3F-18	4	0.0	B55(0.5-4.5)	261	5.2	EP-B3F-4	14	1.2
EP-B3F-8	2	0.0	BLDG28-T4D-041405	238	4.8	BLDG28-T4A-041405	14	1.2
			BLDG28PIPETRENCH-SOUT	234	4.7	BLDG28-T5D-041405	12	1.0
			BLDG28-T4E-041405	231	4.6	BLDG28-T4E-041405	12	1.0
			BLDG28-T4A-041405	221	4.4	CONED-BOT1-022305	10	0.8
			BLDG28PIPETRENCH-CENT	216	4.3	BLDG28-T1D-041405	9	0.8
			BLDG28-T5D-041405	214	4.3	BLDG28-GP5A-031805	8	0.7
			CONED-SSW-022305	196	3.9	BLDG28-T5E-041405	8	0.7
			EP-B3F-2	191	3.8	BLDG28-GP3A-031805	8	0.7
			CONED-BOT1-022305	188	3.8	BLDG28-GP2A-031805	8	0.7
			BLDG28-T4C-041405	185	3.7	BLDG28-T4C-041405	8	0.6
			BLDG28-GP5A-031805	162	3.0	EP-B3F-11	7	0.6
			BLDG28PIPETRENCH-NORT	151	3.0	BLDG28-T5C-041405	6	0.5
			BLDG28-T5E-041405	146	2.9	BLDG28-T5A-041405	6	0.5
			BLDG28-T5C-041405	111	2.2	CONED-BOT2-022305	6	0.5
			BLDG28-T1D-041405	111	2.2	BLDG28PIPETRENCH-NORT	5	0.4
			BLDG28-GP2A-031805	96	1.9	BLDG28-T4B-041405	5	0.4
			B9(1-3)	96	1.9	BLDG28PIPETRENCH-SOUT	5	0.4
			B49(12-15)	95	1.9	BLDG28-T2E-041405	5	0.4
			BLDG28-T1B-041405	87	1.7	BLDG28-T2B-041405	5	0.4
			CONED-BOT2-022305	85	1.7	BLDG28-T3E-041405	4	0.4
			UST1-NSW-033105	81	1.6	BLDG28-T3D-041405	4	0.4
			BLDG28-T3A-041405	79	1.6	BLDG28-T1E-041405	4	0.3
			BLDG28-T5A-041405	78	1.6	BLDG28-T1B-041405	4	0.3
			BLDG28-T2E-041405	78	1.6	BLDG28-T13A-041405	4	0.3
			BLDG28-T3D-041405	77	1.5	EP-B3F-2	4	0.3
			BLDG28-T2B-041405	77	1.5	BLDG28-T2D-041405	4	0.3
			EP-B3F-8	72	1.4	BLDG28-T2A-041405	3	0.3
			BLDG28-T1E-041405	71	1.4	EP-B3F-20	2	0.2
			B46(4-6)	70	1.4	EP-B3F-18	2	0.2
			B58(18-21)	70	1.4	BLDG28-T3C-041405	2	0.2
			BLDG28-T3E-041405	70	1.4	EP-B3F-5	2	0.2
			BLDG28-T2D-041405	67	1.3	EP-B3F-8	2	0.2
			B10(2-4)	67	1.3	EP-B3F-1	2	0.2
			B55(8-12)	65	1.3	EP-B3F-17	2	0.1
			BLDG28-T4B-041405	63	1.3	EP-B3F-7	1	0.1
			B46(6-8)	59	1.2	EP-B3F-14	1	0.1
			BLDG28-T3C-041405	59	1.2			
			BLDG28-T2A-041405	57	1.1			
			EP-B3F-18	52	1.0			
			B38(5-7)	50	1.0			
			EP-B3F-4	43	0.9			
			EP-B3F-11	36	0.7			
			EP-B3F-20	34	0.7			
			EP-B3F-5	29	0.6			
			EP-B3F-1	28	0.6			
			EP-B3F-7	23	0.5			
			EP-B3F-17	21	0.4			
			EP-B3F-14	18	0.4			

TABLE 2B
COMPOUND SPECIFIC RANKING TABLE
TAGM EXCEEDANCES
THE SHOPS AT ATLAS PARK - PARCEL B
GLENDALE, NY

10/27/2006

Sample ID	CHROMIUM (TOTAL) [40 mg/Kg]	Times TAGM	Sample ID	COPPER [50 mg/Kg]	Times TAGM	Sample ID	LEAD {500 mg/Kg}	Times TAGM
BLDG28-GP4A-031805	42	1.1	B48(8-10)	870	17.4	B7-1-9.5-10-110805 (2)	1230	2.5
BLDG28-GP3A-031805	22	0.6	BLDG28-GP4A-031805	227	4.5	B48(8-10)	921	1.8
BLDG28-T3A-041405	21	0.5	B55(0.5-4.5)	188	3.8	B7-5E-9.5-110905	601	1.2
BLDG28-GP1A-031805	20	0.5	BLDG28PIPE TRENCH-CENT	168	3.4	CONED-SSW-022305	286	0.6
BLDG28-GP5A-031805	20	0.5	BLDG28-T4D-041405	148	3.0	B7-1N-9.5-10-110905	183	0.4
BLDG28-T4A-041405	22	0.5	BLDG28-T5D-041405	147	2.9	EP-B3F-18	144	0.3
BLDG28-T4D-041405	20	0.5	BLDG28-T4A-041405	143	2.9	CONED-BOT1-022305	143	0.3
BLDG28-T5D-041405	20	0.5	BLDG28-GP3A-031805	131	2.6	CONED-BOT2-022305	92	0.2
BLDG28-T4F-041405	19	0.5	B48(2-4)	126	2.5	EP-B3F-2	57	0.1
BLDG28-T2D-041405	14	0.4	BLDG28-T4E-041405	120	2.4	EP-B3F-7	3	0.0
BLDG28-T4C-041405	17	0.4	BLDG28-GP5A-031805	96	1.9	EP-B3F-14	2	0.0
BLDG28-T1E-041405	15	0.4	B55(0-5)	95	1.9	EP-B3F-8	22	0.0
EP-B3F-11	15	0.4	B50(6-8)	81	1.6	EP-B3F-11	13	0.0
BLDG28-T5E-041405	15	0.4	BLDG28-GP1A-031805	76	1.5	EP-B3F-1	12	0.0
EP-B3F-2	15	0.4	BLDG28-T4C-041405	74	1.5	EP-B3F-4	12	0.0
BLDG28-T1D-041405	14	0.4	BLDG28-T1D-041405	73	1.5	EP-B3F-20	8	0.0
BLDG28-T1B-041405	14	0.3	BLDG28-T5E-041405	73	1.5	EP-B3F-5	4	0.0
EP-B3F-1	13	0.3	EP-B3F-2	72	1.4	EP-B3F-17	4	0.0
BLDG28-T2E-041405	13	0.3	CONED-BOT1-022305	68	1.4			
EP-B3F-18	12	0.3	BLDG28PIPE TRENCH-SOUT	65	1.3			
EP-B3F-7	13	0.3	B9(1-3)	63	1.3			
EP-B3F-20	13	0.3	BLDG28-GP2A-031805	64	1.3			
EP-B3F-8	12	0.3	BLDG28PIPE TRENCH-NORT	58	1.2			
BLDG28-T5C-041405	12	0.3	CONED-SSW-022305	53	1.1			
BLDG28-T2B-041405	12	0.3	BLDG28-T2E-041405	55	1.1			
BLDG28-T3D-041405	12	0.3	BLDG28-T1B-041405	53	1.1			
EP-B3F-14	12	0.3	BLDG28-T5C-041405	49	1.0			
EP-B3F-4	11	0.3	BLDG28-T2B-041405	50	1.0			
EP-B3F-17	11	0.3	B49(12-15)	52	1.0			
BLDG28-T4B-041405	11	0.3	BLDG28-T3D-041405	49	1.0			
BLDG28-T5A-041405	11	0.3	BLDG28-T1E-041405	49	1.0			
BLDG28-T2A-041405	10	0.3	BLDG28-T5A-041405	47	0.9			
BLDG28-T3C-041405	10	0.3	CONED-BOT2-022305	42	0.8			
EP-B3F-5	10	0.3	BLDG28-T3E-041405	39	0.8			
BLDG28-T3E-041405	10	0.3	BLDG28-T2A-041405	38	0.8			
BLDG28-GP2A-031805	7	0.2	BLDG28-T2D-041405	37	0.7			
			BLDG28-T3A-041405	33	0.7			
			BLDG28-T3C-041405	32	0.6			
			BLDG28-T4B-041405	27	0.5			
			EP-B3F-4	26	0.5			
			EP-B3F-8	26	0.5			
			EP-B3F-11	23	0.5			
			EP-B3F-18	20	0.4			
			EP-B3F-17	18	0.4			
			EP-B3F-20	17	0.3			
			EP-B3F-5	15	0.3			
			EP-B3F-14	15	0.3			
			EP-B3F-1	13	0.3			
			EP-B3F-7	10	0.2			

