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Scope of Work for Additional Sampling at
northern portions of the Foster's Refrigeration Property
Located at 119 North 2nd Street, City of Hudson, Columbia County, New York
NYSDEC: B-00184 ESI File: MH04055.40
August 17, 2006

Introduction

This Scope of Work (SOW) is prepared by Ecosystems Strategies, Inc. (ESI) on behalf of the City of Hudson (CH) for the purpose of outlining procedures to be followed during additional sample collection activities on specified portions of the Foster's Refrigeration Property. The specific area of work is shown in Figure 1 of Attachment A.

Known Environmental Conditions

A previous environmental investigation (conducted by ESI) has identified elevated concentrations of lead in surface and subsurface soils on the northern portion of the property to the north, west, and east of the on-site structure. The elevated lead concentrations appear to be associated with ash-like fill material that is present across the northern portion of the Site. Previous testing documented levels of lead in excess of 1,000 mg/Kg at eight sample locations in the northern portion of the property with a peak concentration of 12,900 mg/Kg in sample TP-9 (1.5'). Subsequent TCLP analysis of samples TP-7 (1.5') and TP-9 (1.5') indicate the presence of hazardous concentrations of lead at these two sample locations. The vertical and lateral extent of lead contamination is not known.

PCB 1254 was detected above NYSDEC guidance levels at one boring location sample location B-8 (4'-8') beneath the floor of the building. The vertical and lateral extent of PCB contamination in this area is not known.

Previous testing results are summarized in Tables 1 through 3 of the Attachment B.

Health and Safety

Investigation activities will be conducted under a previously approved Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP). The HASP will address concerns relating to worker safety during sample collection; the CAMP will address concerns relating to the protection of residents from fugitive dust during sampling. The HASP and CAMP are included as Attachment C of this SOW.

Description of Proposed Additional Investigation Activities

Additional investigative activities will consist of:

- The extension of 12 soil borings to north of the on-site structure to a maximum depth of 12' below surface grade and the collection of soil samples from 0-4', 4'-8' and 8'-12' depths. All 0-4' samples will be will be analyzed for lead. Deeper samples will be submitted for analysis of total weight lead where field evidence of ash is noted in the sample. A maximum of 36 soil samples will be analyzed for total weight lead. Five samples will be analyzed for TCLP lead.

- The extension of four soil borings in the vicinity of B-8 to a maximum depth of 12' below grade and the collection of samples from 0-4', 4-8' and 8-12'. All samples will be submitted for analysis of PCBs.

- The collection of a second round of 5 ground water samples from existing wells and laboratory analysis for total lead. If the soil samples collected from the vicinity of B-8 are found to contain PCBs in excess of 50 ppm, water samples from MW-2, MW-3, MW-4, and MW-5 will be analyzed for PCBs.

- The reporting of laboratory data with ASP Category B Deliverables; and, the data package for independent data validation.

Contingencies for Additional Work

Field observations of the adjoining property to the north indicate the presence of ash-like material on the surface. Additional sampling and analysis may be required if samples collected along the northern boundary of the subject property indicate the presence of elevated concentrations of lead. Additional sampling may also be required if PCBs are detected above guidance levels at sample locations around B-8.

