

August 23, 2013

ELECTRONIC SUBMISSION

George Momberger, P.E., Environmental Engineer New York State Department of Environmental Conservation Remedial Bureau E, Remedial Section A Division of Environmental Remediation 625 Broadway, 12th Floor Albany, NY 12233-7017

Re: Non-Native Material Excavation Program

PSC - Chemical Pollution Control, LLC of New York

Bay Shore, New York

EPA ID No. NYD082785429

NYSDEC Permit No. 1-4728-00086/00002

Dear Mr. Momberger:

The purpose of this letter report is to present a summary of the investigation and remediation activities performed with regard to the non-native material discovered at the PSC - Chemical Pollution Control, LLC of New York (CPC) facility located at 120 South Fourth Street in Bay Shore, New York. The non-native material is a sludge-like material that was discovered at the site by Dvirka and Bartilucci Consulting Engineers (D&B) on July 3, 2013 during completion of the site regrading activities. As a result, an investigation program was developed to determine whether the material should be removed for proper off-site disposal.

Investigation Activities

The non-native material was discovered on-site on July 3, 2013 during completion of the site regrading activities that exposed a grey sludge-like material that exhibited a faint chemical odor. Hand delineation of the material revealed that it was limited in areal extent to approximately 10 feet in diameter, and limited in depth to approximately 6 inches to 1 foot below existing grade. Based on the discovery of this material, it was determined that the material should be sampled to determine whether remediation of the material was necessary.

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On July 8, 2013, D&B mobilized to the site to oversee the groundwater injection phase of the Interim Corrective Measures (ICM) Program being performed at the site. While the injection contractor was setting up its equipment, D&B utilized a new disposable polyethylene scoop to collect a sample of the material for laboratory analysis. The sample was collected from an area exhibiting the greatest visible discoloration and chemical odor. The sample was placed in pre cleaned laboratory-supplied sample containers, which were labeled, placed on ice and sent under chain-of-custody procedures to Spectrum Analytical, Inc. for analysis for Target Compound List (TCL) volatile organic compounds (VOCs), TCL semivolatile organic compounds (SVOCs), TCL pesticides, TCL polychlorinated biphenyls (PCBs), Target Analyte List (TAL) metals and cyanide utilizing an expedited 48-hour turnaround time. Spectrum Analytical, Inc. participates in the New York State Department of Health's (NYSDOH's) Environmental Laboratory Approval Program (ELAP).

The analytical results of the investigation sample are presented on Tables 1 through 4 in Attachment 1 of this letter compared to the New York State Department of Environmental Conservation's (NYSDEC's) Part 375 Unrestricted Use Soil Cleanup Objectives (UUSCOs). As indicated on the table, all compounds and constituents analyzed for were either not detected or were detected at concentrations below the UUSCOs with the exception of trichloroethene. Trichloroethene was detected at a concentration of 510 micrograms per kilogram (ug/kg) in the sample, which exceeds its respective UUSCO of 470 ug/kg.

Based on this result, it was determined that the non-native material should be excavated and transported off-site for proper disposal. This approach was discussed with and approved by the NYSDEC representative present on-site on July 11, 2013 to oversee the groundwater injection activities.

Remediation Activities

On July 24, 2013, D&B mobilized to the field with Eastern Environmental Solutions, Inc. (Eastern) to perform the remediation activities associated with the non-native material. Excavation initiated in the area of the non-native material in the location where the sample was collected and extended outward and downward to remove the material. During the removal activities, D&B screened the excavation visually, by smell and with a photoionization detector (PID). If visual evidence of the material was present or PID readings above background concentrations were encountered at the excavation limits, then the excavation was continued to remove these observed impacts. Utilizing this approach, the final limits of the excavation were approximately 20 feet north-south by approximately 25 feet east-west and approximately 2 feet below existing grade. The excavated material was loaded into a roll-off container for subsequent off-site transportation and disposal at Conestoga Landfill in Morgantown, Pennsylvania.

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Division of Environmental Remediation

During the excavation activities, D&B implemented a Community Air Monitoring Program (CAMP) to ensure that downwind volatile organic compound (VOC) and particulate concentrations were within the action levels specified in the NYSDEC-approved CAMP plan.

Following the removal activities, D&B collected confirmation soil samples from the excavation. The samples were collected at the frequency prescribed in the NYSDEC's DER 10 ("Technical Guidance for Site Investigation and Remediation") to verify the satisfactory removal of the non-native material and any impacted soil. As a result, one confirmation soil sample was collected from each excavation sidewall and the excavation bottom. The locations from where each confirmation soil sample was collected are presented on Figure 1 presented in Attachment 2 of this letter.