TABLE 2B
COMPOUND SPECIFIC RANKING TABLE
TAGM EXCEEDANCES
THE SHOPS AT ATLAS PARK - PARCEL B
GLENDALE, NY

10/27/2006

Sample ID	Times TAGM	Sample ID	Times TAGM	Sample ID	Times TAGM			
EP-B3F-7	25900	5.2	B57(0-5)	2.6	13.0	CONED-BOT1-022305	37	1.5
EP-B3F-4	28300	5.7	B49(12-15)	2	9.0	BLDG28-GP4A-031805	31	1.2
EP-B3F-20	12100	2.4	B10(2-4)	0.7	3.5	B55(8-12)	26	1.0
EP-B3F-17	10200	2.0	B10(8-10)	0.5	2.6	BLDG28-T4C-041405	24	0.9
EP-B3F-11	10000	2.0	B46(6-8)	0.4	2.2	BLDG28-T4A-041405	20	0.8
EP-B3F-14	8100	1.6	B47(2-4)	0.4	2.1	BLDG28-T1B-041405	19	0.8
B46(4-6)	8670	1.7	B9(1-3)	0.4	2.0	BLDG28-T4D-041405	19	0.8
B48(8-10)	6940	1.4	B48(8-10)	0.4	2.0	BLDG28-T5D-041405	18	0.7
B55(8-12)	5250	1.1	CONED-BOT1-022305	0.4	1.9	BLDG28-T2E-041405	18	0.7
EP-B3F-18	4040	0.8	B48(2-4)	0.3	1.5	BLDG28-T4E-041405	18	0.7
CONED-BOT1-022305	3710	0.7	B51(2-4)	0.2	1.2	CONED-SSW-022305	18	0.7
EP-B3F-8	3010	0.6	B45(2-4)	0.2	1.1	CONED-BOT2-022305	17	0.7
EP-B3F-2	2980	0.6	CONED-BOT2-022305	0.2	1.0	BLDG28-T3A-041405	16	0.7
EP-B3F-5	2440	0.5	CONED-SSW-022305	0.1	0.7	BLDG28-T5E-041405	15	0.6
CONED-BOT2-022305	2000	0.4	B7(2-4)	0.1	0.7	BLDG28-T2B-041405	15	0.6
EP-B3F-1	1920	0.4				BLDG28-T5C-041405	15	0.6
CONED-SSW-022305	1720	0.3				BLDG28-T4B-041405	15	0.6
						BLDG28-T5A-041405	14	0.6
						BLDG28-GP3A-031805	14	0.6
						BLDG28-T1D-041405	15	0.6
						BLDG28-GP5A-031805	16	0.6
						BLDG28-T2D-041405	16	0.6
						BLDG28-T1E-041405	15	0.6
						BLDG28PIPE TRENCH-SOUT	14	0.5
						BLDG28-GP1A-031805	13	0.5
						BLDG28-T2A-041405	13	0.5
						BLDG28-T3C-041405	13	0.5
						BLDG28-T3D-041405	13	0.5
						EP-B3F-11	12	0.5
						BLDG28-T3E-041405	12	0.5
						EP-B3F-2	12	0.5
						BLDG28PIPE TRENCH-CENT	12	0.5
						BLDG28PIPE TRENCH-NORT	12	0.5
						EP-B3F-18	10	0.4
						BLDG28-GP2A-031805	10	0.4
						EP-B3F-8	10	0.4
						EP-B3F-1	10	0.4
						EP-B3F-14	10	0.4
						EP-B3F-20	9	0.4
						EP-B3F-17	9	0.3
						EP-B3F-5	8	0.3
						EP-B3F-4	6	0.2
						EP-B3F-7	5	0.2

TABLE 2B
COMPOUND SPECIFIC RANKING TABLE
TAGM EXCEEDANCES
THE SHOPS AT ATLAS PARK - PARCEL B
GLENDALE, NY

10/27/2006

Sample ID	Sample ID	Times TAGM
CADMIUM (1 mg/Kg)	BARIUM (600 mg/Kg)	
B7(7-9)	3.9	3.9
B48(8-10)	1.4	1.4
	B48(2-4)	B48(2-4)
		1280
		687
		2.1
		1.1

Appendix D

Analytical Data for Parcel B USTs

TABLE - 3
BUILDING 7 WS TANKAULT SOIL SAMPLES DETECTION RESULTS
DRAFT FINAL ENGINEERING REPORT
ATLAS PARK - PARCEL B

Location ID Sample ID Sample Date Unit	NYSDDEC TAGM RECOMMENDED SOIL CLEANUP OBJECTIVE ug/Kg	Building 28 BLDG#28-TANK2-030805 3/8/2005 ug/Kg	Building 28 BLDG#28-TANK2-030805 3/8/2005 ug/Kg
VOCs			
ACETONE	200	94.	32
DICHLOROMETHANE	100	21	10
SVOCs			
8-(2-ETHYLHEXYL)PHTHALATE	50000	800	1600
DIN-BUTYLPHthalate	8100	190	< 570 U
PCBs			
	10000	ND	NA
Metals			
ANTIMONY	-	< 124 UN	NA
SODIUM	8000	[REDACTED]	NA
Total GRO			
	-	< 0.071 U	NA
RCRA Characteristics			
CORSOL	-	No	NA
IGNITABILITY	-	Neg	NA
MOISTURE (%)	-	68.1	42.7
REACTIVE CYANIDE (ug/kg)	-	BRL	NA
REACTIVE SULFIDE (mg/kg)	-	< 12 U	NA
TEPH (ug/kg)	-	4900000 D ²⁰	NA
Total Solids (%)	-	31.9	57.3

Notes:

ND : Not detected

NA : Not Analyzed

QUALIFIERS

U = Analyte was not detected at or above the reporting limit.

ORGANICS: PCBs, Pesticides, and Herbicides

J = Result is an estimated value below the reporting limit
or a tentatively identified compound (TIC).

Table 3
BUILDING 8-UST EP SOIL ANALYTICAL RESULTS
ATLAS PARK- PARCEL B

11/7/2006

Location ID	NYSDEC TAGM RECOMMENDED SOIL CLEANUP OBJECTIVE	Bottom Sample UST1-BOT-033105 3/31/2005 ug/kg	North Sidewall UST1-NSW-033105 3/31/2005 ug/kg	East Sidewall UST1-ESW-033105 3/31/2005 ug/kg	East Sidewall UST1-WSW-033105 3/31/2005 ug/kg	East Sidewall UST1-SSW-033105 3/31/2005 ug/kg
VOCs						
ETHYLBENZENE	5600	30	52	ND	ND	ND
METHYLBENZENE (TOLUENE)	1500	2.6	4.6	ND	ND	ND
XYLENE (TOTAL)	1200	33	81	ND	ND	ND
ISOPROPYLBENZENE	NA	ND	24	ND	ND	ND
N-PROPYLBENZENE	NA	40	130	E	ND	ND
P-ISOPROPYLBENZENE	NA	ND	23	ND	ND	ND
1,2,4-TRIMETHYLBENZENE	NA	51	77	E	ND	ND
1,3,5-TRIMETHYLBENZENE	NA	11	21	ND	ND	ND
N-BUTYL-BENZENE	NA	49	85	ND	ND	ND
SEC-BUTYL-BENZENE	NA	32	77	E	ND	ND
TERT-BUTYL-BENZENE	NA	ND	24	ND	ND	ND
METHYL-T-BUTYL ETHER (MTBE)	NA	ND	ND	ND	ND	ND
NAPHTHALENE	NA	330	110	E	ND	ND
TOTAL VOCs	10000	578.6	708.6	ND	ND	8.5
SVOCs						
ACENAPTHENE	50000	590	JD ²	2500	JD ⁴	ND
FLUORENE	50000	790	JD2	3500	D ⁴	ND
PHENANTHRENE	50000	2100	D ²	16000	D ⁴	ND
ANTHRACENE	50000	740	JD ²	3200	D ⁴	ND
FLUORANTHENE	50000	500	JD ²	1900	JD ⁴	ND
PYRENE	50000	2100	D ²	5300	D ⁴	ND
BENZO(A)ANTHRACENE	224	670	JD ²	2400	JD ⁴	ND
CHRYSENE	400	1200	JD ²	3900	D ⁴	ND
BENZO(K)FLUORANTHENE	1100	170	JD ²	400	JMD ⁴	ND
BENZO(A)PYRENE	61	570	JD ²	1600	JD ⁴	ND
INDENO(1,2,3-CD)PYRENE	3200	200	JD ²	300	JD ⁴	ND
BENZO(G,H,I)PERYLENE	50000	410	JD ²	520	JD ⁴	ND
TOTAL SVOCs	500000	10040	41520	ND	ND	357
Moisture (%)						
Total Solids (%)		8.2	8.2	7.7	15	7.1
		91.8	91.8	92.3	85	92.9

NOTES:

- 1) NYSDEC RSCOs obtained from TAGM 4046.
- 2) NYSDEC exceedances are in **BOLD**.

