

**New York State Department of Environmental Conservation**

**Division of Environmental Remediation, Region One**

**Spill Prevention and Response**

Stony Brook University

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Joe Martens  
Commissioner

**M E M O R A N D U M**

**TO:** Jim Harrington, P.E., Director, Remedial Bureau A

**FROM:** Nick Acampora, Project Manager, Region 1 Spill Prevention and Response

**THRU:** Karen Gomez, P.E., ROSE, Region 1

**RE:** **Negative BCP Significant Threat Determination**

Site Name: Former Cibro Petroleum Terminal

Site #: BCP #C130153 (C/T/V) Island Park, Nassau County

Significant Threat: Site does not pose a significant threat.

**DATE:** 08/16/2012

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Based on all investigations performed to date and review of the December 2011 Supplemental Remedial Investigation Field Work Report, we have concluded that the site does not present a significant threat to human health or the environment.

Please find attached the supporting documentation (e.g. attach significant threat determination worksheet and/or conclusions of RI report and DOH concurrence).

Attachments

cc w/att: Jim Harrington, P.E., Director, Remedial Bureau A

Walter Parish, RHWRE, Region 1

Karen Gomez, P.E., Regional Spill Engineer

Nick Acampora, Project Manager

(01-04-11)



## SIGNIFICANT THREAT DETERMINATION WORKSHEET



State Superfund Program  
6 NYCRR 375-2.7

Brownfield Cleanup Program  
ECL 27-1411.1(c)

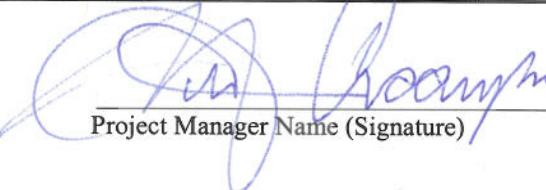
Site Name: Former Cibro Oil Terminal Site Site ID No. C130153

City/Town: Island Park, Hempstead County: Nassau

1. Has all available and relevant evidence regarding the Site been reviewed and the factors in 375-2.7(a)(3) considered?	<input checked="" type="checkbox"/> Yes (go to 2)	<input type="checkbox"/> No (stop)	<input type="checkbox"/> Unsure (stop)
2. Does Site contamination result in significant adverse impacts (375-2.7(a)(1)) to:			
a. species that are endangered, threatened, or of concern?	<input type="checkbox"/> Yes (go to b)	<input checked="" type="checkbox"/> No (go to b)	<input type="checkbox"/> Unsure (go to b)
b. protected streams, tidal/freshwater wetlands, or significant fish and wildlife habitat?	<input type="checkbox"/> Yes (go to c)	<input checked="" type="checkbox"/> No (go to c)	<input type="checkbox"/> Unsure (go to c)
c. flora or fauna from bioaccumulation or leads to a recommendation to limit consumption?	<input type="checkbox"/> Yes (go to d)	<input checked="" type="checkbox"/> No (go to d)	<input type="checkbox"/> Unsure (go to d)
d. fish, shellfish, crustacea, or wildlife from concentrations that cause adverse/chronic effects?	<input type="checkbox"/> Yes (go to e)	<input checked="" type="checkbox"/> No (go to e)	<input type="checkbox"/> Unsure (go to e)
e. the environment due to a fire, spill, explosion, or reaction that generates toxic gases, vapors, fumes, mists or dusts?	<input type="checkbox"/> Yes (go to f)	<input checked="" type="checkbox"/> No (go to f)	<input type="checkbox"/> Unsure (go to f)
f. areas where individuals or water supplies may be present and NYSDOH has determined there to be a significantly increased risk to public health (including from soil vapor)?	<input type="checkbox"/> Yes (go to 3)	<input checked="" type="checkbox"/> No (go to 3)	<input type="checkbox"/> Unsure (go to 3)
3. Does Site contamination result in significant environmental damage (375-2.7(a)(2))?	<input type="checkbox"/> Yes (go to 4)	<input checked="" type="checkbox"/> No (go to 4)	<input type="checkbox"/> Unsure (stop)
4. If any box in items 2 or 3 have been checked "Yes," the site presents a significant threat to public health or the environment; check here.	Significant threat to: <input type="checkbox"/> Public Health <input type="checkbox"/> Environment		
5. If no boxes in items 2 or 3 have been checked "Yes," the site does not present a significant threat to public health or the environment; check here.	<input checked="" type="checkbox"/> Not a Significant Threat		

Nick Acampora

Project Manager Name/Title (Print)

  
Project Manager Name (Signature)

Date

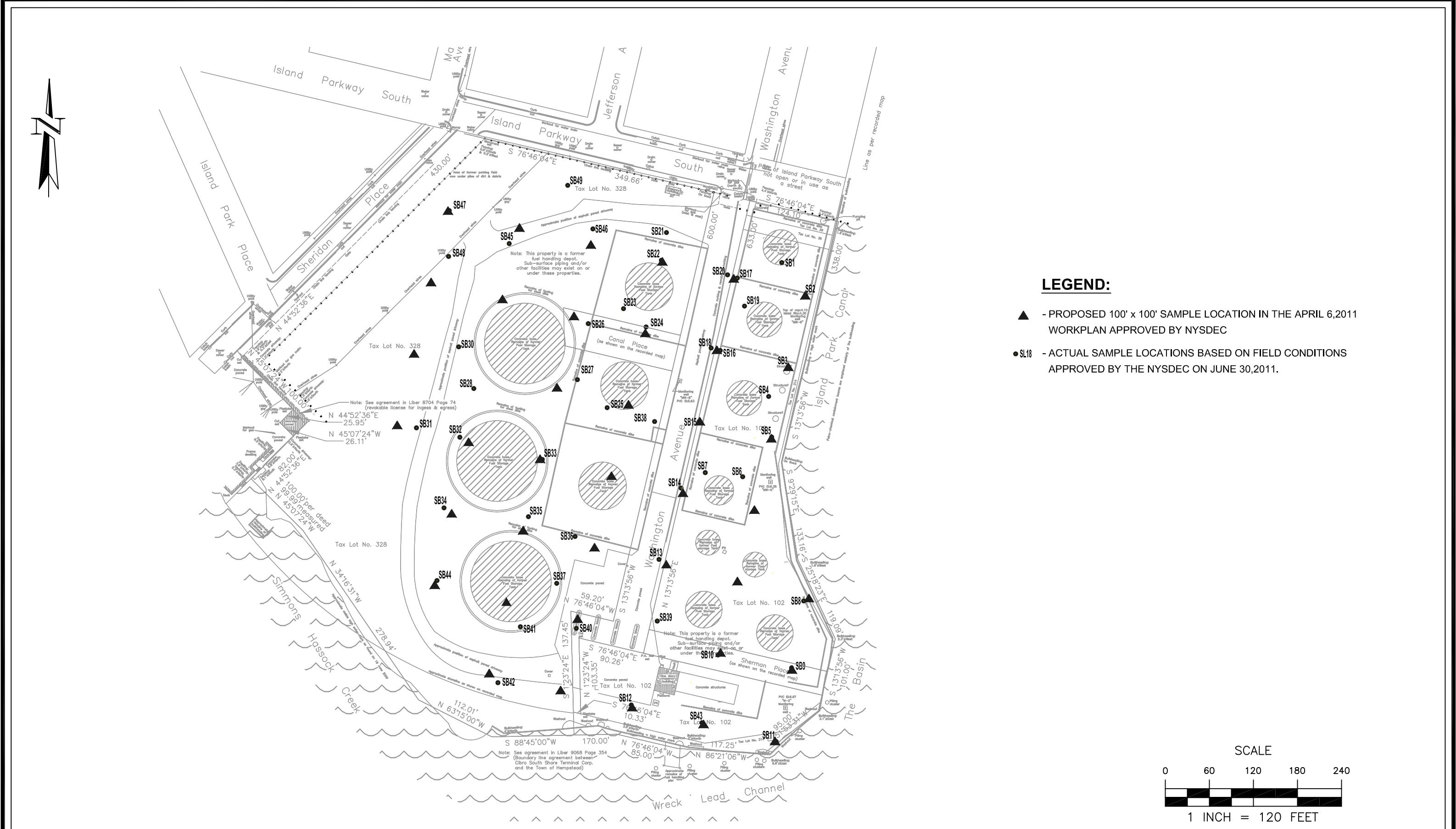
8/21/2012

Bureau Director/RHWRE Name/Title (Print)

Bureau Director/RHWRE Name (Signature)

Date

07/29/10



Revisions/Issues			
No	Date	By	Description

**Posillico Consulting**  
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Farmingdale, NY 11735  
(631) 249-1872



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**FIGURE 3: Proposed and Actual Soil Sampling Locations**

## FORMER CIBRO PETROLEUM FACILITY, ISLAND PARK, NEW YORK

DWN. BY: JB      CHK'D BY: EK      DATE: 11-15-11



Nirav R. Shah, M.D., M.P.H.  
Commissioner



Sue Kelly  
Executive Deputy Commissioner

August 7, 2012

Mr. James Harrington  
Division of Environmental Remediation  
NYS Department of Environmental Conservation  
625 Broadway, 12th Floor  
Albany, NY 12233

Re: Significant Threat Determination  
Former Cibro Terminal  
Site #C130153  
Island Park (V), Nassau County

Dear Mr. Harrington:

Staff reviewed the *December 2011 Supplemental Remedial Investigation Report* for the above referenced site. Based on that review, I understand environmental investigation results indicated limited impacts to groundwater and soils. Groundwater is not used, or expected to be used in the future, as a potable water source as public water is available in the area, therefore exposure to contaminated groundwater is not likely. Exposure to contaminated sediments is unlikely due to limited detections of site-related contaminants and their location in a tidally-influenced wetland area. Stockpiles of excavated and treated soil remain on the site, but are covered with tarps and are located within a lined, bermed area. A fence limits site access. Sampling indicates that soil vapor intrusion is not a concern for off-site buildings. Since the site is vacant and not occupied, soil vapor intrusion is not a concern at this time.