The confirmation soil samples were placed in pre-cleaned laboratory-supplied sample containers, which were labeled, placed on ice and sent under chain-of-custody procedures to Spectrum Analytical, Inc. Since only one VOC was detected in the investigation sample at a concentration exceeding its UUSCO, the confirmation soil samples were analyzed for TCL VOCs only. As noted previously, Spectrum Analytical, Inc. participates in the NYSDOH's ELAP.

The analytical results of the confirmation soil samples are presented on Table 5 in Attachment 1 of this letter compared to the NYSDEC's Part 375 UUSCOs. As indicated on the table, all compounds analyzed for were either not detected or were detected at concentrations below the UUSCOs.

Based on the above activities and confirmation sampling analytical results, it was determined that no further action with regard to the non-native material is warranted. A description of these investigation and remediation activities will also be presented in the ICM Final Report.

If you have any questions regarding this matter, please do not hesitate to contact me at (425) 227 6170.

Very truly yours,

Andy Maloy, Director

Environmental Liability Management

AM/MRHt/ Attachments

cc: G. Bu

G. Burke (NYSDEC)

B. Veith (D&B)

ATTACHMENT 1

SAMPLE ANALYTICAL RESULTS

TABLE 1 PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK NON-NATIVE MATERIAL INVESTIGATION SAMPLE RESULTS VOLATILE ORGANIC COMPOUNDS

Sample ID	CS-SS1	NYSDEC Part 375
Sampling Date	7/8/2013	Unrestricted
Sample Depth (in Feet)	0.25	Use Soil
		Cleanup
		Objectives
Units	ug/kg	ug/kg
1,1,1,2-Tetrachioroethane	U	
1,1,1-Trichloroethane	U	680
1,1,2,2-Tetrachloroethane	U	**
1,1,2-Trichloroethane	Ų	-
1,1-Dichloroethane	U	270
1,1-Dichloroethene	U	330
1,1-Dichloropropene	U	-
1,2,3-Trichlorobenzene	U	-
1,2,3-Trichloropropane	U	
1,2,4-Trichiorobenzene	U	
1,2,4-Trimethylbenzene	U	3,600
1,2-Dibromo-3-chloropropane	U	**
1,2-Dibromoethane (EDB)	U	
1,2-Dichlorobenzene	U	1,100
1,2-Dichloroethane	U	20
1,2-Dichloropropane	U	-
1,3,5-Trimethylbenzene	U	8,400
1,3-Dichlorobenzene	U	2,400
1,3-Dichloropropane	U	•
1,4-Dichlorobenzene	U	1,800
2,2-Dichioropropane	U	
2-Chiorotoluene	U	
2-Hexanone	U	
4-Chlorotoluene	U	
Acetone	U	50
Benzene	U	60
Bromobenzene	U	
Bromochioromethane	U	-
Bromodichloromethane	U	
Bromoform	U	
Bromomethane	U	
Carbon Disulfide	U	-
Carbon Tetrachloride	U	760
Chlorobenzene	U	1,100
Chloroethane	U	

TABLE 1 (continued) PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK NON-NATIVE MATERIAL INVESTIGATION SAMPLE RESULTS VOLATILE ORGANIC COMPOUNDS

Sample ID	CS-SS1		NYSDEC Part 375
Sampling Date	7/8/2013		Unrestricted
Sample Depth (in Feet)	0.25		Use Soil
	100 87 044	1. "	Cleanup
			Objectives
Units	ug/kg		ug/kg
Chloroform		U	370
Chloromethane		U	
cis-1,2-Dichloroethene	6.3	J	250
cis-1,3-Dichloropropene		U	575
Cymene		U	•
Dibromochloromethane		U	<u>*</u>
Dibromomethane		U	***
Dichlorodifluoromethane		U	
Ethylbenzene		U	1,000
Hexachlorobutadiene		U	
lodomethane (Methyl Iodide)		U	**
Isopropylbenzene		U	*
Methyl Ethyl Ketone (2-Butanone)		U	120
Methyl Isobutyl Ketone		U	
Methylene chloride		U	50
m,p-Xylene		U	260
Naphthalene	8.4	J	12,000
N-Butylbenzene		U	12,000
N-Propylbenzene		U	3,900
o-Xylene		U	260
sec-Butylbenzene		U	11,000
Styrene		U	**
tert-Butylbenzene		U	5,900
tert-Butyl Methyl Ether		U	930
Tetrachloroethene	11	J	1,300
Toluene		U	700
trans-1,2-Dichloroethene		υ	190
trans-1,3-Dichloropropene		U	
Trichloroethene	510		470
Trichlorofluoromethane		υ	
Vinyl Acetate		UJ	-
Vinyl Chloride		υ	20
Xylenes, Total		υ	260
Total VOCs	535.7		