QUALIFIERS

- U = Analyte was not detected at or above the reporting limit.
- J = Result is an estimated value below the reporting limit or a tentatively identified compound (TIC) detected.
- ND = Non Detect
- D[#] = Diluted sample, # indicates the dilution factor > 1.

Table 3
BUILDING 8-UST EP SOIL ANALYTICAL RESULTS
ATLAS PARK- PARCEL B

11/7/2006

Location ID	NYSDEC TAGM RECOMMENDED SOIL CLEANUP OBJECTIVE	T1-SW1-080905 ug/kg	TRENCH 8/9/2005 ug/kg	T1-SW2-080905 8/9/2005 ug/kg	TRENCH 8/9/2005 ug/kg	T1-BOT-080905 8/9/2005 ug/kg
VOCs						
ETHYLBENZENE	5500	1.3	<	1	U	U
METHYLBENZENE (TOLUENE)	1500	1.1	<	1	U	U
XYLENE (TOTAL)	1200	2.4	<	3	U	1
ISOPROPYLBENZENE	NA	1	U	1	U	3
N-ISOPROPYLBENZENE	NA	1	U	1	U	1
P-ISOPROPYLTOLUENE	NA	1	U	1	U	1
1,2,4-TRIMETHYLBENZENE	NA	1	U	1	U	1
1,3,5-TRIMETHYLBENZENE	NA	1	U	1	U	1
N-BUTYL-BENZENE	NA	1.1	U	1	U	1.2
SEC-BUTYL-BENZENE	NA	1	U	1	U	1
TERT-BUTYL-BENZENE	NA	1	U	1	U	1
METHYL-T-BUTYL ETHER (MTBE)	NA	1	U	1	U	1
NAPHTHALENE	NA	5	U	5	2.2	1.3
TOTAL VOCs	100000	4.8	ND	2.2	2.2	1.3
SVOCs						
ACENAPHTHENE	50000	NA	NA	NA	NA	NA
FLUORENE	50000	NA	NA	NA	NA	NA
PHENANTHRENE	50000	NA	NA	NA	NA	NA
ANTHRACENE	50000	NA	NA	NA	NA	NA
FLUORANTHENE	50000	NA	NA	NA	NA	NA
PYRENE	50000	NA	NA	NA	NA	NA
BENZO(a)ANTHRACENE	224	NA	NA	NA	NA	NA
CHRYSENE	400	NA	NA	NA	NA	NA
BENZO(k)FLUORANTHENE	1100	NA	NA	NA	NA	NA
BENZO(a)PYRENE	61	NA	NA	NA	NA	NA
INDENO(1,2,3-C)PYRENE	3200	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	50000	NA	NA	NA	NA	NA
TOTAL SVOCs	500000	NA	NA	NA	NA	NA
Moisture (%)		NA	NA	NA	NA	NA
Total Solids (%)		NA	NA	NA	NA	NA

NOTES:

- 1) NYSDEC RSCOs obtained from TAGM 4046.
- 2) NYSDEC exceedances are in **BOLD**.

QUALIFIERS

- U = Analyte was not detected at or above the reporting limit.
- J = Analyte was an estimated value below the reporting limit or a tentatively identified compound (TIC) detected.
- ND = Non Detect
- D[#] = Diluted sample, # indicates the dilution factor > 1.

TABLE - 3
BUILDING 7 WS TANKAUFT WASTE CHARACTERIZATION SOIL SAMPLES DETECTION RESULTS
DRAFT FINAL ENGINEERING REPORT
ATLAS PARK - PARCEL B

Location ID Sample ID Sample Date Unit	NYSDEC/ Federal Hazardous Waste Characteristics Regulatory Levels mg/L	Building 28 BLDG 28-020705 2/7/2005 mg/L	Building 28 BLDG#28-TANK2-030805 3/8/2005 mg/L
TCLP VOCs	-	ND	NA
TCLP SVOCs	-	ND	NA
TCLP Pesticides	-	ND	NA
TCLP Herbicides			
2,4-D	10	<	U
SILVEX	1	<	U
TCLP Metals			
BARIUM	100	0.106	NA
SELENIUM	1	0.0388	NA

Notes:

ND : Not detected
NA : Not Analyzed

QUALIFIERS

D* = Results for a diluted sample, # indicates the dilution factor.
 U = Analyte was not detected at or above the reporting limit.
 ORGANICS /PCBS, Pesticides, and Herbicides)
 J = Result is an estimated value below the reporting limit
 or a tentatively identified compound (TC).

TABLE 3
BUILDING 28- PIPE TRENCH SAMPLES- SOIL ANALYTICAL RESULTS
SUPPLEMENTAL REMEDIAL INVESTIGATION REPORT
ATLAS PARK SITE - PARCEL B

Location ID Sample ID	NYSDEC TAGM RECOMMENDED SOIL CLEANUP OBJECTIVE	Building 28 CENTER 10/19/2005 mg/Kg	Building 28 NORTHEND 10/19/2005 mg/Kg	Building 28 SOUTHEND 10/19/2005 mg/Kg
METALS				
ARSENIC	12		5.28	5.19
BARIUM	600	247	95.3	102
CHROMIUM (TOTAL)	40	13.7	13.6	14.9
COPPER	50	168	58.2	64.9
NICKEL	25	11.6	11.5	13.5
SELENIUM	3.9	1.13	U	0.403
VANADIUM	300	< 37.2	20.6	22.7
ZINC	50	216	151	234

NOTES:

- 1) NYSDEC RSCOs obtained from TAGM 4046.
 2) No NYSDEC exceedances in these samples.

QUALIFIERS

- U = Analyte was not detected at or above the reporting limit.
 J = Result is an estimated value below the reporting limit for a tentatively identified compound (TIC) detected.
 V = Result is changed because of Data Validation.
 R = Data rejected during data validation.

TABLE 3
BUILDING 7 FORMER PROCESS TANKS AND VAULTS
POST-REMOVAL END-POINT SOIL ANALYTICAL RESULTS
SUPPLEMENTAL REMEDIAL INVESTIGATION REPORT
ATLAS PARK SITE - PARCEL B

Location ID Sample ID Sample Date Unit	NYSDEC TAGM Recommended Soil Cleanup Criteria mg/Kg	Tank T1 BLDG28-T1A- 4/14/2005 mg/Kg	Tank T1 BLDG28-T1B- 4/14/2005 mg/Kg	Tank T1 BLDG28-T1C- 4/14/2005 mg/Kg	Tank T1 BLDG28-T1D- 4/14/2005 mg/Kg	Tank T1 BLDG28-T1E- 4/14/2005 mg/Kg
METALS						
ARSENIC	12	<	9.89	U	4.07	2.43
BAARIUM	600		29.4	107	36	9.12
CHROMIUM (TOTAL)	40		7.86	13.6	8.65	155
COPPER	50		15.1	53	18.2	14.4
NICKEL	25		10.1	19.4	11.9	73.4
SELENIUM	3.9	<	19.8	U < 16.7	U < 20.5	14.7
VANADIUM	300		11.7	52	13	U < 16.1
ZINC	50		23.6	86.7	26.6	24.3
					111	71.4
MOISTURE (%)						
Total Solids (%)	-	5.5	8	7.1	9.2	7.5
		94.5	92	92.9	90.8	92.5

NOTES:

1) NYSDEC RSCOs obtained from TAGM 4046.

2) NYSDEC TAGM exceedances are highlighted in **BOLD**.**QUALIFIERS**

U = Analyte was not detected at or above the reporting limit.

TABLE 3
BUILDING 7 FORMER PROCESS TANKS AND VAULTS
POST-REMOVAL END-POINT SOIL ANALYTICAL RESULTS
SUPPLEMENTAL REMEDIAL INVESTIGATION REPORT
ATLAS PARK SITE - PARCEL B

11/7/2006

Location ID Sample ID Sample Date Unit	NYSDEC TAGM Recommended Soil Cleanup Criteria mg/Kg	Tank T2 BLDG28-T2A- 4/14/2005 mg/Kg	Tank T2 BLDG28-T2B- 4/14/2005 mg/Kg	Tank T2 BLDG28-T2C- 4/14/2005 mg/Kg	Tank T2 BLDG28-T2D- 4/14/2005 mg/Kg	Tank T2 BLDG28-T2E- 4/14/2005 mg/Kg
METALS						
ARSENIC	12	3.2	4.65	2.71	3.52	5.15
BARIUM	600	75.6	96.3	69.9	72.5	127
CHROMIUM (TOTAL)	40	10.3	11.5	9.94	14.4	13.1
COPPER	50	38.3	50.4	25.9	36.8	55.2
NICKEL	25	12.5	15.2	11.5	16	18
SELENIUM	< 3.9	< 19.2	U < 16.4	U < 17.8	U < 18.6	U < 20.2
VANADIUM	300	16	17.9	14.7	19.1	21.9
ZINC	50	57.3	76.5	37	67.2	77.5
MOISTURE (%)	-	5.3	4.2	2.2	3.1	4.1
Total Solids (%)	-	94.7	95.8	97.8	96.9	95.9

NOTES:

- 1) NYSDEC RSCOs obtained from TAGM 4046.
- 2) NYSDEC TAGM exceedances are highlighted in **bold**.

