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Memorandum

To: Scott Alfonse and Cheryl Henlin, City of New Bedford

From: David M. Sullivan, LSP CHMM, TRC Environmental Corporation

CC: Dr. Donna J. Vorhees, The Science Collaborative – Northshore

Subject: Explanation of Dioxin Toxic Equivalents (TEQs)

Date: July 6, 2010

The purpose of the memorandum is to provide an explanation for the Toxic Equivalent or TEQ approach for expressing environmental data for polychlorinated dioxins (dioxins), polychlorinated dibenzofurans (furans), and dioxin-like polychlorinated biphenyls (PCBs), sometimes collectively referred to as dioxin-like compounds or congeners, and preparing for the use of those data in toxicological studies or risk assessments.

One compound of the dioxin-class of compounds is 2,3,7,8-tetrachlorodibenzo-*p*-dioxin, also sometimes simply called dioxin. Because this compound has undergone extensive study, its toxicity is fairly well characterized and it appears to be one of the most toxic of the dioxin-like compounds, its toxicity is used as the reference point for this entire class of compounds. The toxicity of the other dioxin-like compounds is less well characterized, but there have been numerous published studies that determined the relative toxicity of many of the dioxin-like compounds, compared to dioxin. To provide a way to measure the relative concern for dioxin-like compounds as compared to dioxin, dioxin has been assigned a toxicity equivalence factor (TEF) of 1. Other dioxin-like compounds are given equal or lower TEFs, with the TEF assigned approximately proportional to a compound's toxicity relative to that of dioxin (e.g., a TEF of 0.1 means that the compound is 10-times less toxic than dioxin).

The individual TEF values have been set by scientific consensus through organizations such as the United Nations World Health Organization (WHO) and the United States National Oceanic and Atmospheric Administration (NOAA). The Massachusetts Department of Environmental Protection (MassDEP) has established their own TEFs as well, which were used in the tabulation of the data collected by TRC for dioxin-like compounds in soil, except for the dioxin-like PCB congeners for which TEFs developed by WHO in 2005 were used because MassDEP has not establish TEFs for these congeners.

The TEQ method of dioxin reporting is more meaningful than simply reporting the total concentration of a mixture of variously toxic compounds because the TEQ method offers toxicity information about the mixture. TEQs are determined by summing the products of concentrations and TEFs for each dioxin-like compound as follows:

$$TEQ = \sum (Dioxin_i \, x TEF_i) + \sum (Furan_i \, x TEF_i) + \sum (PCB_i x TEF_i)$$

where:

TEQ	=	Toxic equivalent concentration
$Dioxin_i$	=	Polychlorinated dioxin congener
$Furan_i$	=	Polychlorinated dibenzofuran congener
PCB_i	=	Dioxin-like PCB congener
TEF_i	=	Toxic equivalency factor

MassDEP has not established standards or background concentrations for individual dioxin-like compounds, most likely because it has adopted the TEQ approach. Toxicologists, risk assessors, and environmental regulators use TEQ estimates instead of individual congener concentrations to assess the toxicity of dioxin-like compounds. For this reason, the dioxin-like compound concentration data are presented somewhat differently from other tabulations of concentration data for this project.

References

MassDEP, 1991 Re-evaluation of the Toxicity Equivalency Factors for Dioxins and Dibenzofurans. Office of Research and Standards. Massachusetts Department of Environmental Protection. October 1991.

Van den Berg, M. et al., 2006. The 2005 World Health Organization Re-evaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-like Compounds. Toxicol. Sci. 93(2):223-241. October 2006.

Summary of Analytical Results for Soil Samples -- 2010
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte							Area Code:	5			6			4		
								Sample ID:	HB-26			HF-14			HF-31D		
								Sample Depth (ft.):	0-1	1-3	1-3	3-5	0-1	1-3	3-4	0-1	1-3	4-6
								Sample Date:	4/15/2010	4/15/2010	4/15/2010 Field Dup	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1*	TSCA											
PAHs																		
(mg/kg)	2-Methylnaphthalene	80	300	80	500	0.7	N/A		0.39 U	0.20 U	0.44 U	1.2 U	0.20 U	0.18 U	0.46 U	0.19 U	0.37 U	0.45 U
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A		0.39 U	**0.31**	0.44 U	1.2 U	0.20 U	0.18 U	**0.59**	0.19 U	0.37 U	0.45 U
	Acenaphthylene	600	10	600	10	1	N/A		0.39 U	0.20 U	0.44 U	1.2 U	0.20 U	0.18 U	0.46 U	0.19 U	0.37 U	0.45 U
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A		0.39 U	**1.2**	**0.78**	1.2 U	0.20 U	0.18 U	**0.93**	0.19 U	**1.1**	0.45 U
	Benzo(a)anthracene	7	7	40	40	7	N/A		**0.73**	**3.9**	**2.4**	1.2 U	0.20 U	**0.21**	**2.4**	0.19 U	**1.5**	**0.68**
	Benzo(a)pyrene	2	2	4	4	2	N/A		**0.65**	3.2	2.2	1.2 U	0.20 U	**0.21**	2.2	0.19 U	**1.4**	**0.64**
	Benzo(b)fluoranthene	7	7	40	40	7	N/A		**0.73**	**4.3**	**2.9**	1.2 U	0.20 U	0.18 U	**3.1**	0.19 U	**1.6**	**0.98**
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A		**0.53**	**1.1**	**0.75**	1.2 U	0.20 U	0.18 U	**0.74**	0.19 U	**0.49**	0.45 U
	Benzo(k)fluoranthene	70	70	400	400	70	N/A		0.39 U	**1.7**	**1.2**	1.2 U	0.20 U	0.18 U	**1.2**	0.19 U	**0.68**	0.45 U
	Chrysene	70	70	400	400	70	N/A		**0.75**	**4.2**	**2.6**	1.2 U	0.20 U	**0.23**	**2.7**	0.19 U	**1.6**	**0.66**
	Dibenz(a,h)anthracene	0.7	0.7	4	4	0.7	N/A		0.39 U	**0.34**	0.44 U	1.2 U	0.20 U	0.18 U	0.46 U	0.19 U	0.37 U	0.45 U
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A		**1.2**	**6.5**	**4.3**	1.2 U	0.20 U	**0.33**	**5.6**	0.19 U	**3.0**	**0.90**
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A		0.39 U	**0.33**	0.44 U	1.2 U	0.20 U	0.18 U	**0.52**	0.19 U	**0.59**	0.45 U
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A		**0.54**	**1.4**	**0.98**	1.2 U	0.20 U	0.18 U	**0.97**	0.19 U	**0.67**	0.45 U
	Naphthalene	40	500	40	1,000	4	N/A		0.39 U	0.20 U	0.44 U	1.2 U	0.20 U	0.18 U	**0.50**	0.19 U	0.37 U	0.45 U
	Phenanthrene	500	500	1,000	1,000	10	N/A		**0.99**	**4.6**	**3.3**	1.2 U	0.20 U	**0.33**	**4.4**	0.19 U	**4.0**	**1.0**
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A		**1.2**	**5.1**	**2.6**	1.2 U	**0.22**	**0.25**	**2.1**	0.19 U	**2.0**	**0.64**
PCB Aroclors																		
(mg/kg)	Aroclor-1016	2	2	3	3	2	1		0.11 U	0.12 U	0.13 U	0.14 U	0.12 U	0.11 U	0.13 U	0.11 U	0.11 U	0.13 U
	Aroclor-1221	2	2	3	3	2	1		0.11 U	0.12 U	0.13 U	0.14 U	0.12 U	0.11 U	0.13 U	0.11 U	0.11 U	0.13 U
	Aroclor-1232	2	2	3	3	2	1		0.11 U	0.12 U	0.13 U	0.14 U	0.12 U	0.11 U	0.13 U	0.11 U	0.11 U	0.13 U
	Aroclor-1242	2	2	3	3	2	1		0.11 U	0.12 U	0.13 U	0.14 U	0.12 U	0.11 U	0.13 U	0.11 U	0.11 U	0.13 U
	Aroclor-1248	2	2	3	3	2	1		0.11 U	0.12 U	0.13 U	0.14 U	0.12 U	0.11 U	0.13 U	0.11 U	0.11 U	0.13 U
	Aroclor-1254	2	2	3	3	2	1		**0.47**	**0.63**	**0.87**	**0.70**	**0.26**	**0.54**	0.13 U	**0.23**	**0.73**	0.13 U
	Aroclor-1260	2	2	3	3	2	1		0.11 U	0.12 U	0.13 U	0.14 U	0.12 U	0.11 U	**1.0**	0.11 U	0.11 U	0.13 U
	Aroclor-1262	2	2	3	3	2	1		0.11 U	0.12 U	0.13 U	0.14 U	0.12 U	0.11 U	0.13 U	0.11 U	0.11 U	0.13 U
	Aroclor-1268	2	2	3	3	2	1		0.11 U	0.12 U	0.13 U	0.14 U	0.12 U	0.11 U	0.13 U	0.11 U	0.11 U	0.13 U
	Total PCBs	2	2	3	3	2	1		**0.47**	**0.63**	**0.87**	**0.70**	**0.26**	**0.54**	**1.0**	**0.23**	**0.73**	0.13 U
PCB Congeners																		
(mg/kg)	***Total PCBs*** [(a)]	2	2	3	3	2	1		***0.465 J***	***1.82 J***	***6.47 J***	***16.62 J***	***0.181 J***	***0.744 J***	***1.15 J***	***0.193 J***	***0.735 J***	***0.082 J***
	Total PCBs [(b)]	2	2	3	3	2	1		***0.465 J***	***1.82 J***	***6.47 J***	***16.63 J***	***0.181 J***	***0.744 J***	***1.15 J***	***0.193 J***	***0.735 J***	***0.082 J***
	Dioxin-like PCB TEQs (ND=0 EMPC=EMPC)	2.0E-05	2.0E-05	5.0E-05	5.0E-05	2.0E-05	N/A		***6.7E-06 J***	***3.9E-05 J***	***1.2E-04 J***	***3.2E-05 J***	***5.1E-06 J***	***7.5E-06 J***	***1.8E-06 J***	***3.1E-06 J***	***1.3E-05 J***	***2.0E-06 J***
	Dioxin-like PCB TEQs (ND=DL/2; EMPC=EMPC)	2.0E-05	2.0E-05	5.0E-05	5.0E-05	2.0E-05	N/A		***6.7E-06 J***	***3.9E-05 J***	***1.2E-04 J***	***3.6E-05 J***	***5.2E-06 J***	***7.6E-06 J***	***4.4E-06 J***	***3.1E-06 J***	***1.3E-05 J***	***2.0E-06 J***
Dioxins																		
(mg/kg)	***TEQs (ND=0; EMPC=EMPC)***	2.0E-05	2.0E-05	5.0E-05	5.0E-05	2.0E-05	N/A		***4.3E-05***	***1.8E-04***	***1.5E-04***	***1.4E-04***	***1.0E-05***	***1.6E-05***	***1.5E-04***	***1.4E-05***	***2.7E-05***	***2.0E-05***
	TEQs (ND=DL/2; EMPC=EMPC)	2.0E-05	2.0E-05	5.0E-05	5.0E-05	2.0E-05	N/A		***4.3E-05***	***1.8E-04***	***1.5E-04***	***1.4E-04***	***1.1E-05***	***1.6E-05***	***1.5E-04***	***1.4E-05***	***2.7E-05***	***2.0E-05***
TEQ Summation**																		
(mg/kg)	***TEQs (ND=0; EMPC=EMPC)***	2.0E-05	2.0E-05	5.0E-05	5.0E-05	2.0E-05	N/A		***5.0E-05***	***2.2E-04***	***2.7E-04***	***1.7E-04***	***1.6E-05***	***2.3E-05***	***1.5E-04***	***1.7E-05***	***4.0E-05***	***2.2E-05***
	TEQs (ND=DL/2; EMPC=EMPC)	2.0E-05	2.0E-05	5.0E-05	5.0E-05	2.0E-05	N/A		***5.0E-05***	***2.2E-04***	***2.7E-04***	***1.8E-04***	***1.6E-05***	***2.3E-05***	***1.5E-04***	***1.7E-05***	***4.0E-05***	***2.2E-05***
Metals																		
(mg/kg)	Antimony	20	20	30	30	20	N/A		4.6 U	24 U	5.2 U	5.5 U	4.8 U	4.3 U	5.4 U	4.4 U	4.3 U	5.2 U
	Arsenic	20	20	20	20	20	N/A		**3.6**	**23**	**22**	**9.1**	3.0 U	2.7 U	**14**	2.7 U	**3.0**	**8.8**
	Barium	1,000	1,000	3,000	3,000	1,000	N/A		**180**	**900**	**1,000**	**540**	**61**	**160**	4,400	**70**	**96**	**380**
	Beryllium	100	100	200	200	100	N/A		0.29 U	**0.44**	**0.49**	**0.67**	0.30 U	0.27 U	**0.48**	0.27 U	0.27 U	**0.81**
	Cadmium	2	2	30	30	2	N/A		**0.77**	**3.5**	**3.7**	**11**	**0.31**	**0.35**	**1.5**	**0.35**	**0.82**	**0.69**
	Chromium	30	30	200	200	30	N/A		**16**	**75**	**69**	**46**	**79**	**16**	**480**	**24**	**9.8**	**20**
	Lead	300	300	300	300	300	N/A		**230**	**1,100**	**1,300**	**4,300**	**41**	**58**	**800**	**100**	**170**	**480**
	Nickel	20	20	700	700	20	N/A		**11**	**54**	**39**	**31**	**6.0**	**4.0**	**49**	**6.0**	**8.2**	**43**

Summary of Analytical Results for Soil Samples -- 2010
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte																	
							Area Code:	5				6			4			
							Sample ID:	HB-26				HF-14			HF-31D			
							Sample Depth (ft.):	0-1	1-3	1-3	3-5	0-1	1-3	3-4	0-1	1-3	4-6	
							Sample Date:	4/15/2010	4/15/2010	4/15/2010 Field Dup	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1*	TSCA											
	Selenium	400	400	800	800	400	N/A	5.8 U	6.0 U	6.4 U	6.9 U	**6.0**	5.3 U	6.7 U	5.5 U	5.4 U	6.5 U	
	Silver	100	100	200	200	100	N/A	0.58 U	**0.90**	0.64 U	**75**	0.60 U	0.53 U	0.67 U	0.55 U	0.54 U	**1.2**	
	Thallium	8	8	60	60	8	N/A	3.5 U	3.6 U	3.9 U	4.1 U	3.6 U	3.2 U	4.0 U	3.3 U	3.2 U	3.9 U	
	Vanadium	600	600	1,000	1,000	600	N/A	**21**	**36**	**41**	**28**	**37**	**14**	**210**	**13**	**8.5**	**32**	
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	**210**	**980**	**1,200**	**410**	**44**	**32**	**360**	**76**	**130**	**220**	
	Mercury	20	20	30	30	20	N/A	**0.62**	**0.84**	**0.52**	**0.11**	**0.045**	**0.080**	**0.34**	**0.16**	**0.27**	**0.40**	

Notes:

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).

EMPC - Estimated Maximum Possible Concentration. An EMPC represents an upper bound on a congener concentration when all criteria for detection of the congener were not met. This value represents the theoretical maximum possible content of dioxins and furans in the sample.

NA - Sample not analyzed for the listed analyte.

N/A - Not applicable.

NS - No MassDEP standards exist for this analyte.

U - Compound was not detected at specified quantitation limit. When this happens, the result is referred to as a "non-detect," or "ND."

Values in **Bold** indicate the compound was detected.

Values shown in Bold and shaded type exceed one or more of the listed MassDEP Method 1 standards.

Values shown in Bold and shaded type exceed TSCA but are less than the listed Method 1 standards.

PAHs - Polynuclear Aromatic Hydrocarbons.

PCBs - Polychlorinated Biphenyls.

RC - Reportable Concentration.

TSCA - Toxic Substances Control Act criteria.

TEQ – the Toxic Equivalent concentration (TEQ) for each sample. It is calculated by summing concentration data for all dioxin, furan, and PCB congeners that are believed to harm human health in the same way as the congener commonly referred to as dioxin (2,3,7,8-tetrachlorodibenzo-p-dioxin). These congeners are sometimes referred to as "dioxin-like." See the TRC memorandum for additional details.

TEQ is calculated for each sample using Toxic Equivalency Factors (TEFs) for each dioxin-like congener defined by MassDEP and the World Health Organization. TEFs are used to mathematically change concentrations of the individual congeners into a single equivalent concentration of dioxin. EMPCs were included in TEQ estimates to avoid underestimating exposure to dioxin-like congeners. Results below detection limits, or "non-detects" (NDs), were included as either ½ the detection limit (referred to as "ND= DL/2") or by setting the concentration to 0 (referred to as "ND=0"). TEQs change only very slightly when these two different assumptions were used for results below detection limits. The higher TEQ (calculated using the ND=DL/2 assumption) was used to estimate the risk from dioxin-like congeners.

(a) - Calculated by summation of PCB homolog groups.

(b) - Calculated by summation of individual congeners.

* - For reference purposes only.