Qualifiers:	Notes:
U: Analyzed for but not detected	ug/kg : Micrograms per kilogram
J: Estimated value or limit	; No standard
	: Concentration exceeds
	its UUSCO.



TABLE 2 PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK NON-NATIVE MATERIAL INVESTIGATION SAMPLE RESULTS SEMIVOLATILE ORGANIC COMPOUNDS

Sample ID	CS-SS1	NYSDEC Part 375
Sampling Date	7/8/2013	Unrestricted
Sample Depth (in Feet)	0.25	Use Soil
	In the Text Transport	Cleanup
		Objectives
Units	ug/kg	ug/kg
1,2,4-Trichlorobenzene	υ	1557 E
1.2-Dichlorobenzene	Ü	1,100
1.3-Dichlorobenzene	Ü	2,400
1.4-Dichlorobenzene	Ü	1,800
2.4.5-Trichlorophenol	ŭ	1,000
2,4,6-Trichlorophenol	ŭ	
2,4-Dichlorophenol	ŭ	
2,4-Dimethylphenol	Ü	
2,4-Dinitrophenol	Ü	
2,4-Dinitrotoluene	Ü	
2.6-Dinitrotoluene	Ü	
2-Chioronaphthalene	Ū	_
2-Chlorophenol	Ü	**
2-Methylnaphthalene	220 J	_
2-Methylphenol	U	330
2-Nitroaniline	U	
2-Nitrophenol	U	-
3,3-Dichlorobenzidine	υ	
3-Nitroanlline	U	
4,6-Dinitro-2-methylphenol	U	-
4-Bromophenyl-phenylether	U	
4-Chloro-3-methylphenol	U	
4-Chloroaniline	U	
4-Chlorophenylphenyl ether	U	
4-Methylphenol (p-Cresol)	U	330
4-Nitroaniline	U	
4-Nitrophenol	U	***
Acenaphthene	U	20,000
Acenaphthylene	U	100,000
Anthracene	U	100,000
Benzo(a)anthracene	U	1,000
Benzo(a)pyrene	U	1,000
Benzo(b)fluoranthene	U	1,000
Benzo(g,h,i)perylene	U	100,000



TABLE 2 (continued) PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK NON-NATIVE MATERIAL INVESTIGATION SAMPLE RESULTS SEMIVOLATILE ORGANIC COMPOUNDS

Sample ID	CS-SS1	NYSDEC Part 375
Sampling Date	7/8/2013	Unrestricted
Sample Depth (in Feet)	0.25	Use Soil
STORY OF STREET		Cleanup
		Objectives
Units	ug/kg	ug/kg
Benzo(k)fluoranthene	υ	800
Benzyl Butyl Phthalate	U	
Bis(2-chloroethoxy)methane	U	
Bis(2-chloroethyl)ether	U	-
Bis(2-chloroisopropyl)ether	U	
Bis(2-ethylhexyl)phthalate (BEHP)	U	
Carbazole	U	
Chrysene	U	1,000
Dibenzo(a,h)anthracene	U	330
Dibenzofuran	U	7,000
Diethyl Phthalate	U	
Dimethyl Phthalate	U	-
DI-n-butyl Phthalate	U	
Di-n-octyl Phthalate	U	
Fluoranthene	U	100,000
Fluorene	U	30,000
Hexachlorobenzene	U	330
Hexachiorobutadiene	U	
Hexachiorocyclopentadiene	U	
Hexachloroethane	U	-
Indeno(1,2,3-cd)pyrene	U	500
Isophorone	U	***
Naphthalene	U	12,000
Nitrobenzene	U	***
N-Nitroso-di-n-propylamine	U	
N-Nitrosodiphenylamine	U	-
Pentachlorophenol	U	800
Phenanthrene	290 J	100,000
Phenol	U	330
Pyrene	U	100,000
Total SVOCs	510	

Qualifiers:

