February 27, 2008

The Dow Chemical Company
3200-3300 Kanawha Turnpike
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USA

Larry Rosenmann
New York State Department of Environmental Conservation
Division of Solid and Hazardous Materials
625 Broadway, 9th Floor
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Subject: AOC C - Gorham Street Soil Sampling Results Technical Memorandum
Former Hampshire Chemical Corporation
Waterloo, New York

Dear Mr. Rosenmann:

The Dow Chemical Company is pleased to submit the attached *AOC C – Gorham Street Soil Sampling Results Technical Memorandum* for the Former Hampshire Chemical Corporation facility in Waterloo, New York. This sampling event was conducted according to the original Work Plan addendum submitted on May 15, 2007 to NYSDEC and NYSDOH. The technical memorandum includes a summary of the field sampling activities performed in August 2007, as well as findings, discussion and recommendations.

Please contact me at 304-747-7788 if you have any questions or comments.

Sincerely,

Jerome E. Cibrik

Jerome Cibrik, P.G.
Remediation leader

cc: Mr. Pete Hoffmire, NYSDEC Region 8
Mr. Scott Foti, NYSDEC Region 8
Ms. Rebecca Quail, NYSDEC
Mr. Mark Sergott, NYSDOH
Mr. Steve Brusso, Evans Chemetics (cover letter only)
CH2M HILL Project File

AOC C - Gorham Street Soil Sampling Results Former Hampshire Chemical Corporation Facility, Waterloo, New York

PREPARED FOR: Jerome Cibrik/The Dow Chemical Company

PREPARED BY: CH2M HILL Project Team

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DATE: February 26, 2008

Introduction

This technical memorandum presents the results of soil sampling activities at Area of Concern (AOC) C – Gorham Street related to the former Hampshire Chemical Corporation (HCC) Facility in Waterloo, New York. The activities and results of the investigation completed were conducted pursuant to the Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) Work Plan Addendum (CH2M HILL 2007). The RFI is being conducted pursuant to an Amended Administrative Consent Order (AACO) executed between HCC and the New York State Department of Environmental Conservation (NYSDEC) (Index Number 8-20000218-3281, June 1, 2004).

As previously reported in the Sampling Visit Report (OBG 2003), post-excavation soil sampling analytical results from a foundation excavation conducted in October 1999 revealed exceedances of polychlorinated biphenyls (PCBs), 10 semivolatile organic compounds (SVOCs), and certain metals above the New York State Technical and Administrative Guidance Memorandum (TAGM) 4046 criteria[1]. This area was then further characterized by limited delineation activities in December 2001 (OBG 2003), and more extensive investigation activities in April 2004 and December 2005 (CH2M HILL 2006). Overall, soil borings and soil sampling were completed along the west side of Gorham Street to evaluate the lateral and vertical extents of potential contamination in soil. Results from these samples confirmed the presence of PCBs, SVOCs, and certain metals above TAGM 4046 criteria in surface and subsurface soil (CH2M HILL 2006).

CH2M HILL collected additional soil samples along Gorham Street at eight locations (SS-14 through SS-21) on August 14, 2007: one sample was collected south of the facility exit near Building 1 (on the west side of Gorham Street); three samples were collected adjacent to the employee parking lot (on the east side of Gorham Street, across the street from the area with the highest PCB concentrations); and four samples were collected along the right-of-way

[1] During the time of this evaluation, TAGM was the criteria to which soil sample results were compared. The new screening criteria, NYSDEC Restricted Use Soil Cleanup Objectives (RUSCO) (6 NYCRR Part 375-6), was promulgated on December 14, 2006. As requested by NYSDEC, the NYSDEC RUSCO Residential will now be used for evaluating all data in this AOC.

adjacent to the residential properties (on the east side of Gorham Street, across the street from areas where PCBs were detected in soil). At each sample location, two samples were collected: one from 0 to 2 inches deep (samples with an "A" suffix) and one from 2 to 12 inches deep (samples with a "B" suffix).[2] Figure 1 illustrates the locations of the soil samples collected in August 2007.

Sampling Procedures

At each soil sample location, two soil samples (0- to 2-inch and 2- to 12-inch depth intervals) were collected. At some locations, compacted gravel limited the final depth of the deeper depth interval. Soil samples were collected and composited from within a 1-square-foot area to provide sufficient volume for analysis, with the exception of volatile organic compounds (VOCs), which were sampled discretely.

Prior to collecting the soil samples, the surface was cleared of grass, gravel, and other debris. VOC samples were collected directly from the newly exposed surface with an EnCore® sampling device. Sample collection for other parameters was attempted with a decontaminated[3], stainless steel hand auger, but the use of a decontaminated, stainless steel trowel was necessary due to the gravel. After sample collection, the sample locations were recorded with coordinates surveyed using a Magellan eXplorist 200® global positioning system (GPS) along with a hand-sketched drawing including measurements.

Laboratory Analysis

Soil samples were submitted to Kemron Environmental Services (Kemron), a New York State-certified laboratory, with an executed chain-of-custody via Federal Express where they were analyzed for U.S. Environmental Protection Agency (USEPA) SW-846 Target Compound List (TCL) VOCs (Method 8260), TCL SVOCs (Method 8270), PCBs (Method 8082), and Total Analyte List (TAL) metals (6000/7000 Series Methods).

Quality Control Samples

Quality assurance (QA)/quality control (QC) samples were collected in accordance with the Quality Assurance Project Plan as prepared by O'Brien and Gere (2001) and as updated by CH2M HILL (2004). QA/QC samples comprised one duplicate soil sample (Dup-SS) collected at SS-21A; one matrix spike/matrix spike duplicate soil sample, which was collected at location SS-18B; one equipment blank; and one trip blank to accompany the equipment blank.

Data Quality Evaluation

A data quality evaluation (DQE) was performed to assess the data quality of analytical results for the soil samples collected. Guidance for this DQE report came from the USEPA Contract Laboratory Program (CLP) National Functional Guidelines (NFG) for Organic Data

[2] As noted further in this memorandum, some samples depths were limited to 2 to 7 inches deep due to subsurface obstructions.

[3] Decontamination was performed by washing with Alconox™ and tap water, then rinsed with tap water, and a final rinse with deionized water and allowed to air dry.

Review (USEPA 1999), the USEPA CLP NFG for Inorganic Data Review (2004), and individual method requirements. The analytical results were evaluated using the criteria of precision, accuracy, representativeness, comparability and completeness (PARCC).

Based on the QA/QC evaluation, all data were considered valid with the exception of the VOC data for sample SS-18B, which were rejected for project use due to internal standard issues. The completeness goal of 100 percent as established in the QAPP (OBG 2001) was met for all analytes with the exception of the VOC data, which were 94 percent complete.

2007 Soil Sample Analytical Results

Table 1 presents a summary of the 2007 sample analytical results. According to direction from NYSDEC, the sample results were screened against the NYSDEC Restricted Use Soil Cleanup Objectives (RUSCO): Protection of Public Health, Residential (6 NYCRR Part 375-6.8(b)). Results exceeding the RUSCO Residential for organics are provided on Figure 2 and for metals on Figure 3.