** - Sum of Dioxin-like PCB Congeners TEQ and Dioxins TEQ.

Summary of Analytical Results for Soil Samples -- 2010
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte							Area Code:	4		8		
								Sample ID:	HF-40		HG-2		
								Sample Depth (ft.):	0-1	1-3	3-5	0-1	1-3	5-7
								Sample Date:	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1*	TSCA							
PAHs														
(mg/kg)	2-Methylnaphthalene	80	300	80	500	0.7	N/A		0.19 U	0.91 U	2.1 U	0.20 U	1.7 U	0.42 U
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A		0.19 U	0.91 U	2.1 U	0.20 U	**2.5**	0.42 U
	Acenaphthylene	600	10	600	10	1	N/A		0.19 U	**10**	**8.9**	0.20 U	1.7 U	0.42 U
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A		0.19 U	**3.6**	**3.9**	0.20 U	**4.0**	0.42 U
	Benzo(a)anthracene	7	7	40	40	7	N/A		0.19 U	**5.8**	**7.0**	0.20 U	**10**	**0.48**
	Benzo(a)pyrene	2	2	4	4	2	N/A		**0.20**	**12**	**13**	0.20 U	**9.0**	0.42 U
	Benzo(b)fluoranthene	7	7	40	40	7	N/A		**0.26**	**9.5**	**12**	0.20 U	**11**	**0.55**
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A		0.19 U	**9.2**	**8.6**	0.20 U	**4.6**	0.42 U
	Benzo(k)fluoranthene	70	70	400	400	70	N/A		0.19 U	**3.3**	**4.1**	0.20 U	1.7 U	0.42 U
	Chrysene	70	70	400	400	70	N/A		**0.23**	**8.3**	**9.6**	0.20 U	**11**	**0.49**
	Dibenz(a,h)anthracene	0.7	0.7	4	4	0.7	N/A		0.19 U	0.91 U	2.1 U	0.20 U	1.7 U	0.42 U
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A		**0.24**	**28**	**30**	0.20 U	**21**	**0.86**
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A		0.19 U	**1.9**	**2.3**	0.20 U	**1.9**	0.42 U
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A		0.19 U	**8.4**	**7.9**	0.20 U	**5.7**	0.42 U
	Naphthalene	40	500	40	1,000	4	N/A		0.19 U	**20**	**17**	0.20 U	1.7 U	0.42 U
	Phenanthrene	500	500	1,000	1,000	10	N/A		**0.21**	**30**	**37**	0.20 U	**17**	**0.76**
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A		**0.28**	**21**	**27**	**0.30**	**14**	**0.55**
PCB Aroclors														
(mg/kg)	Aroclor-1016	2	2	3	3	2	1		0.11 U	1.1 U	1.2 U	0.12 U	0.49 U	0.49 U
	Aroclor-1221	2	2	3	3	2	1		0.11 U	1.1 U	1.2 U	0.12 U	0.49 U	0.49 U
	Aroclor-1232	2	2	3	3	2	1		0.11 U	1.1 U	1.2 U	0.12 U	0.49 U	0.49 U
	Aroclor-1242	2	2	3	3	2	1		0.11 U	1.1 U	1.2 U	0.12 U	0.49 U	0.49 U
	Aroclor-1248	2	2	3	3	2	1		0.11 U	1.1 U	1.2 U	0.12 U	0.49 U	0.49 U
	Aroclor-1254	2	2	3	3	2	1		**0.33**	**8.0**	**12**	0.12 U	**4.2**	**4.0**
	Aroclor-1260	2	2	3	3	2	1		0.11 U	1.1 U	1.2 U	0.12 U	0.49 U	0.49 U
	Aroclor-1262	2	2	3	3	2	1		0.11 U	1.1 U	1.2 U	0.12 U	0.49 U	0.49 U
	Aroclor-1268	2	2	3	3	2	1		0.11 U	1.1 U	1.2 U	0.12 U	0.49 U	0.49 U
	Total PCBs	2	2	3	3	2	1		**0.33**	**8.0**	**12**	0.12 U	**4.2**	**4.0**
PCB Congeners														
(mg/kg)	***Total PCBs*** [a]	2	2	3	3	2	1		***0.267 J***	***0.066 J***	***0.098 J***	***0.255 J***	*4.90 J*	*3.73 J*
	Total PCBs [b]	2	2	3	3	2	1		***0.266 J***	***0.066 J***	***0.098 J***	***0.255 J***	*4.90 J*	*3.73 J*
	Dioxin-like PCB TEQs (ND=0 EMPC=EMPC)	2.0E-05	2.0E-05	5.0E-05	5.0E-05	2.0E-05	N/A		***6.5E-06 J***	***8.3E-07 J***	***1.6E-06 J***	***4.8E-06 J***	*1.1E-04 J*	*7.3E-05 J*
	Dioxin-like PCB TEQs (ND=DL/2; EMPC=EMPC)	2.0E-05	2.0E-05	5.0E-05	5.0E-05	2.0E-05	N/A		***6.6E-06 J***	***8.4E-07 J***	***1.7E-06 J***	***4.8E-06 J***	*1.1E-04 J*	*7.3E-05 J*
Dioxins														
(mg/kg)	***TEQs (ND=0; EMPC=EMPC)***	2.0E-05	2.0E-05	5.0E-05	5.0E-05	2.0E-05	N/A		***1.2E-05***	*5.1E-05*	*1.8E-04*	*1.9E-05*	*1.9E-04*	*1.5E-04*
	TEQs (ND=DL/2; EMPC=EMPC)	2.0E-05	2.0E-05	5.0E-05	5.0E-05	2.0E-05	N/A		***1.2E-05***	*5.1E-05*	*1.8E-04*	*1.9E-05*	*1.9E-04*	*1.5E-04*
TEQ Summation**														
(mg/kg)	***TEQs (ND=0; EMPC=EMPC)***	2.0E-05	2.0E-05	5.0E-05	5.0E-05	2.0E-05	N/A		***1.8E-05***	*5.1E-05*	*1.8E-04*	*2.4E-05*	*3.0E-04*	*2.2E-04*
	TEQs (ND=DL/2; EMPC=EMPC)	2.0E-05	2.0E-05	5.0E-05	5.0E-05	2.0E-05	N/A		***1.9E-05***	*5.1E-05*	*1.8E-04*	*2.4E-05*	*3.0E-04*	*2.2E-04*
Metals														
(mg/kg)	Antimony	20	20	30	30	20	N/A		4.4 U	4.3 U	**7.1**	4.7 U	4.9 U	4.9 U
	Arsenic	20	20	20	20	20	N/A		2.8 U	**3.0**	**12**	3.0 U	**8.0**	**3.3**
	Barium	1,000	1,000	3,000	3,000	1,000	N/A		**22**	**130**	**560**	**56**	**810**	**190**
	Beryllium	100	100	200	200	100	N/A		0.28 U	0.27 U	**0.48**	0.30 U	0.31 U	0.31 U
	Cadmium	2	2	30	30	2	N/A		**0.29**	**1.1**	**3.7**	**1.1**	**2.7**	**2.7**
	Chromium	30	30	200	200	30	N/A		**4.9**	**10**	**33**	**11**	**97**	**47**
	Lead	300	300	300	300	300	N/A		**87**	**280**	**770**	**220**	**1,900**	**320**
	Nickel	20	20	700	700	20	N/A		**3.4**	**5.8**	**21**	**7.3**	**29**	**25**

Summary of Analytical Results for Soil Samples -- 2010
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte							Area Code:	4		8		
								Sample ID:	HF-40			HG-2	
								Sample Depth (ft.):	0-1	1-3	3-5	0-1	1-3	5-7
								Sample Date:	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1*	TSCA							
	Selenium	400	400	800	800	400	N/A		5.5 U	5.4 U	6.2 U	5.9 U	6.1 U	6.2 U
	Silver	100	100	200	200	100	N/A		0.55 U	0.54 U	0.62 U	0.59 U	0.61 U	0.62 U
	Thallium	8	8	60	60	8	N/A		3.3 U	3.2 U	3.7 U	3.6 U	3.7 U	3.7 U
	Vanadium	600	600	1,000	1,000	600	N/A		**8.0**	**6.4**	**19**	**12**	**60**	**28**
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A		**41**	**150**	**580**	**77**	**580**	**340**
	Mercury	20	20	30	30	20	N/A		**0.058**	**0.098**	**0.24**	**0.085**	**1.6**	**0.15**

Notes:

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).

EMPC - Estimated Maximum Possible Concentration. An EMPC represents an upper bound on a congener concentration when all criteria for detection of the congener were not met. This value represents the theoretical maximum possible content of dioxins and furans in the sample.

NA - Sample not analyzed for the listed analyte.

N/A - Not applicable.

NS - No MassDEP standards exist for this analyte.

U - Compound was not detected at specified quantitation limit. When this happens, the result is referred to as a "non-detect," or "ND."

Values in **Bold** indicate the compound was detected.

Values shown in Bold and shaded type exceed one or more of the listed MassDEP Method 1 standards.

Values shown in Bold and shaded type exceed TSCA but are less than the listed Method 1 standards.

PAHs - Polynuclear Aromatic Hydrocarbons.

PCBs - Polychlorinated Biphenyls.

RC - Reportable Concentration.

TSCA - Toxic Substances Control Act criteria.

TEQ – the Toxic Equivalent concentration (TEQ) for each sample. It is calculated by summing concentration data for all dioxin, furan, and PCB congeners that are believed to harm human health in the same way as the congener commonly referred to as dioxin (2,3,7,8-tetrachlorodibenzo-p-dioxin). These congeners are sometimes referred to as "dioxin-like." See the TRC memorandum for additional details.

TEQ is calculated for each sample using Toxic Equivalency Factors (TEFs) for each dioxin-like congener defined by MassDEP and the World Health Organization. TEFs are used to mathematically change concentrations of the individual congeners into a single equivalent concentration of dioxin. EMPCs were included in TEQ estimates to avoid underestimating exposure to dioxin-like congeners. Results below detection limits, or "non-detects" (NDs), were included as either ½ the detection limit (referred to as "ND= DL/2") or by setting the concentration to 0 (referred to as "ND=0"). TEQs change only very slightly when these two different assumptions were used for results below detection limits. The higher TEQ (calculated using the ND=DL/2 assumption) was used to estimate the risk from dioxin-like congeners.

(a) - Calculated by summation of PCB homolog groups.

(b) - Calculated by summation of individual congeners.

* - For reference purposes only.

** - Sum of Dioxin-like PCB Congeners TEQ and Dioxins TEQ.

Summary of Analytical Results for Soil Samples -- 2010
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte							
							Area Code:	8
							Sample ID:	HG-2
							Sample Depth (ft.):	5-7
							Sample Date:	4/15/2010
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA	
VOCs								
(mg/kg)	1,1,1,2-Tetrachloroethane	0.1	7	0.1	100	0.1	N/A	0.084 U
	1,1,1-Trichloroethane	500	500	600	1,000	30	N/A	0.084 U
	1,1,2,2-Tetrachloroethane	0.02	0.8	0.02	10	0.005	N/A	0.042 U
	1,1,2-Trichloroethane	2	4	2	60	0.1	N/A	0.084 U
	1,1-Dichloroethane	5	500	5	1,000	0.4	N/A	0.084 U
	1,1-Dichloroethylene	40	500	40	1,000	3	N/A	0.084 U
	1,1-Dichloropropene	NS	NS	NS	NS	0.01[3]	N/A	0.17 U
	1,2,3-Trichlorobenzene	NS	NS	NS	NS	NS	N/A	0.42 U
	1,2,3-Trichloropropane	NS	NS	NS	NS	100	N/A	0.17 U
	1,2,4-Trichlorobenzene	70	500	70	900	2	N/A	0.33 U
	1,2,4-Trimethylbenzene	100[1]	100[1]	500[1]	500[1]	1,000	N/A	0.084 U
	1,2-Dibromo-3-chloropropane (DBCP)	NS	NS	NS	NS	10	N/A	0.42 U
	1,2-Dibromoethane (EDB)	0.1	0.7	0.1	4	0.1	N/A	0.042 U
	1,2-Dichlorobenzene	30	300	30	300	9	N/A	0.084 U
	1,2-Dichloroethane	0.1	10	0.1	90	0.1	N/A	0.084 U
	1,2-Dichloropropane	0.1	10	0.1	100	0.1	N/A	0.084 U
	1,3,5-Trimethylbenzene	100[1]	100[1]	500[1]	500[1]	10	N/A	0.084 U
	1,3-Dichlorobenzene	40	100	40	500	1	N/A	0.084 U
	1,3-Dichloropropane	NS	NS	NS	NS	500	N/A	0.042 U
	1,4-Dichlorobenzene	4	50	4	300	0.7	N/A	0.084 U
	1,4-Dioxane	6	70	6	500	0.2	N/A	17 U
	2,2-Dichloropropane	NS	NS	NS	NS	0.1[2]	N/A	0.084 U
	2-Butanone (MEK)	50	400	50	400	4	N/A	1.7 U
	2-Chlorotoluene	NS	NS	NS	NS	100	N/A	0.084 U
	2-Hexanone (MBK)	NS	NS	NS	NS	100	N/A	0.84 U
	4-Chlorotoluene	NS	NS	NS	NS	100	N/A	0.084 U
	4-Methyl-2-pentanone (MIBK)	50	400	50	400	0.4	N/A	0.84 U
	Acetone	50	400	50	400	6	N/A	4.2 U
	Benzene	30	30	200	200	2	N/A	0.084 U
	Bromobenzene	NS	NS	NS	NS	100	N/A	0.084 U
	Bromochloromethane	NS	NS	NS	NS	NS	N/A	0.084 U
	Bromodichloromethane	0.1	20	0.1	100	0.1	N/A	0.084 U
	Bromoform	1	200	1	800	0.1	N/A	0.17 U
	Bromomethane	0.5	30	0.5	30	0.5	N/A	0.17 U
	Carbon Disulfide	NS	NS	NS	NS	100	N/A	0.84 U
	Carbon Tetrachloride	5	10	5	60	5	N/A	0.084 U
	Chlorobenzene	3	100	3	100	1	N/A	0.084 U
	Chlorodibromomethane	0.03	20	0.03	100	0.005	N/A	0.042 U
	Chloroethane	NS	NS	NS	NS	100	N/A	0.17 U
	Chloroform	0.3	400	0.3	800	0.3	N/A	0.17 U
	Chloromethane	NS	NS	NS	NS	100	N/A	0.17 U
	cis-1,2-Dichloroethylene	0.4	100	0.4	500	0.3	N/A	0.084 U
	cis-1,3-Dichloropropene	0.4[4]	9[4]	0.4[4]	70[4]	0.01[4]	N/A	0.042 U
	Dibromomethane	NS	NS	NS	NS	500	N/A	0.084 U
	Dichlorodifluoromethane (Freon 12)	NS	NS	NS	NS	1,000	N/A	0.17 U
	Diethyl Ether	NS	NS	NS	NS	100	N/A	0.17 U
	Diisopropyl Ether (DIPE)	NS	NS	NS	NS	100	N/A	0.042 U
	Ethylbenzene	500	500	1,000	1,000	40	N/A	0.084 U
	Hexachlorobutadiene	6	6	90	90	6	N/A	0.084 U
	Isopropylbenzene (Cumene)	100[1]	100[1]	500[1]	500[1]	1,000	N/A	0.084 U
	m+p Xylene	300	500	300	1,000	300	N/A	0.17 U
	Methyl tert-Butyl Ether (MTBE)	100	100	100	500	0.1	N/A	0.084 U
	Methylene Chloride	20	200	20	900	0.1	N/A	0.42 U
	Naphthalene	40	500	40	1,000	4	N/A	0.33 U
	n-Butylbenzene	100[1]	100[1]	500[1]	500[1]	100[1]	N/A	0.17 U
	n-Propylbenzene	100[1]	100[1]	500[1]	500[1]	100	N/A	0.084 U
	o-Xylene	300	500	300	1,000	300	N/A	0.084 U

Summary of Analytical Results for Soil Samples -- 2010
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte	Area Code:						8	
		Sample ID:						HG-2	
		Sample Depth (ft.):						5-7	
		Sample Date:						4/15/2010	
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA		
	p-Isopropyltoluene (p-Cymene)	100(1)	100(1)	500(1)	500(1)	100(1)	N/A	**1.2**	
	sec-Butylbenzene	100(1)	100(1)	500(1)	500(1)	100(1)	N/A	0.084	U
	Styrene	4	30	4	200	3	N/A	0.084	U
	tert-Amyl Methyl Ether (TAME)	NS	NS	NS	NS	NS	N/A	0.042	U
	tert-Butyl Ethyl Ether (TBEE)	NS	NS	NS	NS	NS	N/A	0.042	U
	tert-Butylbenzene	100(1)	100(1)	500(1)	500(1)	100(1)	N/A	0.084	U
	Tetrachloroethylene	10	30	10	200	1	N/A	0.084	U
	Tetrahydrofuran	NS	NS	NS	NS	500	N/A	0.84	U
	Toluene	500	500	1,000	1,000	30	N/A	0.084	U
	trans-1,2-Dichloroethylene	1	500	1	1,000	1	N/A	0.084	U
	trans-1,3-Dichloropropene	0.4(4)	9(4)	0.4(4)	70(4)	0.01(4)	N/A	0.042	U
	Trichloroethylene	2	90	2	700	0.3	N/A	0.084	U
	Trichlorofluoromethane (Freon 11)	NS	NS	NS	NS	1,000	N/A	0.17	U
	Vinyl Chloride	0.6	0.6	0.7	4	0.6	N/A	0.17	U
VPH									
(mg/kg)	Benzene	30	30	200	200	2	N/A	0.088	U
	C5-C8 Aliphatics	100	100	500	500	100	N/A	18	U
	C9-C10 Aromatics	100	100	500	500	100	N/A	**51**	
	C9-C12 Aliphatics	1,000	1,000	3,000	3,000	1,000	N/A	**25**	
	Ethylbenzene	500	500	1,000	1,000	40	N/A	0.088	U
	m+p Xylene	300	500	300	1,000	300	N/A	0.18	U
	Methyl tert-Butyl Ether (MTBE)	100	100	100	500	0.1	N/A	0.088	U
	Naphthalene	40	500	40	1,000	4	N/A	0.88	U
	o-Xylene	300	500	300	1,000	300	N/A	0.088	U
	Toluene	500	500	1,000	1,000	30	N/A	0.088	U
EPH									
(mg/kg)	C11-C22 Aromatics	1,000	1,000	3,000	3,000	1,000	N/A	**120**	
	C19-C36 Aliphatics	3,000	3,000	5,000	5,000	3,000	N/A	**160**	
	C9-C18 Aliphatics	1,000	1,000	3,000	3,000	1,000	N/A	62	U
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	0.62	U
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	0.62	U
	Acenaphthylene	600	10	600	10	1	N/A	0.62	U
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	**1.2**	
	Benzo(a)anthracene	7	7	40	40	7	N/A	**2.5**	
	Benzo(a)pyrene	2	2	4	4	2	N/A	**2.3**	
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	**3.2**	
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	**1.6**	
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	**1.2**	
	Chrysene	70	70	400	400	70	N/A	**2.9**	
	Dibenz(a,h)anthracene	0.7	0.7	4	4	0.7	N/A	0.62	U
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	**5.7**	
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	**0.74**	
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	**1.7**	
	Naphthalene	40	500	40	1,000	4	N/A	0.62	U
	Phenanthrene	500	500	1,000	1,000	10	N/A	**4.7**	
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	**5.4**	

Notes:

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).

NA - Sample not analyzed for the listed analyte.

N/A - Not applicable.

NS - No MassDEP standards exist for this analyte.

U - Compound was not detected at specified quantitation limit.

Values in Bold indicate the compound was detected.

Values shown in Bold and shaded type exceed one or more of the listed MassDEP Method 1 standards.

VOCs - Volatile Organic Compounds.

VPH - Volatile Petroleum Hydrocarbons.

EPH - Extractable Petroleum Hydrocarbons.

PAHs - Polynuclear Aromatic Hydrocarbons.

PCBs - Polychlorinated Biphenyls.

RC - Reportable Concentration.

TSCA - Toxic Substances Control Act criteria.

(1) - MCP Method 1 standards and RC for C9-C10 aromatics used.

(2) - MCP RC for Dichloropropane used.

(3) - MCP RC for Dichloropropene used.

(4) - MCP Method 1 standards and RC for 1,3-Dichloropropene used.

* - For reference purposes only.