Based on this information, I believe that the Former Cibro Terminal site does not represent a significant threat to public health.

Sincerely,

A handwritten signature in blue ink that reads "Charlotte M. Bethoney".  
Charlotte M. Bethoney  
Acting Section Chief, Southern Section  
Bureau of Environmental Exposure Investigation

cc:  
A. Salame-Alfie, Ph.D  
K. Anders, Ph.D  
F. Navratil/S. McLelland/File  
B. Devine - MDO  
J. DeFranco - NCDH  
W. Parish/N. Acampora- NYSDEC, Region 1

TABLE RWP-14  
 SUMMARY OF RESULTS OF ANALYSIS OF GROUND WATER SAMPLES FOR VOLATILE ORGANIC COMPOUNDS  
 AUGUST 2011  
 FORMER CIBRO PETROLEUM TERMINAL SITE  
 BROWNFIELD CLEANUP SITE C130153  
 ISLAND PARK, NASSAU COUNTY, NEW YORK

Sample ID		MW-1	MW-2	MW-3R	MW-12	MW-13	MW-14	MW-15D	MW-15S	MW-16D	MW-16S	MW-17D
Sampling Date		8/12/2011	8/12/2011	8/12/2011	8/12/2011	8/12/2011	8/12/2011	8/12/2011	8/12/2011	8/12/2011	8/12/2011	8/12/2011
Matrix		Water										
Units		µg/L										
VOLATILE ORGANIC COMPOUNDS (VOCs)	Class GA Values	Result										
1,2,4-Trimethylbenzene	5	ND	ND	0.79 J	ND	ND	1.49	83.2	1.44 J	ND	43.8	
1,3,5-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	19.2	ND	ND	8.14	
1,2,4,5-Tetramethylbenzene	5	ND	0.82 J	9.77	ND	ND	10.1	1.04	21.9	1.81 J	ND	10.9
Acetone	50	ND										
Benzene	1	ND	ND	1.06 J	ND	ND	ND	ND	8.36	ND	ND	15.4
Carbon disulfide	60	ND	10.5	ND	ND							
Ethylbenzene	5	ND										
Isopropylbenzene	5	ND	ND	4.02 J	ND	ND	ND	ND	8.44	ND	ND	7.52
m&p-Xylene	5*	ND	20.9	ND	ND	4.44						
Naphthalene	10	ND	4.4 J	89.3	ND	ND	ND	ND	73.5	ND	ND	2.23
n-Butylbenzene	5	ND	ND	1.28 J	ND	ND	ND	ND	5.94	ND	ND	44
n-Propylbenzene	5	ND	ND	6.14	ND	ND	ND	ND	12.5	ND	ND	3.14
o-Xylene	5*	ND	15.5	ND	ND	8.69						
p-Diethylbenzene	NC	ND	22.7	ND	ND	ND						
p-Ethyltoluene	NC	ND	21.1	ND	ND	11.2						
p-Isopropyltoluene	5	ND	5.13	ND	ND	2.04						
sec-Butylbenzene	5	ND	ND	2.36 J	ND	ND	2.19 J	ND	4.95 J	ND	ND	2.51
Toluene	5	ND	0.86 J	ND	ND	2.29						
Total VOC TICs	NC	ND	21	385	ND	ND	173	ND	738	37	ND	350

Notes:

µg/L - micrograms per liter

\* There is no Standard or Guidance Value for total xylenes. The Standard for o-xylene, m-xylene, and p-xylene is 5 µg/L.

MDL and the concentration is an approximate value.

ND - Not detected.

NC - No Criterion

Shading shows where Class GA Values groundwater standards were exceeded.

TABLE RWP-14  
 SUMMARY OF RESULTS OF ANALYSIS OF GROUND WATER SAMPLES FOR VOLATILE ORGANIC COMPOUNDS  
 AUGUST 2011  
 FORMER CIBRO PETROLEUM TERMINAL SITE  
 BROWNFIELD CLEANUP SITE C130153  
 ISLAND PARK, NASSAU COUNTY, NEW YORK

Sample ID		GW-1	GW-2	LMW-2	LMW-4
Sampling Date		8/12/2011	8/12/2011	8/12/2011	8/17/2011
Matrix		Water	Water	Water	Water
Units		µg/L	µg/L	µg/L	µg/L
VOLATILE ORGANIC COMPOUNDS (VOCs)	Class GA Values	Result	Result	Result	Result
1,2,4-Trimethylbenzene	5	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5	ND	ND	ND	ND
1,2,4,5-Tetramethylbenzene	5	1.5 J	ND	14.4	ND
Acetone	50	ND	ND	ND	83.3
Benzene	1	ND	ND	ND	ND
Carbon disulfide	60	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND
Isopropylbenzene	5	ND	ND	ND	ND
m&p-Xylene	5*	ND	ND	ND	ND
Naphthalene	10	ND	ND	ND	ND
n-Butylbenzene	5	ND	ND	ND	ND
n-Propylbenzene	5	ND	ND	ND	ND
o-Xylene	5*	ND	ND	ND	ND
p-Diethylbenzene	NC	ND	ND	ND	ND
p-Ethyltoluene	NC	ND	ND	ND	ND
p-Isopropyltoluene	5	ND	ND	ND	ND
sec-Butylbenzene	5	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND
Total VOC TICs	NC	ND	12	134	ND

Notes:  
 µg/L - micrograms per liter

\* There is no Standard or Guidance Value for total xylenes. The Standard for o-xylene, m-xylene, and p-xylene is 5 µg/L.

MDL and the concentration is an approximate value.

ND - Not detected.

NC - No Criterion

Shading shows where Class GA Values groundwater standards were exceeded.

TABLE RWP-13  
 SUMMARY OF RESULTS OF ANALYSIS OF GROUND WATER SAMPLES FOR SEMIVOLATILE ORGANIC COMPOUNDS  
 AUGUST 2011  
 FORMER CIBRO PETROLEUM TERMINAL SITE  
 BROWNFIELD CLEANUP SITE C130153  
 ISLAND PARK, NASSAU COUNTY, NEW YORK

Sample ID		MW-1	MW-2	MW-3R	MW-12	MW-13	MW-14	MW-15D	MW-15S	MW-16D	MW-16S	MW-17D
Sampling Date		8/12/2011	8/12/2011	8/12/2011	8/12/2011	8/12/2011	8/12/2011	8/12/2011	8/12/2011	8/12/2011	8/12/2011	8/12/2011
Matrix		Water										
Units		µg/L										
SEMIVOLATILE ORGANIC COMPOUNDS (VOCs)	Class GA Values	Result										
2-Methylnaphthalene	NC	ND	ND	28.6	ND	ND	11.9 J	25.8	18.4	ND	ND	ND
3 & 4 Methylphenol	NC	ND										
Acenaphthene	20	ND	1.49 J	ND								
Carbazole	NC	ND	3.09 J	ND	ND	ND						
Cresols	NC	ND	1.99 J	ND	ND	ND						
Fluorene	50	ND										
Naphthalene	10	ND	ND	23.2	ND	ND	ND	ND	10.2	12.5	ND	ND
Phenanthrene	50	ND	1.49 J	ND	ND	ND						
Phenol	1	ND	ND	8.61	ND							
Bis(2-ethylhexyl) phthalate	5	ND										
Total SVOC TICs	NC	80	16	67	5	ND	68	157	158	37	25	4

Notes:

µg/L - micrograms per liter

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

ND - Not detected.

NC - No Criterion

Shading shows where Class GA Values groundwater standards were exceeded.