U: Analyzed for but not detected

J: Estimated value or limit

Notes:

ug/kg : Micrograms per kilogram

- No standard



TABLE 3 PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK NON-NATIVE MATERIAL INVESTIGATION SAMPLE RESULTS PESTICIDES AND PCBs

	restricted
Sample Depth (in Feet) 0.25 L	
	Jse Soil
	Cleanup
	bjectives
Units ug/kg	ug/kg
Pesticides	
Aldrin U	5
alpha BHC U	20
alpha Chlordane U	94
alpha Endosulfan U	2,400
beta BHC U	36
beta Endosulfan U	2,400
delta BHC	40
Dieldrin U	5
Endosulfan Sulfate U	2400
Endrin U	14
Endrin Aldehyde U	
Endrin Ketone U	-
gamma BHC (Lindane)	100
gamma Chlordane U	94
Heptachlor U	42
Heptachlor Epoxide U	
Methoxychlor U	-
P.P'-DDD U	3.3
P,P'-DDE U	3.3
P,P'-DDT	3.3
Toxaphene U	
PCBs	
Aroclor 1016	100
Aroclor 1221	100
Aroclor 1232	100
Aroclor 1242	100
Aroclor 1248	100
Aroclor 1254	100
Aroclor 1260	100
THE OFFICE AND ADDRESS OF THE OFFICE ADDRESS	. 30
Total PCBs U	100

Qualifiers:

U: Analyzed for but not detected

J: Estimated value or limit

Notes:

ug/kg : Micrograms per kilogram

No standard



TABLE 4 PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK NON-NATIVE MATERIAL INVESTIGATION SAMPLE RESULTS METALS AND CYANIDE

Sample ID	CS-SS1		NYSDEC Part 375
Sampling Date	7/8/2013		Unrestricted
Sample Depth (in Feet)	0.25		Use Soil
		8-E)	Cleanup
		- 15	Objectives
Units	mg/kg		mg/kg
Aluminum	12,100		
Antimony	0.60	в	Face
Arsenic	4.6	٠	13
Barlum	44.7		350
Beryillum	0.41		7.2
Cadmium	0.063	В	2.5
Calcium	22,100	٠ ا	2.0
Chromium	14.5	В	30
Cobalt	4.4	٠ ا	-
Copper	21.1		50
Iron	12,000		
Lead	51.7		63
Magnesium	2.600		
Manganese	170		1,600
Mercury	0.059		0.18
Nickel	8.5		30
Potassium	752		
Selenium		U	3.9
Silver	0.28	В	2
Sodium	220		
Thailium	0.38	В	
Vanadium	21.1		
Zinc	52.2		109
Cyanide		U	27

Qualifiers:

U: Analyzed for but not detected

J: Estimated value or limit

B: Detected between the IDL and CRDL

Notes:

mg/kg 👙 Milligrams per kilogram

- No standard

IDL : Instrument detection limit.

CRDL Contract required

detection limit



TABLE 5
PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK
NON-NATIVE MATERIAL
CONFIRMATION SOIL SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample ID	EP-1	EP-2	EPS	EP.4	EP-5	NYSDEC Part 3/5
Sampling Date	7/24/2013	7/24/2013	7/24/2013	7/24/2013	7/24/2013	Unrestricted
Sample Depth (in Feet)	2	7	2	2	2	Use Soll
					Ī	Cleanup
			100000	CHECK		Objectives
Duits	ng/kg	ng/kg	nging	ugikg	ng/kg	Swiften
1 1 1 2. Tetrachlomethans	=	2	7	٦	n	1
1.1.1-Trichloroethane	· >)	n	680
1.1.2.2-Tetrachloroethane	2	ס	_	כ	O	ı
1.1.2-Trichloroethane	· >	ס	כ	כ	ח	1
1.1-Dichloroethane	ס	>	5	<u></u>	ח	270
1,1-Dkthloroethene	כ	ח	2	כ	ם	330
1,1-Dichloropropene	0	ח	_	ס	ם	3
1,2,3-Trichlorobenzene	כ	ח	>	ס	ם	1
1,2,3-Trichloropropane	>	ם	Þ	¬	כ	•
1,2,4-Trichlorobenzene	>	D)	>	D	10
1,2,4-Trimethylbenzene	٥	ס	כ	5	כ	3,600
1,2-Dibromo-3-chloropropane	>	<u></u>	⊃	D	ס	Œ.
1,2-Dibromoethane (EDB)	כ	ם	ס	Þ	ח	3
1,2-Dichlorobenzene	2)	ס	>	כ	1,100
1,2-Dichloroethane	ס	כ	ס	ב	ם	20
1,2-Dichloropropane	ס	>	ח	⊃	כ	1
1,3,5-Trimethylbenzene	ס	ם	ח	J	D	8,400
1,3-Dichlorobenzene	ס	_	ס	ס	D	2,400
1,3-Dichloropropane	ח	⊋	כ	כ	ם	ji.
1,4-Dichlorobenzene	ס	⊃)	5	⊃	1,800
2,2-Dichloropropane	ס	כ	⊃	D	O	£.
2-Chlorotoluene	ס	Þ	ס	2	ם	ų.
2-Hexanone	ס	Þ	ם	>	ם	*
4-Chlorotoluene	¬	ם	⊃	>	ס	ı
Acetone	ס	ח	17	>	Ð	90
Benzene	ר	n	_	כ	_	9
Bromobenzene	ס	2	⊃	ס	0	1
Bromochloromethane	כ	П	כ	>	0	10
Bromodichloromethane	Þ	ח	ח	כ	2	¥.
Вготобот	_	Π	ם	כ	_	×
Bromomethane	ס	ח	n	ם	כ	1
Carbon Disuffide	>	ס	>	D	⊃	j
Carbon Tetrachloride	>	0	ס	J	כ	760
Chlorobenzene	>	ס	_	>	2	1,100
Chloroethane	n	U	O	n	n	1)