Results from the 2007 samples indicate the following:

- No VOCs, SVOCs, or PCBs exceeded the RUSCO Residential in the samples collected at the eight locations. With the exception of arsenic and cadmium (as discussed below) no metals exceeded the RUSCO Residential.
- Arsenic exceeded the RUSCO Residential of 16 milligrams per kilogram (mg/kg) at two locations, SS-19 and SS-20. Exceedances ranged from 17 mg/kg at SS-20A to 33.4 mg/kg at SS-20B. At SS-19B, the arsenic exceedance was detected in the deeper sample (2 to 12 inches deep). At SS-20, the exceedances were detected in both the shallow and deeper samples, with the higher concentration seen in the deeper sample.
- Cadmium exceeded the RUSCO Residential of 2.5 mg/kg in both the shallow and deep samples collected at SS-20. Cadmium was detected at a higher concentration in the deeper sample at this location, with a concentration of 6.17 mg/kg.

Comparison of Historical and 2007 Soil Sample Results

The results of all soil samples collected along Gorham Street exceeding the new RUSCO Residential are shown on Figures 2 and 3 (organics and metals, respectively). These results were compared to the results of the additional samples collected in 2007 to determine the extent of any exceedances seen during historical events. Below is a summary of the results for the events.

- PCBs were detected over the RUSCO Residential at 12 locations, all along the western side of Gorham Street. The locations are as follows:
  - AOCC-EX2-Wall (18 to 30 inches)
  - SB-01A (0 to 24 inches)
  - SB-01B (0 to 24 inches)
  - SB-02 (72 to 96 inches)
  - SB-18 (1.92 to 12 inches)
  - SB-20 (2 to 12 inches)
  - SS-06 (0 to 1.92 inches)
  - SS-09 (0 to 1.92 inches)
  - SS-10 (0 to 1.92 inches)
  - SS-11 (0 to 1.92 inches)
  - SS-12 (0 to 1.92 inches)
  - SS-13 (0 to 1.92 inches)

The PCBs are delineated to the north (by samples SS-04, SS-03, SS-02, and SS-01), to the south (by SS-21), and to the east (by all samples east of Gorham Street collected during 2007)[4].

- Arsenic was detected at 10 locations exceeding the RUSCO Residential, eight on the west side (AOCC-EX2-Wall [18 to 30 inches], SB-01A [0 to 24 inches], SB-02 [72 to 96 inches], SB-02B [0 to 24 inches], SB-20 [2 to 12 and 84 to 108 inches], SS-09 [0 to 1.92 inches], SS-10 [0 to 1.92 inches], and SS-13 [0 to 1.92 inches]) and two on the east side (SS-19 [2 to 12 inches] and SS-20 [0 to 2 inches and 2 to 12 inches]) of Gorham Street. On the west side of Gorham Street, arsenic is delineated to the north (by samples SB-19, SS-08, SS-07, SS-06, as well as many others) and to the south (by SS-21). On the east side of Gorham Street, arsenic is delineated to the north (by samples SS-18, SS-17, SS-16, SS-15, and SS-14).

- Barium was marginally detected above the RUSCO Residential at one location (SB-20 at 108 to 132 inches) along the western side of Gorham Street. Due to the isolated area of barium, it is believed that barium is not related to site operations.

- Cadmium was detected at five locations exceeding the RUSCO Residential, four on the west side (AOCC-EX2-Wall [18 to 30 inches], SB-02 [72 to 96 inches], SB-20 [36 to 60 inches], and SS-10 [0 to 1.92 inches]) and one on the east side (SS-20 at 0 to 2 inches and 2 to 8 inches) of Gorham Street. These exceedances are sporadic and have been seen at different depths. Based on the concentrations and locations, it is believed that cadmium is not related to site operations.

- Lead was detected above the RUSCO Residential at one location (AOCC-EX2-Wall at 18 to 30 inches) along the western side of Gorham Street. Due to the isolated area of lead, it is believed that lead is not related to site operations.

- Mercury was detected above the RUSCO Residential at two locations (SB-20 at 36 to 60 inches and SS-11 at 0 to 1.92 inches) along the western side of Gorham Street. Mercury is delineated to the north (by samples SB-02, SB-01B, SB-02A, SS-10, as well as many others), to the south (by SS-13 and SS-21), and to the east (by all samples collected east of Gorham Street during 2007).

- Zinc was detected above the RUSCO Residential at two locations (AOCC-EX2-Wall at 36 to 60 inches and SS-10 at 0 to 1.92 inches) along the western side of Gorham Street. Due to the isolated areas of zinc exceedances, it is believed that zinc is not related to site operations.

- Ten SVOCs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, fluoranthene, hexachlorobenzene, indeno(1,2,3-c,d)pyrene and pyrene) exceeded the RUSCO Residential at 15 locations along the western side of the site. The SVOCs are delineated to the north (by samples SS-04, SS-03, SS-02, and SS-01), to the south (by SS-21), and to the east (by all samples collected during 2007). It is possible these constituents may be related to historical site operations, from paving of Gorham Street, or both.

[4] PCBs, as well as arsenic and mercury, are bounded to the west by the presence of the existing facility structures.

Summary of Historical and Recent Results

Table 2 presents the compounds/analytes detected on Gorham Street, and data to support if that compound/analyte is believed to be site related. The rationale for determining if a compound/analyte is site related is based on the results of the samples collected on Gorham Street, site operations, and background conditions.

TABLE 2
Detected Compound/Analyte Summary

Compound	Site-Related Compound (Yes/No/Maybe)	Rationale
PCBs	Yes	Detected above the RUSCO Residential along the western portion of Gorham Street only, adjacent to the site.
Arsenic	Maybe	Detected above the RUSCO Residential, located within the area of PCB impacts as described above, and one area along the eastern portion Gorham Street, adjacent to the facility parking lot.
Barium	No	Only detected above the RUSCO Residential at one location at depth. Not detected at any other location of other site-related compounds (such as PCBs).
Cadmium	No	Sporadic locations and depths of cadmium exceed the RUSCO Residential, located within the area of PCB impacts as described above, and one area along the eastern portion of Gorham Street, adjacent to the facility parking lot.
Lead	No	Only detected above the RUSCO Residential at one location at depth. Located within the area of PCB impacts as described above.
Mercury	Maybe	Only detected above the RUSCO Residential at two locations, located within the area of PCB impacts as described above.
Zinc	No	Isolated sample locations exceeded the RUSCO Residential. Located within the area of PCB impacts as described above.
Benzo(a)anthracene	Maybe	Detected above the RUSCO Residential consistently with locations of PCBs; however, it is acknowledged that some detectable concentrations of these compounds may be related to Gorham Street road use.
Benzo(a)pyrene	Maybe	Detected above the RUSCO Residential consistently with locations of PCBs; however, it is acknowledged that some detectable concentrations of these compounds may be related to Gorham Street road use.
Benzo(b)fluoranthene	Maybe	Detected above the RUSCO Residential consistently with locations of PCBs; however, it is acknowledged that some detectable concentrations of these compounds may be related to Gorham Street road use.
Benzo(k)fluoranthene	Maybe	Detected above the RUSCO Residential consistently with locations of PCBs; however, it is acknowledged that some detectable concentrations of these compounds may be related to Gorham Street road use.