TABLE RWP-13  
 SUMMARY OF RESULTS OF ANALYSIS OF GROUND WATER SAMPLES FOR SEMIVOLATILE ORGANIC COMPOUNDS  
 AUGUST 2011  
 FORMER CIBRO PETROLEUM TERMINAL SITE  
 BROWNFIELD CLEANUP SITE C130153  
 ISLAND PARK, NASSAU COUNTY, NEW YORK

Sample ID		GW-1	GW-2	LMW-2	LMW-4
Sampling Date		8/12/2011	8/12/2011	8/12/2011	8/17/2011
Matrix		Water	Water	Water	Water
Units		µg/L	µg/L	µg/L	µg/L
SEMICONDUCTIVE ORGANIC COMPOUNDS (VOCs)	Class GA Values	Result	Result	Result	Result
2-Methylnaphthalene	NC	ND	ND	12.5	ND
3 & 4 Methylphenol	NC	ND	ND	ND	7.29
Acenaphthene	20	1.04	ND	2.34 J	ND
Carbazole	NC	ND	ND	ND	ND
Cresols	NC	ND	ND	ND	7.29 J
Fluorene	50	ND	ND	2.33 J	ND
Naphthalene	10	ND	ND	ND	ND
Phenanthrene	50	ND	ND	ND	ND
Phenol	1	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	5	ND	ND	2.56	ND
Total SVOC TICs	NC	25	21	ND	181

Notes:

µg/L - micrograms per liter

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

ND - Not detected.

NC - No Criterion

Shading shows where Class GA Values groundwater standards were exceeded.

**TABLE RWP-9**  
**SUMMARY OF RESULTS OF ANALYSIS OF SOIL SAMPLES FOR SEMIVOLATILE ORGANIC COMPOUNDS**  
**JULY/AUGUST 2011**  
**FORMER CIBRO PETROLEUM TERMINAL SITE**  
**BROWNFIELD CLEANUP SITE C130153**  
**ISLAND PARK, NASSAU COUNTY, NEW YORK**

Sample ID	ISLAND PARK, NASSAU COUNTY, NEW YORK																																									
Depth	SB-1B			SB-1C			SB-2C			SB-3B			SB-3C			SB-4B			SB-4C			SB-5B			SB-5C			SB-6B			SB-6C											
Lab Sample ID	0.5-3			3-7			0.5-3			3-7			0.5-3			3-7			0.5-3			3-7			0.5-3			3-7														
Sampling Date	11/07/2011			11/07/2011			11/07/2011			11/07/2011			11/07/2011			11/07/2011			11/07/2011			11/07/2011			11/07/2011			11/07/2011														
Matrix	Solid			Solid			Solid			Solid			Solid			Solid			Solid			Solid			Solid			Soil														
Units	µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg														
SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs)	Unrestricted Use SCO	Restricted-Residential Use SCO	Proposed Site-Specific SCO	Result																																						
/isophorone	NC	NC		<54.9			<58.8			<108			<52.2			<51.3			<53.8			<214			<224			<203			<214			<50.8			<215					
N-Nitrosodi-n-propylamine	NC	NC		<36.3			<38.9			<71.6			<34.5			<33.9			<35.9			<141			<148			<134			<33.6			<142			<33.6			<215		
N,N-Nitrosodimethylamine	NC	NC		<76.2			<81.7			<150			<72.5			<71.3			<74.7			<297			<311			<282			<298			<70.6			<299					
N,N-Nitrosodiphenylamine	NC	NC		<65.4			<70.1			<129			<62.2			<61.2			<64.1			<255			<267			<267			<256			<60.6			<256					
Naphthalene	12,000	100,000		<48.3			<51.7			<95.3			<45.9			<45.1			<47.3			<188			<197			<178			<189			<44.7			<189					
Nitrobenzene	NC	NC		<45.5			<49.8			<91.7			<44.2			<43.4			<45.5			<181			<190			<172			<181			<43.0			<182					
Pentachlorophenol	800	6,700		<45.5			<48.8			<898			<433			<425			<446			<1770			<1860			<1680			<1780			<422			<1780			<1870		
Phenanthrene	100,000	100,000		<45.6			<58.6			<108			<51.9			<51.1			<53.5			<213			<223			<202			<213			<50.6			<214					
Phenol	330	100,000		<31.3			<33.6			<61.8			<29.8			<29.3			<30.7			<122			<128			<116			<122			<29.0			<123					
Pyrene	100,000	100,000		<44.4			<47.6			<347			<42.2			<164			<366			<225			<181			<164			<464			<329			<175					
Pyridine	NC	NC		<69.8			<73.7			<136			<65.4			<64.3			<67.4			<268			<281			<254			<269			<63.7			<270					
Total SVOC TICs	Notes:	NC	100,000	NR			95,820			194,740			147,200																													

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**Notes:**

$\mu\text{g/kg}$  - micrograms per kilogram

B - Analyte found in the method blank as well as the sample indicating possible cross contamination;  
L - Result is less than the RL but greater than the LOQ.

J - Result is less than the RL but greater than or equal to the RL minus a tolerance value.  
is an approximate value.

**U.** Indicates the

NR - No result

NC - No Criterion  
SCO - Soil Cleanup Objective

Shading indicates result above SCO. Color representing least stringent SCO exceeded is shown unless otherwise noted.  
\*\* There is no SCO for 3+4-methylphenol. The Unrestricted Use SCOs for 3-methylphenol and 4-methylphenol are 330 mg/L. The Restricted Residential Use SCO is 100 mg/L.

TABLE RWP-9  
SUMMARY OF RESULTS OF ANALYSIS OF SOIL SAMPLES FOR SEMIVOLATILE ORGANIC COMPOUNDS  
JULY/AUGUST 2011  
FORMER CIBRO PETROLEUM TERMINAL SITE  
BROWNFIELD CLEANUP SITE C130153  
ISLAND PARK, NASSAU COUNTY, NEW YORK