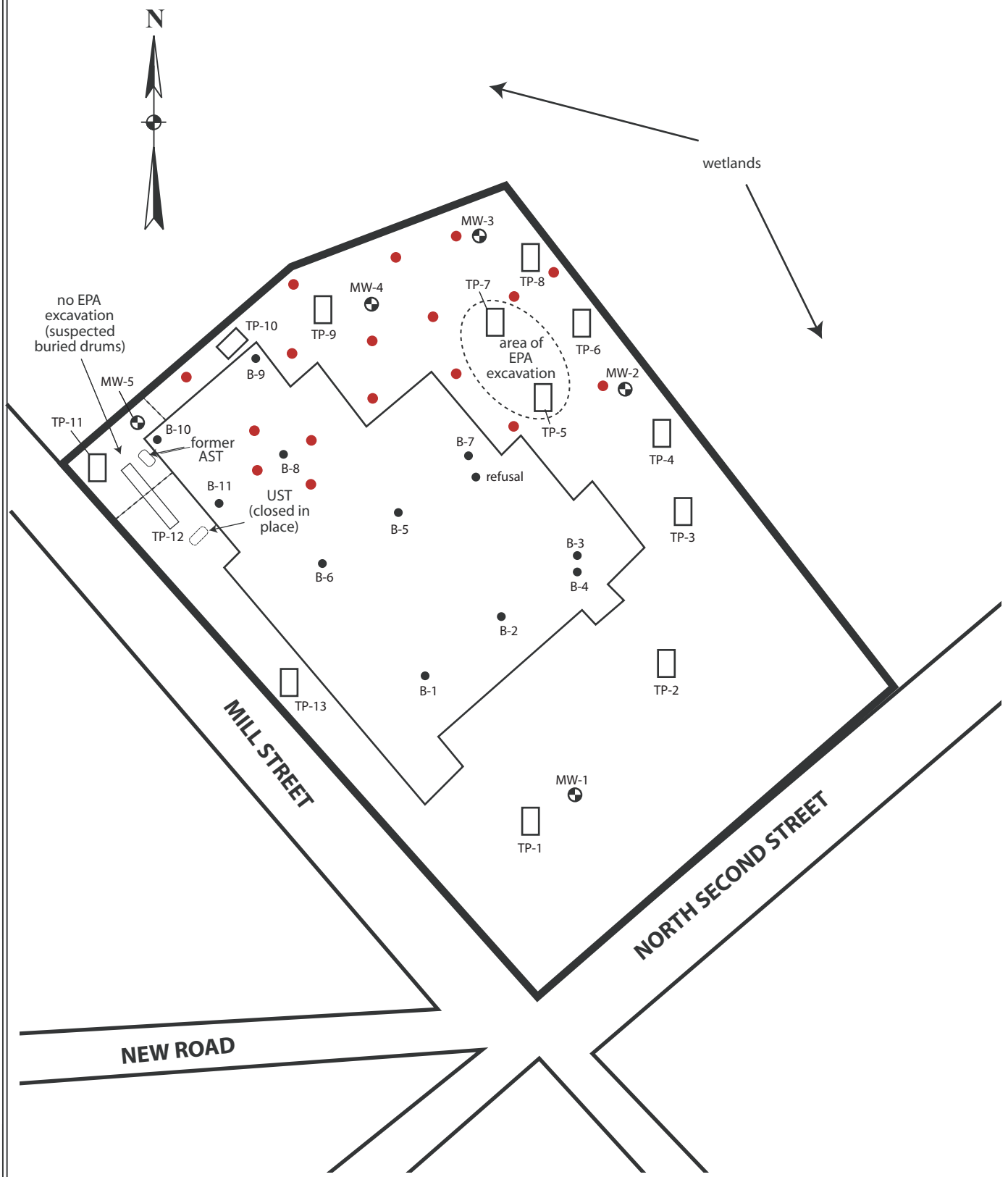
Project Documentation

- The results of the above fieldwork will be included in the Draft Remedial Investigation Report

- Complete Laboratory Data Packages

ATTACHMENTS

A Proposed Fieldwork Map
B Data Tables



All feature locations are approximate. This map is intended as a schematic to be used in conjunction with the associated report, and it should not be relied upon as a survey for planning or other activities.

Proposed Fieldwork Map

Foster Refrigeration Site
119 North 2nd Street
Hudson, New York

Legend:
- subject property border
- test pits
- boring location
- monitoring well
- proposed boring location

ESI File: MH04055.40

August 2006

Scale: 1" = 50' (approx.)

Attachment A

Table 1: Target Analyte List (TAL) Metals in Soils from Borings

Results provided in mg/kg (parts per million). Results shown in **bold** exceed guidance levels.