TABLE 2
Detected Compound/Analyte Summary

Compound	Site-Related Compound (Yes/No/Maybe)	Rationale
Chrysene	Maybe	Detected above the RUSCO Residential consistently with locations of PCBs; however, it is acknowledged that some detectable concentrations of these compounds may be related to Gorham Street road use.
Dibenzo(a,h)anthracene	Maybe	Detected above the RUSCO Residential consistently with locations of PCBs; however, it is acknowledged that some detectable concentrations of these compounds may be related to Gorham Street road use.
Fluoranthene	Maybe	Detected above the RUSCO Residential consistently with locations of PCBs; however, it is acknowledged that some detectable concentrations of these compounds may be related to Gorham Street road use.
Hexachlorobenzene	Maybe	Detected above the RUSCO Residential consistently with locations of PCBs; however, it is acknowledged that some detectable concentrations of these compounds may be related to Gorham Street road use.
Indeno(1,2,3-c,d)pyrene	Maybe	Detected above the RUSCO Residential consistently with locations of PCBs; however, it is acknowledged that some detectable concentrations of these compounds may be related to Gorham Street road use.
Pyrene	Maybe	Detected above the RUSCO Residential consistently with locations of PCBs; however, it is acknowledged that some detectable concentrations of these compounds may be related to Gorham Street road use.

When looking at the area of exceedances from site-related impacts, the area on the western side of Gorham Street generally extends between samples SB-18 and SS-13. The area on the eastern side of Gorham Street extends between samples SS-19 and SS-20, and is adjacent to the facility parking lot.

Conclusions

The soils impacted by PCBs, SVOCs, arsenic, and mercury are limited to the area along the western portion of Gorham Street only and have been delineated. The soils impacted by arsenic also are contained in this area, but also are present in a limited area along the eastern portion of Gorham Street, adjacent to the employee parking lot. There are no PCBs, SVOCs, arsenic, or mercury detected above the RUSCO Residential along the eastern side of Gorham Street; therefore, no additional investigation will be performed in this AOC. A corrective measures work plan will be prepared to evaluate and propose corrective measures for this area.

References

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New York State Department of Environmental Conservation (NYSDEC). 1994. Technical and Administrative Guidance Memorandum (TAGM) 4046: Recommended Soil Cleanup Objectives. January 1994, as amended.

New York State Department of Environmental Conservation (NYSDEC). 2006. Environmental Remediation Programs. NYSDEC Restricted Use Soil Cleanup Objectives (RUSCO): Protection of Public Health, Residential (6 NYCRR Part 375-6.8(b)). December.

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U.S. Environmental Protection Agency (USEPA). 1999. USEPA Contract Laboratory Program, National Functional Guidelines for Organic Data Review. October.

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Table 1
AOC C - Gorham Street Soil Sample Results
Hampshire Chemical Corporation, Waterloo, New York