Sample ID		SB-7A	SB-8A	SB-8B	SB-8C	SB-8D	SB-9A	SB-9B	SB-9C	SB-9D	SB-10B	SB-10C	SB-11A
Depth		0-0.5	0-0.5	0.5-3	3-7	7+	0-0.5	0.5-3	3-7	7+	0.5-3	3-7	0-0.5
Lab Sample ID		1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290
Sampling Date		7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011
Matrix		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Solid
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
<b>SEMICOLVATILE ORGANIC COMPOUNDS (SVOCs)</b>	<b>Unrestricted Use SCO</b>	<b>Restricted-Residential Use SCO</b>	<b>Proposed Site-Specific SCO</b>	<b>Result</b>									
1,2,4-Trichlorobenzene	NC	NC	<202	U	<176	U	<91.7	U	<49.3	U	<50.7	U	NR
1,2-Dichlorobenzene	NC	NC	<150	U	<130	U	<68.1	U	<36.7	U	<37.7	U	NR
1,2-Diphenylhydrazine	NC	NC	<147	U	<127	U	<66.6	U	<35.8	U	<36.8	U	NR
1,3-Dichlorobenzene	NC	NC	<163	U	<142	U	<74.1	U	<39.9	U	<41.0	U	NR
1,4-Dichlorobenzene	NC	NC	<158	U	<136	U	<71.9	U	<38.7	U	<39.8	U	NR
2,3,4,6-Tetrachlorophenol	NC	NC	<192	U	<167	U	<87.3	U	<47.0	U	<48.3	U	NR
2,4,5-Trichlorophenol	NC	NC	<105	U	<91.6	U	<47.9	U	<25.7	U	<26.5	U	NR
2,4,6-Trichlorophenol	NC	NC	<183	U	<159	U	<82.9	U	<44.6	U	<45.9	U	NR
2,4-Dichlorophenol	NC	NC	<159	U	<138	U	<72.3	U	<38.9	U	<40.0	U	NR
2,4-Dimethylphenol	NC	NC	<203	U	<176	U	<92.2	U	<49.6	U	<51.0	U	NR
2,4-Dinitrophenol	NC	NC	<1710	U	<1490	U	<776	U	<418	U	<429	U	NR
2,4-Dinitrotoluene	NC	NC	<292	U	<253	U	<132	U	<71.2	U	<73.2	U	NR
2,6-Dinitrotoluene	NC	NC	<200	U	<174	U	<90.8	U	<48.9	U	<50.2	U	NR
2-Chloronaphthalene	NC	NC	<234	U	<203	U	<106	U	<57.2	U	<58.8	U	NR
2-Chlorophenol	NC	NC	<234	U	<203	U	<106	U	<57.2	U	<58.8	U	NR
2-Methylnaphthalene	NC	NC	<193	U	<160	U	<87.5	U	<47.1	U	192	J	NR
2-Methylphenol	330	100,000	<174	U	<151	U	<78.9	U	<42.5	U	<43.7	U	NR
2-Nitroaniline	NC	NC	<253	U	<220	U	<115	U	<61.8	U	<63.5	U	NR
2-Nitrophenol	NC	NC	<148	U	<128	U	<67.0	U	<36.1	U	<37.1	U	NR
3,4-Methylphenol	330**	330**	<150	U	<130	U	<68.1	U	<36.7	U	<37.7	U	NR
3,3'-Dichlorobenzidine	NC	NC	<234	U	<203	U	<106	U	<57.2	U	<58.8	U	NR
3-Nitroaniline	NC	NC	<83.6	U	<72.6	U	<37.9	U	<20.4	U	<21.0	U	NR
4,6-Dinitro-2-methylphenol	NC	NC	<2120	U	<1840	U	<964	U	<518	U	<533	U	NR
4-Bromophenyl phenyl ether	NC	NC	<221	U	<192	U	<100	U	<53.9	U	<55.4	U	NR
4-Chloro-3-methylphenol	NC	NC	<181	U	<157	U	<82.2	U	<44.2	U	<45.5	U	NR
4-Chloraniline	NC	NC	<185	U	<161	U	<84.0	U	<45.2	U	<46.5	U	NR
4-Chlorophenyl phenyl ether	NC	NC	<189	U	<164	U	<85.8	U	<46.1	U	<47.4	U	NR
4-Nitroaniline	NC	NC	<475	U	<413	U	<216	U	<116	U	<119	U	NR
4-Nitrophenol	NC	NC	<3240	U	<2810	U	<1470	U	<791	U	<813	U	NR
Acenaphthene	20,000	100,000	<205	U	<178	U	<92.8	U	<49.9	U	<51.3	U	NR
Acenaphthylene	100,000	100,000	<167	U	<145	U	<75.9	U	<40.8	U	<42.0	U	NR
Aniline	NC	NC	<151	U	<131	U	<68.6	U	<36.9	U	<37.9	U	NR
Anthracene	100,000	100,000	<216	U	<186	U	<98.1	U	<52.8	U	<54.3	U	NR
Benzidine	NC	NC	<4270	U	<3700	U	<1940	U	<1040	U	<1070	U	NR
Benz(a)anthracene	1,000	1,000	<206	U	<178	U	<93.3	U	<50.2	U	<51.6	U	NR
Benz(a)pyrene	1,000	1,000	<253	U	<220	U	<115	U	<61.8	U	<63.5	U	NR
Benz(b)fluoranthene	1,000	1,000	<202	U	<176	U	<91.5	U	<49.2	U	<50.6	U	NR
Benz(g,h)perylene	100,000	100,000	<371	U	<322	U	<168	U	<90.6	U	<93.2	U	NR
Benz(k)fluoranthene	800	3,900	<370	U	<321	U	<168	U	<90.3	U	<92.8	U	NR
Benzoic acid	NC	NC	<28500	U	<24700	U	<12900	U	<6950	U	<7150	U	NR
Benzyl alcohol	NC	NC	<287	U	<249	U	<130	U	<70.0	U	<72.0	U	NR
bis(2-Chloroethoxy)methane	NC	NC	<201	U	<175	U	<91.3	U	<49.1	U	<50.5	U	NR
bis(2-Chloroethyl)ether	NC	NC	<230	U	<200	U	<104	U	<56.1	U	<57.7	U	NR
bis(2-Chloroethyl)phthalate	NC	NC	<178	U	<155	U	<80.9	U	<43.5	U	<44.8	U	NR
Butyl benzyl phthalate	NC	NC	<257	U	<223	U	<116	U	<62.6	U	<64.4	U	NR
Carbazole	NC	NC	<280	U	<243	U	<127	U	<66.3	U	<70.2	U	NR
Chrysene	1,000	3,900	<257	U	<223	U	<117	U	<62.8	U	<64.5	U	NR
Cresols	NC	NC	<324	U	<281	U	<147	U	<79.2	U	<81.4	U	NR
Di-n-butyl phthalate	NC	NC	<274	U	<238	U	<124	U	<66.8	U	<68.7	U	NR
Di-n-octyl phthalate	NC	NC	<239	U	<208	U	<108	U	<58.4	U	<60.0	U	NR
Dibenzo(a,h)anthracene	330	330	<271	U	<235	U	<123	U	<66.2	U	<68.0	U	NR
Dibenzofuran	7,000	50,000	<162	U	<141	U	<73.6	U	<39.6	U	<40.7	U	NR
Diethyl phthalate	NC	NC	<318	U	<276	U	<144	U	<77.6	U	<79.8	U	NR
Dimethyl phthalate	NC	NC	<235	U	<204	U	<107	U	<57.3	U	<58.9	U	NR
Fluoranthene	100,000	100,000	<268	U	<232	U	<121	U	<65.4	U	<67.2	U	NR
Fluorene	30,000	100,000	<195	U	<170	U	<88.6	U	<47.7	U	<49.0	U	NR
Hexachlorobenzene	330	1,200	<208	U	<181	U	<94.4	U	<50.8	U	<52.2	U	NR
Hexachlorobutadiene	NC	NC	<194	U	<169	U	<88.2	U	<47.4	U	<48.8	U	NR
Hexachlorocyclopentadiene	NC	NC	<1500	U	<1300	U	<681	U	<367	U	<377	U	NR
Hexachloroethane	NC	NC	<216	U	<188	U	<98.1	U	<52.8	U	<54.3	U	NR
Indeno(1,2,3-cd)pyrene	500	500	<225	U	<195	U	<102	U	<54.8	U	<56.3	U	NR

TABLE RWP-9  
SUMMARY OF RESULTS OF ANALYSIS OF SOIL SAMPLES FOR SEMIVOLATILE ORGANIC COMPOUNDS  
JULY/AUGUST 2011  
FORMER CIBRO PETROLEUM TERMINAL SITE  
BROWNFIELD CLEANUP SITE C130153  
ISLAND PARK, NASSAU COUNTY, NEW YORK

Sample ID	Depth			SB-7A	SB-8A	SB-8B	SB-8C	SB-8D	SB-9A	SB-9B	SB-9C	SB-9D	SB-10B	SB-10C	SB-11A											
Lab Sample ID	0-0.5			0-0.5	0.5-3	3-7	7+	0-0.5	0.5-3	3-7	7+	0.5-3	3-7	3-7	0-0.5											
Sampling Date	1107290			1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290											
Matrix	Soil			Soil																						
Units	µg/kg			µg/kg																						
SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs)	Unrestricted Use SCO	Restricted-Residential Use SCO	Proposed Site-Specific SCO	Result																						
isophorone	NC	NC		<222	U	<193	U	<101	U	<54.2	U	<55.7	U	NR	<204	U	<58.8	U	<57.0	U	<197	U	<56.7	U	<227	U
N-Nitrosodi-n-propylamine	NC	NC		<147	U	<127	U	<66.6	U	<35.8	U	<36.8	U	NR	<135	U	<38.9	U	<37.7	U	<130	U	<37.5	U	<150	U
N-Nitrosodimethylamine	NC	NC		<309	U	<268	U	<140	U	<75.3	U	<77.4	U	NR	<283	U	<81.7	U	<79.2	U	<273	U	<78.8	U	<315	U
N-Nitrosodiphenylamine	NC	NC		<265	U	<230	U	<120	U	<64.7	U	<66.5	U	NR	<243	U	<70.1	U	<68.0	U	<235	U	<67.6	U	<270	U
Naphthalene	12,000	100,000		<195	U	<170	U	<88.6	U	<47.7	U	<49.0	U	NR	<179	U	<51.7	U	<50.1	U	2480	155	<200	U	<200	U
Nitrobenzene	NC	NC		<188	U	<163	U	<85.3	U	<45.9	U	<47.2	U	NR	<172	U	<49.8	U	<48.3	U	<167	U	<48.0	U	<192	U
Pentachlorophenol	800	6,700		<1840	U	<1600	U	<836	U	<450	U	<462	U	NR	<1690	U	<488	U	<473	U	<1630	U	<470	U	<1880	U
Phenanthrene	100,000	100,000		<221	U	<192	U	<100	U	<54.0	U	<88.6	J	NR	1070	J	<58.6	U	<56.7	U	2110	J	211	J	<226	U
Phenol	330	100,000		<127	U	<110	U	<57.6	U	<31.0	U	<31.8	U	NR	<116	U	<33.6	U	<32.5	U	<112	U	<32.4	U	<130	U
Pyrene	100,000	100,000		<180	U	<156	U	<81.6	U	<43.9	U	<45.1	U	NR	<165	U	<47.6	U	<46.1	U	<159	U	<45.9	U	<184	U
Pyridine	NC	NC		<278	U	<242	U	<126	U	<68.0	U	<69.9	U	NR	<255	U	<73.7	U	<71.4	U	<247	U	<71.1	U	<284	U
Total SVOC TICs	NC	NC	100,000	NR	NR	25,607		744	NR	NR	NR	191,450		NR	17,725	NR	207,240		19,832	NR						

Notes:

B - Analyte found in the method blank as well as the sample indicating possible cross contamination;

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value

U - Indicates the analyte was analyzed for but not detected

NR - No result

NC - No Criterion

SCO - Soil Cleanup Objective

Shading indicates result above SCO. Color representing least stringent SCO exceeded is shown unless otherwise noted

\*\* There is no SCO for 3+4-methylphenol. The Unrestricted Use SCOS for 3-methylphenol and 4-methylphenol are 330 µg/kg. The Restricted-Residential Use SCOS are 100,000 µg/kg.