Summary of Analytical Dioxins Results for Soil Samples - April 2010
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte	Exposure Area Code:						5				6		
		Sample ID:						HB-26				HF-14		
		Sample Depth (ft.):						0-1	1-3	1-3	3-5	0-1	1-3	3-4
		Sample Date:						4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1*	Backgound							
Dioxins														
(mg/kg)	2378-TCDD	NS	NS	NS	NS	NS	NS	**4.79E-07**	**1.63E-06 EMPC**	**9.58E-07**	**2.98E-07 J**	1.83E-07 U	1.94E-07 U	**1.24E-06**
	12378-PeCDD	NS	NS	NS	NS	NS	NS	**9.14E-07 J**	**1.00E-05**	**4.79E-06**	**9.08E-07 J**	**4.06E-07 J**	**4.81E-07 J**	**3.41E-06**
	123478-HxCDD	NS	NS	NS	NS	NS	NS	**9.98E-07 J**	**1.32E-05**	**6.23E-06**	**1.74E-06 J**	**5.32E-07 J**	**6.38E-07 J**	**3.32E-06**
	123678-HxCDD	NS	NS	NS	NS	NS	NS	**5.04E-06**	**2.39E-05**	**1.83E-05**	**1.41E-05**	**1.48E-06 J**	**2.36E-06**	**2.34E-05**
	123789-HxCDD	NS	NS	NS	NS	NS	NS	**2.65E-06**	**1.53E-05**	**1.12E-05**	**2.85E-06**	**1.42E-06 J**	**1.39E-06 J**	**1.03E-05**
	1234678-HpCDD	NS	NS	NS	NS	NS	NS	**1.50E-04**	**3.84E-04**	**3.49E-04**	**2.48E-04**	**3.48E-05**	**4.99E-05**	**5.80E-04**
	OCDD	NS	NS	NS	NS	NS	NS	**1.83E-03**	**2.50E-03**	**2.59E-03**	**3.19E-03**	**5.56E-04**	**6.10E-04**	**7.05E-03**
	2378-TCDF	NS	NS	NS	NS	NS	NS	**1.06E-05**	**3.59E-05**	**2.99E-05**	**8.26E-06**	**2.30E-06**	**8.78E-06**	**1.76E-05**
	12378-PeCDF	NS	NS	NS	NS	NS	NS	**1.65E-06 J**	**1.62E-05**	**7.76E-06**	**2.92E-06**	**5.66E-07 J**	**6.60E-07 J, EMPC**	**5.99E-06**
	23478-PeCDF	NS	NS	NS	NS	NS	NS	**9.62E-06**	**6.29E-05**	**5.05E-05**	**1.05E-05**	**1.80E-06 J**	**2.98E-06**	**3.36E-05**
	123478-HxCDF	NS	NS	NS	NS	NS	NS	**6.34E-06**	**3.74E-05**	**3.40E-05**	**9.00E-06**	**1.46E-06 J**	**2.96E-06**	**1.96E-05**
	123678-HxCDF	NS	NS	NS	NS	NS	NS	**3.95E-06**	**2.98E-05**	**2.18E-05**	**6.00E-06**	**9.20E-07 J**	**1.87E-06 J**	**1.15E-05**
	234678-HxCDF	NS	NS	NS	NS	NS	NS	**6.01E-06**	**4.03E-05**	**3.00E-05**	**9.59E-06**	**1.28E-06 J**	**2.00E-06 J**	**1.93E-05**
	123789-HxCDF	NS	NS	NS	NS	NS	NS	4.53E-07 U	9.33E-07 U	6.11E-07 U	8.76E-07 U	2.44E-07 U	2.48E-07 U	2.01E-07 U
	1234678-HpCDF	NS	NS	NS	NS	NS	NS	**5.87E-05**	**1.93E-04**	**1.89E-04**	**7.92E-04**	**1.62E-05**	**1.76E-05**	**1.50E-04**
	1234789-HpCDF	NS	NS	NS	NS	NS	NS	**2.55E-06**	**1.37E-05**	**1.59E-05**	**6.72E-06**	**4.44E-07 J, EMPC**	**1.45E-06 J**	**1.19E-05**
	OCDF	NS	NS	NS	NS	NS	NS	**5.99E-05**	**2.67E-04**	**3.33E-04**	**3.51E-04**	**1.88E-05**	**2.48E-05**	**3.48E-04**
	Total TCDD	NS	NS	NS	NS	NS	NS	**7.63E-06 EMPC**	**6.58E-05 EMPC**	**2.96E-05 EMPC**	**5.37E-06 EMPC**	**1.20E-06 EMPC**	**1.75E-06 EMPC**	**2.60E-05 EMPC**
	Total PeCDD	NS	NS	NS	NS	NS	NS	**1.77E-05 EMPC**	**1.53E-04 EMPC**	**6.72E-05 EMPC**	**3.21E-05 EMPC**	**3.88E-06 EMPC**	**8.24E-06 EMPC**	**6.98E-05 EMPC**
	Total HxCDD	NS	NS	NS	NS	NS	NS	**4.96E-05 EMPC**	**3.60E-04 EMPC**	**2.04E-04 EMPC**	**2.06E-04 EMPC**	**1.67E-05 EMPC**	**2.84E-05 EMPC**	**2.43E-04 EMPC**
	Total HpCDD	NS	NS	NS	NS	NS	NS	**3.21E-04 EMPC**	**8.62E-04 EMPC**	**8.66E-04 EMPC**	**4.42E-04 EMPC**	**7.66E-05 EMPC**	**1.04E-04 EMPC**	**1.22E-03 EMPC**
	Total TCDF	NS	NS	NS	NS	NS	NS	**7.96E-05 EMPC**	**4.55E-04 EMPC**	**3.24E-04 EMPC**	**9.11E-05 EMPC**	**2.09E-05 EMPC**	**5.04E-05 EMPC**	**2.12E-04 EMPC**
	Total PeCDF	NS	NS	NS	NS	NS	NS	**1.03E-04 EMPC**	**6.20E-04 EMPC**	**4.60E-04 EMPC**	**1.08E-04 EMPC**	**2.60E-05 EMPC**	**4.45E-05 EMPC**	**2.99E-04 EMPC**
	Total HxCDF	NS	NS	NS	NS	NS	NS	**9.32E-05 EMPC**	**5.43E-04 EMPC**	**4.49E-04 EMPC**	**4.47E-04 EMPC**	**1.90E-05 EMPC**	**3.33E-05 EMPC**	**3.04E-04 EMPC**
	Total HpCDF	NS	NS	NS	NS	NS	NS	**1.24E-04 EMPC**	**4.53E-04 EMPC**	**4.69E-04 EMPC**	**1.50E-03 EMPC**	**3.14E-05 EMPC**	**4.78E-05 EMPC**	**4.88E-04 EMPC**
	TEQs (ND=0; EMPC=EMPC)	2.0E-05	2.0E-05	5.0E-05	5.0E-05	2.0E-05	2.2E-05	***4.28E-05***	***1.81E-04***	***1.45E-04***	***1.43E-04***	***1.04E-05***	***1.58E-05***	***1.48E-04***
	TEQs (ND=DL/2; EMPC=EMPC)	2.0E-05	2.0E-05	5.0E-05	5.0E-05	2.0E-05	2.2E-05	***4.29E-05***	***1.81E-04***	***1.46E-04***	***1.43E-04***	***1.05E-05***	***1.59E-05***	***1.48E-04***

Notes:

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).

EMPC - Estimated Maximum Possible Concentration. An EMPC represents an upper bound on a congener concentration when all criteria for detection of the congener were not met. This value represents the theoretical maximum possible content of dioxins and furans in the sample.

J - Estimated value.

NS - No MassDEP standards exist for this analyte.

U - Compound was not detected at specified quantitation limit. When this happens, the result is referred to as a "non-detect," or "ND."

Values in **Bold** indicate the compound was detected.

Values shown in Bold and shaded type exceed one or more of the listed MassDEP Method 1 standards.

TEQ – the Toxic Equivalent concentration (TEQ) for each sample. It is calculated by summing concentration data for all dioxin, furan, and PCB congeners that are believed to harm human health in the same way as the congener commonly referred to as dioxin (2,3,7,8-tetrachlorodibenzo-p-dioxin). These congeners are sometimes referred to as "dioxin-like." See the TRC memorandum for additional details.

TEQ is calculated for each sample using Toxic Equivalency Factors (TEFs) for each dioxin-like congener defined by MassDEP and the World Health Organization. TEFs are used to mathematically change concentrations of the individual congeners into a single equivalent concentration of dioxin. EMPCs were included in TEQ estimates to avoid underestimating exposure to dioxin-like congeners. Results below detection limits, or "non-detects" (NDs), were included as either ½ the detection limit (referred to as "ND= DL/2") or by setting the concentration to 0 (referred to as "ND=0"). TEQs change only very slightly when these two different assumptions were used for results below detection limits. The higher TEQ (calculated using the ND=DL/2 assumption) was used to estimate the risk from dioxin-like congeners.

* - For reference purposes only.

Summary of Analytical Dioxins Results for Soil Samples - April 2010
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte	Exposure Area Code:						4			4			8		
		Sample ID:						HF-31D			HF-40			HG-2		
		Sample Depth (ft.):						0-1	1-3	4-6	0-1	1-3	3-5	0-1	1-3	5-7
		Sample Date:						4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1*	Backgound									
Dioxins																
(mg/kg)	2378-TCDD	NS	NS	NS	NS	NS	NS	**1.16E-07 J, EMPC**	**2.71E-07 J, EMPC**	**1.17E-07 J, EMPC**	2.17E-07 U	**1.51E-07 J, EMPC**	**1.10E-06**	**2.02E-07 J, EMPC**	**1.54E-06**	**7.22E-07 EMPC**
	12378-PeCDD	NS	NS	NS	NS	NS	NS	**4.97E-07 J**	**8.18E-07 J**	**8.09E-07 J**	2.59E-07 U	**6.54E-07 J, EMPC**	**4.52E-06**	**5.96E-07 J, EMPC**	**4.03E-06 J**	**3.18E-06 J**
	123478-HxCDD	NS	NS	NS	NS	NS	NS	2.18E-07 U	**8.91E-07 J**	**4.87E-07 J, EMPC**	**4.77E-07 J**	**5.66E-07 J**	**2.49E-06**	**5.91E-07 J, EMPC**	**5.27E-06**	**3.30E-06**
	123678-HxCDD	NS	NS	NS	NS	NS	NS	**1.39E-06 J, EMPC**	**3.28E-06**	**1.93E-06 J**	**1.16E-06 J**	**2.71E-06**	**1.28E-05**	**2.57E-06**	**3.40E-05**	**2.12E-05**
	123789-HxCDD	NS	NS	NS	NS	NS	NS	**8.75E-07 J**	**1.72E-06 J**	**1.30E-06 J**	**8.42E-07 J**	**1.16E-06 J**	**6.68E-06**	**1.97E-06 J**	**1.34E-05**	**1.26E-05**
	1234678-HpCDD	NS	NS	NS	NS	NS	NS	**3.16E-05**	**4.89E-05**	**1.49E-05**	**2.13E-05**	**3.09E-05**	**1.20E-04**	**5.78E-05**	**8.91E-04**	**7.42E-04**
	OCDD	NS	NS	NS	NS	NS	NS	**5.86E-04**	**6.99E-04**	**1.09E-04**	**3.44E-04**	**4.16E-04**	**1.07E-03**	**6.88E-04**	**8.38E-03**	**4.76E-03**
	2378-TCDF	NS	NS	NS	NS	NS	NS	**4.57E-06**	**7.34E-06**	**3.63E-06**	**5.37E-06**	**2.38E-05**	**4.07E-05**	**6.53E-06**	**6.00E-05**	**3.13E-05**
	12378-PeCDF	NS	NS	NS	NS	NS	NS	**6.53E-07 J**	**1.99E-06 J**	**1.85E-06 J**	**1.20E-06 J**	**3.25E-06**	**1.36E-05**	**1.49E-06 J**	**1.06E-05**	**8.77E-06**
	23478-PeCDF	NS	NS	NS	NS	NS	NS	**3.94E-06**	**8.68E-06**	**1.29E-05**	**3.01E-06**	**1.69E-05**	**1.13E-04**	**4.04E-06**	9.88E-07 U	**2.69E-05**
	123478-HxCDF	NS	NS	NS	NS	NS	NS	**1.84E-06 J**	**4.87E-06**	**3.87E-06**	**3.91E-06**	**4.11E-05**	**3.53E-05**	**3.15E-06**	**3.33E-05**	**1.88E-05**
	123678-HxCDF	NS	NS	NS	NS	NS	NS	**1.52E-06 J**	**3.40E-06**	**3.45E-06**	**2.38E-06**	**2.05E-05**	**2.88E-05**	**2.22E-06 J**	**1.95E-05**	**1.15E-05**
	234678-HxCDF	NS	NS	NS	NS	NS	NS	**2.63E-06**	**4.81E-06**	**6.75E-06**	**2.56E-06**	**2.09E-05**	**5.49E-05**	**2.44E-06 J**	**1.90E-05**	**1.29E-05**
	123789-HxCDF	NS	NS	NS	NS	NS	NS	2.47E-07 U	3.52E-07 U	2.84E-07 U	3.10E-07 U	3.63E-07 U	2.02E-07 U	2.87E-07 U	4.79E-07 U	5.10E-07 U
	1234678-HpCDF	NS	NS	NS	NS	NS	NS	**2.35E-05**	**5.11E-05**	**2.09E-05**	**2.10E-05**	**9.39E-05**	**2.02E-04**	**2.54E-05**	**2.33E-04**	**1.10E-04**
	1234789-HpCDF	NS	NS	NS	NS	NS	NS	**7.93E-07 J, EMPC**	**2.06E-06 J**	**1.15E-06 J**	**1.65E-06 J, EMPC**	**2.65E-05**	**1.31E-05**	**1.35E-06 J**	**1.90E-05**	**7.70E-06**
	OCDF	NS	NS	NS	NS	NS	NS	**2.34E-05**	**4.40E-05**	**9.84E-06**	**1.57E-05**	**5.27E-05**	**1.41E-04**	**4.98E-05**	**7.61E-04**	**2.35E-04**
	Total TCDD	NS	NS	NS	NS	NS	NS	**1.60E-06 EMPC**	**6.17E-06 EMPC**	**5.06E-06 EMPC**	**2.35E-06 EMPC**	**5.45E-06 EMPC**	**2.24E-05 EMPC**	**5.14E-06 EMPC**	**3.40E-05 EMPC**	**1.84E-05 EMPC**
	Total PeCDD	NS	NS	NS	NS	NS	NS	**5.42E-06 EMPC**	**1.42E-05 EMPC**	**1.03E-05 EMPC**	**3.54E-06 EMPC**	**1.53E-05 EMPC**	**6.45E-05 EMPC**	**1.18E-05 EMPC**	**6.98E-05 EMPC**	**4.34E-05 EMPC**
	Total HxCDD	NS	NS	NS	NS	NS	NS	**1.66E-05 EMPC**	**3.10E-05 EMPC**	**1.77E-05 EMPC**	**1.26E-05 EMPC**	**2.43E-05 EMPC**	**1.27E-04 EMPC**	**3.59E-05 EMPC**	**2.64E-04 EMPC**	**2.06E-04 EMPC**
	Total HpCDD	NS	NS	NS	NS	NS	NS	**6.14E-05 EMPC**	**9.41E-05 EMPC**	**2.75E-05 EMPC**	**4.30E-05 EMPC**	**5.87E-05 EMPC**	**2.13E-04 EMPC**	**1.13E-04 EMPC**	**1.65E-03 EMPC**	**1.32E-03 EMPC**
	Total TCDF	NS	NS	NS	NS	NS	NS	**3.14E-05 EMPC**	**7.87E-05 EMPC**	**5.97E-05 EMPC**	**3.93E-05 EMPC**	**1.42E-04 EMPC**	**5.79E-04 EMPC**	**5.37E-05 EMPC**	**4.17E-04 EMPC**	**3.07E-04 EMPC**
	Total PeCDF	NS	NS	NS	NS	NS	NS	**4.43E-05 EMPC**	**8.57E-05 EMPC**	**9.63E-05 EMPC**	**4.47E-05 EMPC**	**1.84E-04 EMPC**	**9.50E-04 EMPC**	**4.73E-05 EMPC**	**3.07E-04 EMPC**	**2.36E-04 EMPC**
	Total HxCDF	NS	NS	NS	NS	NS	NS	**3.73E-05 EMPC**	**7.82E-05 EMPC**	**8.02E-05 EMPC**	**3.55E-05 EMPC**	**2.54E-04 EMPC**	**7.60E-04 EMPC**	**3.81E-05 EMPC**	**3.75E-04 EMPC**	**2.10E-04 EMPC**
	Total HpCDF	NS	NS	NS	NS	NS	NS	**4.73E-05 EMPC**	**1.03E-04 EMPC**	**3.74E-05 EMPC**	**3.94E-05 EMPC**	**2.20E-04 EMPC**	**4.26E-04 EMPC**	**5.87E-05 EMPC**	**8.31E-04 EMPC**	**3.19E-04 EMPC**
	TEQs (ND=0; EMPC=EMPC)	2.0E-05	2.0E-05	5.0E-05	5.0E-05	2.0E-05	2.2E-05	***1.36E-05***	***2.66E-05***	***2.01E-05***	***1.18E-05***	***5.06E-05***	***1.80E-04***	***1.91E-05***	***1.91E-04***	***1.48E-04***
	TEQs (ND=DL/2; EMPC=EMPC)	2.0E-05	2.0E-05	5.0E-05	5.0E-05	2.0E-05	2.2E-05	***1.37E-05***	***2.67E-05*** *	***2.01E-05***	***1.20E-05***	***5.06E-05***	***1.80E-04*** *	***1.91E-05***	***1.91E-04***	***1.48E-04***

Notes:

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).

EMPC - Estimated Maximum Possible Concentration. An EMPC represents an upper bound on a congener concentration when all criteria for detection of the congener were not met. This value represents the theoretical maximum possible content of dioxins and furans in the sample.

J - Estimated value.

NS - No MassDEP standards exist for this analyte.

U - Compound was not detected at specified quantitation limit. When this happens, the result is referred to as a "non-detect," or "ND."

Values in **Bold** indicate the compound was detected.

Values shown in Bold and shaded type exceed one or more of the listed MassDEP Method 1 standards.

TEQ – the Toxic Equivalent concentration (TEQ) for each sample. It is calculated by summing concentration data for all dioxin, furan, and PCB congeners that are believed to harm human health in the same way as the congener commonly referred to as dioxin (2,3,7,8-tetrachlorodibenzo-p-dioxin). These congeners are sometimes referred to as "dioxin-like." See the TRC memorandum for additional details.

TEQ is calculated for each sample using Toxic Equivalency Factors (TEFs) for each dioxin-like congener defined by MassDEP and the World Health Organization. TEFs are used to mathematically change concentrations of the individual congeners into a single equivalent concentration of dioxin. EMPCs were included in TEQ estimates to avoid underestimating exposure to dioxin-like congeners. Results below detection limits, or "non-detects" (NDs), were included as either ½ the detection limit (referred to as "ND= DL/2") or by setting the concentration to 0 (referred to as "ND=0"). TEQs change only very slightly when these two different assumptions were used for results below detection limits. The higher TEQ (calculated using the ND=DL/2 assumption) was used to estimate the risk from dioxin-like congeners.

* - For reference purposes only.