Field Sample ID	NYSDEC	SS-14A	SS-14B	SS-15A	SS-15B	SS-16A	SS-16B	SS-17A	SS-17B	SS-18A	SS-18B	SS-19A	SS-19B	SS-20A	SS-20B	DUP-SS	SS-21A	SS-21B	SS-18B-MS	SS-18B-MSD
Location ID	Residential	SS-14	SS-14	SS-15	SS-15	SS-16	SS-16	SS-17	SS-17	SS-18	SS-18	SS-19	SS-19	SS-20	SS-20	SS-21	SS-21	SS-21	SS-18	SS-18
Depth Interval	Restricted	0 - 2 IN	2 - 7 IN	0 - 2 IN	2 - 7 IN	0 - 2 IN	2 - 7 IN	0 - 2 IN	2 - 12 IN	0 - 2 IN	2 - 7 IN	0 - 2 IN	2 - 12 IN	0 - 2 IN	2 - 8 IN	0 - 2 IN	0 - 2 IN	2 - 11 IN	2 - 7 IN	2 - 7 IN
Sample Date	Use	8/14/2007	8/14/2007	8/14/2007	8/14/2007	8/14/2007	8/14/2007	8/14/2007	8/14/2007	8/14/2007	8/14/2007	8/14/2007	8/14/2007	8/14/2007	8/14/2007	8/14/2007	8/14/2007	8/14/2007	8/14/2007	8/14/2007
Sample Type		Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Duplicate	Normal	Normal	MS	SD
Matrix		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Metals (mg/kg)																				
Aluminum	--	2000	2150	1700	2420	3430	2720	3560	2480	6370	4450	3490	2870	4180	6020	6590	6330	6390	6620	5870
Antimony	--	1.01 U	1.04 U	0.986 U	1.03 U	1.02 U	1.03 U	0.996 U	1.01 U	1.03 U	1.04 U	1.03 U	1.06 U	1 U	1.05 U	1.03 U	1.05 U	1.05 U	0.618 J	0.581 J
Arsenic	16	6.36	6.36	5.67	7.61	11.3	6.3	5.9	7.7	5.16 U	4.26 J	9.83	**31.3**	**17**	**33.4**	10.6	9.92	9.12	13.8	13.4
Barium	350	34.9	24.7	17.4	47.5	14.1	22	37	23.6	28.5	21.3	52.2	80.2	44.8	82.8	43.4	41.7	38.7	42.7	42.7
Beryllium	14	0.0764 J	0.0636 J	0.0268 J	0.0838 J	0.138 J	0.102 J	0.146 J	0.062 J	0.205 J	0.0969 J	0.17 J	0.496	0.173 J	0.43	0.258 J	0.251 J	0.238 J	0.991	0.93
Cadmium	2.5	0.396	0.33 J	0.37 J	0.376 J	0.244 J	0.385 J	0.674	0.385	0.154 J	0.162 J	0.852	0.449	**2.87**	**6.17**	0.703	0.685	0.67	1.06	1.01
Calcium	--	223000	247000	254000	252000	222000	211000	174000	243000	7480	128000	154000	30300	157000	64200	33600	32200	59000	121000	140000
Chromium	36	5.12	4.62	3.6	4.24	5.44	5.08	9.14	5.73	7.02	4.92	9.54	5.84	14.6	21.8	13.5	13.6	11.9	14.8	13.7
Cobalt	--	4.97	6.68	5.68	7.46	10.8	7.42	6.96	6.03	2.32 J	3.51 J	5.31	3.68 J	5.01	8.47	3.85 J	3.81 J	3.68 J	7.47	6.46
Copper	270	21.8	15.8	16.8	16.9	13.3	20.6	31.5	19	6.56	8.4	47.5	43.6	182	151	32.1	34.9	26	18.6	19.2
Iron	--	7140	5740	5420	6090	7470	10200	8550	6220	8030	5890	9740	7950	9400	18700	9710	9160	9240	6910	5920
Lead	400	26.7	26	30.3	24.2	20.8	104	86.4	65.2	10.5	14.3	336	96.7	215	303	102	89.2	94.4	23.6	23.5
Magnesium	--	12300	13000	14200	12900	15100	11500	12400	11800	1690	5760	14300	3190	16400	15700	5990	5990	6340	7550	7900
Manganese	2000	252	271	276	246	341	256	327	257	126	193	255	87.7	261	278	233	209	222	220	202
Mercury	0.81	0.0299 J	0.0151 J	0.0213 J	0.0146 J	0.0153 J	0.0711 J	0.0792 J	0.045 J	0.0313 J	0.0369 J	0.178 J	0.085 J	0.361 J	0.73 J	0.172 J	0.164 J	0.148 J	0.351	0.332
Nickel	140	16.3	15.1	14.1	17.8	21.1	20.8	18.3	14.9	5.2	9.19 J	24.5	14.9	14.4	20.7	11.2	11.1	10.2	18.7	16.2
Potassium	--	801	863	739	999	1270	918	925	755	455	571 J	782	421	946	1160	838	832	844	2050	1840
Selenium	36	5.07 U	5.21 U	4.93 U	5.14 U	5.12 U	5.13 U	4.98 U	1.12 J	5.16 U	5.21 U	1.2 J	5.29 U	1.32 J	2.72 J	5.17 U	5.26 U	5.26 U	10.7	9.96
Silver	36	0.204 U	0.766 U	0.756 U	0.794 U	0.254 U	0.331 U	0.402 U	0.22 U	0.318 U	0.386 U	1.08	1.18	0.726 U	1.12	0.838 U	0.861 U	0.876 U	7.64	7.6
Sodium	--	589	493	303	302	1060	578	269	229	1710	656	152	196	141	179	66.5 J	67.8 J	86.1	1610	1550
Thallium	--	1.57 U	1.47 U	0.71 U	10.3 U	10.2 U	10.3 U	9.96 U	10.1 U	10.3 U	10.4 U	10.3 U	10.6 U	10 U	10.5 U	10.3 U	10.5 U	10.5 U	8.8 J	9.13 J
Vanadium	--	8.17	7.55	6.57	7.88	10	18.7	15.3	10.3	11.3	8.56	73.1	41.8	20.5	29.9	21.5	20.5	18.6	29.4	28.1
Zinc	2200	56.7	53	52.9	63.5	51.8	76	145	84.1	36.1	29.4 J	179	62	343	578	111	109	99	54.1	45.6
PCBs (mg/kg)																				
Aroclor-1016	--	0.0166 U	0.0172 U	0.0167 U	0.0167 U	0.0169 U	0.0171 U	0.0172 U	0.017 U	0.0167 U	0.0171 U	0.0168 U	0.0175 U	0.0168 U	0.0173 U	0.0173 U	0.0174 U	0.0172 U	0.0836	0.0941
Aroclor-1221	--	0.0166 U	0.0172 U	0.0167 U	0.0167 U	0.0169 U	0.0171 U	0.0172 U	0.017 U	0.0167 U	0.0171 U	0.0168 U	0.0175 U	0.0168 U	0.0173 U	0.0173 U	0.0174 U	0.0172 U	--	--
Aroclor-1232	--	0.0166 U	0.0172 U	0.0167 U	0.0167 U	0.0169 U	0.0171 U	0.0172 U	0.017 U	0.0167 U	0.0171 U	0.0168 U	0.0175 U	0.0168 U	0.0173 U	0.0173 U	0.0174 U	0.0172 U	--	--
Aroclor-1242	--	0.0166 U	0.0172 U	0.0167 U	0.0167 U	0.0169 U	0.0171 U	0.0172 U	0.017 U	0.0167 U	0.0171 U	0.0168 U	0.0175 U	0.0168 U	0.0173 U	0.0173 U	0.0174 U	0.0172 U	--	--
Aroclor-1248	--	0.0166 U	0.0172 U	0.0167 U	0.0167 U	0.0169 U	0.0171 U	0.0172 U	0.017 U	0.0167 U	0.0171 U	0.0168 U	0.0175 U	0.0168 U	0.0173 U	0.0173 U	0.0174 U	0.0172 U	--	--
Aroclor-1254	--	0.049	0.0602	0.179	0.0396	0.0196	0.507	0.465	0.157	0.0277	0.187	0.653	0.237	0.359	0.314	0.258	0.252	0.538	--	--
Aroclor-1260	--	0.0166 U	0.0172 U	0.0167 U	0.0167 U	0.0169 U	0.0171 U	0.0172 U	0.017 U	0.0167 U	0.0171 U	0.0168 U	0.0175 U	0.0168 U	0.0173 U	0.0173 U	0.0174 U	0.0172 U	0.16	0.197
Total PCBs	1	0.049	0.0602	0.179	0.0396	0.0196	0.507	0.465	0.157	0.0277	0.187	0.653	0.237	0.359	0.314	0.258	0.252	0.538	0.2436	0.2911
Volatile Organics (mg/kg)																				
1,1,1-Trichloroethane	100	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.0058 R	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.0145	0.0104
1,1,2,2-Tetrachloroethane	--	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.0058 R	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.0254	0.029
1,1,2-Trichloroethane	--	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.0058 R	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.0183	0.0182
1,1-Dichloroethane	19	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.0058 R	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.0146	0.0112
1,1-Dichloroethene	100	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.0058 R	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.0139	0.00936
1,2-Dichloroethane	2.3	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.0058 R	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.0167	0.0164
1,2-Dichloropropane	--	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.0058 R	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.0154	0.0133
2-Butanone	100	0.0101 U	0.00949 U	0.0124 U	0.0103 U	0.0114 U	0.0125 U	0.0111 U	0.0113 U	0.011 U	0.0116 R	0.0113 U	0.0147 U	0.0131 U	0.00979 U	0.0121 U	0.0127 U	0.0121 U	0.0163	0.0188
2-Hexanone	--	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.0058 R	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.0141	0.0162
4-Methyl-2-Pentanoe	--	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.0058 R	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.0162	0.0175
Acetone	100	0.0101 U	0.00949 U	0.0124 U	0.0103 U	0.0114 U	0.0125 U	0.0111 U	0.0113 U	0.011 U	0.0116 R	0.0113 U	0.0147 U	0.0131 U	0.00979 U	0.0121 U	0.0127 U	0.0121 U	0.0179	0.022
Acrylonitrile	--	0.0202 U	0.019 U	0.0249 U	0.0206 U	0.0228 U	0.0251 U	0.0222 U	0.0225 U	0.0219 U	0.0232 R	0.0227 U	0.0294 U	0.0262 U	0.0196 U	0.0241 U	0.0254 U	0.0242 U	0.0186 J	0.0202 J
Benzene	2.9	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.0058 R	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.014	0.0109
Bromodichloromethane	--	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.0058 R	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.0155	0.0137
Bromoform	--	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.0058 R	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.0128	0.0139
Bromomethane	--	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.0058 R	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.0181	0.0126
Carbon Disulfide	--	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.0058 R	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.0115	0.00694
Carbon tetrachloride	1.4	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.0058 R	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.015	0.00983
Chlorobenzene	100	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.0058 R	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.0121	0.0102
Chloroethane	--	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.0058 R	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.0158	0.0108
Chloroform	10	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.0058 R	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.0155	0.013
Chloromethane	--	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.0058 R	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.0167	0.0115
cis-1,2-Dichloroethylene	59	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.0058 R	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.0148	0.0116
cis-1,3-Dichloropropene	--	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.0058 R	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.0117	0.0102
Dibromochloromethane	--	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.0058 R	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.0158	0.0143
Ethylbenzene	30	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.0058 R	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.0126	0.00917
Methylene chloride	51	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.0058 R	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.0162	0.0139
Styrene	--	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.0058 R	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.0105	0.00823
Trichlorethene	10	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.0058 R	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.0129	0.00972
Tetrachloroethene	5.5	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.0058 R	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.0135	0.00955
Toluene	100	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.000681 U	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.0144	0.0109
Trans-1,2-Dichloroethylene	100	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.0058 R	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.0134	0.0105
trans-1,3-Dichloropropene	--	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.0058 R	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.0108	0.0104
Vinyl chloride	0.21	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.0058 R	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.0167	0.0107
Xylenes, Total	100	0.00506 U	0.00475 U	0.00622 U	0.00515 U	0.0057 U	0.00627 U	0.00554 U	0.00563 U	0.00548 U	0.0058 R	0.00567 U	0.00734 U	0.00655 U	0.00489 U	0.00603 U	0.00636 U	0.00604 U	0.0389	0.0294
Epichlorohydrin	--	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 R	0 U	0 U	0 U	0 U	0 U	0 U	0 U	--	--