TABLE RWP-9  
SUMMARY OF RESULTS OF ANALYSIS OF SOIL SAMPLES FOR SEMIVOLATILE ORGANIC COMPOUNDS  
JULY/AUGUST 2011  
FORMER CIBRO PETROLEUM TERMINAL SITE  
BROWNFIELD CLEANUP SITE C130153  
ISLAND PARK, NASSAU COUNTY, NEW YORK

Sample ID		SB-12A	SB-12B	SB-12C	SB-12D	SB-13B	SB-13C	SB-14A	SB-14B	SB-14C	SB-15A	SB-15B	SB-15C	SB-16A
Depth		0-0.5	0.5-3	3-7	7+	0.5-3	3-7	0-0.5	0.5-3	3-7	0-0.5	0.5-3	3-7	0-0.5
Lab Sample ID		1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290
Sampling Date		7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011
Matrix		Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
SEMICVOLATILE ORGANIC COMPOUNDS (SVOCs)	Unrestricted Use SCO	Restricted-Residential Use SCO	Proposed Site-Specific SCO	Result										
1,2,4-Trichlorobenzene	NC	NC		NR	<188	U	<46.1	U	<203	U	<227	U	<48.2	U
1,2-Dichlorobenzene	NC	NC		NR	<139	U	<34.3	U	<151	U	<168	U	<35.8	U
1,2-Diphenylhydrazine	NC	NC		NR	<136	U	<33.5	U	<147	U	<164	U	<35.0	U
1,3-Dichlorobenzene	NC	NC		NR	<152	U	<37.3	U	<164	U	<183	U	<38.9	U
1,4-Dichlorobenzene	NC	NC		NR	<147	U	<36.1	U	<159	U	<176	U	<37.8	U
2,3,4,6-Tetrachlorophenol	NC	NC		NR	<179	U	<43.9	U	<193	U	<216	U	<45.9	U
2,4,5-Trichlorophenol	NC	NC		NR	<97.9	U	<24.1	U	<106	U	<118	U	<25.1	U
2,4,6-Trichlorophenol	NC	NC		NR	<170	U	<41.7	U	<184	U	<205	U	<43.6	U
2,4-Dichlorophenol	NC	NC		NR	<148	U	<36.4	U	<160	U	<179	U	<38.0	U
2,4-Dimethylphenol	NC	NC		NR	<189	U	<46.3	U	<204	U	<228	U	<48.4	U
2,4-Dinitrophenol	NC	NC		NR	<1590	U	<39.0	U	<1720	U	<1920	U	<408	U
2,4-Dinitrotoluene	NC	NC		NR	<271	U	<66.5	U	<293	U	<327	U	<69.5	U
2,6-Dinitrotoluene	NC	NC		NR	<186	U	<45.7	U	<201	U	<224	U	<47.7	U
2-Chloronaphthalene	NC	NC		NR	<217	U	<53.4	U	<235	U	<263	U	<55.9	U
2-Chlorophenol	NC	NC		NR	<217	U	<53.4	U	<235	U	<263	U	<55.9	U
2-Methylnaphthalene	NC	NC		NR	917	J	50300	21300	19000		<46.0	U	NR	566
2-Methylphenol	330	100,000		NR	<161	U	<39.7	U	<175	U	<195	U	<41.5	U
2-Nitroaniline	NC	NC		NR	<235	U	<57.8	U	<254	U	<284	U	<60.4	U
2-Nitrophenol	NC	NC		NR	<137	U	<33.7	U	<148	U	<166	U	<35.2	U
3+4-Methylphenol	330**	330**		NR	<139	U	<34.3	U	<151	U	<168	U	<35.8	U
3,3'-Dichlorobenzidine	NC	NC		NR	<217	U	<53.4	U	<235	U	<263	U	<55.9	U
3-Nitroaniline	NC	NC		NR	<7.6	U	<19.1	U	<84.0	U	<93.7	U	<19.9	U
4,6-Dinitro-2-methylphenol	NC	NC		NR	<1970	U	<484	U	<2130	U	<2380	U	<506	U
4-Bromophenyl phenyl ether	NC	NC		NR	<205	U	<50.3	U	<222	U	<247	U	<52.6	U
4-Chloro-3-methylphenol	NC	NC		NR	<168	U	<41.4	U	<182	U	<203	U	<43.2	U
4-Chloroaniline	NC	NC		NR	<172	U	<42.2	U	<186	U	<208	U	<44.1	U
4-Chlorophenyl phenyl ether	NC	NC		NR	<175	U	<43.1	U	<190	U	<212	U	<45.1	U
4-Nitroaniline	NC	NC		NR	<441	U	<108	U	<478	U	<533	U	<113	U
4-Nitrophenol	NC	NC		NR	<3010	U	<739	U	<3260	U	<3630	U	<73	U
Acenaphthene	20,000	100,000		NR	1280	J	1870	1230	J	1110	J	<48.8	U	NR
Acenaphthylene	100,000	100,000		NR	<155	U	<38.1	U	<168	U	<187	U	<39.9	U
Aniline	NC	NC		NR	<140	U	<34.5	U	<152	U	<169	U	<36.0	U
Anthracene	100,000	100,000		NR	<201	U	<49.3	U	<217	U	<242	U	<51.6	U
Benzidine	NC	NC		NR	<3960	U	<973	U	<4290	U	<4780	U	<1020	U
Benz[a]anthracene	1,000	1,000		NR	<191	U	<46.9	U	<207	U	<230	U	<49.0	U
Benz[a]pyrene	1,000	1,000		NR	<235	U	<57.8	U	<254	U	<284	U	<60.4	U
Benz[b]fluoranthene	1,000	1,000		NR	<187	U	<46.0	U	<203	U	<226	U	<48.1	U
Benz[g,h]perylene	100,000	100,000		NR	<345	U	<84.7	U	<373	U	<416	U	<88.5	U
Benz[k]fluoranthene	800	3,900		NR	<343	U	<84.4	U	<372	U	<414	U	<88.2	U
Benzzoic acid	NC	NC		NR	<26400	U	<6500	U	<28600	U	<31900	U	<6790	U
Benzyl alcohol	NC	NC		NR	<266	U	<65.4	U	<288	U	<321	U	<68.4	U
bis(2-Chloroethoxy)methane	NC	NC		NR	<187	U	<45.9	U	<202	U	<225	U	<48.0	U
bis(2-Chloroethyl)ether	NC	NC		NR	<213	U	<52.4	U	<231	U	<258	U	<54.8	U
bis(2-Chloroisopropyl)ether	NC	NC		NR	<166	U	<40.7	U	<179	U	<200	U	<42.5	U
bis(2-Ethylhexyl)phthalate	NC	NC		NR	<295	U	<72.6	U	400	J	2020	J	<75.9	U
Butyl benzyl phthalate	NC	NC		NR	<238	U	<58.5	U	<258	U	<288	U	<61.2	U
Carbazole	NC	NC		NR	<260	U	<63.9	U	<281	U	<314	U	<66.7	U
Chrysene	1,000	3,900		NR	<239	U	<58.6	U	<258	U	<288	U	<61.3	U
Cresols	NC	NC		NR	<300	U	<74.0	U	<326	U	<363	U	<77.3	U
Di-n-butyl phthalate	NC	NC		NR	<254	U	<62.4	U	<275	U	<307	U	<65.2	U
Di-n-octyl phthalate	NC	NC		NR	<222	U	<54.5	U	<240	U	<268	U	<57.0	U
Dibenzo[a,h]anthracene	330	330		NR	<252	U	<61.9	U	<273	U	<304	U	<64.7	U
Dibenzofuran	7,000	59,000		NR	<151	U	<37.0	U	<163	U	<182	U	<38.7	U
Diethyl phthalate	NC	NC		NR	<295	U	<72.5	U	<319	U	<356	U	<75.8	U
Dimethyl phthalate	NC	NC		NR	<218	U	<53.5	U	<236	U	<263	U	<56.0	U
Fluoranthene	100,000	100,000		NR	743	J	186	J	554	J	<300	U	<63.8	U
Fluorene	30,000	100,000		NR	1860	J	3440	<196	U	2380	J	<46.6	U	NR
Hexachlorobenzene	330	1,200		NR	<193	U	<47.5	U	<209	U	<233	U	<49.6	U
Hexachlorobutadiene	NC	NC		NR	<180	U	<44.3	U	<195	U	<218	U	<46.3	U
Hexachlorocyclopentadiene	NC	NC		NR	<1390	U	<343	U	<1510	U	<1680	U	<358	U
Hexachloroethane	NC	NC		NR	<201	U	<49.3	U	<217	U	<242	U	<51.6	U
Indeno[1,2,3-cd]pyrene	500	500		NR	<208	U	<51.2	U	<226	U	<252	U	<53.5	U

TABLE RWP-10  
SUMMARY OF RESULTS OF ANALYSIS OF SOIL SAMPLES FOR VOLATILE ORGANIC COMPOUNDS  
JULY/AUGUST 2011  
FORMER CIBRO PETROLEUM TERMINAL SITE  
BROWNFIELD CLEANUP SITE C130153  
ISLAND PARK, NASSAU COUNTY, NEW YORK