Summary of Analytical PCB Congener Results for Soil Samples -- April 2010
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte							Area Code:	5			6		
								Sample ID:	HB-26			HF-14		
								Sample Depth (ft.):	0-1	1-3	1-3	3-5	0-1	1-3	3-4
								Sample Date:	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1*	TSCA								
PCB Congeners															
(mg/kg)	PCB-1 2-MoCB	NS	NS	NS	NS	NS	N/A		**4.74E-06**	**1.33E-04 J**	**3.87E-05 J**	**3.37E-04**	**3.84E-06**	**4.28E-06**	**3.02E-05**
	PCB-2 3-MoCB	NS	NS	NS	NS	NS	N/A		**5.82E-06**	**1.20E-04 J**	**1.20E-04 J**	**8.59E-05**	**2.07E-06**	**5.06E-06**	**2.89E-05**
	PCB-3 4-MoCB	NS	NS	NS	NS	NS	N/A		**1.01E-05**	**1.42E-04 J**	**1.96E-04 J**	**4.43E-04**	**6.59E-06**	**8.80E-06**	**3.74E-05**
	PCB-4 22'-DiCB	NS	NS	NS	NS	NS	N/A		**1.02E-05**	**2.05E-04 J**	**4.48E-05 J**	**1.76E-04**	**1.26E-05**	**6.99E-06**	**2.52E-05**
	PCB-10 26-DiCB	NS	NS	NS	NS	NS	N/A		**5.89E-07 J**	**7.04E-06 J**	3.68E-06 UJ	**1.07E-05 J**	**5.07E-07 J**	5.90E-07 U	2.72E-06 U
	PCB-9 25-DiCB	NS	NS	NS	NS	NS	N/A		**1.47E-06 J**	**3.06E-05 J**	**1.19E-05 J**	**6.12E-05**	**2.50E-06**	8.45E-07 U	**4.19E-06 J**
	PCB-7 24-DiCB	NS	NS	NS	NS	NS	N/A		**9.82E-07 J**	**1.47E-05 J**	**9.18E-06 J**	**4.98E-05**	**1.68E-06**	5.81E-07 U	**3.61E-06 J**
	PCB-6 23'-DiCB	NS	NS	NS	NS	NS	N/A		**6.47E-06**	**9.03E-05 J**	**5.22E-05 J**	**1.50E-04**	**3.13E-05**	**3.78E-06**	**1.70E-05 J**
	PCB-5 23-DiCB	NS	NS	NS	NS	NS	N/A		**6.48E-07 J**	**8.54E-06 J**	**4.63E-06 J**	**1.98E-05**	**7.25E-07 J**	6.12E-07 U	4.08E-06 U
	PCB-8 24'-DiCB	NS	NS	NS	NS	NS	N/A		**2.74E-05**	**1.92E-04 J**	**1.73E-04 J**	**8.12E-04**	**5.52E-05**	**1.38E-05**	**6.00E-05**
	PCB-14 35-DiCB	NS	NS	NS	NS	NS	N/A		5.41E-07 U	**2.35E-06 J**	**8.44E-06 J**	6.30E-06 U	3.27E-07 U	5.63E-07 U	**1.09E-05 J**
	PCB-11 33'-DiCB	NS	NS	NS	NS	NS	N/A		1.97E-05 U	**2.16E-04 J**	**1.75E-04 J**	**2.28E-04**	**4.42E-05**	1.27E-05 U	**1.02E-04**
	PCB-13/12 34'/34-DiCB	NS	NS	NS	NS	NS	N/A		**8.38E-06**	**1.35E-04 J**	**1.62E-04 J**	**2.13E-04**	**4.36E-05**	**6.82E-06**	**2.63E-05 J**
	PCB-15 44'-DiCB	NS	NS	NS	NS	NS	N/A		**9.15E-05**	**4.47E-04 J**	**5.63E-04 J**	**1.18E-03**	**1.30E-04**	**6.08E-05**	**1.13E-04**
	PCB-19 22'6-TrCB	NS	NS	NS	NS	NS	N/A		**7.42E-06**	**8.25E-05 J**	**2.53E-05 J**	**8.74E-05**	**7.57E-06**	**5.28E-06**	**3.54E-05**
	PCB-30/18 246/22'5-TrCB	NS	NS	NS	NS	NS	N/A		**4.24E-05**	**2.93E-04 J**	**2.18E-04 J**	**1.58E-03**	**6.28E-05**	**2.40E-05**	**9.34E-05**
	PCB-17 22'4-TrCB	NS	NS	NS	NS	NS	N/A		**1.92E-05**	**1.42E-04 J**	**9.86E-05 J**	**9.65E-04**	**3.17E-05**	**1.18E-05**	**3.52E-05**
	PCB-27 23'6-TrCB	NS	NS	NS	NS	NS	N/A		**6.72E-06**	**4.00E-05 J**	**3.25E-05 J**	**7.40E-05**	**5.93E-06**	**3.32E-06**	**1.39E-05**
	PCB-24 236-TrCB	NS	NS	NS	NS	NS	N/A		**9.01E-07**	**5.85E-06 J**	**4.39E-06 J**	**1.06E-05**	**8.69E-07**	**3.97E-07 J**	2.00E-06 U
	PCB-16 22'3-TrCB	NS	NS	NS	NS	NS	N/A		**1.80E-05**	**1.13E-04 J**	**8.69E-05 J**	**3.58E-04**	**2.68E-05**	**1.04E-05**	**3.23E-05 J**
	PCB-32 24'6-TrCB	NS	NS	NS	NS	NS	N/A		**2.11E-05**	**1.06E-04 J**	**1.21E-04 J**	**8.96E-04**	**1.95E-05**	**1.56E-05**	**4.10E-05**
	PCB-34 23'5'-TrCB	NS	NS	NS	NS	NS	N/A		**5.50E-07 J**	**5.07E-06 J**	**1.46E-05 J**	**2.31E-04**	**1.33E-06**	5.37E-07 U	**9.30E-06**
	PCB-23 235-TrCB	NS	NS	NS	NS	NS	N/A		5.22E-07 U	1.47E-06 UJ	3.68E-06 UJ	1.72E-05 U	5.81E-07 U	6.04E-07 U	1.39E-05 U
	PCB-26/29 23'5/245-TrCB	NS	NS	NS	NS	NS	N/A		**6.38E-05**	**5.59E-04 J**	**5.74E-04 J**	**1.10E-03**	**1.21E-04**	**4.12E-05**	1.15E-05 U
	PCB-25 23'4-TrCB	NS	NS	NS	NS	NS	N/A		**2.65E-05**	**1.97E-04 J**	**2.08E-04 J**	**1.16E-03**	**5.50E-05**	**1.32E-05**	**3.53E-05**
	PCB-31 24'5-TrCB	NS	NS	NS	NS	NS	N/A		**1.09E-04**	**7.73E-04 J**	**1.35E-03 J**	**2.80E-02 J**	**2.02E-04**	**1.03E-04**	**1.90E-04**
	PCB-28/20 244'/233'-TrCB	NS	NS	NS	NS	NS	N/A		**1.45E-04**	**9.39E-04 J**	**1.42E-03 J**	**2.11E-02 J**	**2.59E-04**	**1.04E-04**	**2.51E-04**
	PCB-21/33 234/23'4'-TrCB	NS	NS	NS	NS	NS	N/A		**4.68E-05**	**3.32E-04 J**	**4.31E-04 J**	**1.29E-03**	**5.73E-05**	**2.20E-05**	**8.32E-05**
	PCB-22 234'-TrCB	NS	NS	NS	NS	NS	N/A		**3.71E-05**	**2.51E-04 J**	**4.11E-04 J**	**6.47E-04**	**6.01E-05**	**1.88E-05**	**4.59E-05**
	PCB-36 33'5-TrCB	NS	NS	NS	NS	NS	N/A		4.15E-07 U	**5.75E-06 J**	**3.41E-05 J**	1.41E-05 U	4.67E-07 U	4.86E-07 U	1.14E-05 U
	PCB-39 34'5-TrCB	NS	NS	NS	NS	NS	N/A		**2.11E-06 J**	**1.74E-05 J**	**7.10E-05 J**	**1.83E-04**	**2.88E-06**	5.55E-07 U	**4.32E-05**
	PCB-38 345-TrCB	NS	NS	NS	NS	NS	N/A		**9.33E-07 J**	**7.50E-06 J**	**8.93E-06 J**	**2.44E-04**	**7.93E-07 J**	**2.31E-06**	1.35E-05 U
	PCB-35 33'4-TrCB	NS	NS	NS	NS	NS	N/A		**6.49E-06**	**1.10E-04 J**	**1.35E-04 J**	**1.05E-04**	5.28E-07 U	**4.66E-06**	**1.38E-05**
	PCB-37 344'-TrCB	NS	NS	NS	NS	NS	N/A		**1.43E-04**	**8.99E-04 J**	**1.68E-03 J**	**1.70E-03**	**1.65E-04**	**1.14E-04**	**1.60E-04**
	PCB-54 22'66'-TeCB	NS	NS	NS	NS	NS	N/A		**5.83E-07 J**	**8.89E-06 J**	2.99E-06 UJ	**1.22E-05**	**5.24E-07 J**	4.00E-07 U	4.49E-06 U
	PCB-50/53 22'46/22'56'-TeCB	NS	NS	NS	NS	NS	N/A		**9.25E-05**	**4.44E-04 J**	**9.15E-04 J**	**1.74E-02 J**	**1.04E-04**	**1.87E-04**	**5.11E-04**
	PCB-45 22'36-TeCB	NS	NS	NS	NS	NS	N/A		**2.83E-05**	**1.68E-04 J**	**3.20E-04 J**	**2.76E-03 J**	**4.53E-05**	**4.55E-05**	**1.51E-04**
	PCB-51 22'46'-TeCB	NS	NS	NS	NS	NS	N/A		**1.16E-05**	**5.73E-05 J**	**8.28E-05 J**	**4.20E-03 J**	**1.23E-05**	**1.24E-05**	**6.29E-05**
	PCB-46 22'36'-TeCB	NS	NS	NS	NS	NS	N/A		**1.39E-05**	**6.86E-05 J**	**1.32E-04 J**	**1.81E-03**	**1.73E-05**	**1.10E-05**	**1.05E-04**
	PCB-52 22'55'-TeCB	NS	NS	NS	NS	NS	N/A		**5.54E-03 J**	**2.42E-02 J**	**8.62E-02 J**	**8.85E-01 J**	**5.30E-03 J**	**1.18E-02 J**	**8.34E-03 J**
	PCB-73 23'5'6-TeCB	NS	NS	NS	NS	NS	N/A		**7.23E-06**	8.82E-07 UJ	3.88E-06 UJ	7.31E-06 U	3.25E-07 U	**1.08E-05 J**	9.88E-06 U
	PCB-43 22'35-TeCB	NS	NS	NS	NS	NS	N/A		**7.87E-06**	**6.03E-05 J**	**1.67E-04 J**	1.02E-05 U	**2.00E-05**	**1.79E-05**	1.38E-05 U
	PCB-69/49 23'46/22'45'-TeCB	NS	NS	NS	NS	NS	N/A		**1.57E-03**	**7.30E-03 J**	**2.36E-02 J**	**8.02E-01 J**	**2.53E-03 J**	**4.79E-03 J**	**2.57E-03 J**
	PCB-48 22'45-TeCB	NS	NS	NS	NS	NS	N/A		**2.80E-05**	**2.29E-04 J**	**1.30E-03 J**	**7.34E-03 J**	3.67E-07 U	**5.21E-05**	**8.72E-05**
	PCB-44/47/65 ...-TeCB	NS	NS	NS	NS	NS	N/A		**1.95E-03 J**	**9.32E-03 J**	**3.85E-02 J**	**7.96E-01 J**	**2.58E-03 J**	**3.98E-03 J**	**2.92E-03 J**
	PCB-59/62/75 ...-TeCB	NS	NS	NS	NS	NS	N/A		**8.50E-05**	**4.61E-04 J**	**8.91E-04 J**	**3.65E-02 J**	**1.08E-04**	**2.00E-04**	**1.57E-04**
	PCB-42 22'34'-TeCB	NS	NS	NS	NS	NS	N/A		**2.19E-04**	**1.14E-03 J**	**3.63E-03 J**	**1.79E-01 J**	**3.67E-04**	**4.61E-04**	**3.90E-04**
	PCB-41 22'34-TeCB	NS	NS	NS	NS	NS	N/A		**5.68E-06**	**6.90E-05 J**	**2.80E-04 J**	9.59E-06 U	4.20E-07 U	6.44E-07 U	**1.72E-05**
	PCB-71/40 23'4'6/22'33'-TeCB	NS	NS	NS	NS	NS	N/A		**2.81E-04**	**1.36E-03 J**	**6.14E-03 J**	**5.33E-02 J**	**2.74E-04**	**3.88E-04**	**4.62E-04**
	PCB-64 234'6-TeCB	NS	NS	NS	NS	NS	N/A		**9.11E-04**	**6.26E-03 J**	**1.90E-02 J**	**1.08E-01 J**	**6.10E-04**	**1.96E-03 J**	**1.44E-03**
	PCB-72 23'55'-TeCB	NS	NS	NS	NS	NS	N/A		**1.01E-04**	**4.26E-04 J**	**5.55E-04 J**	**5.11E-02 J**	**8.67E-05**	**3.69E-04**	**1.25E-04**
	PCB-68 23'45'-TeCB	NS	NS	NS	NS	NS	N/A		**7.18E-05**	**2.94E-04 J**	**3.73E-04 J**	**5.31E-02 J**	**6.91E-05**	**2.41E-04**	**1.35E-04 J**
	PCB-57 233'5-TeCB	NS	NS	NS	NS	NS	N/A		**5.17E-06**	**4.71E-05 J**	9.35E-05 UJ	**2.31E-04**	1.74E-06 U	1.08E-05 U	3.83E-05 U
	PCB-58 233'5'-TeCB	NS	NS	NS	NS	NS	N/A		**1.65E-05**	**7.94E-05 J**	8.25E-05 UJ	**1.16E-02 J**	1.53E-06 U	9.82E-06 U	**1.35E-04**
	PCB-67 23'45-TeCB	NS	NS	NS	NS	NS	N/A		**1.18E-05**	**1.52E-04 J**	**4.73E-04 J**	**1.16E-03**	**1.56E-05**	8.74E-06 U	**3.50E-05 J**
	PCB-63 234'5-TeCB	NS	NS	NS	NS	NS	N/A		**3.80E-05**	**3.82E-04 J**	**1.92E-03 J**	**3.40E-02 J**	**6.53E-05**	**1.03E-04**	**6.43E-05**
	PCB-61/70/74/76 ...-TeCB	NS	NS	NS	NS	NS	N/A		**3.47E-03 J**	**2.98E-02 J**	**1.74E-01 J**	**8.05E-01 J**	**3.78E-03 J**	**1.08E-02 J**	**6.56E-03 J**
	PCB-66 23'44'-TeCB	NS	NS	NS	NS	NS	N/A		**1.38E-03**	**1.09E-02 J**	**4.49E-02 J**	**6.09E-01 J**	**1.59E-03**	**4.85E-03 J**	**2.71E-03 J**
	PCB-55 233'4-TeCB	NS	NS	NS	NS	NS	N/A		**4.55E-06**	2.38E-05 UJ	8.58E-05 UJ	1.06E-04 U	1.59E-06 U	9.95E-06 U	3.58E-05 U
	PCB-56 233'4'-TeCB	NS	NS	NS	NS	NS	N/A		**4.27E-04**	**3.12E-03 J**	**1.67E-02 J**	**5.49E-02 J**	**3.22E-04**	**1.02E-03**	**6.48E-04**
	PCB-60 2344'-TeCB	NS	NS	NS	NS	NS	N/A		**9.95E-05**	**1.02E-03 J**	8.05E-05 UJ	**1.76E-03**	**9.74E-05**	**1.51E-04**	**1.90E-04**
	PCB-80 33'55'-TeCB	NS	NS	NS	NS	NS	N/A		1.66E-06 U	2.53E-05 UJ	8.87E-05 UJ	1.10E-04 U	1.65E-06 U	1.06E-05 U	3.71E-05 U
	PCB-79 33'45'-TeCB	NS	NS	NS	NS	NS	N/A		**1.51E-04**	**6.54E-04 J**	**3.34E-03 J**	**1.07E-02 J**	**6.38E-05**	**3.40E-04**	**4.03E-04**
	PCB-78 33'45-TeCB	NS	NS	NS	NS	NS	N/A		**4.26E-06**	2.49E-05 UJ	8.57E-05 UJ	1.09E-04 U	1.59E-06 U	1.04E-05 U	3.67E-05 U
	PCB-81 344'5-TeCB	NS	NS	NS	NS	NS	N/A		**1.14E-05**	**6.37E-05 J**	**2.29E-04 J**	1.27E-04 U	**6.64E-06**	1.25E-05 U	4.29E-05 U