Table 1
AOC C - Gorham Street Soil Sample Results
Hampshire Chemical Corporation, Waterloo, New York

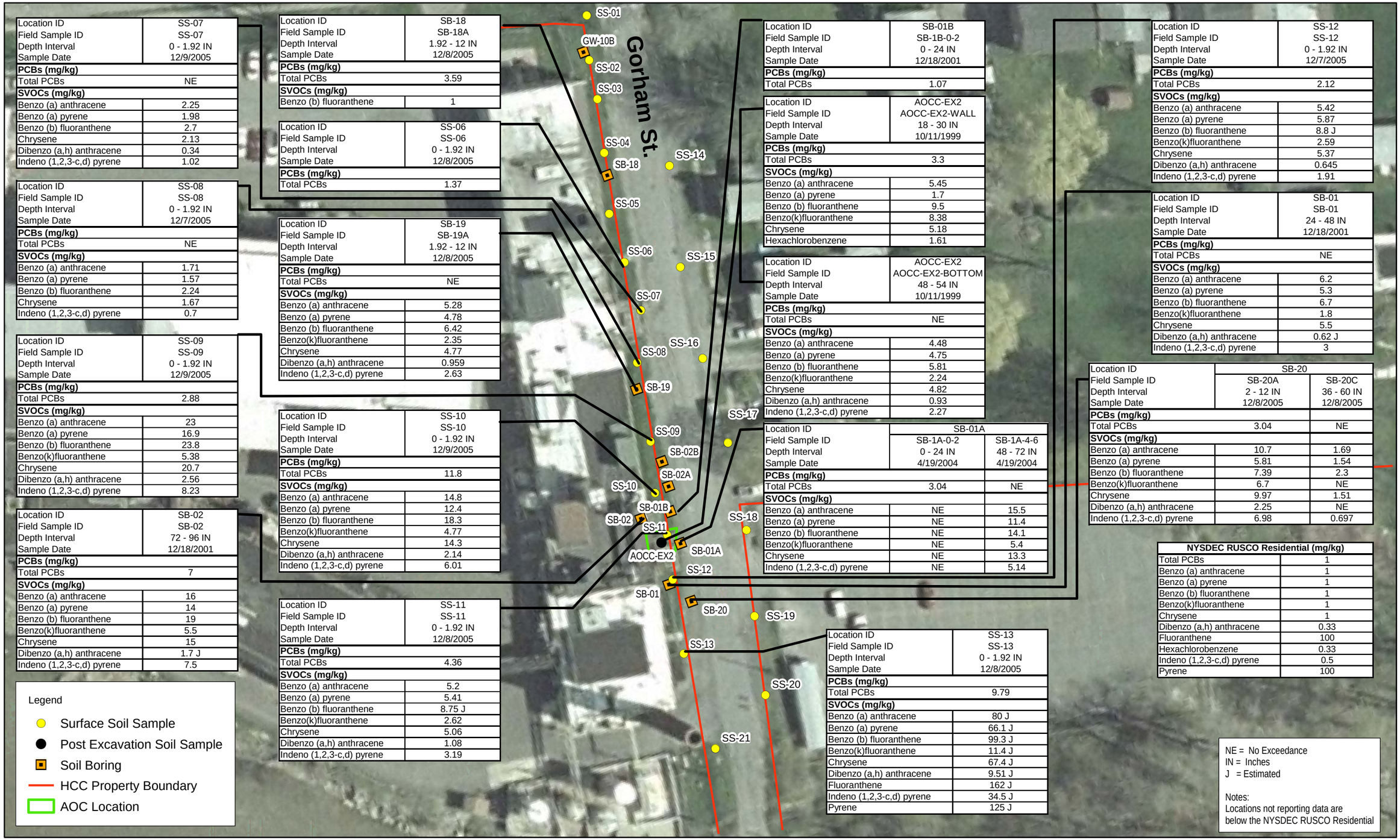
Field Sample ID	NYSDEC	SS-14A	SS-14B	SS-15A	SS-15B	SS-16A	SS-16B	SS-17A	SS-17B	SS-18A	SS-18B	SS-19A	SS-19B	SS-20A	SS-20B	DUP-SS	SS-21A	SS-21B	SS-18B-MS	SS-18B-MSD
Location ID	Residential	SS-14	SS-14	SS-15	SS-15	SS-16	SS-16	SS-17	SS-17	SS-18	SS-18	SS-19	SS-19	SS-20	SS-20	SS-21	SS-21	SS-21	SS-18	SS-18
Depth Interval	Restricted	0 - 2 IN	2 - 7 IN	0 - 2 IN	2 - 7 IN	0 - 2 IN	2 - 7 IN	0 - 2 IN	2 - 12 IN	0 - 2 IN	2 - 7 IN	0 - 2 IN	2 - 12 IN	0 - 2 IN	2 - 8 IN	0 - 2 IN	0 - 2 IN	2 - 11 IN	2 - 7 IN	2 - 7 IN
Sample Date	Use	8/14/2007	8/14/2007	8/14/2007	8/14/2007	8/14/2007	8/14/2007	8/14/2007	8/14/2007	8/14/2007	8/14/2007	8/14/2007	8/14/2007	8/14/2007	8/14/2007	8/14/2007	8/14/2007	8/14/2007	8/14/2007	8/14/2007
Sample Type		Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Duplicate	Normal	Normal	MS	SD
Matrix		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Semi-Volatile Organics (mg/kg)																				
1,2,4-Trichlorobenzene	--	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.17 J	1.15 J
1,2-Dichlorobenzene	100	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.16 J	1.15 J
1,3-Dichlorobenzene	17	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.1 J	1.07 J
1,4-Dichlorobenzene	9.8	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.1 J	1.08 J
2,4,5-Trichlorophenol	--	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.59 J	1.37 J
2,4,6-Trichlorophenol	--	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.24 J	1.05 J
2,4-Dichlorophenol	--	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.35 J	1.23 J
2,4-Dimethylphenol	--	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.24 J	1.22 J
2,4-Dinitrophenol	--	8.44 U	8.4 U	8.28 U	8.44 U	8.45 U	8.42 U	17.2 U	17 U	8.48 U	8.54 U	16.7 U	8.77 U	16.9 U	17.2 U	8.64 U	17.2 U	8.65 U	8.54 U	8.54 U
2,4-Dinitrotoluene	--	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.46 J	1.32 J
2,6-Dinitrotoluene	--	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.34 J	1.23 J
2-Chloronaphthalene	--	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.15 J	1.07 J
2-Methylnaphthalene	--	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.32 J	1.24 J
2-Methylphenol	100	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.24 J	1.19 J
2-Nitroaniline	--	8.44 U	8.4 U	8.28 U	8.44 U	8.45 U	8.42 U	17.2 U	17 U	8.48 U	8.54 U	16.7 U	8.77 U	16.9 U	17.2 U	8.64 U	17.2 U	8.65 U	8.54 U	8.54 U
2-Nitrophenol	--	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.71 U	1.71 U
3,3'-Dichlorobenzidine	--	3.38 U	3.36 U	3.31 U	3.38 U	3.38 U	3.37 U	6.87 U	6.82 U	3.39 U	3.42 U	6.68 U	3.51 U	6.76 U	6.86 U	3.45 U	6.86 U	3.46 U	1.87 J	1.75 J
3-,4-Methylphenol	--	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.37 J	1.28 J
3-Nitroaniline	--	8.44 U	8.4 U	8.28 U	8.44 U	8.45 U	8.42 U	17.2 U	17 U	8.48 U	8.54 U	16.7 U	8.77 U	16.9 U	17.2 U	8.64 U	17.2 U	8.65 U	8.54 U	8.54 U
4,6-Dinitro-2-methylphenol	--	8.44 U	8.4 U	8.28 U	8.44 U	8.45 U	8.42 U	17.2 U	17 U	8.48 U	8.54 U	16.7 U	8.77 U	16.9 U	17.2 U	8.64 U	17.2 U	8.65 U	4.1 J	4.02 J
4-Bromophenyl phenyl ether	--	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.69 J	1.38 J
4-Chloro-3-methylphenol	--	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.62 J	1.44 J
4-Chloroaniline	--	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	0.998 J	0.957 J
4-Chlorophenyl phenyl ether	--	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.61 J	1.38 J
4-Nitroaniline	--	8.44 U	8.4 U	8.28 U	8.44 U	8.45 U	8.42 U	17.2 U	17 U	8.48 U	8.54 U	16.7 U	8.77 U	16.9 U	17.2 U	8.64 U	17.2 U	8.65 U	8.54 U	8.54 U
4-Nitrophenol	--	8.44 U	8.4 U	8.28 U	8.44 U	8.45 U	8.42 U	17.2 U	17 U	8.48 U	8.54 U	16.7 U	8.77 U	16.9 U	17.2 U	8.64 U	17.2 U	8.65 U	8.54 U	8.54 U
Acenaphthene	100	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.48 J	1.33 J
Acenaphthylene	100	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.45 J	1.32 J
Anthracene	100	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	2.18	1.92
Benzo (a) anthracene	1	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	2.34	2.08
Benzo (a) pyrene	1	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	2.23	1.97
Benzo (b) fluoranthene	1	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	2.21	1.8
Benzo (g,h,i) perylene	100	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.78	1.54 J
Benzo(k)fluoranthene	1	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	2.3	1.97
Bis (2-chloroethoxy) methane	--	1.69 UJ	1.68 UJ	1.66 UJ	1.69 UJ	1.69 UJ	1.68 UJ	3.43 UJ	3.41 UJ	1.7 UJ	1.71 UJ	3.34 UJ	1.75 UJ	3.38 UJ	3.43 UJ	1.73 UJ	3.43 UJ	1.73 UJ	0.959 J	0.966 J
Bis (2-chloroethyl) ether	--	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.09 J	1.12 J
Bis (2-chloroisopropyl) ether	--	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.13 J	1.23 J
Bis (2-ethylhexyl) phthalate	--	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	2.35	4.74
Butyl benzylphthalate	--	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	2.38	2.24
Carbazole	--	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	2.29	2.1
Chrysene	1	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	2.38	2.16
Dibenzo (a,h) anthracene	0.33	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.92	1.64 J
Dibenzofuran	14	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.64 J	1.43 J
Diethyl phthalate	--	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.85	1.64 J
Dimethyl phthalate	--	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.62 J	1.45 J
Di-n-butylphthalate	--	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	2.18	1.94
Di-n-octylphthalate	--	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	2.01	1.92
Fluoranthene	100	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	1.96 J	1.75 U	2.47 J	3.07 J	1.33 J	3.43 U	1.13 J	2.55	2.21
Fluorene	100	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.7 J	1.5 J
Hexachlorobenzene	0.33	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	2.08	1.77
Hexachlorobutadiene	--	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.27 J	1.17 J
Hexachlorocyclopentadiene	--	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.71 U	1.71 U
Hexachloroethane	--	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1 J	0.98 J
Indeno (1,2,3-c,d) pyrene	0.5	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.91	1.62 J
Isophorone	--	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.4 J	1.4 J
Naphthalene	100	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.24 J	1.21 J
Nitrobenzene	--	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	0.975 J	1.08 J
n-Nitrosodi-n-propylamine	--	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.19 J	1.25 J
n-Nitrosodiphenylamine	--	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.66 J	1.5 J
Pentachlorophenol	2.4	8.44 U	8.4 U	8.28 U	8.44 U	8.45 U	8.42 U	17.2 U	17 U	8.48 U	8.54 U	16.7 U	8.77 U	16.9 U	17.2 U	8.64 U	17.2 U	8.65 U	4.32 J	4.24 J
Phenanthrene	100	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	1.76 J	1.73 U	3.43 U	1.73 U	2.23	1.97
Phenol	100	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	3.38 U	3.43 U	1.73 U	3.43 U	1.73 U	1.26 J	1.21 J
Pyrene	100	1.69 U	1.68 U	1.66 U	1.69 U	1.69 U	1.68 U	3.43 U	3.41 U	1.7 U	1.71 U	3.34 U	1.75 U	2.12 J	2.55 J	1.25 J	3.43 U	0.994 J	2.51	2.25