Sample ID					SB-1B	SB-1C	SB-2B	SB-2C	SB-3B	SB-3C	SB-4B	SB-4C	SB-5B	SB-5C	SB-6B	SB-6C	
Depth					0.5-3	3-7	0.5-3	3-7	0.5-3	3-7	0.5-3	3-7	0.5-3	3-7	0.5-3	3-7	
Lab Sample ID					1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290	
Sampling Date					7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	
Matrix					Solid												
Units					µg/kg												
VOLATILE ORGANIC COMPOUNDS (VOCs)	Unrestricted Use SCO	Restricted-Residential Use SCO	Proposed Site-Specific SCO		Result												
p-Ethyltoluene	NC	NC			<0.84 U	<0.90 U	<0.83 U	<0.80 U	<0.78 U	<0.82 U	<0.82 U	<0.86 U	<0.77 U	<119 U	<0.77 U	<0.82 U	
o-Butylbenzene	11,000	100,000			<0.76 U	<0.81 U	<0.75 U	<0.72 U	<0.71 U	<0.74 U	<0.74 U	<0.77 U	<0.70 U	<115 U	<0.70 U	<0.74 U	
Styrene	NC	NC			<0.49 U	<0.52 U	<0.48 U	<0.46 U	<0.46 U	<0.48 U	<0.48 U	<0.47 U	<0.50 U	<0.45 U	<119 U	<0.45 U	<0.48 U
t-1,2-Dichloroethene	190	100,000			<0.92 U	<0.99 U	<0.91 U	<0.87 U	<0.86 U	<0.90 U	<0.89 U	<0.94 U	<0.85 U	<140 U	<0.85 U	<0.90 U	
t-1,3-Dichloropropene	NC	NC			<0.89 U	<0.96 U	<0.88 U	<0.85 U	<0.83 U	<0.87 U	<0.87 U	<0.91 U	<0.82 U	<116 U	<0.82 U	<0.87 U	
tert- Amyl methyl Ether/TAME	NC	NC			<0.65 U	<0.70 U	<0.64 U	<0.62 U	<0.61 U	<0.64 U	<0.63 U	<0.66 U	<0.60 U	<126 U	<0.60 U	<0.64 U	
tert-Butylbenzene	5,900	100,000			<0.70 U	<0.75 U	<0.69 U	<0.67 U	<0.66 U	<0.69 U	<0.68 U	<0.72 U	<0.65 U	<125 U	<0.65 U	<0.69 U	
Tertiary butyl alcohol	NC	NC			<19.7 U	<21.1 U	<19.4 U	<18.7 U	<18.4 U	<18.4 U	<19.3 U	<19.1 U	<20.1 U	<18.2 U	<1190 U	<18.2 U	<19.3 U
Tetrachloroethene (PCE)	1,300	19,000			<0.78 U	<0.84 U	<0.77 U	<0.75 U	<0.73 U	<0.77 U	<0.76 U	<0.80 U	<0.73 U	<123 U	<0.73 U	<0.77 U	
Toluene	700	100,000			<0.89 U	<0.96 U	<0.88 U	<0.85 U	<0.83 U	<0.87 U	<0.87 U	<0.91 U	<0.82 U	<159 U	<0.82 U	<0.87 U	
Trichloroethene (TCE)	470	21,000			<0.81 U	<0.87 U	<0.80 U	<0.77 U	<0.76 U	<0.80 U	<0.79 U	<0.83 U	<0.75 U	<138 U	<0.75 U	<0.80 U	
Trichlorofluoromethane	NC	NC			<0.78 U	<0.84 U	<0.77 U	<0.75 U	<0.73 U	<0.77 U	<0.76 U	<0.80 U	<0.73 U	<147 U	<0.73 U	<0.77 U	
Vinyl Chloride	20	900			<0.65 U	<0.70 U	<0.64 U	<0.62 U	<0.61 U	<0.64 U	<0.63 U	<0.66 U	<0.60 U	<121 U	<0.60 U	<0.64 U	
Total VOC TICs	NC	NC	10,000	101	0	376	217	285	359	0	94	0	57	57,310	749	46	

Notes:

µg/kg - micrograms per kilogram

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value

U - Indicates the analyte was analyzed for but not detected

NR - No Result

NC - No Criterion

SCO - Soil Cleanup Objective

Shading indicates result above SCO. Color representing least stringent SCO exceeded is shown unless otherwise noted.

\*\* There is no SCO for m/p xylene or o-xylene. The Unrestricted Use SCO for total xylenes is 260 µg/kg. The Restricted-Residential Use SCO for total xylenes is 100,000 µg/kg.

TABLE RWP-10  
SUMMARY OF RESULTS OF ANALYSIS OF SOIL SAMPLES FOR VOLATILE ORGANIC COMPOUNDS  
JULY/AUGUST 2011  
FORMER CIBRO PETROLEUM TERMINAL SITE  
BROWNFIELD CLEANUP SITE C130153  
ISLAND PARK, NASSAU COUNTY, NEW YORK

Sample ID	SB-7A	SB-8A	SB-8B	SB-8C	SB-8D	SB-9A	SB-9B	SB-9C	SB-9D	SB-10B	SB-10C	SB-11A
Depth	0-0.5	0-0.5	0.5-3	3-7	7+	0-0.5	0.5-3	3-7	7+	0.5-3	3-7	0-0.5
Lab Sample ID	1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290
Sampling Date	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Solid	Solid
Units	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
VOLATILE ORGANIC COMPOUNDS (VOCs)	Unrestricted Use SCO	Restricted-Residential Use SCO	Proposed Site-Specific SCO	Result								
1,1,1-Trichloroethane (TCA)	880	100,000		<0.82	U	<0.71	U	<0.74	U	<0.82	U	NR
1,1,2-Tetrachloroethane	NC	NC		<0.68	U	<0.59	U	<0.62	U	<0.67	U	NR
1,1,2-Tetrachloroethane	NC	NC		<1.06	U	<0.92	U	<0.97	U	<1.04	U	NR
1,1,2-Trichloroethane	NC	NC		<1.01	U	<0.88	U	<0.92	U	<1.01	U	NR
1,1,2-Trichlorotrifluoroethane (Freon 113)	NC	NC		<0.68	U	<0.59	U	<0.62	U	<0.67	U	NR
1,1-Dichloroethane	270	26,000		<0.60	U	<0.52	U	<0.55	U	<0.60	U	NR
1,1-Dichloroethene	330	100,000		<0.79	U	<0.69	U	<0.72	U	<0.77	U	NR
1,1-Dichloropropene	NC	NC		<1.31	U	<1.14	U	<1.19	U	<1.28	U	NR
1,2,3-Trichlorobenzene	NC	NC		<0.96	U	<0.83	U	<0.87	U	<0.93	U	NR
1,2,3-Trichloropropane	NC	NC		<1.69	U	<1.47	U	<1.54	U	<1.66	U	NR
1,2,4-Tetramethylbenzene (Durene)	NC	NC		<0.98	U	<0.85	J	9.5	J	12	J	NR
1,2,4-Trichlorobenzene	NC	NC		<0.82	U	<0.71	U	<0.74	U	<0.80	U	NR
1,2,4-Trimethylbenzene	3,600	52,000		<0.82	U	<0.71	U	<0.74	U	<0.80	U	NR
1,2-Dibromo-3-chloropropane	NC	NC		<2.21	U	<1.92	U	<2.01	U	<2.16	U	NR
1,2-Dibromopropane	NC	NC		<0.79	U	<0.69	U	<0.72	U	<0.77	U	NR
1,2-Dibromobutane	NC	NC		<0.79	U	<0.69	U	<0.72	U	<0.77	U	NR
1,2-Dichlorobenzene	1,100	100,000		<0.87	U	<0.76	U	<0.79	U	<0.85	U	NR
1,2-Dichloroethane	20	3,100		<0.96	U	<0.83	U	<0.87	U	<0.93	U	NR
1,2-Dichloropropane	NC	NC		<1.04	U	<0.90	U	<0.94	U	<1.01	U	NR
1,3,5-Trimethylbenzene	8,400	52,000		<0.93	U	<0.81	U	<0.84	U	<0.91	U	NR
1,3-Dichlorobenzene	2,400	49,000		<0.74	U	<0.64	U	<0.67	U	<0.72	U	NR
1,3-Dichloropropane	NC	NC		<0.57	U	<0.50	U	<0.52	U	<0.56	U	NR
1,4-Dichlorobenzene	1,800	13,000		<0.57	U	<0.50	U	<0.52	U	<0.56	U	NR
2,2-Dichloropropane	NC	NC		<1.01	U	<0.88	U	<0.92	U	<0.99	U	NR
2-Butanone (MEK)	120	100,000		<5.73	U	<4.98	U	<5.21	U	<5.61	U	NR
2-Chloroethylvinylether	NC	NC		<4.45	U	<3.86	U	<4.04	U	<4.35	U	NR
2-Chlorotoluene	NC	NC		<0.74	U	<0.64	U	<0.67	U	<0.72	U	NR
2-Hexanone	NC	NC		<2.40	U	<2.09	U	<2.18	U	<2.35	U	NR
4-Chlorotoluene	NC	NC		<0.82	U	<0.71	U	<0.74	U	<0.80	U	NR
4-Isopropyltoluene	NC	NC		<0.63	U	<0.55	U	<0.57	U	<0.61	U	NR
4-Methyl-2-pentanone	NC	NC		<3.63	U	<3.15	U	<3.30	U	<3.55	U	NR
Acetone	50	100,000		<6.72	U	<5.83	U	<6.10	U	<6.57	U	NR
Acrylonitrile	NC	NC		<16.8	U	<14.6	U	<15.3	U	<16.4	U	NR
Benzene	60	4,800		<0.85	U	<0.73	U	<0.77	U	<0.83	U	NR
Bromobenzene	NC	NC		<0.85	U	<0.73	U	<0.77	U	<0.83	U	NR
Bromochloromethane	NC	NC		<1.12	U	<0.97	U	<1.02	U	<1.09	U	NR
Bromodichloromethane	NC	NC		<0.82	U	<0.71	U	<0.74	U	<0.80	U	NR
Bromoform	NC	NC		<0.90	U	<0.78	U	<0.82	U	<0.86	U	NR
Bromomethane	NC	NC		<1.34	U	<1.16	U	<1.22	U	<1.31	U	NR
Carbon disulfide	NC	NC		<0.79	U	<0.69	U	<0.72	U	<0.77	U	NR
Carbon Tetrachloride	760	2,400		<1.04	U	<0.90	U	<0.94	U	<1.01	U	NR
Chlorobenzene	1,100	100,000		<0.71	U	<0.62	U	<0.64	U	<0.69	U	NR
Chlorodifluoromethane (Freon 22)	NC	NC		<0.79	U	<0.69	U	<0.72	U	<0.77	U	NR
Chloroethane	NC	NC		<1.17	U	<1.02	U	<1.07	U	<1.15	U	NR
Chloroform	370	49,000		<0.66	U	<0.57	U	<0.60	U	<0.64	U	NR
Chromomethane	NC	NC		<1.06	U	<0.92	U	<0.97	U	<1.04	U	NR
c-1,2-Dichloroethene	250	100,000		<1.06	U	<0.92	U	<0.97	U	<1.04	U	NR
c-1,3-Dichloropropene	NC	NC		<0.85	U	<0.73	U	<0.77	U	<0.83	U	NR
Dibromochloromethane	NC	NC		<0.55	U	<0.47	U	<0.50	U	<0.53	U	NR
Dibromomethane	NC	NC		<0.71	U	<0.62	U	<0.64	U	<0.69	U	NR
Dichlorodifluoromethane	NC	NC		<1.06	U	<0.92	U	<0.97	U	<1.04	U	NR
Ethylbenzene	1,000	41,000		<1.06	U	<0.92	U	<0.97	U	<1.04	U	NR
Hexachlorobutadiene	NC	NC		<0.93	U	<0.81	U	<0.84	U	<0.91	U	NR
Isopropylbenzene	NC	NC		<0.68	U	<0.59	U	<0.62	U	<0.67	U	NR
m,p-xylene	NC**	NC**		<1.72	U	<1.49	U	<1.56	U	<1.68	U	NR
Methyl t-butyl ether (MTBE)	930	100,000		<0.85	U	<0.73	U	<0.77	U	<0.83	U	NR
Methylene Chloride	50	100,000		<0.55	U	<0.47	U	<0.50	U	<0.53	U	NR
Naphthalene	NC	NC		<1.45	U	<1.26	U	<1.31	U	<1.42	U	NR
n-Butylbenzene	12,000	100,000		<0.74	U	<0.64	U	<0.67	U	<0.72	U	NR
n-Propylbenzene	3,900	100,000		<0.96	U	<0.83	U	<0.87	U	<0.93	U	NR
o-xylene	NC**	NC**		<0.93	U	<0.81	U	<0.84	U	<0.91	U	NR
p-Diethylbenzene	NC	NC		<0.74	U	<0.64	U	<0.67	U	<0.72	U	NR