QUALIFIERS

- U = Analyte was not detected at or above the reporting limit.

TABLE 3
BUILDING 7 FORMER PROCESS TANKS AND VAULTS
POST-REMOVAL END-POINT SOIL ANALYTICAL RESULTS
SUPPLEMENTAL REMEDIAL INVESTIGATION REPORT
ATLAS PARK SITE -PARCEL B

Location ID Sample ID Sample Date Unit	NYSDEC TAGM Recommended Soil Cleanup Criteria mg/Kg	Tank T3 BLDG28-T3A- 4/14/2005 mg/Kg	Tank T3 BLDG28-T3B- 4/14/2005 mg/Kg	Tank T3 BLDG28-T3C- 4/14/2005 mg/Kg	Tank T3 BLDG28-T3D- 4/14/2005 mg/Kg	Tank T3 BLDG28-T3E- 4/14/2005 mg/Kg
METALS						
ARSENIC	12	3.94	<	11.9	U	4.25
BARIUM	600	81.2	48.1	60	99.7	4.29
CHROMIUM (TOTAL)	40	21.4	10.8	10.3	11.5	75.8
COPPER	50	33.3	24.3	32.1	49	10
NICKEL	25	16.4	13.4	12.5	12.5	39.1
SELENIUM	3.9	< 17.8	U <	16.6	U <	11.8
VANADIUM	300	27.3	13.9	14.1	18	U < 17.9
ZINC	50	79.4	45.1	58.7	76.8	14.5
MOISTURE (%)	-	7.9	21	19.3	18	20.3
Total Solids (%)	-	92.1	79	80.7	82	79.7

NOTES:

1) NYSDEC RSCOs obtained from TAGM 4046.

2) NYSDEC TAGM exceedances are highlighted in **BOLD**.**QUALIFIERS**

U = Analyte was not detected at or above the reporting limit.

TABLE 3
BUILDING 7 FORMER PROCESS TANKS AND VAULTS
POST-REMOVAL END-POINT SOIL ANALYTICAL RESULTS
SUPPLEMENTAL REMEDIAL INVESTIGATION REPORT
ATLAS PARK SITE -PARCEL B

Location ID Sample ID Sample Date Unit	NYSDEC TAGM Recommended Soil Cleanup Criteria mg/Kg	Tank T4 BLDG28-T4A- 4/14/2005 mg/Kg	Tank T4 BLDG28-T4B- 4/14/2005 mg/Kg	Tank T4 BLDG28-T4C- 4/14/2005 mg/Kg	Tank T4 BLDG28-T4D- 4/14/2005 mg/Kg	Tank T4 BLDG28-T4E- 4/14/2005 mg/Kg
METALS						
ARSENIC	12	14.1	5.33	7.67	21	11.7
BARIUM	600	326	91	207	237	248
CHROMIUM (TOTAL)	40	21.7	10.9	17.4	19.8	18.5
COPPER	50	143	27.1	74.2	148	120
NICKEL	25	19.5	14.7	23.5	19	17.8
SELENIUM	3.9	< 16.5	U < 21.6	U < 19.6	U < 19.6	U < 20.5
VANADIUM	300	40.7	15.2	27.5	59.9	40.1
ZINC	50	221	62.6	185	238	231
MOISTURE (%)	-	19.3	19.4	21.4	22.6	10.4
Total Solids (%)	-	80.7	80.6	78.6	77.4	89.6

NOTES:

1) NYSDEC RSCOs obtained from TAGM 4046.

2) NYSDEC TAGM exceedances are highlighted in **BOLD**.**QUALIFIERS**

U = Analyte was not detected at or above the reporting limit.

TABLE 3
BUILDING 7 FORMER PROCESS TANKS AND VAULTS
POST-REMOVAL END-POINT SOIL ANALYTICAL RESULTS
SUPPLEMENTAL REMEDIAL INVESTIGATION REPORT
ATLAS PARK SITE - PARCEL B

Location ID Sample ID Sample Date Unit	NYSDEC TAGM Recommended Soil Cleanup Criteria mg/Kg	Tank T5 BLDG28-T5A- 4/14/2005 mg/Kg	Tank T5 BLDG28-T5B- 4/14/2005 mg/Kg	Tank T5 BLDG28-T5C- 4/14/2005 mg/Kg	Tank T5 BLDG28-T5D- 4/14/2005 mg/Kg	Tank T5 BLDG28-T5E- 4/14/2005 mg/Kg
METALS						
ARSENIC	12	6.33	<	9.61	U	5.59
BARIUM	600	104	23	130	11.9	8.13
CHROMIUM {TOTAL}	40	10.8	5.66	11.6	37.5	167
COPPER	50	47	5.94	49.2	19.7	14.9
NICKEL	25	13.8	10.9	14.7	147	73.4
SELENIUM	3.9	< 18.5	U <	19.2	U <	18.2
VANADIUM	30.0	17.1	6.71	15.4	U <	15.3
ZINC	50	78.2	10.5	21.7	42.9	27.2
MOISTURE (%)				111	214	146
Total Solids (%)	-	3.5	7.9	6.6	19.6	19.3
		96.5	92.1	93.4	80.4	80.7

NOTES:

1) NYSDEC RSCOs obtained from TAGM 4046.

2) NYSDEC TAGM exceedances are highlighted in **BOLD**.**QUALIFIERS**

U = Analyte was not detected at or above the reporting limit.

TABLE 3
BUILDING 7 FORMER PROCESS TANKS AND VAULTS
SUB-VAULT SOIL ANALYTICAL RESULTS - DETECTED COMPOUNDS
SUPPLEMENTAL REMEDIAL INVESTIGATION REPORT
ATLAS PARK SITE - PARCEL B

11/7/2006

Location ID Sample ID Sample Date	NYSDEC TAGM RECOMMENDED SOIL CLEANUP OBJECTIVE	VAULT INVERT BLDG28-GP2A-031805 3/18/2005	VAULT INVERT BLDG28-GP2A-031805 3/18/2005	VAULT INVERT BLDG28-GP5A-031805 3/18/2005	VAULT INVERT BLDG28-GP4A-031805 3/18/2005	VAULT INVERT BLDG28-GP5A-031805 3/18/2005
VOC	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
ACETONE	200	NA	NA	NA	NA	NA
DICHLOROMETHANE	100	NA	NA	NA	NA	NA
TOTAL VOCs	10000	-	-	-	-	-
SVOC	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
BIS(2-ETHYLHEXYL)PHthalATE	50000	NA	NA	NA	NA	NA
Di-N-BUTYLPHthalATE	8100	NA	NA	NA	NA	NA
PCBs						
TOTAL PCBs	10000	-	-	-	-	-
TPH						
	NA	NA	NA	NA	NA	NA
METALS	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
ARSENIC	12	32	7.3	8.1	15.4	8.2
BARIUM	600	102	XN	373	XN	258
CHROMIUM	40	20.1	N	6.5	22.4	42
COPPER	50	75.7	63.9	131	227	N
NICKEL	25	12.8	9.8	14.4	30.9	95.7
SELENIUM	3.9	1.8	U	< 2	2.3	16.1
SODIUM	8000	<	NA	NA	NA	2.2
VANADIUM	300	20.8	14.2	18.4	47.7	NA
ZINC	50	267	XN	356	XN	1250
Moisture (%)	%	%	%	%	%	%
Total Solids (%)	13.2	8.5	91.5	15.9	22.6	13.5
	86.8			84.1	77.4	86.5

NOTES:

- 1) NYSDEC RSCOs from TAGM 4046.
- 2) NYSDEC TAGM exceedances are in **bold**.

QUALIFIERS:
 D# = Diluted sample, # indicates the dilution factor.
 U = Analyte was not detected at or above the reporting limit.

INORGANICS (METALS AND CYANIDE):

B = Result is less than the CRD/RL, but greater than or equal to the IDL/ML
 X = LCS, LCR, MD, Batch GC exceeds the upper or lower control limits.
 N = MS, MSD: Spike recovery exceeds the upper or lower control limits.

ORGANICS: (PCBs, Pesticides, and Herbicides)

J = Result is an estimated value below the reporting limit or a tentatively identified compound (TIC).