U = The constituent was not detected above the associated reporting limit
J - The constituent concentration was estimated
Gray shading indicates that the constituent was detected above a criteria
-- indicates no criteria established
mg/kg = milligram per kilogram
IN = inches

FIGURE 1
August 2007 Soil Sampling Locations
AOC C - Gorham Street
Hampshire Chemical Corporation
Waterloo, New York

CH2MHILL

MKE \\LSG31019756\GIS\DOW\WATERLOO\MAPDOCS\AOC C\FIGURE1_AOCC_SURFACE_SOIL.MXD FIGURE1_AOCC_SURFACE_SOIL.MXD 1/21/2008 08:44:47



Location ID	SS-07
Field Sample ID	SS-07
Depth Interval	0 - 1.92 IN
Sample Date	12/9/2005
PCBs (mg/kg)	
Total PCBs	NE
SVOCs (mg/kg)	
Benzo (a) anthracene	2.25
Benzo (a) pyrene	1.98
Benzo (b) fluoranthene	2.7
Chrysene	2.13
Dibenzo (a,h) anthracene	0.34
Indeno (1,2,3-c,d) pyrene	1.02

Location ID	SS-08
Field Sample ID	SS-08
Depth Interval	0 - 1.92 IN
Sample Date	12/7/2005
PCBs (mg/kg)	
Total PCBs	NE
SVOCs (mg/kg)	
Benzo (a) anthracene	1.71
Benzo (a) pyrene	1.57
Benzo (b) fluoranthene	2.24
Chrysene	1.67
Indeno (1,2,3-c,d) pyrene	0.7

Location ID	SS-09
Field Sample ID	SS-09
Depth Interval	0 - 1.92 IN
Sample Date	12/9/2005
PCBs (mg/kg)	
Total PCBs	2.88
SVOCs (mg/kg)	
Benzo (a) anthracene	23
Benzo (a) pyrene	16.9
Benzo (b) fluoranthene	23.8
Benzo(k)fluoranthene	5.38
Chrysene	20.7
Dibenzo (a,h) anthracene	2.56
Indeno (1,2,3-c,d) pyrene	8.23