TABLE RWP-10  
SUMMARY OF RESULTS OF ANALYSIS OF SOIL SAMPLES FOR VOLATILE ORGANIC COMPOUNDS  
JULY/AUGUST 2011  
FORMER CIBRO PETROLEUM TERMINAL SITE  
BROWNFIELD CLEANUP SITE C130153  
ISLAND PARK, NASSAU COUNTY, NEW YORK

Sample ID		SB-7A	SR-8A	SR-8B	SB-8C	SB-8D	SB-9A	SB-9B	SB-9C	SB-9D	SB-10B	SB-10C	SB-11A
Depth		0-5	0-5	0.5-3	3-7	7+	0-5	0.5-3	3-7	7+	0.5-3	3-7	0-5
Lab Sample ID		1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290
Sampling Date		7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011
Matrix		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
VOLATILE ORGANIC COMPOUNDS (VOCs)	Unrestricted Use SCO	Restricted-Residential Use SCO	Proposed Site-Specific SCO	Result									
p-Ethyltoluene	NC	NC		<0.85	U	<0.73	U	<0.77	U	<0.83	U	<0.85	U
sec-Butylbenzene	11,000	100,000		<0.76	U	<0.66	U	<0.89	U	<0.75	U	<0.77	U
Styrene	NC	NC		<0.49	U	<0.43	U	<0.45	U	<0.48	U	<0.49	U
1,1,2-Dichloroethene	190	100,000		<0.93	U	<0.81	U	<0.84	U	<0.91	U	<0.93	U
1,1,2,3-Tetrachloropropene	NC	NC		<0.90	U	<0.78	U	<0.82	U	<0.88	U	<0.90	U
tert-Amyl methyl Ether/TAME	NC	NC		<0.66	U	<0.57	U	<0.60	U	<0.64	U	<0.66	U
tert-Butylbenzene	5,900	100,000		<0.71	U	<0.62	U	<0.64	U	<0.69	U	<0.71	U
Tertiary butyl alcohol	NC	NC		<19.9	U	<17.3	U	<18.1	U	<19.4	U	<19.9	U
Tetrachloroethene (PCE)	1,300	19,000		<0.79	U	<0.69	U	<0.72	U	<0.77	U	<0.79	U
Toluene	700	100,000		<0.90	U	<0.78	U	<0.82	U	<0.88	U	<0.90	U
Trichloroethene (TCE)	470	21,000		<0.82	U	<0.71	U	<0.74	U	<0.80	U	<0.82	U
Trichlorofluoromethane	NC	NC		<0.79	U	<0.69	U	<0.72	U	<0.77	U	<0.79	U
Vinyl Chloride	20	900		<0.66	U	<0.57	U	<0.60	U	<0.64	U	<0.66	U
Total VOC TICs	NC	NC	10,000	0	0	68	0	0	NR	167	0	14	107,590

Notes:

µg/kg - micrograms per kilogram

J - Result is less than the RL but greater than or equal to the MDL and the concentration

is an approximate value

U - Indicates the analyte was analyzed for but not detected

NR - No Result

NC - No Criterion

SCO - Soli Cleanup Objective

Shading indicates result above SCO. Color representing least stringent SCO exceeded

is shown unless otherwise noted.

\*\* There is no SCO for m/p xylene or o-xylene. The Unrestricted Use SCO for total xylenes

is 260 µg/kg. The Restricted-Residential Use SCO for total xylenes is 100,000 µg/kg.

**TABLE RWP-10**  
**SUMMARY OF RESULTS OF ANALYSIS OF SOIL SAMPLES FOR VOLATILE ORGANIC COMPOUNDS**  
**JULY/AUGUST 2011**

**FORMER CIBRO PETROLEUM TERMINAL SITE**  
**BROWNFIELD CLEANUP SITE C130153**  
**ISLAND PARK, NASSAU COUNTY, NEW YORK**