Appendix E

Estimated Remedial Costs

TABLE 4
REMEDIAL COST ESTIMATE - ALTERNATIVE #3
ATLAS PARK SITE - PARCEL B
GLENDALE, NY

Item #	Description of Work	Unit	Estimated Quantity	Estimated Unit Price	Estimated Cost
APPROXIMATE REMEDIAL ACTION COSTS					
1	Mobilization/Site Maintenance/Demobilization				
a	Mobilization/Demobilization/Permits/Site Maintenance	LS MNTHS	1 6	\$200,000 \$15,000	\$200,000 \$90,000
b	Facilities and Utilities				Sub-Total
					\$290,000
2	Excavation for Construction Purposes				
a	Soil Disposal Resulting from Construction	TONS EA	3500 125	\$50 \$1,200	\$175,000 \$150,000
b	Laboratory Costs for Disposal Sampling (Lab Analysis)				Sub-Total
					\$325,000
3	Engineering and Institutional Controls				
a	Sub Slab Depressurization Systems (Buildings 3, 7, and 8)	EA YR	5 20	\$100,000 \$7,500	\$500,000 \$150,000
b	Operation and Maintenance (20 Years)				Sub-Total
					\$650,000
4	Soil Vapor Extraction System (Building 3)				
a	SVE System Design	LS	1	\$25,000	\$25,000
b	SVE System Installation	LS	1	\$60,000	\$40,000
c	SVE Components and Construction	LS	1	\$125,000	\$125,000
d	Operation and Maintenance (20 Years)	YR	20	\$15,000	\$300,000
					Sub-Total
					\$490,000
5	Soil Vapor Extraction System (Southern Site Perimeter)				
a	SVE System Design	LS	1	\$25,000	\$25,000
b	SVE System Installation	LS	1	\$80,000	\$40,000
c	SVE Components and Construction	LS	1	\$125,000	\$125,000
d	Operation and Maintenance (20 Years)	YR	20	\$15,000	\$300,000
					Sub-Total
					\$490,000
6	Laboratory/Data Validation Costs				
a	End Point Soil Samples	EA	25	\$1,000	\$25,000
b	Sidewall Soil Samples	EA	100	\$1,000	\$100,000
d	Data Validation	LS	10	\$5,000	\$50,000
					Sub-Total
					\$175,000
7	Environmental Consultant Fees (Langan)				
a	Environmental Oversight and Office Support	MNTHS	6	\$50,000	\$300,000
b	Reporting (FER, SMP, OM&M, SMP, Deed Notice)	LS	1	\$400,000	\$400,000
					Sub-Total
					\$700,000
Total Capitol Costs Administration, Insurance, and Engineering (15%) Contingency (30%)					
TOTAL ESTIMATED COSTS FOR ALTERNATIVE #3 \$4,524,000					
ROUND TO \$4,600,000					

Line Item Notes

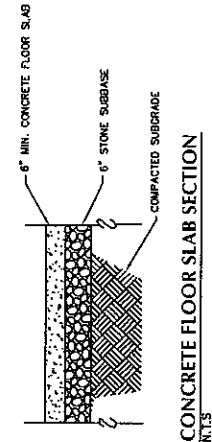
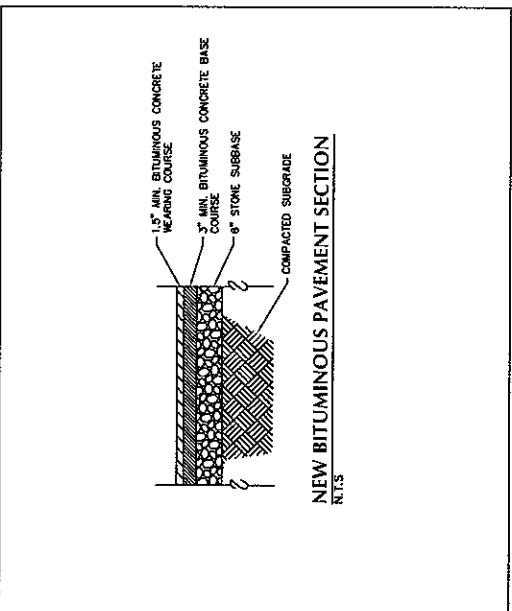
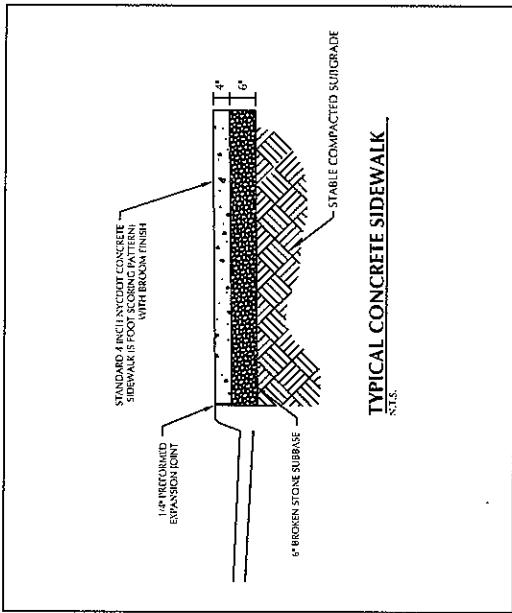
- 1a Mobilization and demobilization cost estimate includes mobilization and demobilization of all labor, equipment, and materials necessary to
- 1b Facilities and Utilities cost estimate includes cost of leasing and installing the office trailers and connections to utilities
- 2a Soil Excavation cost estimate assumes typical excavation costs for the New York City area and an average disposal cost for the excavated
- 2b Waste characterization sampling and analysis for soil disposal purposes.
- 3a SSDS systems installed in all buildings as an engineering control eliminate potential residual vapors remaining in soil pore space. Material, construction, and oversight costs included. Does not include OM&M
- 3b Includes operation and maintenance of the five systems over an estimated 20 year period.
- 4a & 5a Cost for Langan to design a soil vapor extraction system for Building 3
- 4b & 5b Cost of all components and installation
- 4c & 5c Cost per year for operation and general maintenance of the system, including carbon change out, filters, etc.
- 6 Soil sampling for end point and sidewall samples per DER-10.
- 7a Assumes a team of three Langan personnel onsite full time with office support when needed.
- 7b Cost to prepare and submit Remedial Action Workplan, Final Engineering Report, OM&M Plans, and preparation of Deed Notice.

General Notes

- 1 There are no operations and maintenance costs associated with Alternative I as the site is cleaned to Track 1
- 2 Total estimated cost is the sum of all estimated costs rounded up to the nearest million dollars.

Appendix F

Site Surface Cover Details



Project ATLAS PARK - PARCEL B CAPPING DETAILS					
Glendale	Project No. 5555113	Date 10/20/06	Scale 1/2000	N. T. S.	Dwg. No. 1
New York	Project No. 243427395400	Date 10/20/06	Scale 1/2000	N. T. S.	Dwg. No.
Glendale	Project No. 5555113	Date 10/20/06	Scale 1/2000	N. T. S.	Dwg. No.
New York	Project No. 243427395400	Date 10/20/06	Scale 1/2000	N. T. S.	Dwg. No.

Appendix G

Chronological Description of the Separation of Parcel A and Parcel B

APPENDIX G

Description of Parcel A and Parcel B Separation

Atlas Park LLC (Atlas), entered into a Brownfield Cleanup Program (BCP) Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) in January 2004, to investigate and, where necessary, remediate a 12-acre, subdivided portion of a larger 80-year old, 20-acre industrial park, Atlas Terminals, located in Glendale, Queens, New York. A United States Geological Survey (USGS) topographical quadrangle map (Figure 1) shows the site location. A new, mixed-use project, The Shops at Atlas Park, was proposed for the 12-acre parcel. When completed, The Shops at Atlas Park will include nearly 400,000 square feet of shopping, entertainment, dining, and office space. Refer to the Brownfield Cleanup Program (BCP) application for development details. A boundary map is attached to the BCA Amendment to satisfy the requirements of ECL Title 14 Section 27-1419.

The BCA originally covered the entire 12-acre parcel. However, the 12-acre parcel was formally separated into two distinct areas: Parcel A (formerly known as the "Interim Remedial Measure [IRM] Area") and Parcel B (formerly known as the "Remedial Investigation [RI] Area"). Parcel A consists of an 8.474-acre portion of the 12-acre parcel, and Parcel B (which is the subject of this report and is hereafter referred to as the "Site") consists of the remaining 3.531-acre portion. With concurrence from NYSDEC during a meeting on April 18, 2005, the Developer completed the administrative process of separating Parcels A and B into separate BCAs.

The original BCA was amended to reflect the IRM Area as Parcel A, and the RI Area as Parcel B. The Amendment clarifies that the original BCA now relates to Parcel A exclusively; Parcel A received a Certificate of Completion from NYSDEC dated December 31, 2005. Parcel B was designated as BCA Index No. W2-1070-05-06 Site No. C241088.