Location ID	SB-02
Field Sample ID	SB-02
Depth Interval	72 - 96 IN
Sample Date	12/18/2001
PCBs (mg/kg)	
Total PCBs	7
SVOCs (mg/kg)	
Benzo (a) anthracene	16
Benzo (a) pyrene	14
Benzo (b) fluoranthene	19
Benzo(k)fluoranthene	5.5
Chrysene	15
Dibenzo (a,h) anthracene	1.7 J
Indeno (1,2,3-c,d) pyrene	7.5

Location ID	SB-18
Field Sample ID	SB-18A
Depth Interval	1.92 - 12 IN
Sample Date	12/8/2005
PCBs (mg/kg)	
Total PCBs	3.59
SVOCs (mg/kg)	
Benzo (b) fluoranthene	1

Location ID	SS-06
Field Sample ID	SS-06
Depth Interval	0 - 1.92 IN
Sample Date	12/8/2005
PCBs (mg/kg)	
Total PCBs	1.37

Location ID	SB-19
Field Sample ID	SB-19A
Depth Interval	1.92 - 12 IN
Sample Date	12/8/2005
PCBs (mg/kg)	
Total PCBs	NE
SVOCs (mg/kg)	
Benzo (a) anthracene	5.28
Benzo (a) pyrene	4.78
Benzo (b) fluoranthene	6.42
Benzo(k)fluoranthene	2.35
Chrysene	4.77
Dibenzo (a,h) anthracene	0.959
Indeno (1,2,3-c,d) pyrene	2.63

Location ID	SS-10
Field Sample ID	SS-10
Depth Interval	0 - 1.92 IN
Sample Date	12/9/2005
PCBs (mg/kg)	
Total PCBs	11.8
SVOCs (mg/kg)	
Benzo (a) anthracene	14.8
Benzo (a) pyrene	12.4
Benzo (b) fluoranthene	18.3
Benzo(k)fluoranthene	4.77
Chrysene	14.3
Dibenzo (a,h) anthracene	2.14
Indeno (1,2,3-c,d) pyrene	6.01

Location ID	SS-11
Field Sample ID	SS-11
Depth Interval	0 - 1.92 IN
Sample Date	12/8/2005
PCBs (mg/kg)	
Total PCBs	4.36
SVOCs (mg/kg)	
Benzo (a) anthracene	5.2
Benzo (a) pyrene	5.41
Benzo (b) fluoranthene	8.75 J
Benzo(k)fluoranthene	2.62
Chrysene	5.06
Dibenzo (a,h) anthracene	1.08
Indeno (1,2,3-c,d) pyrene	3.19

Location ID	SB-01B
Field Sample ID	SB-1B-0-2
Depth Interval	0 - 24 IN
Sample Date	12/18/2001
PCBs (mg/kg)	
Total PCBs	1.07

Location ID	AOCC-EX2
Field Sample ID	AOCC-EX2-WALL
Depth Interval	18 - 30 IN
Sample Date	10/11/1999
PCBs (mg/kg)	
Total PCBs	3.3
SVOCs (mg/kg)	
Benzo (a) anthracene	5.45
Benzo (a) pyrene	1.7
Benzo (b) fluoranthene	9.5
Benzo(k)fluoranthene	8.38
Chrysene	5.18
Hexachlorobenzene	1.61

Location ID	AOCC-EX2
Field Sample ID	AOCC-EX2-BOTTOM
Depth Interval	48 - 54 IN
Sample Date	10/11/1999
PCBs (mg/kg)	
Total PCBs	NE
SVOCs (mg/kg)	
Benzo (a) anthracene	4.48
Benzo (a) pyrene	4.75
Benzo (b) fluoranthene	5.81
Benzo(k)fluoranthene	2.24
Chrysene	4.82
Dibenzo (a,h) anthracene	0.93
Indeno (1,2,3-c,d) pyrene	2.27

Location ID	SB-01A	
Field Sample ID	SB-1A-0-2	SB-1A-4-6
Depth Interval	0 - 24 IN	48 - 72 IN
Sample Date	4/19/2004	4/19/2004
PCBs (mg/kg)		
Total PCBs	3.04	NE
SVOCs (mg/kg)		
Benzo (a) anthracene	NE	15.5
Benzo (a) pyrene	NE	11.4
Benzo (b) fluoranthene	NE	14.1
Benzo(k)fluoranthene	NE	5.4
Chrysene	NE	13.3
Indeno (1,2,3-c,d) pyrene	NE	5.14

Location ID	SS-13
Field Sample ID	SS-13
Depth Interval	0 - 1.92 IN
Sample Date	12/8/2005
PCBs (mg/kg)	
Total PCBs	9.79
SVOCs (mg/kg)	
Benzo (a) anthracene	80 J
Benzo (a) pyrene	66.1 J
Benzo (b) fluoranthene	99.3 J
Benzo(k)fluoranthene	11.4 J
Chrysene	67.4 J
Dibenzo (a,h) anthracene	9.51 J
Fluoranthene	162 J
Indeno (1,2,3-c,d) pyrene	34.5 J
Pyrene	125 J

Location ID	SS-12
Field Sample ID	SS-12
Depth Interval	0 - 1.92 IN
Sample Date	12/7/2005
PCBs (mg/kg)	
Total PCBs	2.12
SVOCs (mg/kg)	
Benzo (a) anthracene	5.42
Benzo (a) pyrene	5.87
Benzo (b) fluoranthene	8.8 J
Benzo(k)fluoranthene	2.59
Chrysene	5.37
Dibenzo (a,h) anthracene	0.645
Indeno (1,2,3-c,d) pyrene	1.91

Location ID	SB-01
Field Sample ID	SB-01
Depth Interval	24 - 48 IN
Sample Date	12/18/2001
PCBs (mg/kg)	
Total PCBs	NE
SVOCs (mg/kg)	
Benzo (a) anthracene	6.2
Benzo (a) pyrene	5.3
Benzo (b) fluoranthene	6.7
Benzo(k)fluoranthene	1.8
Chrysene	5.5
Dibenzo (a,h) anthracene	0.62 J
Indeno (1,2,3-c,d) pyrene	3

Location ID	SB-20	
Field Sample ID	SB-20A	SB-20C
Depth Interval	2 - 12 IN	36 - 60 IN
Sample Date	12/8/2005	12/8/2005
PCBs (mg/kg)		
Total PCBs	3.04	NE
SVOCs (mg/kg)		
Benzo (a) anthracene	10.7	1.69
Benzo (a) pyrene	5.81	1.54
Benzo (b) fluoranthene	7.39	2.3
Benzo(k)fluoranthene	6.7	NE
Chrysene	9.97	1.51
Dibenzo (a,h) anthracene	2.25	NE
Indeno (1,2,3-c,d) pyrene	6.98	0.697