TABLE 5 (continued) PSC - CHEMICAL POLLUTION CONTROL, LLC OF NEW YORK NON-NATIVE MATERIAL CONFIRMATION SOIL SAMPLE RESULTS VOLATILE ORGANIC COMPOUNDS

Sample ID	EP-1	EP-2	EP.3	EP4	EP-5	NYSDEC Part 375
Sampling Date	7/24/2013	7124/2013	7/24/2013	7/24/2013	7/24/2013	Unrestricted
Sample Depth (in Feet)	2	2	2	2	2	Use Soil
						Cleanup
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Chloroform	=	=	=	Ξ	Ξ	3370
Chloromethane	0 0) <u>-</u>	0 0	> >	2	3 1
cis-1,2-Dichloroethene))) >	4.3	· ⊃))	250
cis-1,3-Dichloropropene	0		_	0	- >	ī
Cymene	0	>	>	Э	ם	1
Dibromochloromethane	2	ם	ס	ס	Þ	1
Dibromomethane	0	n	0	2	ם	ij
Dichlorodifluoromethane	>	_	2	כ	ם	ij
Ethylbenzene	0	>	0	2	ס	1,000
Hexachlorobutadiene	2	ם	2	2	ס	£
todomethane (Methyl todide)	>	_	>	2	3	1
Isopropylbenzene	>	ח	>	0	ס	ı
Methyl Ethyl Ketone (2-Butanone)	>	ס	>	5	>	120
Methyl Isobutyl Ketone	>	ם	2	ח	2	ı
Methylene chloride	0	כ	2.6 J	כ	כ	20
m.p-Xylene	>	>	Þ	2	2	260
Naphthalene	>	⊃	כ	n	2	12,000
N-Butylbenzene	כ	_	>	>	2	12,000
N-Propylbenzene	>	ח	2	5	2	3,900
o-Xylene	>	>	5	n	כ	260
sec-Butylbenzene	2	ח	_	כ	ס	11,000
Styrene	>	⊃	>)	ם	ı
tert-Butylbenzene	>	ח	>	כ	Þ	5,900
tert-Butyl Methyl Ether	>	ם	כ	>	>	930
Tetrachloroethene	>	4.6	5.1	2	ס	1,300
Toluene	>	_	_	>	2	700
trans-1,2-Dichloroethene	_	ס	>	5	0	190
trans-1,3-Dichloropropene	5	_	>	5	2	ì
Trichloroethene	>	6.1	14	_	2	470
Trichlorofluoromethane	כ	ם	>	כ	ם	ł
Vinyi Acetate	ם	n	_	כ	ס	1
Vinyl Chloride	כ	2	2	5	כ	20
Xylenes, Total	ם	ם	>	5	ם	260
Total VOCs	0	10.7	02	0	0	J

Qualifiers

U. Analyzed for but not detected

J. Estimated value or limit

Notes: ug/kg : Micrograms per kilogram --- No standard



ATTACHMENT 2

SAMPLE LOCATION PLAN