		Sample Identification																				
		B-1			B-2			B-3	B-4	B-5		B-6		B-7		B-8		B-9		B-10	B-11	
RCRA Metal	Guidance Level	0-4'	4'-8'	8'-12'	1'-2'	2'-4'	4'-8'	0-3'	0-2'	0-4'	4'-5'	0-4'	4'-8'	0-4'	4'-8'	0-4'	4'-8'	0-4'	4'-8'	4'-6'	0-4'	4'-8'
Aluminum	SB**	12,100	12,300	8,170	4,510	13,900	9,550	13,500	9,680	2,610	7,380	14,400	5,040	11,700	9,190	4,790	7,090	6,920	4010	6990	2,160	9,160
Antimony	SB**	4.35	ND	ND	3.08	ND	ND	5.4	1.33	1.89	ND	3.89	ND	4.85	4.4	14.2	3.97	5.06	2.93	ND	3.84	3.43
Arsenic	7.4*	7.39	**9.87**	**9.63**	4.38	**12.1**	**8.05**	6.56	**8.46**	**8.77**	**11.4**	6.57	5.88	7.13	6.82	**16.6**	3.5	**12**	**10.7**	6.44	**12.8**	3.91
Barium	81.1*	157	**90.1**	64	**280**	174	**82.5**	111	**549**	**88.9**	**108**	**222**	29.4	**189**	**82.8**	**466**	30.1	**540**	**85.5**	55.5	43.8	62.9
Beryllium	0.75*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35	ND	ND
Cadmium	0.22*	0.56	ND	ND	ND	ND	ND	ND	**1.56**	ND	ND	**0.89**	ND	0.56	ND	**3.99**	ND	**1.28**	ND	ND	ND	ND
Calcium	SB**	62,900	43,500	55,900	167,000	13,600	1,860	45,400	52,300	3,520	31,900	105,000	7,270	97,200	20,500	24,100	20,400	36,200	13,300	16,200	20,200	8,750
Chromium	20.9*	16.2	12.6	11.8	12.1	19.6	13.1	16.16	**67.1**	9.08	**62.5**	**32.5**	6.75	17.7	13.1	**24.9**	11.2	16.2	5.5	10.1	3.53	12.5
Cobalt	30 or SB**	8.32	5.4	6.8	4.13	11.7	10.5	9.05	9.26	5.38	6.05	8.56	5.51	7.52	10.4	6.91	7.75	9.01	5.07	7.22	6.28	9.83
Copper	23.4*	48.3	20.2	21.8	22.9	**35.3**	**27.3**	**29.6**	**2,590**	**62.8**	**33.3**	49	13.3	**37.8**	**27.6**	**124**	**26.8**	**240**	**25.3**	**28.4**	**32.8**	23.6
Iron	2,000 or SB**	19,700	14,800	15,200	12,000	26,900	19,300	24,400	27,500	9,950	20,200	212	8,790	18,900	17,100	60,100	16,200	35,000	8,790	17,300	6,760	16,100
Lead	72.5*	**87.7**	27	19	**116**	**144**	13	22.9	**2,330**	**645**	**151**	**197**	32.1	**142**	63.8	**559**	10.5	**1,030**	**88.7**	38	42.9	15.9
Magnesium	SB**	12,200	22,400	4,680	5,980	5,600	3,740	7,100	7,290	681	4,210	20,900	2,720	14,300	5,910	1,850	6,470	2,470	1,420	5,660	6.12	4,950
Manganese	SB**	628	855	295	363	931	458	786	605	104	361	1,010	137	702	287	416	376	530	159	416	61.6	346
Mercury	0.24*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.088	ND	ND
Nickel	21*	**21.5**	13.3	14.6	15.3	20.4	16	**22.7**	**24.2**	12	**32.7**	**33.3**	11.1	**25.9**	19.3	12	18.5	**66.2**	12.7	16.2	11.2	19.5
Potassium	SB**	1,680	1,020	707	921	1,650	444	1,320	1,110	420	906	2,010	398	1,440	943	675	755	829	514	928	209	864
Selenium	1*	ND	ND	ND	ND	ND	ND	ND	ND	**1.53**	ND	**1.48**	ND	**1.04**	ND	ND	ND	ND	**1.06**	ND	ND	ND
Silver	SB**	ND	ND	ND	ND	ND	ND	ND	ND	ND	**3.61**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	SB**	699	576	192	713	200	59.5	481	1,110	361	468	836	60.4	715	420	1,610	437	891	452	83.8	393	376
Thallium	SB**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	150 or SB**	22.1	19.1	16.8	20.6	24.6	16.3	20.5	18	15.7	20.7	32.1	14.4	24.1	17	19.9	12.7	21.6	12.5	13.9	12.6	16.1
Zinc	87.1*	**223**	53	54.4	**154**	**151**	54.6	**80.7**	**1,080**	67	**136**	**194**	33.2	**256**	**90.6**	**1,330**	**75.4**	**613**	**82.2**	**75.9**	**126**	**70.3**