Appendix H

List of Local and Governmental Permits, Certificates, and Approvals

Atlas Park - Parcel B
Remedial Action Work Plan - Stipulation List
Permits Issued Pursuant to New York City Building Code
Appendix H

Department	Issued	Expires	Approved	Permit No
Department of Building	5/2/2006	5/1/2007	5/2/2006	401959109-01-AL
Department of Building	4/28/2006	1/5/2007	4/28/2006	402256116-01-AL
Department of Building	9/18/2006	1/20/2007	9/18/2006	402246208-01-NB
Department of Building	9/18/2006	12/31/2006	9/18/2006	402246208-01-EQ-FN
Department of Building	4/28/2006	12/31/2006	4/28/2006	402256116-01-EQ-FN
Department of Building	5/19/2006	5/1/2007	5/19/2006	402304341-01-AL
Department of Building	4/28/2006	1/5/2007	4/28/2006	402364892-01-EW-OT
Department of Building	4/28/2006	1/5/2007	4/28/2006	402364892-02-EW-MH
Department of Building	5/2/2006	5/1/2007	5/2/2006	401847613-01-AL
Department of Building	5/2/2006	12/31/2006	5/2/2006	401847613-01-EQ-FN
Department of Building	5/2/2006	5/1/2007	5/2/2006	401815684-01-NB
Department of Building	5/2/2006	12/31/2006	5/2/2006	401815684-01-EQ-FN
Department of Building	4/25/2006	1/5/2007	5/2/2006	402320573-01-EW-OT
Department of Building	4/25/2006	1/5/2007	5/2/2006	402320573-02-EW-MH
Department of Building	4/25/2006	1/5/2007	5/2/2006	402320573-02-EW-MH
Department of Building	4/25/2006	1/5/2007	5/2/2006	402320573-01-EW-OT
Department of Building	5/2/2006	5/1/2007	5/2/2006	402066394-01-NB

Appendix I

Disposal Facility Trucking Routes

Bridgeport United Recycling, Inc.

Instructions

For

Depart 80 Cooper Ave, Ridgewood, NY 11385 on Cooper Ave (East)

Bear RIGHT (East) onto Metropolitan Ave	1.1 mi
Bear LEFT (East) onto Union Tpke	0.6 mi
Continue (North-East) on Ramp	0.7 mi
Merge onto I-678 {Van Wyck Expy} (North)	7.3 mi
Tollbooth Stay on I-678 {Hutchinson River Pkwy} (North)	120 yds
Stay on I-678 {Hutchinson River Pkwy} (North)	0.9 mi
Bear RIGHT (North) onto Hutchinson River Pkwy N	4.1 mi
Continue (North) on Ramp	0.2 mi
Merge onto I-95 {New England Thwy} (East)	3.9 mi
Tollbooth stay on I-95 {New England Thwy} (North- East)	0.1 mi
At I-95 Exit 17, stay on I-95 { New England Thwy} (North-East)	37.8 mi
<i>Entering Connecticut</i>	
At I-95 Exit 28, turn off onto Ramp	174 yds
Turn LEFT (North) onto Pembroke St	0.6 mi
Turn RIGHT (East) onto Barnum Ave	1.0 mi
Turn RIGHT (South) onto Elizabeth St	0.1 mi
Turn LEFT (East)onto cross St	43 yds

Arrive 50 Cross St, Bridgeport, CT 06610

Capitol Environmental Services, Inc.

Here is the routing from Atlas Park:

Local roads to I- 678, then travel North
I-95 South across george Washington Bridge
West on I-80 in New Jersey, then Pennsylvania and Ohio
West on I-76 in Ohio
North on I-77
West on Ohio route 18
Right on Ohio Route 3 to Vexor Technologies

South Hadley Landfill

Instructions

Depart 80 Cooper Ave, Ridgewood, NY 11385 on Cooper Ave (East) for 0.4 mi

Bear RIGHT (East) onto Metropolitan Ave for 1.1 mi

Bear LEFT (East) onto Union Tpke for 0.6 mi

Continue (North-East) on Ramp for 0.7 mi

Merge onto I-678 {Van Wyck Expy} (North) for 7.3 mi

Tollbooth Stay on I-678 (Hutchinson River Pkwy) (North) for 120 yds

Stay on I-678 (Hutchinson River Pkwy) (North for 0.9 mi

Bear RIGHT (North) onto Hutchinson River Pky N for 4.1 mi

Continue (North) on Ramp for 0.2 mi

Merge onto I-95 { New England Thwy} (East) for 3.9 mi

Tollbooth Stay on I-95 { New England Thwy} (North-East) for 0.1 mi

At I-95 Exit 117, Stay on I-95 { New England Thwy} (North-East) for 42.5 mi

Entering Connecticut

Toll road Stay on I-95 (Connecticut Tpke) (North) for 6.8 mi

Stay on I-95 {Connecticut Tpke} (North) for 6.2 mi

At I-95 exit 48, turn off onto Ramp for 0.4 mi

Merge onto I-91 (North) for 71.7 mi

Entering Massachusetts

At I-91 Exit 16, turn off onto Ramp for 0.3 mi

Bear Right (East) onto US-202 (Cherry St) for 2.4 mi

At Roundabout, take the SECOND exit for 174 yds

Exit roundabout onto US-202 (Purple Heart Dr) for 1.6 mi

Turn RIGHT (South-East) onto SR-33 { Old Lyman Rd} for 120 yds

Bear LEFT (east) onto Lyman Rd for 0.7 mi

Arrive Industrial Dr. South Hadley, MA 01075

Clean Earth of Philadelphia

Instructions

For

Depart 80 Cooper Ave, Ridgewood, NY 11385 on Cooper Ave (East)

Turn RIGHT (North) onto 80 th St	0.3 mi
Turn LEFT (West) onto Metropolitan Ave	3.1 mi
Bear LEFT (West) onto Grand St	1.1 mi
Road name changes to Borinquen PL (Grand St)	0.3 mi
Turn LEFT (South-West) onto Borinquen PL for	0.1 mi
Road name changes to S 4 th St	43 yds
Bear Left (West) onto Ramp for	0.1mi
Bear RIGHT (North-West) onto Williamsburgh Bridge	1.4 mi
Keep STRAIGHT onto Delancey St	0.5 mi
Keep STRAIGHT onto Kenmore St	0.2 mi
Turn LEFT (South-West) onto Lafayette St, then immediately turn RIGHT (West) onto Broome St	0.3 mi
Keep STRAIGHT onto Watte St	0.2 mi
Road name changes to Local road(s) for 131 yds towards Holland Tunnel	
Bear RIGHT (North) onto Holland Tunnel for	1.9 mi
Entering New Jersey	
Bear LEFT (West) onto 14 th St {Boyle Plaza}	0.3 mi
Road name changes to I-78 {US-1} for 98yds	
Toll road keep RIGHT to stay on I-78 {New Jersey Tpke Ext} for 8.0 mi towards turnpike	
Toll road Turn RIGHT onto Ramp for 0.8 mi towards I-96 / turnpike South	
Toll road Take Ramp (RIGHT) onto I-95 (New Jersey Tpke) for 35.5 mi towards cars/trucks-Buses	
Toll road Road name changes to New Jersey Tpke for 42.5 mi	
At exit 3, keep RIGHT onto Ramp for 0.4 mi towards RT-168/Camden/Woodbury	
Take Ramp (RIGHT) onto SR-168 (S Black Horse Pike) for 0.9 mi towards RT-168/Camden/Philadelphia	
Take Ramp (RIGHT) onto I-295 for 0.9 mi towards I-295/Walt Whitman Br/ Del Mern Br	
At Exit 26, take Ramp (LEFT) onto I-78 for 8.0 mi towards I-76/I-676? Camden/ Philadelphia entering Pennsylvania	
At Exit 346B, take Ramp (RIGHT) onto S 34 th St for 0.7 mi towards University Avenue/Givio Center	
Road name Changes to S University Ave	0.5 mi
Keep RIGHT onto S 38 th St for 109 yds	
Keep STRAIGHT onto US-13 {S 38 th St}	0.3 mi
Turn LEFT (West) onto SR-3 {Walnut St}	2.4 mi
Turn LEFT (South) onto S61st St	0.2 mi

Arrive S 61st St, Philadelphia, PA 19145

Recycle Technology, LLC

Instructions

For

Depart 80 Cooper Ave, Ridgewood, NY 11385 on Cooper Ave (East) 0.4 mi

Bear RIGHT (East) onto Metropolitan Ave	1.1 mi
Bear LEFT (East) onto Union Tpke	0.6 mi
Continue (North0 East) on Ramp	0.7 mi
Merge onto I-678 { Van Wyck EXPwy} (North)	7.3 mi
Tollbooth Stay on I-678 {Hutchinson River Pky} (North)	120 yds
Stay on I-678 {Hutchinson River Pky} (North)	0.9 mi
Bear RIGHT (North) onto Hutchinson River Pky N	4.1 mi
Continue (North) on Ramp	0.2 mi
Merge onto I-95 {New England Thwy} (East)	3.9 mi
Tollbooth Stay on I-95 {New England Thwy} (North-East)	0.1 mi
At I-95 Exit 17, stay on I-95 {New England Thwy} (North-East)	42.5 mi
<i>Entering Connecticut</i>	
Toll Road stay on I-95 {Connecticut Tpke} (North)	6.8 mi
Stay on I-95{Connecticut Tpke} (North)	6.2 mi
At I-95 Exit 48, turn off onto ramp	0.4 mi
Merge onto I-91 (North)	36.5 mi
At I-91 Exit 29, turn off onto ramp	0.4 mi
Continue (North) on US-5 { SR-15}	0.1 mi
At US-5 Exit 90, continue (North) on SR-15 {Wilbur Cross Hwy}	1.6 mi
Continue (East) on I-84 {US-6}	40.6 mi
<i>Entering Massachusetts</i>	
At I-84 Exit 3, turn LEFT (East) onto US-20	4.8 mi