Summary of Analytical PCB Congener Results for Soil Samples -- April 2010
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte							Area Code:	5			6		
								Sample ID:	HB-26			HF-14		
								Sample Depth (ft.):	0-1	1-3	1-3	3-5	0-1	1-3	3-4
								Sample Date:	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1*	TSCA								
	PCB-77 33'44'-TeCB	NS	NS	NS	NS	NS	N/A		**1.42E-04**	**1.25E-03 J**	**3.62E-03 J**	**3.68E-03 J**	**1.54E-04**	**1.87E-04**	**2.40E-04**
	PCB-104 22'466'-PeCB	NS	NS	NS	NS	NS	N/A		6.46E-07 U	**3.90E-06 J**	7.23E-06 UJ	**2.71E-04**	3.82E-07 U	**2.78E-06**	7.43E-06 U
	PCB-96 22'366'-PeCB	NS	NS	NS	NS	NS	N/A		**8.41E-05**	**5.13E-04 J**	**1.34E-03 J**	**6.01E-03 J**	**3.54E-05**	**2.64E-04**	**2.75E-04**
	PCB-103 22'45'6-PeCB	NS	NS	NS	NS	NS	N/A		**1.30E-04**	**5.53E-04 J**	**1.63E-03 J**	**4.85E-02 J**	**1.05E-04**	**5.22E-04**	**5.66E-04**
	PCB-94 22'356'-PeCB	NS	NS	NS	NS	NS	N/A		**9.48E-05**	**3.88E-04 J**	**1.51E-03 J**	**1.13E-02 J**	**3.85E-05**	**2.13E-04**	**2.58E-04**
	PCB-95 22'35'6-PeCB	NS	NS	NS	NS	NS	N/A		**1.93E-02 J**	**7.55E-02 J**	**2.72E-01 J**	**1.22E+00 J**	**7.85E-03 J**	**4.20E-02 J**	**5.05E-02 J**
	PCB-100/93 22'44'6/22'356-PeCB	NS	NS	NS	NS	NS	N/A		**1.43E-04**	**5.80E-04 J**	**1.92E-05 U J**	**3.80E-02 J**	**8.43E-05**	**4.11E-04**	**4.13E-04**
	PCB-102 22'456'-PeCB	NS	NS	NS	NS	NS	N/A		**4.78E-04**	**1.84E-03 J**	**1.11E-02 J**	**4.68E-02 J**	**2.52E-04**	**1.06E-03**	**1.41E-03**
	PCB-98 22'34'6'-PeCB	NS	NS	NS	NS	NS	N/A		**1.96E-05**	2.64E-05 UJ	1.73E-05 UJ	**1.92E-02 J**	5.07E-06 U	9.59E-06 U	**1.23E-04**
	PCB-88 22'346-PeCB	NS	NS	NS	NS	NS	N/A		1.40E-06 U	3.28E-05 UJ	2.70E-05 UJ	8.32E-04 U	7.89E-06 U	1.19E-05 U	3.02E-05 U
	PCB-91 22'34'6-PeCB	NS	NS	NS	NS	NS	N/A		**4.41E-03 J**	**1.77E-02 J**	**5.69E-02 J**	**2.61E-01 J**	**1.55E-03**	**9.52E-03 J**	**8.37E-03 J**
	PCB-84 22'33'6-PeCB	NS	NS	NS	NS	NS	N/A		**3.88E-03 J**	**1.94E-02 J**	**1.04E-01 J**	**4.83E-01 J**	**2.45E-03 J**	**8.72E-03 J**	**1.32E-02 J**
	PCB-89 22'346'-PeCB	NS	NS	NS	NS	NS	N/A		**6.26E-05**	**3.81E-04 J**	**2.83E-03 J**	**7.57E-03 J**	**4.84E-05**	**1.78E-04**	**3.13E-04**
	PCB-121 23'45'6-PeCB	NS	NS	NS	NS	NS	N/A		**3.49E-06**	2.27E-05 UJ	1.67E-05 UJ	**1.55E-03**	4.87E-06 U	8.25E-06 U	1.90E-05 U
	PCB-92 22'355'-PeCB	NS	NS	NS	NS	NS	N/A		**6.97E-03 J**	**2.48E-02 J**	**1.01E-01 J**	**4.87E-01 J**	**2.80E-03 J**	**1.44E-02 J**	**1.02E-02 J**
	PCB-113/90/101 ...-PeCB	NS	NS	NS	NS	NS	N/A		**2.82E-02 J**	**1.09E-01 J**	**5.20E-01 J**	**1.82E+00 J**	**1.35E-02 J**	**5.87E-02 J**	**4.14E-02 J**
	PCB-83 22'33'5-PeCB	NS	NS	NS	NS	NS	N/A		**1.11E-03**	**5.80E-03 J**	**2.21E-02 J**	**1.41E-01 J**	6.05E-06 U	1.09E-05 U	**1.35E-03**
	PCB-99 22'44'5-PeCB	NS	NS	NS	NS	NS	N/A		**1.43E-02 J**	**5.27E-02 J**	**2.34E-01 J**	**1.41E+00 J**	**7.15E-03 J**	**3.39E-02 J**	**1.93E-02 J**
	PCB-112 233'56-PeCB	NS	NS	NS	NS	NS	N/A		8.13E-07 U	2.03E-05 UJ	1.44E-05 UJ	**7.92E-04**	4.22E-06 U	7.38E-06 U	1.76E-05 U
	PCB-109/119/86/97/125...-PeCB	NS	NS	NS	NS	NS	N/A		**1.92E-02 J**	**7.84E-02 J**	**4.05E-01 J**	**7.69E-01 J**	**8.28E-03 J**	**3.99E-02 J**	**2.37E-02 J**
	PCB-117 234'56-PeCB	NS	NS	NS	NS	NS	N/A		**8.14E-04**	**4.02E-03 J**	1.48E-05 UJ	**5.24E-02 J**	**2.38E-04**	8.26E-06 U	**1.23E-03**
	PCB-116/85 23456/22'344'-PeCB	NS	NS	NS	NS	NS	N/A		**6.51E-03 J**	**2.44E-02 J**	**1.34E-01 J**	**3.07E-02 J**	**2.47E-03 J**	**1.26E-02 J**	**5.25E-03 J**
	PCB-110 233'4'6-PeCB	NS	NS	NS	NS	NS	N/A		**4.28E-02 J**	**1.43E-01 J**	**4.99E-01 J**	**1.45E+00 J**	**1.20E-02 J**	**6.60E-02 J**	**5.96E-02 J**
	PCB-115 2344'6-PeCB	NS	NS	NS	NS	NS	N/A		**4.48E-04**	1.84E-05 UJ	1.43E-05 UJ	**1.86E-02 J**	4.18E-06 U	6.68E-06 U	1.69E-05 U
	PCB-82 22'33'4-PeCB	NS	NS	NS	NS	NS	N/A		**2.38E-03 J**	**1.18E-02 J**	**6.44E-02 J**	**1.99E-02 J**	**1.04E-03**	**4.43E-03 J**	**3.98E-03 J**
	PCB-111 233'55'-PeCB	NS	NS	NS	NS	NS	N/A		**1.38E-05**	2.32E-05 UJ	**2.08E-04 J**	**7.50E-03 J**	**1.33E-05**	**8.96E-05**	**4.82E-05**
	PCB-120 23'455'-PeCB	NS	NS	NS	NS	NS	N/A		**8.43E-05**	**3.32E-04 J**	1.39E-05 UJ	**4.51E-02 J**	**5.36E-05**	**4.06E-04**	**1.94E-04**
	PCB-108/124 ...-PeCB	NS	NS	NS	NS	NS	N/A		**1.24E-03**	**5.25E-03 J**	**2.56E-02 J**	**6.87E-03 J**	**5.23E-04**	**2.10E-03 J**	**1.24E-03**
	PCB-107 233'4'5-PeCB	NS	NS	NS	NS	NS	N/A		**1.68E-03**	**7.88E-03 J**	**3.61E-02 J**	**2.06E-01 J**	**8.34E-04**	**3.30E-03 J**	**1.86E-03**
	PCB-123 23'44'5'-PeCB	NS	NS	NS	NS	NS	N/A		**5.99E-04**	**2.31E-03 J**	**1.04E-02 J**	**2.53E-03 J**	**2.29E-04**	**1.04E-03**	**6.67E-04**
	PCB-106 233'45-PeCB	NS	NS	NS	NS	NS	N/A		8.31E-07 U	2.15E-05 UJ	1.52E-05 UJ	4.90E-04 U	4.44E-06 U	7.80E-06 U	1.78E-05 U
	PCB-118 23'44'5-PeCB	NS	NS	NS	NS	NS	N/A		**2.13E-02 J**	**1.16E-01 J**	**4.83E-01 J**	**9.04E-01 J**	**1.14E-02 J**	**4.84E-02 J**	**3.31E-02 J**
	PCB-122 233'4'5'-PeCB	NS	NS	NS	NS	NS	N/A		**3.40E-04**	**1.47E-03 J**	**7.50E-03 J**	**1.96E-03 J**	**1.28E-04**	**5.88E-04**	**4.18E-04**
	PCB-114 2344'5-PeCB	NS	NS	NS	NS	NS	N/A		**2.49E-04**	**2.36E-03 J**	**1.78E-02 J**	**4.50E-03 J**	**1.82E-04**	**4.71E-04**	**4.44E-04**
	PCB-105 233'44'-PeCB	NS	NS	NS	NS	NS	N/A		**9.16E-03 J**	**5.12E-02 J**	**2.59E-01 J**	**7.71E-02 J**	**4.38E-03 J**	**1.58E-02 J**	**1.24E-02 J**
	PCB-127 33'455'-PeCB	NS	NS	NS	NS	NS	N/A		9.02E-07 U	**2.40E-04 J**	**1.55E-03 J**	5.14E-04 U	5.12E-06 U	9.33E-06 U	2.12E-05 U
	PCB-126 33'44'5-PeCB	NS	NS	NS	NS	NS	N/A		**5.50E-05**	**3.27E-04 J**	**9.58E-04 J**	5.81E-05 U	**4.53E-05**	**5.18E-05**	3.50E-05 U
	PCB-155 22'44'66'-HxCB	NS	NS	NS	NS	NS	N/A		4.76E-07 U	2.00E-06 UJ	5.38E-06 UJ	**1.97E-05 J**	4.48E-07 U	**7.77E-07 J**	8.31E-06 U
	PCB-152 22'3566'-HxCB	NS	NS	NS	NS	NS	N/A		**3.72E-05**	**1.56E-04 J**	**5.64E-04 J**	**1.19E-03**	**1.01E-05**	**7.16E-05**	**6.05E-05**
	PCB-150 22'34'66'-HxCB	NS	NS	NS	NS	NS	N/A		**4.12E-05**	**2.01E-04 J**	**5.93E-04 J**	**2.49E-03 J**	**1.51E-05**	**1.29E-04**	**1.65E-04**
	PCB-136 22'33'66'-HxCB	NS	NS	NS	NS	NS	N/A		**4.36E-03 J**	**2.08E-02 J**	**6.42E-02 J**	**1.30E-01 J**	**1.34E-03**	**8.58E-03 J**	**1.62E-02 J**
	PCB-145 22'3466'-HxCB	NS	NS	NS	NS	NS	N/A		**1.50E-05**	**7.85E-05 J**	**3.08E-04 J**	**3.60E-04**	**4.32E-06**	**2.90E-05 J**	**3.46E-05**
	PCB-148 22'34'56'-HxCB	NS	NS	NS	NS	NS	N/A		**3.67E-05**	**1.17E-04 J**	**3.40E-04 J**	**3.79E-03 J**	**1.56E-05**	**1.64E-04**	**2.53E-04**
	PCB-151/135 ...-HxCB	NS	NS	NS	NS	NS	N/A		**1.02E-02 J**	**3.92E-02 J**	**1.19E-01 J**	**1.92E-01 J**	**3.53E-03 J**	**1.86E-02 J**	**3.71E-02 J**
	PCB-154 22'44'56'-HxCB	NS	NS	NS	NS	NS	N/A		**3.51E-04**	**1.24E-03 J**	**4.10E-03 J**	**2.57E-02 J**	**1.57E-04**	1.03E-06 U	**1.45E-03**
	PCB-144 22'345'6-HxCB	NS	NS	NS	NS	NS	N/A		**1.50E-03**	**6.37E-03 J**	**2.17E-02 J**	**3.79E-03 J**	**4.42E-04**	**2.32E-03 J**	**4.68E-03 J**
	PCB-147/149 ...-HxCB	NS	NS	NS	NS	NS	N/A		**2.53E-02 J**	**8.80E-02 J**	**2.78E-01 J**	**4.48E-01 J**	**8.65E-03 J**	**3.80E-02 J**	**7.26E-02 J**
	PCB-134 22'33'56-HxCB	NS	NS	NS	NS	NS	N/A		**2.40E-03 J**	**9.88E-03 J**	**3.24E-02 J**	**5.79E-02 J**	**8.14E-04**	**4.30E-03 J**	**4.81E-03 J**
	PCB-143 22'3456'-HxCB	NS	NS	NS	NS	NS	N/A		**1.53E-04**	2.67E-06 UJ	9.45E-06 UJ	1.16E-05 U	8.00E-07 U	1.34E-06 U	9.06E-06 U
	PCB-139/140 ...-HxCB	NS	NS	NS	NS	NS	N/A		**1.04E-03**	**3.63E-03 J**	**1.41E-02 J**	**1.86E-02 J**	**3.36E-04**	**1.89E-03 J**	**1.84E-03**
	PCB-131 22'33'46-HxCB	NS	NS	NS	NS	NS	N/A		**5.45E-04**	**2.15E-03 J**	**9.15E-03 J**	**1.95E-03 J**	**1.76E-04**	**8.90E-04**	**9.53E-04**
	PCB-142 22'3456-HxCB	NS	NS	NS	NS	NS	N/A		**1.28E-05**	2.87E-06 UJ	**2.16E-04 J**	1.33E-05 U	7.68E-07 U	1.45E-06 U	1.03E-05 U
	PCB-132 22'33'46'-HxCB	NS	NS	NS	NS	NS	N/A		**1.30E-02 J**	**4.70E-02 J**	**1.61E-01 J**	**2.52E-01 J**	**3.95E-03 J**	**2.11E-02 J**	**2.74E-02 J**
	PCB-133 22'33'55'-HxCB	NS	NS	NS	NS	NS	N/A		**5.58E-04**	**1.93E-03 J**	**6.41E-03 J**	**1.61E-02 J**	**2.19E-04**	**1.16E-03**	**1.52E-03**
	PCB-165 233'55'6-HxCB	NS	NS	NS	NS	NS	N/A		**7.42E-06**	2.02E-06 UJ	6.29E-06 UJ	**3.24E-04**	5.33E-07 U	1.02E-06 U	7.24E-06 U
	PCB-146 22'34'55'-HxCB	NS	NS	NS	NS	NS	N/A		**4.80E-03 J**	**1.66E-02 J**	**5.44E-02 J**	**1.25E-01 J**	**1.81E-03 J**	**8.87E-03 J**	**1.32E-02 J**
	PCB-161 233'45'6-HxCB	NS	NS	NS	NS	NS	N/A		5.20E-07 U	1.95E-06 UJ	6.14E-06 UJ	8.93E-06 U	5.20E-07 U	9.84E-07 U	6.95E-06 U
	PCB-153/168 ...-HxCB	NS	NS	NS	NS	NS	N/A		**2.82E-02 J**	**1.04E-01 J**	**3.10E-01 J**	**4.38E-01 J**	**1.05E-02 J**	**4.33E-02 J**	**7.08E-02 J**
	PCB-141 22'3455'-HxCB	NS	NS	NS	NS	NS	N/A		**5.89E-03 J**	**2.35E-02 J**	**7.97E-02 J**	**1.46E-02 J**	**1.95E-03 J**	**8.52E-03 J**	**1.52E-02 J**
	PCB-130 22'33'45'-HxCB	NS	NS	NS	NS	NS	N/A		**2.97E-03 J**	**1.05E-02 J**	**3.83E-02 J**	**1.40E-02 J**	**1.10E-03**	**4.50E-03 J**	**5.15E-03 J**
	PCB-137 22'344'5-HxCB	NS	NS	NS	NS	NS	N/A		**2.72E-03 J**	**9.79E-03 J**	**4.27E-02 J**	**9.50E-03 J**	**9.77E-04**	**3.91E-03 J**	**3.55E-03 J**
	PCB-164 233'4'5'6-HxCB	NS	NS	NS	NS	NS	N/A		**2.78E-03 J**	**9.55E-03 J**	**2.99E-02 J**	**3.29E-02 J**	**9.38E-04**	**4.26E-03 J**	**5.85E-03 J**
	PCB-163/138/129 ...-HxCB	NS	NS	NS	NS	NS	N/A		**4.42E-02 J**	**1.47E-01 J**	**4.86E-01 J**	**2.72E-01 J**	**1.60E-02 J**	**5.96E-02 J**	**8.36E-02 J**
	PCB-160 233'456-HxCB	NS	NS	NS	NS	NS	N/A		5.46E-07 U	2.17E-06 UJ	7.12E-06 UJ	1.08E-05 U	6.03E-07 U	1.10E-06 U	8.40E-06 U
	PCB-158 233'44'6-HxCB	NS	NS	NS	NS	NS	N/A		**4.26E-03 J**	**1.68E-02 J**	**5.92E-02 J**	**1.43E-02 J**	**1.46E-03**	**6.55E-03 J**	**7.78E-03 J**
	PCB-128/166 ...-HxCB	NS	NS	NS	NS	NS	N/A		**8.43E-03 J**	**2.97E-02 J**	**1.19E-01 J**	**4.38E-02 J**	**2.95E-03 J**	**1.13E-02 J**	**1.45E-02 J**