Sample ID		SB-12A	SB-12B	SB-12C	SB-12D	SB-13B	SB-13C	SB-14A	SB-14B	SB-14C	SB-15A	SB-15B	SB-15C											
Depth		0-0.5	0.5-3	3-7	7+	0.5-3	3-7	0-0.5	0.5-3	3-7	0-0.5	0.5-3	3-7											
Lab Sample ID		1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290	1107290											
Sampling Date		7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011											
Matrix		Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid	Solid											
Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg											
VOLATILE ORGANIC COMPOUNDS (VOCs)	Unrestricted Use SCO	Restricted-Residential Use SCO	Proposed Site-Specific SCO	Result																				
1,1,1-Trichloroethane (TCA)	680	100,000		NR	<134	U	<132	U	<290	U	<129	U	<138	U	NR	<131	U	<0.79	U	NR	<129	U	<142	U
1,1,2,2-Tetrachloroethane	NC	NC		NR	<121	U	<120	U	<262	U	<117	U	<125	U	NR	<119	U	<0.66	U	NR	<117	U	<128	U
1,1,2,2-Tetrachloroethane	NC	NC		NR	<106	U	<104	U	<229	U	<102	U	<109	U	NR	<104	U	<1.03	U	NR	<102	U	<112	U
1,1,2-Trichloroethane	NC	NC		NR	<127	U	<125	U	<274	U	<122	U	<130	U	NR	<124	U	<0.97	U	NR	<122	U	<134	U
1,1,2-Trichlorofluoroethane (Freon 113)	NC	NC		NR	<124	U	<122	U	<268	U	<120	U	<128	U	NR	<121	U	<0.66	U	NR	<120	U	<131	U
1,1-Dichloroethane	270	26,000		NR	<142	U	<140	U	<308	U	<137	U	<146	U	NR	<139	U	<0.58	U	NR	<137	U	<150	U
1,1-Dichloroethene	330	100,000		NR	<131	U	<129	U	<284	U	<126	U	<135	U	NR	<128	U	<0.76	U	NR	<126	U	<139	U
1,1-Dichloropropene	NC	NC		NR	<113	U	<111	U	<244	U	<109	U	<116	U	NR	<110	U	<1.26	U	NR	<109	U	<119	U
1,2,3-Trichlorobenzene	NC	NC		NR	<87	U	<86.2	U	<189	U	<84.3	U	<89.9	U	NR	<85.6	U	<0.92	U	NR	<84.3	U	<92.4	U
1,2,3-Trichloropropane	NC	NC		NR	<110	U	<108	U	<238	U	<106	U	<113	U	NR	<108	U	<1.63	U	NR	<106	U	<116	U
1,2,4,5-Tetramethylbenzene (Durene)	NC	NC		NR	4,630	5,350		12,700		3,770		8,680		NR	6,200		8.87	J	NR	16,600		8,350		
1,2,4-Trichlorobenzene	NC	NC		NR	<94.5	U	<93.1	U	<204	U	<91.1	U	<97.2	U	NR	<92.5	U	<0.79	U	NR	<91.1	U	<98.8	U
1,2,4-Tribromo-3-chloropropane	3,600	52,000		NR	<118	U	<117	U	<256	U	<114	U	601		NR	1400		<0.79	U	NR	3030		<125	U
1,2-Dibromoethane	NC	NC		NR	<106	U	<104	U	<229	U	<102	U	<109	U	NR	<104	U	<2.13	U	NR	<102	U	<112	U
1,2-Dichlorobenzene	NC	NC		NR	<110	U	<108	U	<238	U	<106	U	<113	U	NR	<108	U	<0.76	U	NR	<106	U	<116	U
1,2-Dichloroethane	1,100	100,000		NR	<113	U	<111	U	<244	U	<109	U	<116	U	NR	<110	U	<0.84	U	NR	<109	U	<119	U
1,2-Dichloropropane	20	3,100		NR	<137	U	<135	U	<295	U	<132	U	<141	U	NR	<134	U	<0.92	U	NR	<132	U	<145	U
1,3,5-Trimethylbenzene	8,400	52,000		NR	<116	U	<114	U	<250	U	<112	U	207		NR	<123	U	<1.00	U	NR	<121	U	<133	U
1,3-Dichlorobenzene	2,400	49,000		NR	<109	U	<107	U	<235	U	<105	U	<112	U	NR	<106	U	<0.71	U	NR	2630		<122	U
1,3-Dichloropropane	NC	NC		NR	<117	U	<115	U	<253	U	<113	U	<120	U	NR	<115	U	<0.55	U	NR	<113	U	<124	U
1,4-Dichlorobenzene	1,800	13,000		NR	<110	U	<108	U	<238	U	<105	U	<113	U	NR	<108	U	<0.55	U	NR	<106	U	<116	U
2,2-Dichloropropane	NC	NC		NR	<123	U	<121	U	<265	U	<118	U	<126	U	NR	<120	U	<0.97	U	NR	<118	U	<130	U
2-Butanone (MEK)	120	100,000		NR	<107	U	<106	U	<232	U	<103	U	<110	U	NR	<105	U	<5.52	U	NR	<103	U	<113	U
2-Chloroethylvinyl ether	NC	NC		NR	<200	U	<197	U	<433	U	<193	U	<206	U	NR	<196	U	<4.29	U	NR	<193	U	<212	U
2-Chlorotoluene	NC	NC		NR	<117	U	<115	U	<253	U	<113	U	<120	U	NR	<115	U	<0.71	U	NR	<113	U	<124	U
2-Hexanone	NC	NC		NR	<86.0	U	<84.8	U	<186	U	<83.0	U	<88.4	U	NR	<84.2	U	<2.31	U	NR	<83.0	U	<90.9	U
4-Chlorotoluene	NC	NC		NR	<110	U	<108	U	<238	U	<106	U	<113	U	NR	<108	U	<0.79	U	NR	<106	U	<116	U
4-Isopropyltoluene	NC	NC		NR	<114	U	<113	U	<247	U	<110	U	<117	U	NR	1110		<0.60	U	NR	5010		282	J
4-Methyl-2-pentanone	NC	NC		NR	<121	U	<120	U	<262	U	<117	U	<125	U	NR	<119	U	<3.50	U	NR	<117	U	<128	U
Acetone	50	100,000		NR	<164	U	<161	U	<354	U	<158	U	<168	U	NR	<160	U	<6.47	U	NR	<158	U	<173	U
Acrylonitrile	NC	NC		NR	<533	U	<525	U	<1150	U	<514	U	<548	U	NR	<522	U	<16.2	U	NR	<514	U	<563	U
Benzene	60	4,800		NR	<124	U	<122	U	<268	U	<120	U	<128	U	NR	<121	U	<0.82	U	NR	<120	U	<131	U
Bromobenzene	NC	NC		NR	<113	U	<111	U	<244	U	<109	U	<116	U	NR	<110	U	<0.82	U	NR	<109	U	<119	U
Bromochloromethane	NC	NC		NR	<128	U	<126	U	<278	U	<124	U	<132	U	NR	<126	U	<1.08	U	NR	<124	U	<136	U
Bromodichloromethane	NC	NC		NR	<125	U	<124	U	<271	U	<121	U	<129	U	NR	<123	U	<0.79	U	NR	<121	U	<133	U
Bromoform	NC	NC		NR	<114	U	<113	U	<247	U	<110	U	<117	U	NR	<112	U	<0.87	U	NR	<110	U	<121	U
Bromomethane	NC	NC		NR	<144	U	<142	U	<311	U	<139	U	<148	U	NR	<141	U	<1.29	U	NR	<139	U	<152	U
Carbon disulfide	NC	NC		NR	<116	U	<114	U	<250	U	<112	U	<119	U	NR	<113	U	<0.76	U	NR	<112	U	<122	U
Carbon Tetrachloride	760	2,400		NR	<127	U	<125	U	<274	U	<122	U	<130	U	NR	<124	U	<1.00	U	NR	<122	U	<134	U
Chlorobenzene	1,100	100,000		NR	<121	U	<120	U	<262	U	<117	U	<125	U	NR	<119	U	<0.68	U	NR	<117	U	<128	U
Chlorodifluoromethane (Freon 22)	NC	NC		NR	<131	U	<129	U	<284	U	<126	U	<135	U	NR	<128	U	<0.76	U	NR	<126	U	<139	U
Chloroethane	NC	NC		NR	<203	U	<200	U	<439	U	<196	U	<209	U	NR	<199	U	<1.13	U	NR	<198	U	<215	U
Chloroform	370	49,000		NR	<137	U	<135	U	<296	U	<132	U	<141	U	NR	<134	U	<0.63	U	NR	<132	U	<145	U
Chloromethane	NC	NC		NR	<111	U	<110	U	<241	U	<107	U	<115	U	NR	<109	U	<1.03	U	NR	<107	U	<118	U
c-1,2-Dichloroethene	250	100,000		NR	<125	U	<124	U	<271	U	<121	U	<129	U	NR	<123	U	<1.03	U	NR	<121	U	<133	U
c-1,3-Dichloropropene	NC	NC		NR	<123	U	<121	U	<265	U	<118	U	<126	U	NR	<120	U	<0.82	U	NR	<118	U	<130	U
Dibromochloromethane	NC	NC		NR	<117	U	<115	U	<253	U	<113	U	<120	U	NR	<115	U	<0.53	U	NR	<113	U	<124	U
Dibromomethane	NC	NC		NR	<128	U	<126	U	<278	U	<124	U	<132	U	NR	<126	U	<0.68	U	NR	<124	U	<136	U
Dichlorodifluoromethane	NC	NC		NR	<113	U	<111	U	<244	U	<109	U	<116	U	NR	<110	U	<1.03	U	NR	<109	U	<119	U
Ethylibenzene	1,000	41,000		NR	<125	U	<124	U	<271	U	<121	U	<129	U	NR	<123	U	<1.03	U	NR	150	J	<133	U
Hexachlorobutadiene	NC	NC		NR	<111	U	<110	U	<241	U	<107	U	<115	U	NR	<109	U	<0.89	U	NR	<107	U	<118	U
Isopropylbenzene	NC	NC		NR	589	J	811		1780		338	J	1190		NR	199	J	<0.66	U	NR	1010	J	307	J
m,p-xylene	NC**	NC**		NR	<245	U	<242	U	<531	U	<237	U	<252	U	NR	<240	U	<1.66	U	NR	261	J	<259	U
Methyl-t-butyl ether (MTBE)	930	100,000		NR	<124	U	<122	U	<268	U	<120	U	<128	U	NR	<121	U	<0.82	U	NR	<120	U	<131	U
Methylene Chloride	50	100,000		NR	<152	U	<150	U	<329	U	<147	U	<157	U	NR	<149	U	&lt						