Arrive Griffin Rd, Charlton, MA 01507

Appendix J
P.E. Certification for Conformance
to DER-10

ENGINEERING CERTIFICATIONS

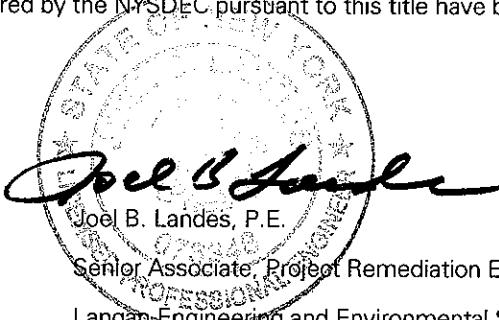
In accordance with the Environmental Conservation Law Title 14 Brownfield Cleanup Program certification requirements, I, Joel B. Landes, hereby certify that all remedial elements described in this Remedial Action Work Plan will be completed in accordance with the New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation Draft DER-10 document entitled Technical Guidance for Site Investigation and Remediation, December 2002. Any modifications/supplements made to the Remedial Action Work Plan will be approved by the NYSDEC prior to implementation during the remedial action activities, and other agreements reached with NYSDEC, and standard engineering practices.

Specifically, Joel B. Landes (Langan Engineering and Environmental Services, P.C.) certifies the following:

- All export including transport and disposal of soil, fill, water, or other material from the property will be performed in accordance with the approved Remedial Action Work Plan, and will be disposed at facilities licensed to accept this material in full compliance with all federal, state, and local laws;
- All remedial work will conform to the terms defined in the approved Remedial Action Work Plan;
- All invasive work during the remediation and all invasive development work will be conducted in accordance with dust and odor suppression methodologies defined in the Remedial Action Work Plan;
- The data submitted to the NYSDEC will demonstrate that the remediation requirements set forth in the approved Remedial Action Work Plan and any other relevant provisions of this title will be achieved in accordance with the time frames established in such work plan; and
- Any deviations from the approved Remedial Action Work Plan will be fully described in the Final Engineering Report.

I also acknowledge the following certifications specifically required by ECL Title 14 Section 27-1419 and certifies that these **ARE APPLICABLE** to this project:

- Use restrictions, institutional controls, engineering controls and/or any operation and maintenance requirements applicable to the site will be contained in an environmental easement created and recorded pursuant to title thirty-six of article seventy-one of ECL and that any affected local governments, as defined in title thirty-six of article seventy-one of ECL have been notified that such easement has been recorded;
- An Site Management Plan will be submitted by the applicant for the continual and proper operation, maintenance, and monitoring of any engineering controls employed at the site including the proper maintenance of all engineering controls (SSDS and AS/SVE systems), surface capping, and remaining monitoring wells, and that such plan has been approved by the NYSDEC; and
- Any financial assurance mechanisms required by the NYSDEC pursuant to this title have been executed.



Appendix K

Soil Erosion and Sediment Control Plan

Stipulation #22

SOIL EROSION AND SEDIMENT CONTROL PLAN

This plan identifies standard and Site-specific measures that will be implemented by the Excavation Contractor to minimize erosion and sedimentation, and consequently storm-water pollution, during remediation activities. Measures will include physical methods to control and/or divert surface water flows and to limit the potential for erosion and migration of Site soil, via wind (dust) or water. This Section also contains a dust suppression plan. The erosion and sediment controls will be in conformance with the requirements presented in New York State Guidelines for Urban Erosion and Sediment Control.

STORMWATER RUNOFF CHARACTERISTICS

Currently, storm-water runoff from the Site is collected via a series of on-Site catch basins and conveyed via an underground pipe network to existing combined sewers located along 80th Street, 83rd Street, and Doran Avenue. The combined sewers are tributaries to the existing Bowery Bay Water Pollution Control Plant.

During construction, the existing on-Site pipe network will be used to convey the stormwater runoff off-Site. It is expected that most of the stormwater will percolate into the ground since the majority of invasive work is conducted in sheltered areas (ie. in buildings, covered areas, etc.).

The planned redevelopment of the Site includes buildings (both new and renovated), paved streets, and sidewalks. A network of new catch basins and underground pipes will convey the stormwater runoff to a new on-Site underground detention basin located on Parcel A. The new basin will connect to the existing combined sewer systems along 80th Street.

STORMWATER POLLUTION PREVENTION CONTROLS

The stormwater pollution prevention controls for the project include stabilization practices and structural practices as itemized below. These controls will be constructed in

accordance with the New York Standards and Specifications for Erosion and Sediment Control.

Stabilization Practices

- Surface cover removal activities shall be completed only in areas where earthwork will be performed and shall progress as earthwork is needed
- Frequent watering of excavation and fill areas to minimize wind erosion during construction (if necessary)

Structural Practices

- Inlet protection and outlet protection using filter fabric and hay bales
- Site perimeter and soil stockpile protection using silt fence (if outside of cover)
- Stabilized construction entrance/exit pads
- Existing combined sewer infrastructure

During the soil excavation activities, surface-water diversion methodologies will be implemented to minimize the amount of water that enters an excavation area. The Remediation Engineer will take appropriate action to maintain the integrity of the excavation floor, as deemed necessary. Surface water diversion methods may include (but are not limited to) channeling surface water flow around the soil excavation areas by excavating a temporary ditch, and/or construction of berms to create a preferential flow path for the surface water around each excavation area.

Stormwater runoff from the truck wash area will be conveyed into the existing on-Site sewers via gravity or pumping. This area will also be surrounded with silt fence. No water shall be conveyed directly to the City streets.

Specific detail must be adhered to regarding the construction of the soil stockpile areas, the stabilized construction entrance/exit pads and the truck wash areas. Soil stockpiles are to be constructed for the staging of contaminated soil as well as presumed clean soil, pending loading for off-Site disposal or characterization testing. These stockpiles shall be constructed and maintained in accordance with Section XX of the August RAWP for Parcel

B. In addition, a row of silt fence shall surround every stockpile at any stage of its construction.

SEQUENCE OF MAJOR ACTIVITIES

The Contractor will implement soil erosion and sediment control measures to maintain storm water quality and prevent the spread of contaminated material. The work will be performed under inspection by the Remedial Engineer to ensure quality control. To this end, the order of major activities will be generally as follows:

1. Construct stabilized construction entrance/exit pads
2. Install perimeter silt fences and inlet protection on existing catch basins
3. Construct truck wash area
4. As soil stockpile areas are constructed install silt fencing
5. Maintain stormwater pollution prevention controls throughout entire operation.

Note that the above sequence is relevant for the mass excavation and grading of the Site, including the removal of the contaminated material, and does not continue beyond the performance of this work.

MAINTENANCE OF EROSION/SEDIMENTATION CONTROL MEASURES

The Contractor will install and maintain temporary erosion control measures. Silt fencing, inlet protection, and hay bale checks at catch basins installed on the Site shall be maintained as follows:

- The barrier and hay bale check condition shall be inspected once a week or after every storm event whichever comes first. Any necessary repairs shall be made immediately.
- Accumulated sediments shall be removed as required to maintain the barrier and hay bale check functional.
- Undercutting or erosion of the silt-fence toe anchor shall be repaired immediately with backfill materials (e.g., stone).

- Adhere to manufacturer's recommendations for replacing silt fence due to weathering.
- Areas used for Contractor storage of hazardous substances and materials (e.g., fuels) shall be lined with plastic and inspected regularly for any leakage of chemicals or fuels to the ground. Any such leakage will be rectified immediately upon discovery.
- Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters
- Locations where vehicles enter or exit the Site shall be inspected daily for evidence of off-Site sediment tracking
- The existing conditions of the adjacent City streets shall be maintained. If necessary, cleaning of the adjacent streets within 100 feet of the Site entrance/exit may be performed on an as needed basis as determined by the Remedial Engineer.

DUST SUPPRESSION

This Subsection presents a dust suppression plan to address dust management during invasive on-Site work. Monitoring of the construction activities for dust generation will be conducted by the Remedial Engineer and the Construction Manager's field inspectors.

Observation of visible dust will trigger additional dust control measures to mitigate the dust condition. Dust suppression will be achieved through the continuous use of a dedicated on-Site water truck equipped with a rear nozzle and water cannon to enable the spray of water into off-road areas including excavations and stockpiles. Preventative measures for dust generation will include construction of an engineered construction entrance, truck wash area(s), covering contaminated and potentially contaminated soil in the stockpile areas, and limiting vehicle speeds.

INSPECTIONS AND REPORTING

The Remediation Engineer will inspect the Site prior to commencement of construction to ensure that the appropriate erosion and sediment controls have been adequately installed or implemented to ensure overall preparedness of the Site for the commencement of construction. Following the commencement of construction, Site inspections shall be conducted by the Remediation Engineer at least once a week.