Notes:

Guidance levels and background levels based on NYSDEC TAGM 4046.

** Background lead concentrations in urban settings typically range from 200 to 500 ppm.

ND = Not Detected NP = Not Provided SB = Site Backgrounc

Table 2: Target Analyte List (TAL) Metals in Soils from Test Pits

Results provided in mg/kg (parts per million). Results shown in **bold** exceed guidance levels.

		Sample Identification													
RCRA Metal	Guidance Level	TP-1 0-4"	TP-2 4'-5'	TP-3 6'	TP-4 5.5'	TP-5 5.5'	TP-6 6'	TP-7 1.5'	TP-8 5'	TP-9 2"-6"	TP-9 1.5'	TP-10 2'	TP-11 0-6"	TP-12 1'	TP-13
Aluminum	**SB****	9,430	2,630	19,500	6,430	7,800	5,580	9,000	6,120	5,480	1,320	3,910	9,340	6,720	Pending
Antimony	**SB****	6.73	1.23	8.16	6.47	32.7	ND	ND	3.62	ND	2.95	ND	ND	ND	Pending
Arsenic	**7.4***	**11.8**	1.42	**7.79**	**14.1**	**23.5**	**19.2**	**21.8**	**24.4**	**17**	4.85	7.27	**33.3**	**17.0**	8.52
Barium	**81.1***	**210**	38.8	**166**	**279**	**459**	**146**	**2,080**	**615**	**591**	**1,100**	**524**	**871**	**255**	**120**
Beryllium	**0.75***	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.68	ND	Pending
Cadmium	**0.22***	**1.47**	ND	ND	**1.09**	**1.8**	**1.09**	**1.27**	**1.98**	**1.23**	**2.79**	ND	**4.43**	**0.71**	Pending
Calcium	**SB****	33,300	2,930	18,900	20,800	4,190	2,350	9,680	4,790	4,140	24,200	2,990	10,500	25,00	Pending
Chromium	**20.9***	19.1	3.51	**22.6**	**17.7**	**22.6**	**26.3**	**40.4**	**29.3**	**112**	7.1	6.47	**34.0**	**15.6**	4.88
Cobalt	**30 or SB****	8.75	3.11	14.1	7.71	13.4	6.08	10.9	7.92	7.97	1.71	7.82	13.1	9.08	Pending
Copper	**23.4***	**78.5**	**28.7**	**28.2**	**87.3**	**142**	**139**	**172**	**147**	**198**	**27**	**44**	**238**	**89.2**	Pending
Iron	**2,000 or SB****	21,400	3,430	30,200	24,700	36,000	46,700	51,200	19,200	28,900	3,330	7,360	42,300	30,600	Pending
Lead	**72.5***	**407**	**93.6**	13	**1,080**	**2,540**	**339**	**2,600**	**1,770**	**2,820**	**12,900**	**273**	**2,460**	**1,440**	**1,440**
Magnesium	**SB****	4,960	529	8,800	2,700	2,600	1,440	2,020	1,430	788	7,560	245	2,270	3,520	Pending
Manganese	**SB****	486	31.8	551	378	710	200	692	388	220	111	238	675	479	Pending
Mercury	**0.24***	ND	0.21	ND	ND	0.78	ND	**0.766**	ND	ND	**0.25**	ND	ND	**0.31**	ND
Nickel	**21***	**20.4**	8.78	**31.8**	**17.9**	**13.7**	4.28	**25.3**	17.9	13.1	5.82	17.9	19.9	15.4	Pending
Potassium	**SB****	1,410	238	2,960	627	632	439	1,160	419	653	246	271	953	658	Pending
Selenium	**1***	ND	ND	ND	ND	ND	ND	**3.12**	ND	ND	ND	ND	ND	ND	ND
Silver	**SB****	ND	ND	ND	ND	1.28	1.77	ND	2.16	5.78	ND	ND	1.69	ND	ND
Sodium	**SB****	916	314	553	791	343	409	837	431	349	366	144	638	307	Pending
Thallium	**SB****	ND	ND	ND	ND	ND	ND	1.31	ND	ND	ND	ND	ND	ND	Pending
Vanadium	**150 or SB****	20.7	10.2	30.6	22.1	22.9	15.1	50.8	21.3	24.6	4.23	17	36.7	25.0	Pending
Zinc	**87.1***	**654**	56.3	**89**	**464**	**996**	**1,140**	**1,490**	**1,200**	**950**	**1,690**	**301**	**1,730**	**608**	Pending