Summary of Analytical PCB Congener Results for Soil Samples -- April 2010
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte							Area Code:	5			6		
								Sample ID:	HB-26			HF-14		
								Sample Depth (ft.):	0-1	1-3	1-3	3-5	0-1	1-3	3-4
								Sample Date:	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1*	TSCA								
	PCB-159 233'455'-HxCB	NS	NS	NS	NS	NS	N/A		1.70E-04	8.97E-04 J	2.24E-03 J	6.87E-04	6.59E-05	2.39E-04	2.22E-04
	PCB-162 233'4'55'-HxCB	NS	NS	NS	NS	NS	N/A		1.76E-04	6.61E-04 J	2.60E-03 J	8.16E-04	6.95E-05	2.29E-04	2.23E-04
	PCB-167 23'44'55'-HxCB	NS	NS	NS	NS	NS	N/A		2.17E-03 J	7.78E-03 J	3.08E-02 J	1.06E-02 J	7.79E-04	2.86E-03 J	3.51E-03 J
	PCB-156/157 ...-HxCB	NS	NS	NS	NS	NS	N/A		5.32E-03 J	2.23E-02 J	1.04E-01 J	3.83E-02 J	2.23E-03 J	7.41E-03 J	6.67E-03 J
	PCB-169 33'44'55'-HxCB	NS	NS	NS	NS	NS	N/A		3.36E-06 U	1.19E-05 UJ	4.79E-05 UJ	7.18E-05 U	2.70E-06 U	4.56E-06 U	6.20E-05 U
	PCB-188 22'34'566'-HpCB	NS	NS	NS	NS	NS	N/A		6.74E-06	4.23E-05 J	6.26E-05 J	1.34E-04	3.69E-06	1.19E-05	2.15E-05
	PCB-179 22'33'566'-HpCB	NS	NS	NS	NS	NS	N/A		1.98E-03 J	1.05E-02 J	2.22E-02 J	1.57E-02 J	7.34E-04	3.17E-03 J	1.84E-02 J
	PCB-184 22'344'66'-HpCB	NS	NS	NS	NS	NS	N/A		5.04E-06	2.72E-05 J	5.46E-05 J	9.31E-05	2.02E-06	7.50E-06	4.57E-06 U
	PCB-176 22'33'466'-HpCB	NS	NS	NS	NS	NS	N/A		7.65E-04	4.21E-03 J	9.27E-03 J	7.37E-03 J	2.32E-04	1.16E-03	6.01E-03 J
	PCB-186 22'34566'-HpCB	NS	NS	NS	NS	NS	N/A		2.30E-06	8.32E-06 J	4.00E-05 J	1.10E-05 J	2.64E-07 U	5.19E-07 U	4.36E-06 U
	PCB-178 22'33'55'6-HpCB	NS	NS	NS	NS	NS	N/A		9.83E-04	5.09E-03 J	9.49E-03 J	8.67E-03 J	4.13E-04	1.40E-03	7.16E-03 J
	PCB-175 22'33'45'6-HpCB	NS	NS	NS	NS	NS	N/A		2.50E-04	1.11E-03 J	2.95E-03 J	7.11E-04	7.02E-05	2.87E-04	1.28E-03
	PCB-187 22'34'55'6-HpCB	NS	NS	NS	NS	NS	N/A		6.84E-03 J	2.97E-02 J	6.47E-02 J	4.62E-02 J	2.42E-03 J	7.88E-03 J	4.19E-02 J
	PCB-182 22'344'56'-HpCB	NS	NS	NS	NS	NS	N/A		3.25E-05	1.44E-04 J	4.14E-04 J	5.56E-04	1.26E-05	7.06E-05	2.79E-04
	PCB-183 22'344'5'6-HpCB	NS	NS	NS	NS	NS	N/A		3.08E-03 J	1.41E-02 J	3.82E-02 J	8.71E-03 J	1.06E-03	3.58E-03 J	1.80E-02 J
	PCB-185 22'3455'6-HpCB	NS	NS	NS	NS	NS	N/A		8.20E-04	3.22E-03 J	7.16E-03 J	7.53E-04	1.28E-06 U	5.59E-04	4.09E-03 J
	PCB-174 22'33'456'-HpCB	NS	NS	NS	NS	NS	N/A		5.61E-03 J	2.48E-02 J	6.16E-02 J	1.93E-02 J	1.85E-03 J	6.58E-03 J	3.28E-02 J
	PCB-177 22'33'45'6'-HpCB	NS	NS	NS	NS	NS	N/A		3.42E-03 J	1.38E-02 J	3.64E-02 J	3.49E-02 J	1.13E-03	4.09E-03 J	1.82E-02 J
	PCB-181 22'344'56-HpCB	NS	NS	NS	NS	NS	N/A		1.06E-04	3.46E-04 J	1.50E-03 J	6.24E-04	3.50E-05	2.58E-06 U	1.26E-04
	PCB-171/173 ...-HpCB	NS	NS	NS	NS	NS	N/A		1.85E-03 J	7.56E-03 J	2.26E-02 J	8.15E-03 J	5.67E-04	2.32E-03 J	8.21E-03 J
	PCB-172 22'33'455'-HpCB	NS	NS	NS	NS	NS	N/A		8.89E-04	4.00E-03 J	9.90E-03 J	2.77E-03 J	3.17E-04	1.08E-03	4.72E-03 J
	PCB-192 233'455'6-HpCB	NS	NS	NS	NS	NS	N/A		1.64E-06 U	6.19E-06 UJ	1.78E-05 UJ	2.07E-05 U	9.51E-07 U	2.10E-06 U	2.36E-05 U
	PCB-180/193 ...-HpCB	NS	NS	NS	NS	NS	N/A		1.69E-02 J	7.77E-02 J	1.73E-01 J	4.19E-02 J	5.76E-03 J	1.90E-02 J	1.02E-01 J
	PCB-191 233'44'5'6-HpCB	NS	NS	NS	NS	NS	N/A		2.34E-04	1.03E-03 J	2.61E-03 J	7.88E-04	6.89E-05	2.87E-04	1.18E-03
	PCB-170 22'33'44'5-HpCB	NS	NS	NS	NS	NS	N/A		4.51E-03 J	1.96E-02 J	5.37E-02 J	1.61E-02 J	1.60E-03	5.64E-03 J	2.72E-02 J
	PCB-190 233'44'56-HpCB	NS	NS	NS	NS	NS	N/A		1.07E-03	4.35E-03 J	1.25E-02 J	2.82E-03 J	4.11E-04	1.24E-03	8.40E-03 J
	PCB-189 233'44'55'-HpCB	NS	NS	NS	NS	NS	N/A		2.66E-04	1.07E-03 J	3.32E-03 J	1.40E-03	9.63E-05	3.32E-04	1.03E-03
	PCB-202 22'33'55'66'-OcCB	NS	NS	NS	NS	NS	N/A		8.28E-04	4.26E-03 J	5.83E-03 J	1.98E-03 J	2.84E-04	8.19E-04	5.87E-03 J
	PCB-201 22'33'45'66'-OcCB	NS	NS	NS	NS	NS	N/A		3.75E-04	2.19E-03 J	3.14E-03 J	9.98E-04	1.28E-04	4.55E-04	3.88E-03 J
	PCB-204 22'344'566'-OcCB	NS	NS	NS	NS	NS	N/A		1.95E-06	9.57E-06 J	1.30E-05 UJ	7.08E-06 U	4.05E-07 U	8.41E-07 U	7.44E-06 U
	PCB-197 22'33'44'66'-OcCB	NS	NS	NS	NS	NS	N/A		7.65E-05	4.79E-04 J	7.15E-04 J	2.26E-04	2.69E-05	9.71E-05	5.64E-04
	PCB-200 22'33'4566'-OcCB	NS	NS	NS	NS	NS	N/A		3.87E-04	2.16E-03 J	3.49E-03 J	3.67E-04	1.49E-04	4.64E-04	4.37E-03 J
	PCB-198/199 ...-OcCB	NS	NS	NS	NS	NS	N/A		3.45E-03 J	1.82E-02 J	2.49E-02 J	5.11E-03 J	1.32E-03	3.57E-03 J	3.20E-02 J
	PCB-196 22'33'44'56'-OcCB	NS	NS	NS	NS	NS	N/A		1.18E-03	7.40E-03 J	1.14E-02 J	1.42E-03	4.44E-04	1.54E-03	1.36E-02 J
	PCB-203 22'344'55'6-OcCB	NS	NS	NS	NS	NS	N/A		1.92E-03 J	1.02E-02 J	1.48E-02 J	1.93E-03 J	7.66E-04	2.23E-03 J	2.06E-02 J
	PCB-195 22'33'44'56-OcCB	NS	NS	NS	NS	NS	N/A		1.20E-03	4.80E-03 J	1.11E-02 J	1.29E-03	3.58E-04	1.07E-03	7.94E-03 J
	PCB-194 22'33'44'55'-OcCB	NS	NS	NS	NS	NS	N/A		2.96E-03 J	1.33E-02 J	2.94E-02 J	3.52E-03 J	9.64E-04	2.96E-03 J	2.25E-02 J
	PCB-205 233'44'55'6-OcCB	NS	NS	NS	NS	NS	N/A		1.77E-04	8.07E-04 J	1.78E-03 J	1.92E-04	6.65E-05	1.84E-04	1.33E-03
	PCB-208 22'33'455'66'-NoCB	NS	NS	NS	NS	NS	N/A		3.03E-03 J	7.80E-03 J	7.98E-03 J	5.09E-03 J	2.19E-04	7.66E-04	2.95E-03 J
	PCB-207 22'33'44'566'-NoCB	NS	NS	NS	NS	NS	N/A		4.00E-04	1.17E-03 J	1.76E-03 J	7.60E-04	5.58E-05	1.67E-04	1.30E-03 J
	PCB-206 22'33'44'55'6-NoCB	NS	NS	NS	NS	NS	N/A		6.75E-03 J	1.69E-02 J	1.97E-02 J	1.06E-02 J	6.46E-04	1.97E-03 J	3.69E-03 J
	PCB-209 DeCB	NS	NS	NS	NS	NS	N/A		1.69E-02 J	2.68E-02 J	2.40E-02 J	1.63E-02 J	6.48E-04	2.13E-03 J	4.27E-03 J
	Mono-CBs	N/A	N/A	N/A	N/A	N/A	N/A		2.07E-05	3.96E-04 J	3.55E-04 J	8.65E-04	1.25E-05	1.81E-05	9.65E-05
	Di-CBs	N/A	N/A	N/A	N/A	N/A	N/A		1.48E-04	1.35E-03 J	1.20E-03 J	2.90E-03	3.22E-04	9.22E-05	3.62E-04
	Tri-CBs	N/A	N/A	N/A	N/A	N/A	N/A		6.97E-04 J	4.88E-03 J	6.93E-03 J	5.98E-02	1.08E-03 J	4.94E-04	1.08E-03 J
	Tetra-CBs	N/A	N/A	N/A	N/A	N/A	N/A		1.67E-02	9.93E-02 J	4.28E-01 J	4.53E+00	1.82E-02	4.20E-02 J	2.85E-02 J
	Penta-CBs	N/A	N/A	N/A	N/A	N/A	N/A		1.86E-01	7.58E-01 J	3.27E+00 J	9.59E+00	7.77E-02	3.65E-01	2.92E-01
	Hexa-CBs	N/A	N/A	N/A	N/A	N/A	N/A		1.72E-01	6.20E-01 J	2.07E+00 J	2.17E+00 J	6.05E-02	2.59E-01 J	3.99E-01
	Hepta-CBs	N/A	N/A	N/A	N/A	N/A	N/A		4.96E-02	2.23E-01 J	5.32E-01 J	2.18E-01 J	1.68E-02	5.87E-02	3.01E-01
	Octa-CBs	N/A	N/A	N/A	N/A	N/A	N/A		1.26E-02	6.38E-02 J	1.07E-01 J	1.70E-02	4.50E-03	1.34E-02	1.13E-01
	Nona-CBs	N/A	N/A	N/A	N/A	N/A	N/A		1.02E-02	2.58E-02 J	2.94E-02 J	1.64E-02	9.21E-04	2.91E-03	7.94E-03
	De-CB	N/A	N/A	N/A	N/A	N/A	N/A		1.69E-02 J	2.68E-02 J	2.40E-02 J	1.63E-02 J	6.48E-04	2.13E-03	4.27E-03 J
	Total PCBs [(a)]	2	2	3	3	2	1		*4.65E-01 J*	*1.82E+00 J*	*6.47E+00 J*	*1.66E+01 J*	*1.81E-01 J*	*7.44E-01 J*	*1.15E+00 J*
	Total PCBs [(b)]	2	2	3	3	2	1		*4.65E-01 J*	*1.82E+00 J*	*6.47E+00 J*	*1.66E+01 J*	*1.81E-01 J*	*7.44E-01 J*	*1.15E+00 J*
	Dioxin-like PCB TEQs (ND=0 EMPC=EMPC)	2.0E-05	2.0E-05	5.0E-05	5.0E-05	2.0E-05	N/A		*6.7E-06 J*	*3.9E-05 J*	*1.2E-04 J*	*3.2E-05 J*	*5.1E-06 J*	*7.5E-06 J*	*1.8E-06 J*
	Dioxin-like PCB TEQs (ND=DL/2; EMPC=EMPC)	2.0E-05	2.0E-05	5.0E-05	5.0E-05	2.0E-05	N/A		*6.7E-06 J*	*3.9E-05 J*	*1.2E-04 J*	*3.6E-05 J*	*5.2E-06 J*	*7.6E-06 J*	*4.4E-06 J*

Summary of Analytical PCB Congener Results for Soil Samples -- April 2010
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte							Area Code:	4		4			8		
								Sample ID:	HF-31D		HF-40			HG-2		
								Sample Depth (ft.):	0-1	1-3	4-6	0-1	1-3	3-5	0-1	1-3	5-7
								Sample Date:	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1*	TSCA										
PCB Congeners																	
(mg/kg)	PCB-1 2-MoCB	NS	NS	NS	NS	NS	N/A		**2.34E-06**	**9.31E-06**	**8.88E-06**	**3.93E-06**	4.08E-07 U	6.11E-07 U	**9.78E-06**	**1.15E-04**	**5.08E-05**
	PCB-2 3-MoCB	NS	NS	NS	NS	NS	N/A		**1.71E-06**	**1.06E-05**	**2.90E-05**	**4.03E-06**	1.13E-07 U	5.52E-07 U	**4.82E-06**	**7.07E-05**	**8.17E-05**
	PCB-3 4-MoCB	NS	NS	NS	NS	NS	N/A		**4.58E-06**	**1.84E-05**	**3.12E-05**	**7.79E-06**	3.52E-07 U	**8.10E-07**	**1.17E-05**	**1.80E-04**	**9.22E-05**
	PCB-4 22'-DiCB	NS	NS	NS	NS	NS	N/A		5.58E-06 U	**2.48E-05**	3.56E-06 U	**7.60E-06**	4.89E-07 U	1.53E-06 U	**8.83E-06**	**1.33E-04**	**7.76E-05**
	PCB-10 26-DiCB	NS	NS	NS	NS	NS	N/A		**3.14E-07 J**	**1.39E-06**	3.54E-07 U	4.22E-07 U	1.45E-07 U	1.18E-07 U	**5.14E-07 J**	**8.41E-06 J**	**5.44E-06 J**
	PCB-9 25-DiCB	NS	NS	NS	NS	NS	N/A		8.28E-07 UJ	**3.62E-06**	**2.17E-06**	**1.37E-06**	2.14E-07 U	2.29E-07 U	**1.47E-06**	**2.58E-05**	**4.17E-05**
	PCB-7 24-DiCB	NS	NS	NS	NS	NS	N/A		**6.03E-07 J**	**1.95E-06**	**8.89E-07 J**	**8.74E-07 J**	2.09E-07 U	1.31E-07 U	**1.09E-06 J**	**1.49E-05**	**2.00E-05 J**
	PCB-6 23'-DiCB	NS	NS	NS	NS	NS	N/A		**3.71E-06**	**1.52E-05**	**3.43E-06**	**4.92E-06**	2.53E-07 U	6.14E-07 U	**5.09E-06**	**8.52E-05**	**8.97E-05**
	PCB-5 23-DiCB	NS	NS	NS	NS	NS	N/A		**2.89E-07 J**	9.29E-07 U	**1.74E-06**	7.10E-07 U	2.22E-07 U	1.38E-07 U	**6.06E-07 J**	**7.47E-06 J**	**1.03E-05 J**
	PCB-8 24'-DiCB	NS	NS	NS	NS	NS	N/A		**1.61E-05**	**5.93E-05**	**7.43E-06**	**2.13E-05**	9.31E-07 U	2.58E-06 U	**1.91E-05**	**3.48E-04**	**1.83E-04**
	PCB-14 35-DiCB	NS	NS	NS	NS	NS	N/A		3.59E-07 U	8.54E-07 U	5.87E-07 U	6.48E-07 U	2.03E-07 U	1.26E-07 U	**2.27E-07 J**	7.44E-06 U	**9.65E-05**
	PCB-11 33'-DiCB	NS	NS	NS	NS	NS	N/A		2.06E-05 U	**3.94E-05**	**1.35E-04**	1.56E-05 U	**4.69E-07 J**	9.12E-06 U	3.57E-05 U	**1.57E-04**	**2.57E-04**
	PCB-13/12 34'/34-DiCB	NS	NS	NS	NS	NS	N/A		**3.86E-06**	**1.81E-05**	**1.25E-05**	**5.97E-06**	2.50E-07 U	**3.58E-07 J**	**8.20E-06**	**1.28E-04**	**4.83E-04**
	PCB-15 44'-DiCB	NS	NS	NS	NS	NS	N/A		**3.77E-05**	**1.99E-04**	**1.23E-05**	**5.17E-05**	**2.14E-06**	**3.33E-06**	**6.75E-05**	**1.35E-03**	**4.32E-04**
	PCB-19 22'6-TrCB	NS	NS	NS	NS	NS	N/A		**3.27E-06**	**1.88E-05**	**2.12E-06 J**	**3.93E-06**	2.89E-07 U	5.63E-07 U	**4.89E-06**	**1.22E-04**	**8.50E-05**
	PCB-30/18 246/22'5-TrCB	NS	NS	NS	NS	NS	N/A		**1.91E-05**	**1.12E-04**	**1.26E-05**	**2.65E-05**	3.36E-06 U	**7.31E-06**	**2.75E-05**	**5.53E-04**	**4.16E-04**
	PCB-17 22'4-TrCB	NS	NS	NS	NS	NS	N/A		**8.31E-06**	**5.09E-05**	**5.26E-06**	**1.15E-05**	9.60E-07 U	**2.91E-06**	**1.21E-05**	**2.36E-04**	**1.72E-04**
	PCB-27 23'6-TrCB	NS	NS	NS	NS	NS	N/A		**2.61E-06**	**1.59E-05**	**1.82E-06**	**2.76E-06 J**	1.81E-07 U	3.67E-07 U	**3.55E-06**	**8.92E-05**	**9.39E-05**
	PCB-24 236-TrCB	NS	NS	NS	NS	NS	N/A		**3.37E-07 J**	5.36E-07 U	2.75E-07 U	2.83E-07 U	8.97E-08 U	6.34E-08 U	**5.03E-07 J**	2.82E-06 U	**1.58E-05**
	PCB-16 22'3-TrCB	NS	NS	NS	NS	NS	N/A		**7.61E-06**	**4.21E-05**	**6.34E-06**	**1.17E-05**	4.60E-07 UJ	1.68E-06 U	**1.14E-05**	**2.18E-04**	**1.16E-04**
	PCB-32 24'6-TrCB	NS	NS	NS	NS	NS	N/A		**9.07E-06**	**4.71E-05**	2.51E-07 U	2.57E-07 U	1.23E-06 U	**1.88E-06**	**1.12E-05**	2.54E-06 U	**2.87E-04**
	PCB-34 23'5'-TrCB	NS	NS	NS	NS	NS	N/A		3.46E-07 U	**1.80E-06 J**	6.66E-07 U	5.28E-07 U	1.47E-07 U	**4.77E-07 J**	3.14E-07 U	**1.44E-05**	**2.27E-04**
	PCB-23 235-TrCB	NS	NS	NS	NS	NS	N/A		3.82E-07 U	1.18E-06 U	7.53E-07 U	5.96E-07 U	1.66E-07 U	9.76E-08 U	3.47E-07 U	3.52E-06 U	**8.07E-06**
	PCB-26/29 23'5/245-TrCB	NS	NS	NS	NS	NS	N/A		**3.29E-05**	**1.98E-04**	**1.21E-05**	**2.55E-05**	**7.45E-06**	**2.82E-06**	**2.20E-05**	**5.36E-04**	**1.78E-03**
	PCB-25 23'4-TrCB	NS	NS	NS	NS	NS	N/A		**1.17E-05**	**7.15E-05**	**5.29E-06**	**9.54E-06**	**2.51E-06**	**2.53E-06**	**9.22E-06**	**2.15E-04**	**8.38E-04**
	PCB-31 24'5-TrCB	NS	NS	NS	NS	NS	N/A		**4.61E-05**	**3.30E-04**	**2.81E-05**	**7.28E-05**	**2.95E-05**	**5.24E-05**	**5.98E-05**	**1.44E-03**	**1.44E-03**
	PCB-28/20 244'/233'-TrCB	NS	NS	NS	NS	NS	N/A		**5.90E-05**	**3.96E-04**	**2.43E-05**	**7.94E-05**	**2.82E-05**	**5.68E-05**	**7.50E-05**	**1.80E-03**	**1.36E-03**
	PCB-21/33 234/23'4'-TrCB	NS	NS	NS	NS	NS	N/A		**2.07E-05**	**1.07E-04**	**1.91E-05**	**3.04E-05**	1.85E-06 U	**5.01E-06**	**2.57E-05**	**5.77E-04**	**5.12E-04**
	PCB-22 234'-TrCB	NS	NS	NS	NS	NS	N/A		**1.60E-05**	**8.69E-05**	**6.17E-06**	**2.15E-05**	**1.46E-06 J**	**3.60E-06**	**2.08E-05**	**4.40E-04**	**2.75E-04**
	PCB-36 33'5-TrCB	NS	NS	NS	NS	NS	N/A		3.04E-07 U	9.45E-07 U	**1.20E-06**	4.80E-07 U	1.33E-07 U	7.86E-08 U	**7.57E-07 J**	2.83E-06 U	**2.57E-04**
	PCB-39 34'5-TrCB	NS	NS	NS	NS	NS	N/A		**6.25E-07 J**	**5.25E-06 J**	**1.42E-06**	5.51E-07 U	1.53E-07 U	9.02E-08 U	**1.37E-06 J**	**7.90E-05**	**2.67E-03 J**
	PCB-38 345-TrCB	NS	NS	NS	NS	NS	N/A		3.63E-07 U	**1.57E-06 J**	7.17E-07 U	5.68E-07 U	1.58E-07 U	**7.05E-07**	**4.97E-07 J**	**1.59E-05 J**	**1.14E-05 J**
	PCB-35 33'4-TrCB	NS	NS	NS	NS	NS	N/A		**2.94E-06**	**1.64E-05**	**1.08E-05**	**4.43E-06**	**2.55E-07 J**	**1.04E-06**	**6.16E-06**	**1.30E-04**	**1.51E-04**
	PCB-37 344'-TrCB	NS	NS	NS	NS	NS	N/A		**4.99E-05**	**3.50E-04**	**2.39E-05**	**7.54E-05**	**5.74E-06**	**1.34E-05**	**8.83E-05**	**2.64E-03**	**1.26E-03**
	PCB-54 22'66'-TeCB	NS	NS	NS	NS	NS	N/A		1.96E-07 U	7.69E-07 U	3.29E-07 U	4.23E-07 U	1.06E-07 U	5.85E-08 U	**4.42E-07 J**	**2.60E-05**	**1.38E-05**
	PCB-50/53 22'46/22'56'-TeCB	NS	NS	NS	NS	NS	N/A		**3.57E-05**	**2.82E-04**	**6.14E-05**	**4.72E-05**	**4.15E-05**	**5.61E-05**	**4.65E-05**	**2.59E-03**	**3.62E-03 J**
	PCB-45 22'36-TeCB	NS	NS	NS	NS	NS	N/A		**1.05E-05**	**9.74E-05**	**1.53E-05**	3.79E-07 U	**9.97E-06**	**1.26E-05**	**1.93E-05**	**1.03E-03**	**8.05E-04**
	PCB-51 22'46'-TeCB	NS	NS	NS	NS	NS	N/A		**4.94E-06**	**2.15E-05**	**5.03E-06**	3.89E-07 U	1.55E-07 U	**2.37E-06**	**6.71E-06**	**3.29E-04**	**5.85E-04**
	PCB-46 22'36'-TeCB	NS	NS	NS	NS	NS	N/A		**5.34E-06**	**3.97E-05**	**8.00E-06**	**6.02E-06**	**2.79E-06**	**5.39E-06**	**7.22E-06**	**3.38E-04**	**5.50E-04**
	PCB-52 22'55'-TeCB	NS	NS	NS	NS	NS	N/A		**2.63E-03 J**	**1.52E-02 J**	**1.91E-03 J**	**4.93E-03 J**	**2.76E-03 J**	**3.39E-03 J**	**2.34E-03 J**	**9.71E-02 J**	**1.60E-01 J**
	PCB-73 23'5'6-TeCB	NS	NS	NS	NS	NS	N/A		**2.00E-06**	4.49E-07 U	2.64E-07 U	3.15E-07 U	1.26E-07 U	7.36E-08 U	**2.59E-06**	**8.68E-05**	**1.14E-03**
	PCB-43 22'35-TeCB	NS	NS	NS	NS	NS	N/A		**3.87E-06**	**3.44E-05**	**3.36E-06**	4.30E-07 U	**5.27E-06**	**1.27E-05**	**4.40E-06**	**1.77E-04**	**2.47E-04**
	PCB-69/49 23'46/22'45'-TeCB	NS	NS	NS	NS	NS	N/A		**7.42E-04**	**4.40E-03 J**	**3.97E-04**	**1.46E-03**	**7.58E-04**	**1.59E-03 J**	**9.32E-04**	**2.61E-02 J**	**4.41E-02 J**
	PCB-48 22'45-TeCB	NS	NS	NS	NS	NS	N/A		**1.27E-05**	**1.20E-04**	**1.47E-05**	**2.29E-05**	**2.57E-05**	**3.15E-05**	**1.41E-05**	**8.06E-04**	**8.12E-04**
	PCB-44/47/65 ...-TeCB	NS	NS	NS	NS	NS	N/A		**8.05E-04**	**5.81E-03 J**	**6.22E-04**	**1.32E-03**	**1.01E-03**	**1.76E-03 J**	**8.20E-04**	**3.68E-02 J**	**6.11E-02 J**
	PCB-59/62/75 ...-TeCB	NS	NS	NS	NS	NS	N/A		**3.01E-05**	**2.13E-04**	**2.00E-05**	**4.05E-05**	**2.52E-05**	**8.02E-05**	**3.96E-05**	**1.37E-03**	**1.47E-03**
	PCB-42 22'34'-TeCB	NS	NS	NS	NS	NS	N/A		**8.71E-05**	**6.86E-04**	**5.90E-05**	**1.27E-04**	**9.02E-05**	**2.43E-04**	**9.22E-05**	**4.38E-03 J**	**7.04E-03 J**
	PCB-41 22'34-TeCB	NS	NS	NS	NS	NS	N/A		**3.91E-06**	**2.23E-05**	3.40E-07 U	4.07E-07 U	1.62E-07 U	9.51E-08 U	**6.15E-06**	**2.07E-04**	**1.21E-04**
	PCB-71/40 23'4'6/22'33'-TeCB	NS	NS	NS	NS	NS	N/A		**1.06E-04**	**8.08E-04**	**1.07E-04**	**1.51E-04**	**9.80E-05**	**1.60E-04**	**1.06E-04**	**5.79E-03 J**	**9.62E-03 J**
	PCB-64 234'6-TeCB	NS	NS	NS	NS	NS	N/A		**3.72E-04**	**2.49E-03 J**	**2.57E-04**	**5.45E-04**	**3.44E-04**	**4.73E-04**	**3.25E-04**	**1.31E-02 J**	**1.46E-02 J**
	PCB-72 23'55'-TeCB	NS	NS	NS	NS	NS	N/A		**3.27E-05**	**1.84E-04**	**7.81E-06**	**4.65E-05**	**1.62E-05**	**8.50E-05**	**4.93E-05**	**9.39E-04**	**1.47E-03**
	PCB-68 23'45'-TeCB	NS	NS	NS	NS	NS	N/A		**2.29E-05**	**1.29E-04**	**4.97E-06**	**3.50E-05**	**1.27E-05**	**6.95E-05**	**3.56E-05**	**8.09E-04**	**1.16E-02 J**
	PCB-57 233'5-TeCB	NS	NS	NS	NS	NS	N/A		**1.84E-06 J**	**1.20E-05**	1.43E-06 U	3.08E-06 U	9.23E-07 U	1.07E-06 U	**2.31E-06 J**	7.05E-05 U	**1.43E-04**
	PCB-58 233'5'-TeCB	NS	NS	NS	NS	NS	N/A		**5.49E-06 J**	**2.25E-05**	1.26E-06 U	2.72E-06 U	8.14E-07 U	9.47E-07 U	**6.79E-06**	6.43E-05 U	**2.77E-04**
	PCB-67 23'45-TeCB	NS	NS	NS	NS	NS	N/A		**5.06E-06**	**4.76E-05**	**1.20E-05**	2.51E-06 U	7.52E-07 U	8.76E-07 U	**8.79E-06**	**3.04E-04**	**3.24E-04**
	PCB-63 234'5-TeCB	NS	NS	NS	NS	NS	N/A		**1.63E-05**	**1.69E-04**	**1.17E-05**	**3.64E-05**	**2.25E-05**	**7.95E-05**	**1.52E-05**	**6.22E-04**	**7.63E-04**
	PCB-61/70/74/76 ...-TeCB	NS	NS	NS	NS	NS	N/A		**1.65E-03**	**1.49E-02 J**	**1.11E-03**	**4.14E-03 J**	**2.41E-03 J**	**3.61E-03 J**	**1.79E-03**	**7.45E-02 J**	**6.65E-02 J**
	PCB-66 23'44'-TeCB	NS	NS	NS	NS	NS	N/A		**5.12E-04**	**5.57E-03 J**	**3.06E-04**	**1.07E-03**	**7.47E-04**	**1.68E-03 J**	**5.77E-04**	**2.65E-02 J**	**3.27E-02 J**
	PCB-55 233'4-TeCB	NS	NS	NS	NS	NS	N/A		**1.77E-06**	8.40E-06 U	**3.21E-06 J**	2.83E-06 U	8.47E-07 U	9.86E-07 U	**2.73E-06**	6.52E-05 U	**9.15E-05**
	PCB-56 233'4'-TeCB	NS	NS	NS	NS	NS	N/A		**1.54E-04**	**1.48E-03**	**1.40E-04**	**3.21E-04**	**1.74E-04**	**2.72E-04**	**1.63E-04**	**8.07E-03 J**	**6.98E-03 J**
	PCB-60 2344'-TeCB	NS	NS	NS	NS	NS	N/A		**3.79E-05**	**4.38E-04**	**3.30E-05**	**7.82E-05**	**4.86E-05**	**6.52E-05**	**4.10E-05**	**2.12E-03**	**1.68E-03**
	PCB-80 33'55'-TeCB	NS	NS	NS	NS	NS	N/A		1.19E-06 U	8.92E-06 U	1.35E-06 U	2.93E-06 U	8.76E-07 U	1.02E-06 U	7.68E-07 U	6.92E-05 U	**6.48E-04**
	PCB-79 33'45'-TeCB	NS	NS	NS	NS	NS	N/A		**5.82E-05**	**2.79E-04**	**2.94E-05**	**9.61E-05**	**3.14E-05**	**7.29E-05**	**7.10E-05**	**2.69E-03**	**2.14E-03**
	PCB-78 33'45-TeCB	NS	NS	NS	NS	NS	N/A		1.20E-06 U	8.79E-06 U	1.31E-06 U	2.83E-06 U	8.46E-07 U	9.85E-07 U	**1.14E-06**	6.82E-05 U	3.72E-05 U
	PCB-81 344'5-TeCB	NS	NS	NS	NS	NS	N/A		**3.71E-06**	**2.46E-05**	**3.13E-06**	**6.97E-06**	9.68E-07 U	**2.49E-06**	**5.34E-06**	**1.50E-04**	**9.50E-05**