Appendix L
Resume of Site Safety Coordinator
(John M. Gavras)

JOHN M. GAVRAS, PG, CPG
Project Manager/Senior Hydrogeologist

**Site Characterization/Remediation
Environmental Due Diligence
RI/RAA Investigations
Brownfield Cleanup Program**

EDUCATION

M.S., Earth Sciences (Hydrogeology), Adelphi University

B.S., Geology, State University of New York, College at Oneonta

PROFESSIONAL CERTIFICATION

Certificate in Project Management, Penn State Management Development Programs and Services

Certified Professional Geologist, CPG-07908, American Institute of Professional Geologists

Professional Geologist, PG-002070-G, Commonwealth of Pennsylvania

YEARS OF EXPERIENCE: 21

SUMMARY OF QUALIFICATIONS

Mr. Gavras has over twenty-one years of comprehensive professional consulting experience including diverse project experience in geologic and hydrogeologic analyses and interpretation. Develops and manages environmental assessment programs to determine the nature and extent of corrective action at industrial and municipal sites characterized by hazardous wastes and hazardous materials in structures, soil, groundwater, and surface water. Evaluates the compliance status of aboveground and underground tanks and systems. Manages RCRA, CERCLA, Brownfield Cleanup Programs and other state-mandated investigations at sites that generate, treat, store, or dispose of hazardous materials. Develops and manages risk-based corrective action programs at closed or abandoned industrial and hazardous waste sites, including those on federal and state priority lists. Manages risk assessments, remedial action plans, and feasibility and corrective measures studies. Manages pre-purchase and presale due diligence environmental assessments of industrial and commercial properties to assess site conditions and environmental risk.

RELEVANT EXPERIENCE

Medgar Evers College, Brooklyn, NY - The expansion of Medgar Evers College will involve the razing of a NYC Department of Sanitation (NYCDOS) Facility located in Brooklyn, New York where impacted soil from historical petroleum releases (i.e., gasoline and diesel) are present and petroleum-related compounds migrated downwards from the source areas (e.g., tanks, piping, and dispensers) and in some areas adversely affected perched ground-water quality. In support of a Draft Generic Environmental Impact Statement (DGEIS), for DASNY, managed a Phase I Environmental Site Assessment (ESA) of this facility. Based on the findings of the Phase I ESA, recommended the following scope of work for Phase II investigation activities at the site: obtain, review and evaluate existing background information, develop a site-specific Work Plan for characterization of soil and groundwater from a pre-construction standpoint, and provide environmental oversight during construction activities. Developed order-of-magnitude costs for potential remedial activities that may be associated with the discharge of petroleum at the site.

The Shops at Atlas Park, Glendale, Queens, NY, AtCo Properties, Inc. - Project Manager for a 12-acre, 80-year old former industrial park being redeveloped under the NYS BCP for mixed-use commercial, office space and entertainment. Primary responsibilities include managing a number of submittals to the NYSDEC including a Remedial Action Work Plan and Final Engineering Report in connection with obtaining a certificate of completion for the project, the first such certificate to be issued in the State under the BCP.

JOHN M. GAVRAS, PG, CPG

Managed the investigative and remedial activities and coordinated with the NYSDEC. As part of the remediation activities, numerous areas of concern were discovered and mitigated during mass excavation of historic fill from the property for new sub-grade structures (buildings and parking garages) proposed for The Shops at Atlas Park. As part of the remedy, sub-slab vapor-depressurization systems (SSDSs) were designed and installed to address soil vapors in the sub-slabs of the proposed buildings. The SSDSs were designed and installed in accordance with the New York State Department of Health's draft soil-vapor intrusion guidance document.

Environmental Due Diligence/ Phase I and Phase II Site Assessments for Confidential Developer - Project Manager for expedited due diligence review and environmental site assessment of a number of prospective sites located in Fairfield County, Connecticut. The client is in the process of purchasing the property for construction of a new corporate headquarters for a major financial institution that will contain office, trading space, and parking. Areas of Environmental Concern (AOCs) include to prior gasoline filling stations, metal plating operations and an automobile repair shop. Managed the review of nearly 100 prior environmental reports and other documents, and performed expedited comprehensive Phase II Site Investigation activities to evaluate the AOCs at the various parcels. The Phase II data are being utilized to develop order-of-magnitude costs to determine the client's environmental liabilities to acquire and redevelop the properties.

Remedial Investigation and Remedial Alternatives Analysis, City of Yonkers Jail Site, Yonkers Industrial Development Agency (YIDA), Yonkers, New York - Project Manager for a Remedial Investigation and Remedial Alternatives Analysis at the City of Yonkers Jail site in Yonkers, New York. The work is being conducted under a grant that was awarded to YIDA under the Environmental Protection Agency's (EPA's) Brownfield Assessment Program Cooperative Agreement. As part of the scope, Langan prepared a comprehensive Remedial Investigation Work Plan (RIWP) to delineate the extent and magnitude of soil and/or groundwater impacts on the site and potential asbestos containing materials (ACM) and lead-based paint (LBP) in the building in order to establish a basis for remedial alternatives and final remedy selection for the future development of the site.

Professional Hydrogeologic and Engineering Services, Rockville Centre, NY - Project Manager responsible for providing technical support and assistance to the Village of Rockville Centre and advising them throughout remedial investigation/feasibility study (RI/FS), remedial design (RD), and remedial action (RA) tasks for the Franklin Cleaners site, a New York State inactive hazardous waste site. A volatile organic groundwater plume, composed primarily of tetrachloroethene (PCE), has been identified, documented, and found to be migrating south from the Franklin Cleaners site and potentially threatening the Village's public supply wells and residential irrigation wells located downgradient of the plume. Communicated extensively with the New York State Department of Environmental Conservation (NYSDEC) to express the Village's concerns regarding the delineation, configuration, and potential further migration of the PCE groundwater plume. Successfully influenced the NYSDEC to install monitoring wells above and below the clay layer and ahead of the leading edge of the plume to act as early detection wells.

Groundwater Monitoring Services, Oyster Bay, NY, Town of Oyster Bay - Senior Hydrogeologist involved in the groundwater-monitoring program for the Town of Oyster Bay. Groundwater monitoring is conducted to assess the effectiveness of the remediation system at Old Bethpage Landfill, which is located in Oyster Bay. A volatile organic compound (VOC) plume that originated at the landfill was migrated off site 0.5 miles downgradient of the source. The contaminated groundwater is being recovered by five high-capacity extraction wells, treated on site, and discharged to an upgradient recharge basin. The remedial system has been operating since April 1992. The remedial system's zone of influence and groundwater quality was monitored on a quarterly basis to assess the progress of the groundwater cleanup and to determine whether the termination criteria for remediation have been met. Conducted a comprehensive well inventory and assessment, and managed the rehabilitation and redevelopment of wells, and coordinated the retrofitting and proper placement of dedicated submersible pumps.

JOHN M. GAVRAS, PG, CPG

Site Investigation/Hazard Ranking of a Class 2a Site, Hicksville, NY, GTE Services Corp. - Senior Project Manager responsible for supervising Phase I and Phase II site investigations and Hazard Ranking System II scoring to assess chlorinated solvent contamination in soils and groundwater. Key components of the project included drum removal, soil remediation, a comprehensive soil gas survey, extensive groundwater monitoring and assessment, and the generation of supporting data for reclassifying the site as a Class 4 site.

Hydrogeologic Investigation, Municipal Clean Fill Landfill, Islip Resource Recovery Agency, Hauppauge, NY - Senior Project Manager for a hydrogeologic investigation at a Phase II clean fill lateral expansion landfill. The hydrogeologic investigation included the installation of 15 multilevel monitoring wells. Two phases of groundwater sampling were conducted to establish baseline groundwater-quality data. In addition, the project involved conducting three-dimensional groundwater flow modeling and particle tracking to ascertain the ability to monitor the well network for the proposed lateral expansion both during site operations and after closure.

Site Assessment of a Former Color Concentrate Manufacturing Facility and Class 2a Site, Farmingdale, NY - Confidential Potentially Responsible Party (PRP) Group. Senior Project Manager responsible for a preliminary site assessment at a former color concentrate manufacturing facility and Class 2a site for a PRP group. Evaluated the occurrence of metals contamination in soils throughout the site, within dry wells, and in former recharge basins through a comprehensive soil and groundwater-sampling program.

Management Programs/Closures of UST Sites, Various Locations, NY, Various Clients - Senior Project Manager responsible for implementing UST management programs and tank closures involving the delineation and excavation of contaminated soils at UST sites throughout New York pursuant to the New York State Department of Environmental Conservation's (NYSDEC's) Spill Technology and Remediation Series (STARS) Conducted direct negotiations with NYSDEC and local health departments.

PROFESSIONAL AFFILIATIONS

American Institute of Professional Geologists
New York State Council of Professional Geologists
Association of Ground Water Scientists and Engineers, National Ground Water Association

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