Notes:

Guidance levels and background levels based on NYSDEC Background Concentrations of Lower Hudson Valley Soils* and NYSDEC TAGM 4046**

ND = Not Detected SB = Site Background

Table 3: Target Analyte List (TAL) Metals in Water

All results provided in ug/L. Results in **bold** exceed designated guidance levels.

TAL METAL	Guidance Level	Sample Identification					
		MW-1	MW-1 (Dup)	MW-2	MW-3	MW-4	MW-5
Aluminum	**100**	70.9	60.4	**767**	**323**	**163**	**559**
Antimony	**3**	ND	ND	ND	ND	ND	ND
Arsenic	**25**	ND	ND	ND	ND	11.9	ND
Barium	**1,000**	89.2	89.3	375	415	396	219
Beryllium	**3**	ND	ND	ND	ND	ND	ND
Cadmium	**5**	ND	ND	ND	ND	ND	ND
Calcium	**NE**	112,000	111,000	143,000	86,600	83,700	67,500
Chromium	**50**	5.7	5	11.7	ND	ND	ND
Cobalt	**5**	ND	ND	ND	ND	ND	ND
Copper	**200**	ND	ND	ND	6.8	8.1	7.9
Iron	**500**	**3,570**	**3,640**	**11,800**	**30,600**	**47,300**	**31,300**
Lead	**25**	ND	ND	10.7	**56**	7.3	6
Magnesium	**35,000**	28,900	28,500	24,600	22,900	22,400	14,500
Manganese	**300**	**705**	**702**	**1,460**	**2,060**	**2,310**	**1,750**
Mercury	**0.7**	ND	ND	ND	ND	ND	ND
Nickel	**100**	5.7	6	7.3	ND	5.1	5
Potassium	**NE**	5,130	5,000	11,000	1,620	2,060	661
Selenium	**10**	ND	ND	ND	ND	ND	ND
Silver	**50**	ND	ND	ND	ND	ND	ND
Sodium	**20,000**	**29,200**	**29,000**	**27,300**	**24,600**	**30,400**	**16,900**
Thallium	**0.5**	ND	ND	ND	ND	ND	ND
Vanadium	**14**	ND	ND	ND	10	ND	ND
Zinc	**2,000**	ND	ND	29.6	48.7	41.1	32.9

Notes:

Guidance levels based on NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1, Ambient Water Quality Standards And Guidance Values And Groundwater Effluent Limitations (June 1988 edition)

ND = Not Detected