Summary of Analytical PCB Congener Results for Soil Samples -- April 2010
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte	S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1*	TSCA	Area Code: 4			4			8		
								Sample ID: HF-31D			HF-40			HG-2		
								Sample Depth (ft.): 0-1	1-3	4-6	0-1	1-3	3-5	0-1	1-3	5-7
								Sample Date: 4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010
	PCB-77 33'44'-TeCB	NS	NS	NS	NS	NS	N/A	**5.13E-05**	**5.77E-04**	**8.79E-05**	**1.09E-04**	**1.88E-05**	**5.68E-05**	**1.02E-04**	**5.70E-03 J**	**2.87E-03 J**
	PCB-104 22'466'-PeCB	NS	NS	NS	NS	NS	N/A	3.85E-07 U	1.17E-06 U	3.84E-07 U	4.62E-07 U	1.96E-07 U	1.16E-07 U	2.43E-07 U	**1.38E-05**	**1.55E-05**
	PCB-96 22'366'-PeCB	NS	NS	NS	NS	NS	N/A	**2.67E-05**	**2.46E-04**	**3.89E-05**	**2.88E-05**	**2.36E-05**	**3.33E-05**	**4.77E-05**	**2.14E-03**	**1.57E-03**
	PCB-103 22'45'6-PeCB	NS	NS	NS	NS	NS	N/A	**4.41E-05**	**2.37E-04**	**2.89E-05**	**7.20E-05**	**2.74E-05**	**8.73E-05**	**8.35E-05**	**1.98E-03**	**2.10E-03**
	PCB-94 22'356'-PeCB	NS	NS	NS	NS	NS	N/A	**3.14E-05**	**1.80E-04**	**2.84E-05**	**3.47E-05**	**1.81E-05**	**3.05E-05**	**3.61E-05**	1.39E-04 U	**1.30E-03**
	PCB-95 22'35'6-PeCB	NS	NS	NS	NS	NS	N/A	**7.97E-03 J**	**3.45E-02 J**	**5.47E-03 J**	**1.01E-02 J**	**4.05E-03 J**	**5.19E-03 J**	**9.81E-03 J**	**2.84E-01 J**	**2.44E-01 J**
	PCB-100/93 22'44'6/22'356-PeCB	NS	NS	NS	NS	NS	N/A	**4.46E-05**	**2.65E-04**	**3.66E-05**	**5.48E-05**	1.03E-06 U	**6.84E-05**	**6.91E-05**	1.15E-04 U	**1.79E-03**
	PCB-102 22'456'-PeCB	NS	NS	NS	NS	NS	N/A	**1.78E-04**	**9.03E-04**	**2.00E-04**	**2.14E-04**	1.16E-06 U	**2.13E-04**	**1.89E-04**	**7.38E-03 J**	**8.17E-03 J**
	PCB-98 22'34'6'-PeCB	NS	NS	NS	NS	NS	N/A	**7.89E-06**	4.79E-06 U	1.15E-06 U	2.93E-06 U	9.25E-07 U	3.72E-06 U	**1.08E-05**	1.15E-04 U	**4.21E-04**
	PCB-88 22'346-PeCB	NS	NS	NS	NS	NS	N/A	8.31E-07 U	5.96E-06 U	1.80E-06 U	4.57E-06 U	1.44E-06 U	5.79E-06 U	6.56E-07 U	1.43E-04 U	3.31E-05 U
	PCB-91 22'34'6-PeCB	NS	NS	NS	NS	NS	N/A	**1.64E-03**	**7.27E-03 J**	**1.02E-03**	**1.96E-03 J**	**6.77E-04**	**9.30E-04**	**2.22E-03 J**	**5.68E-02 J**	**4.59E-02 J**
	PCB-84 22'33'6-PeCB	NS	NS	NS	NS	NS	N/A	**1.55E-03**	**9.36E-03 J**	**1.92E-03 J**	**2.27E-03 J**	**1.41E-03**	**1.93E-03 J**	**2.05E-03 J**	**8.87E-02 J**	**8.74E-02 J**
	PCB-89 22'346'-PeCB	NS	NS	NS	NS	NS	N/A	**2.44E-05**	**1.76E-04**	**3.63E-05**	**2.86E-05**	**2.88E-05**	**4.72E-05**	**3.22E-05**	1.21E-04 U	**1.78E-03**
	PCB-121 23'45'6-PeCB	NS	NS	NS	NS	NS	N/A	5.42E-07 U	4.12E-06 U	1.11E-06 U	2.82E-06 U	8.90E-07 U	3.58E-06 U	**2.15E-06**	9.86E-05 U	**2.99E-03 J**
	PCB-92 22'355'-PeCB	NS	NS	NS	NS	NS	N/A	**2.89E-03 J**	**1.06E-02 J**	**1.05E-03**	**4.32E-03 J**	**1.05E-03**	**1.70E-03 J**	**3.18E-03 J**	**7.74E-02 J**	**6.48E-02 J**
	PCB-113/90/101 ...-PeCB	NS	NS	NS	NS	NS	N/A	**1.28E-02 J**	**4.97E-02 J**	**4.84E-03 J**	**2.15E-02 J**	**5.87E-03 J**	**8.50E-03 J**	**1.47E-02 J**	**3.83E-01 J**	**3.31E-01 J**
	PCB-83 22'33'5-PeCB	NS	NS	NS	NS	NS	N/A	**5.45E-04**	**2.17E-03 J**	**3.07E-04**	3.50E-06 U	**2.52E-04**	**3.61E-04**	**5.52E-04**	**1.52E-02 J**	**1.57E-02 J**
	PCB-99 22'44'5-PeCB	NS	NS	NS	NS	NS	N/A	**6.09E-03 J**	**2.23E-02 J**	**2.13E-03 J**	**1.06E-02 J**	**2.42E-03 J**	**4.60E-03 J**	**7.30E-03 J**	**1.60E-01 J**	**1.41E-01 J**
	PCB-112 233'56-PeCB	NS	NS	NS	NS	NS	N/A	4.84E-07 U	3.68E-06 U	9.61E-07 U	2.45E-06 U	**2.93E-06**	3.10E-06 U	3.82E-07 U	8.82E-05 U	1.93E-05 U
	PCB-109/119/86/97/125...-PeCB	NS	NS	NS	NS	NS	N/A	**8.18E-03 J**	**3.41E-02 J**	**3.22E-03 J**	**1.29E-02 J**	**4.08E-03 J**	**5.25E-03 J**	**9.19E-03 J**	**2.77E-01 J**	**2.27E-01 J**
	PCB-117 234'56-PeCB	NS	NS	NS	NS	NS	N/A	**2.86E-04**	**1.71E-03 J**	**8.62E-04**	2.51E-06 U	7.90E-07 U	3.17E-06 U	**3.15E-04**	**7.58E-03 J**	**5.41E-03 J**
	PCB-116/85 23456/22'344'-PeCB	NS	NS	NS	NS	NS	N/A	**2.83E-03 J**	**9.74E-03 J**	1.35E-06 U	**5.30E-03 J**	**1.14E-03**	**1.49E-03 J**	**3.17E-03 J**	**7.43E-02 J**	**5.52E-02 J**
	PCB-110 233'4'6-PeCB	NS	NS	NS	NS	NS	N/A	**1.74E-02 J**	**5.66E-02 J**	**6.44E-03 J**	**1.88E-02 J**	**5.39E-03 J**	**7.56E-03 J**	**1.98E-02 J**	**4.33E-01 J**	**3.44E-01 J**
	PCB-115 2344'6-PeCB	NS	NS	NS	NS	NS	N/A	**1.31E-04**	3.34E-06 U	9.50E-07 U	2.42E-06 U	7.63E-07 U	3.06E-06 U	**1.40E-04**	7.99E-05 U	**3.05E-03 J**
	PCB-82 22'33'4-PeCB	NS	NS	NS	NS	NS	N/A	**1.03E-03**	**4.70E-03 J**	**5.17E-04**	**1.66E-03**	**5.56E-04**	**6.79E-04**	**1.12E-03**	**4.19E-02 J**	**3.39E-02 J**
	PCB-111 233'55'-PeCB	NS	NS	NS	NS	NS	N/A	**3.43E-06 J**	**3.08E-05**	**6.08E-06**	**1.15E-05**	8.73E-07 U	**1.24E-05**	**1.01E-05**	**2.21E-04**	**1.91E-04**
	PCB-120 23'455'-PeCB	NS	NS	NS	NS	NS	N/A	**2.73E-05**	3.56E-06 U	9.27E-07 U	2.36E-06 U	**1.02E-05**	**7.52E-05**	**4.12E-05**	8.52E-05 U	**8.09E-04**
	PCB-108/124 ...-PeCB	NS	NS	NS	NS	NS	N/A	**5.71E-04**	**2.10E-03 J**	**1.70E-04**	**1.02E-03**	**2.06E-04**	**2.33E-04**	**6.56E-04**	**1.57E-02 J**	**1.02E-02 J**
	PCB-107 233'4'5-PeCB	NS	NS	NS	NS	NS	N/A	**6.87E-04**	**3.01E-03 J**	**2.33E-04**	**1.34E-03**	**3.10E-04**	**6.66E-04**	**8.37E-04**	**1.96E-02 J**	**1.55E-02 J**
	PCB-123 23'44'5'-PeCB	NS	NS	NS	NS	NS	N/A	**2.85E-04**	**9.28E-04**	**9.92E-05**	**5.38E-04**	**8.06E-05**	**1.01E-04**	**3.12E-04**	**7.56E-03 J**	**4.90E-03 J**
	PCB-106 233'45-PeCB	NS	NS	NS	NS	NS	N/A	4.95E-07 U	3.90E-06 U	1.01E-06 U	2.57E-06 U	8.10E-07 U	3.25E-06 U	3.90E-07 U	9.33E-05 U	1.97E-05 U
	PCB-118 23'44'5-PeCB	NS	NS	NS	NS	NS	N/A	**8.37E-03 J**	**4.93E-02 J**	**3.40E-03 J**	**1.90E-02 J**	**5.33E-03 J**	**8.41E-03 J**	**1.22E-02 J**	**3.30E-01 J**	**2.56E-01 J**
	PCB-122 233'4'5'-PeCB	NS	NS	NS	NS	NS	N/A	**1.45E-04**	**5.71E-04**	**5.36E-05**	**2.72E-04**	**5.24E-05**	**6.18E-05**	**1.73E-04**	**4.68E-03 J**	**3.08E-03 J**
	PCB-114 2344'5-PeCB	NS	NS	NS	NS	NS	N/A	**1.08E-04**	**8.70E-04**	**5.97E-05**	**3.19E-04**	**1.10E-04**	**1.45E-04**	**1.34E-04**	**5.31E-03 J**	**3.15E-03 J**
	PCB-105 233'44'-PeCB	NS	NS	NS	NS	NS	N/A	**3.57E-03 J**	**2.02E-02 J**	**1.42E-03**	**8.15E-03 J**	**2.08E-03 J**	**2.40E-03 J**	**4.74E-03 J**	**1.42E-01 J**	**8.87E-02 J**
	PCB-127 33'455'-PeCB	NS	NS	NS	NS	NS	N/A	5.17E-07 U	4.20E-06 U	1.09E-06 U	2.96E-06 U	8.86E-07 U	3.51E-06 U	4.19E-07 U	1.03E-04 U	2.13E-05 U
	PCB-126 33'44'5-PeCB	NS	NS	NS	NS	NS	N/A	**2.59E-05**	**1.08E-04**	**1.76E-05**	**5.49E-05**	**5.61E-06**	**1.26E-05**	**4.11E-05**	**9.10E-04**	**6.01E-04**
	PCB-155 22'44'66'-HxCB	NS	NS	NS	NS	NS	N/A	3.26E-07 U	1.09E-06 U	3.13E-07 U	5.09E-07 U	1.90E-07 U	1.27E-07 U	**3.37E-07 J**	6.20E-06 U	**4.59E-06 J**
	PCB-152 22'3566'-HxCB	NS	NS	NS	NS	NS	N/A	**1.41E-05**	**5.79E-05**	**9.05E-06**	**1.55E-05**	**5.08E-06**	**7.95E-06**	**1.73E-05**	**4.66E-04**	**2.90E-04**
	PCB-150 22'34'66'-HxCB	NS	NS	NS	NS	NS	N/A	**1.55E-05**	**6.20E-05**	**1.10E-05**	**1.94E-05**	**4.96E-06**	**8.56E-06**	**2.09E-05**	**5.07E-04**	**3.51E-04**
	PCB-136 22'33'66'-HxCB	NS	NS	NS	NS	NS	N/A	**1.76E-03 J**	**7.69E-03 J**	**1.00E-03**	**2.01E-03 J**	**5.67E-04**	**8.52E-04**	**2.40E-03 J**	**5.66E-02 J**	**3.43E-02 J**
	PCB-145 22'3466'-HxCB	NS	NS	NS	NS	NS	N/A	**5.53E-06**	**2.75E-05**	**4.95E-06**	**6.29E-06**	**2.45E-06**	**4.03E-06**	**7.49E-06**	**2.33E-04**	**1.50E-04**
	PCB-148 22'34'56'-HxCB	NS	NS	NS	NS	NS	N/A	**1.35E-05**	**4.27E-05**	**6.71E-06**	**1.61E-05**	**3.19E-06**	**1.15E-05**	**1.77E-05**	**3.05E-04**	**2.24E-04**
	PCB-151/135 ...-HxCB	NS	NS	NS	NS	NS	N/A	**4.23E-03 J**	**1.51E-02 J**	**1.76E-03**	**5.20E-03 J**	**9.61E-04**	**1.54E-03 J**	**5.50E-03 J**	**8.57E-02 J**	**5.82E-02 J**
	PCB-154 22'44'56'-HxCB	NS	NS	NS	NS	NS	N/A	**1.41E-04**	**4.63E-04**	**6.97E-05**	**2.03E-04**	**3.89E-05**	**1.06E-04**	**1.77E-04**	**3.23E-03**	**2.45E-03**
	PCB-144 22'345'6-HxCB	NS	NS	NS	NS	NS	N/A	**6.01E-04**	**2.37E-03 J**	**3.16E-04**	**8.03E-04**	**1.72E-04**	**2.07E-04**	**7.70E-04**	**1.47E-02 J**	**9.63E-03 J**
	PCB-147/149 ...-HxCB	NS	NS	NS	NS	NS	N/A	**1.07E-02 J**	**3.48E-02 J**	**4.69E-03 J**	**1.23E-02 J**	**2.64E-03 J**	**4.08E-03 J**	**1.32E-02 J**	**2.14E-01 J**	**1.50E-01 J**
	PCB-134 22'33'56-HxCB	NS	NS	NS	NS	NS	N/A	**9.78E-04**	**3.73E-03 J**	**4.87E-04**	**1.22E-03**	**3.01E-04**	**4.72E-04**	**1.12E-03**	**2.50E-02 J**	**1.64E-02 J**
	PCB-143 22'3456'-HxCB	NS	NS	NS	NS	NS	N/A	**4.51E-05**	1.50E-06 U	5.88E-07 U	8.69E-07 U	2.87E-07 U	2.03E-07 U	**5.10E-05**	6.81E-06 U	**9.58E-04**
	PCB-139/140 ...-HxCB	NS	NS	NS	NS	NS	N/A	**4.30E-04**	**1.39E-03**	**2.18E-04**	**5.57E-04**	**1.26E-04**	**1.98E-04**	**4.69E-04**	**9.64E-03 J**	**6.79E-03 J**
	PCB-131 22'33'46-HxCB	NS	NS	NS	NS	NS	N/A	**2.19E-04**	**8.56E-04**	**1.34E-04**	**2.79E-04**	**7.91E-05**	**9.95E-05**	**2.40E-04**	**6.26E-03 J**	**4.14E-03 J**
	PCB-142 22'3456-HxCB	NS	NS	NS	NS	NS	N/A	**4.52E-06**	1.61E-06 U	5.64E-07 U	8.33E-07 U	2.75E-07 U	**2.45E-06**	**5.65E-06**	7.33E-06 U	**6.45E-05**
	PCB-132 22'33'46'-HxCB	NS	NS	NS	NS	NS	N/A	**5.43E-03 J**	**1.87E-02 J**	**2.61E-03 J**	**5.80E-03 J**	**1.61E-03 J**	**2.51E-03 J**	**6.01E-03 J**	**1.28E-01 J**	**8.57E-02 J**
	PCB-133 22'33'55'-HxCB	NS	NS	NS	NS	NS	N/A	**2.31E-04**	**7.50E-04**	**9.85E-05**	**3.33E-04**	**5.68E-05**	**1.11E-04**	**2.88E-04**	**4.96E-03 J**	**3.33E-03 J**
	PCB-165 233'55'6-HxCB	NS	NS	NS	NS	NS	N/A	**2.48E-06**	1.14E-06 U	3.91E-07 U	5.78E-07 U	1.91E-07 U	1.35E-07 U	**3.32E-06**	5.17E-06 U	**4.20E-05**
	PCB-146 22'34'55'-HxCB	NS	NS	NS	NS	NS	N/A	**2.06E-03 J**	**6.47E-03 J**	**8.01E-04**	**2.93E-03 J**	**4.91E-04**	**9.31E-04**	**2.49E-03 J**	**4.21E-02 J**	**2.80E-02 J**
	PCB-161 233'45'6-HxCB	NS	NS	NS	NS	NS	N/A	3.34E-07 U	1.10E-06 U	3.82E-07 U	5.64E-07 U	1.86E-07 U	1.32E-07 U	2.83E-07 U	4.99E-06 U	**2.33E-05**
	PCB-153/168 ...-HxCB	NS	NS	NS	NS	NS	N/A	**1.26E-02 J**	**4.09E-02 J**	**4.35E-03 J**	**1.86E-02 J**	**2.99E-03 J**	**4.77E-03 J**	**1.59E-02 J**	**2.63E-01 J**	**1.67E-01 J**
	PCB-141 22'3455'-HxCB	NS	NS	NS	NS	NS	N/A	**2.57E-03 J**	**9.22E-03 J**	**9.66E-04**	**3.58E-03 J**	**6.41E-04**	**8.09E-04**	**3.14E-03 J**	**5.84E-02 J**	**3.45E-02 J**
	PCB-130 22'33'45'-HxCB	NS	NS	NS	NS	NS	N/A	**1.33E-03**	**4.19E-03 J**	**5.78E-04**	**2.14E-03 J**	**3.52E-04**	**5.25E-04**	**1.42E-03**	**2.96E-02 J**	**1.86E-02 J**
	PCB-137 22'344'5-HxCB	NS	NS	NS	NS	NS	N/A	**1.30E-03**	**4.05E-03 J**	**6.12E-04**	**2.11E-03 J**	**3.80E-04**	**5.05E-04**	**1.38E-03**	**3.15E-02 J**	**1.90E-02 J**
	PCB-164 233'4'5'6-HxCB	NS	NS	NS	NS	NS	N/A	**1.13E-03**	**3.81E-03 J**	**4.61E-04**	**1.40E-03**	**2.83E-04**	**4.35E-04**	**1.29E-03**	**2.37E-02 J**	**1.50E-02 J**
	PCB-163/138/129 ...-HxCB	NS	NS	NS	NS	NS	N/A	**1.96E-02 J**	**5.77E-02 J**	**7.43E-03 J**	**2.87E-02 J**	**5.01E-03 J**	**6.84E-03 J**	**2.32E-02 J**	**4.21E-01 J**	**2.65E-01 J**
	PCB-160 233'456-HxCB	NS	NS	NS	NS	NS	N/A	3.51E-07 U	1.22E-06 U	4.43E-07 U	6.55E-07 U	2.16E-07 U	1.53E-07 U	2.98E-07 U	5.56E-06 U	3.80E-06 U
	PCB-158 233'44'6-HxCB	NS	NS	NS	NS	NS	N/A	**1.84E-03 J**	**6.64E-03 J**	**8.19E-04**	**2.70E-03 J**	**5.65E-04**	**7.24E-04**	**2.13E-03 J**	**4.75E-02 J**	**2.76E-02 J**
	PCB-128/166 ...-HxCB	NS	NS	NS	NS	NS	N/A	**3.82E-03 J**	**1.09E-02 J**	**1.62E-03**	**6.09E-03 J**	**9.81E-04**	**1.33E-03 J**	**3.96E-03 J**	**8.75E-02 J**	**5.34E-02 J**