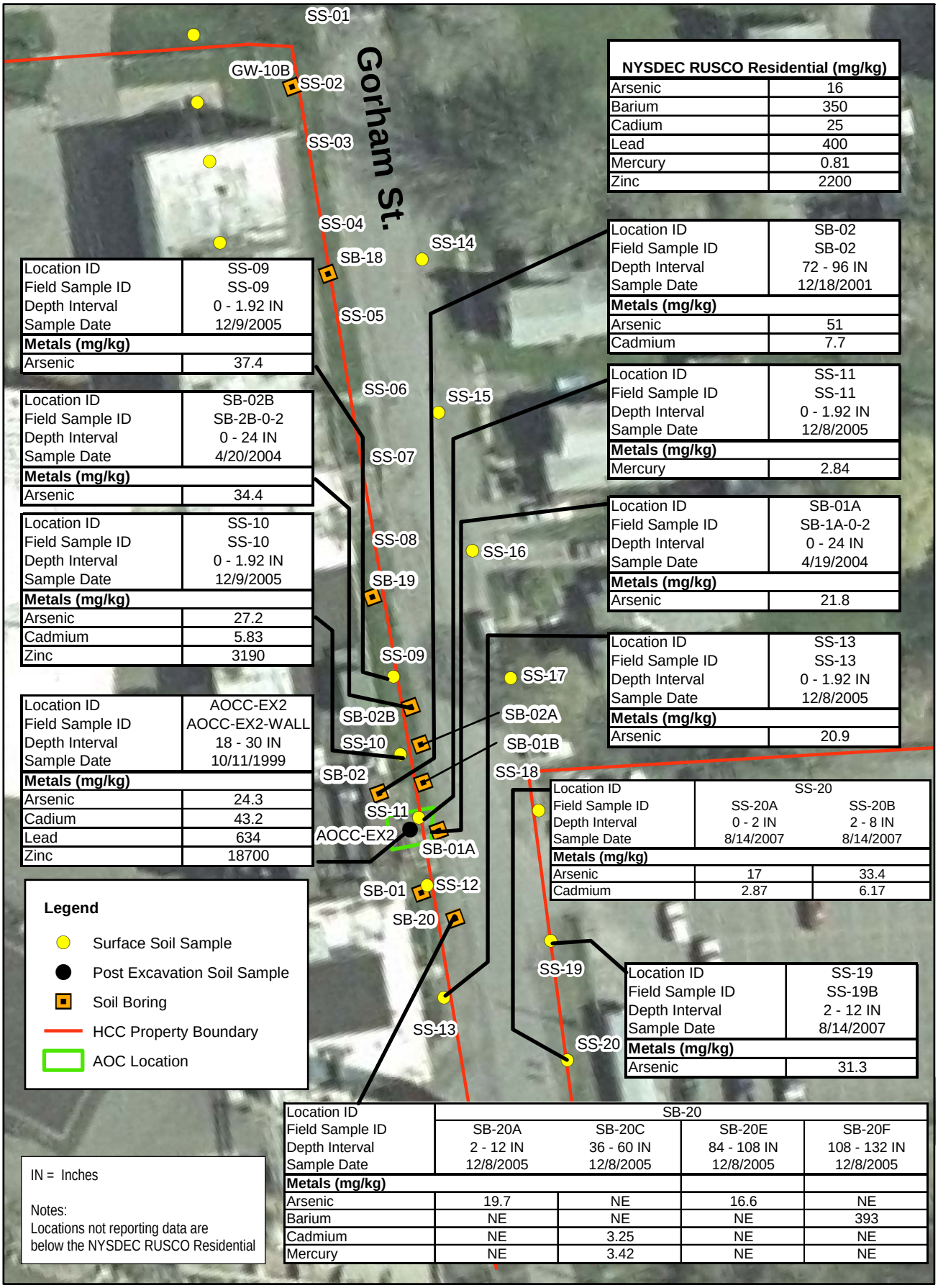
NYSDEC RUSCO Residential (mg/kg)	
Total PCBs	1
Benzo (a) anthracene	1
Benzo (a) pyrene	1
Benzo (b) fluoranthene	1
Benzo(k)fluoranthene	1
Chrysene	1
Dibenzo (a,h) anthracene	0.33
Fluoranthene	100
Hexachlorobenzene	0.33
Indeno (1,2,3-c,d) pyrene	0.5
Pyrene	100

NE = No Exceedance
IN = Inches
J = Estimated

Notes:
Locations not reporting data are below the NYSDEC RUSCO Residential

Figure 2
Organics Above Screening Levels – AOC C – Surface/Subsurface Soil
Hampshire Chemical Corporation
Waterloo, New York

CH2MHILL



NYSDEC RUSCO Residential (mg/kg)	
Arsenic	16
Barium	350
Cadium	25
Lead	400
Mercury	0.81
Zinc	2200

Location ID	SS-09
Field Sample ID	SS-09
Depth Interval	0 - 1.92 IN
Sample Date	12/9/2005
Metals (mg/kg)	
Arsenic	37.4

Location ID	SB-02
Field Sample ID	SB-02
Depth Interval	72 - 96 IN
Sample Date	12/18/2001
Metals (mg/kg)	
Arsenic	51
Cadmium	7.7

Location ID	SB-02B
Field Sample ID	SB-2B-0-2
Depth Interval	0 - 24 IN
Sample Date	4/20/2004
Metals (mg/kg)	
Arsenic	34.4

Location ID	SS-11
Field Sample ID	SS-11
Depth Interval	0 - 1.92 IN
Sample Date	12/8/2005
Metals (mg/kg)	
Mercury	2.84

Location ID	SS-10
Field Sample ID	SS-10
Depth Interval	0 - 1.92 IN
Sample Date	12/9/2005
Metals (mg/kg)	
Arsenic	27.2
Cadmium	5.83
Zinc	3190

Location ID	SB-01A
Field Sample ID	SB-1A-0-2
Depth Interval	0 - 24 IN
Sample Date	4/19/2004
Metals (mg/kg)	
Arsenic	21.8

Location ID	SS-13
Field Sample ID	SS-13
Depth Interval	0 - 1.92 IN
Sample Date	12/8/2005
Metals (mg/kg)	
Arsenic	20.9

Location ID	AOCC-EX2
Field Sample ID	AOCC-EX2-WALL
Depth Interval	18 - 30 IN
Sample Date	10/11/1999
Metals (mg/kg)	
Arsenic	24.3
Cadium	43.2
Lead	634
Zinc	18700

Location ID	SS-20	
Field Sample ID	SS-20A	SS-20B
Depth Interval	0 - 2 IN	2 - 8 IN
Sample Date	8/14/2007	8/14/2007
Metals (mg/kg)		
Arsenic	17	33.4
Cadmium	2.87	6.17

Location ID	SS-19
Field Sample ID	SS-19B
Depth Interval	2 - 12 IN
Sample Date	8/14/2007
Metals (mg/kg)	
Arsenic	31.3

Location ID	SB-20			
Field Sample ID	SB-20A	SB-20C	SB-20E	SB-20F
Depth Interval	2 - 12 IN	36 - 60 IN	84 - 108 IN	108 - 132 IN
Sample Date	12/8/2005	12/8/2005	12/8/2005	12/8/2005
Metals (mg/kg)				
Arsenic	19.7	NE	16.6	NE
Barium	NE	NE	NE	393
Cadmium	NE	3.25	NE	NE
Mercury	NE	3.42	NE	NE

FIGURE 3
Metals Above Screening Levels - AOC C - Surface/Subsurface Soil
Hampshire Chemical Corporation
Waterloo, New York

CH2MHILL