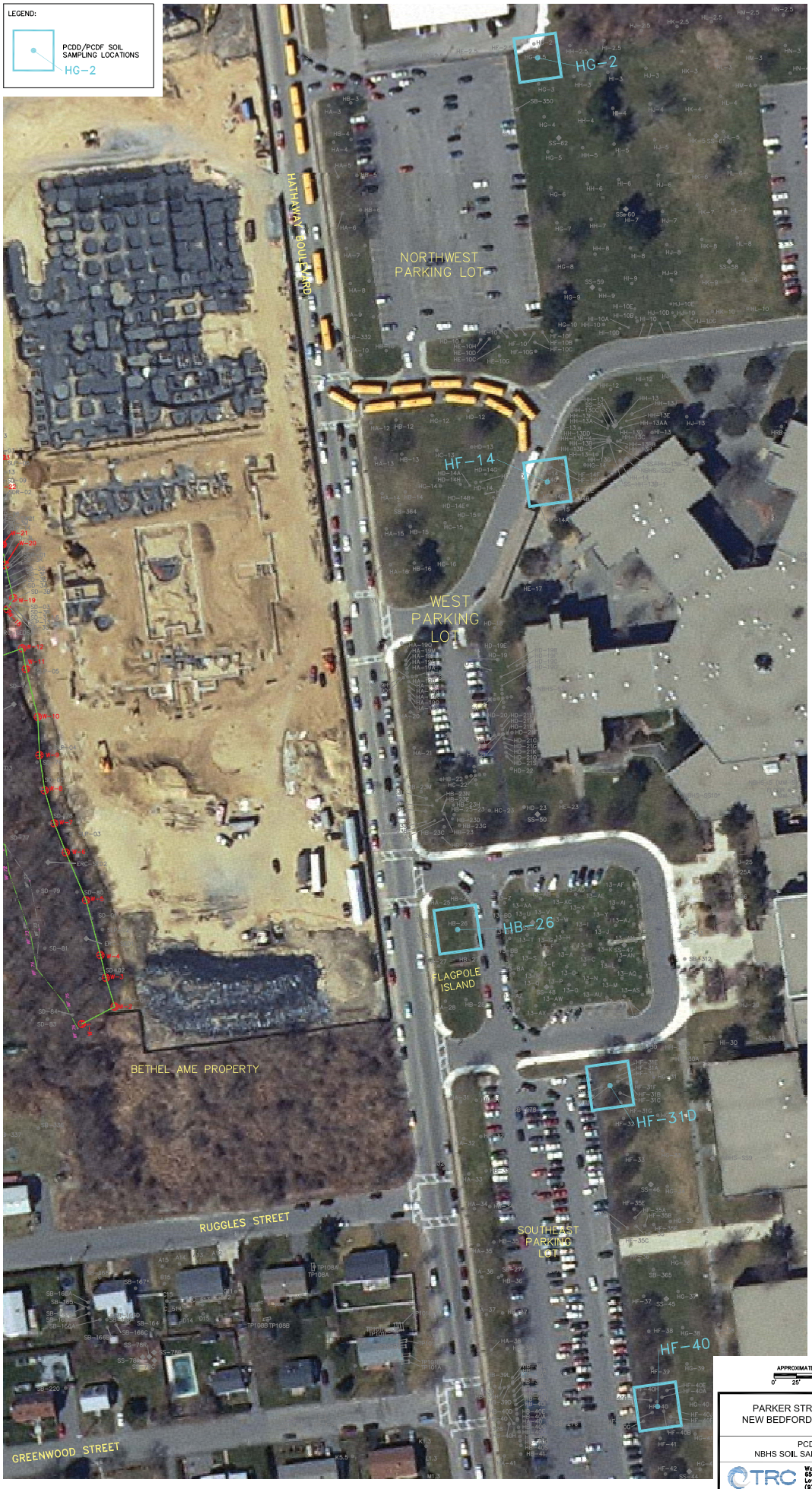
Summary of Analytical PCB Congener Results for Soil Samples -- April 2010
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte							Area Code:	4			4			8		
								Sample ID:	HF-31D			HF-40			HG-2		
								Sample Depth (ft.):	0-1	1-3	4-6	0-1	1-3	3-5	0-1	1-3	5-7
								Sample Date:	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010	4/15/2010
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1*	TSCA										
	PCB-159 233'455'-HxCB	NS	NS	NS	NS	NS	N/A		7.79E-05	2.91E-04	2.23E-05	5.62E-05	7.91E-06	1.34E-05	1.30E-04	1.50E-03	5.81E-04
	PCB-162 233'4'55'-HxCB	NS	NS	NS	NS	NS	N/A		7.61E-05	2.41E-04	3.65E-05	1.34E-04	1.96E-05	2.76E-05	8.79E-05	1.82E-03	1.18E-03
	PCB-167 23'44'55'-HxCB	NS	NS	NS	NS	NS	N/A		9.59E-04	2.88E-03 J	3.88E-04	1.61E-03	2.52E-04	3.43E-04	1.06E-03	2.37E-02 J	1.35E-02 J
	PCB-156/157 ...-HxCB	NS	NS	NS	NS	NS	N/A		2.33E-03 J	8.49E-03 J	8.00E-04	4.76E-03 J	8.69E-04	1.16E-03	2.71E-03 J	6.51E-02 J	3.86E-02 J
	PCB-169 33'44'55'-HxCB	NS	NS	NS	NS	NS	N/A		1.56E-06 U	5.11E-06 U	2.17E-06 U	2.60E-06 U	9.37E-07 U	6.62E-07 U	2.40E-06 U	3.29E-05 U	1.42E-05 U
	PCB-188 22'34'566'-HpCB	NS	NS	NS	NS	NS	N/A		2.88E-06	9.04E-06	1.84E-06	2.97E-06 J	1.62E-07 U	7.10E-07	4.20E-06	5.75E-05	3.40E-05
	PCB-179 22'33'566'-HpCB	NS	NS	NS	NS	NS	N/A		8.87E-04	3.69E-03 J	2.62E-04	7.88E-04	8.66E-05	1.51E-04	1.27E-03	1.85E-02 J	7.33E-03 J
	PCB-184 22'344'66'-HpCB	NS	NS	NS	NS	NS	N/A		2.01E-06	6.43E-06	1.93E-06	2.76E-06	1.53E-07 U	7.18E-07	2.20E-06	4.92E-05	2.21E-05 J
	PCB-176 22'33'466'-HpCB	NS	NS	NS	NS	NS	N/A		3.22E-04	1.32E-03	1.12E-04	2.81E-04	4.07E-05	7.10E-05	5.14E-04	6.97E-03 J	3.00E-03 J
	PCB-186 22'34566'-HpCB	NS	NS	NS	NS	NS	N/A		1.02E-06	3.78E-06	8.24E-07 J	1.59E-06	1.49E-07 U	7.50E-08 U	1.04E-06	2.68E-05	1.24E-05 J
	PCB-178 22'33'55'6-HpCB	NS	NS	NS	NS	NS	N/A		4.31E-04	1.63E-03	1.16E-04	4.59E-04	3.66E-05	6.82E-05	7.81E-04	8.28E-03 J	3.15E-03 J
	PCB-175 22'33'45'6-HpCB	NS	NS	NS	NS	NS	N/A		1.03E-04	3.67E-04	3.89E-05	9.45E-05	1.29E-05	1.90E-05	1.33E-04	1.75E-03	9.10E-04
	PCB-187 22'34'55'6-HpCB	NS	NS	NS	NS	NS	N/A		3.00E-03 J	9.62E-03 J	7.67E-04	2.55E-03 J	2.27E-04	3.78E-04	4.99E-03 J	4.15E-02 J	1.94E-02 J
	PCB-182 22'344'56'-HpCB	NS	NS	NS	NS	NS	N/A		1.40E-05	4.00E-05	7.00E-06	1.21E-06 U	2.95E-06	5.41E-06	1.63E-05	1.29E-05 U	1.79E-04
	PCB-183 22'344'5'6-HpCB	NS	NS	NS	NS	NS	N/A		1.31E-03	4.52E-03 J	4.33E-04	1.16E-03	1.55E-04	2.23E-04	1.99E-03	2.18E-02 J	1.08E-02 J
	PCB-185 22'3455'6-HpCB	NS	NS	NS	NS	NS	N/A		2.84E-04	1.03E-03	7.69E-05	2.32E-04	2.20E-05	3.21E-05	4.68E-04	3.13E-03	1.84E-03
	PCB-174 22'33'456'-HpCB	NS	NS	NS	NS	NS	N/A		2.43E-03 J	8.33E-03 J	6.87E-04	1.86E-03 J	2.52E-04	3.75E-04	3.90E-03 J	3.85E-02 J	1.87E-02 J
	PCB-177 22'33'45'6'-HpCB	NS	NS	NS	NS	NS	N/A		1.44E-03	4.67E-03 J	4.00E-04	1.27E-03	1.64E-04	2.76E-04	2.24E-03 J	2.25E-02 J	1.18E-02 J
	PCB-181 22'344'56-HpCB	NS	NS	NS	NS	NS	N/A		4.43E-05	1.34E-04	2.03E-05	6.89E-05	1.24E-05	1.70E-05	4.64E-05	1.02E-03	5.73E-04
	PCB-171/173 ...-HpCB	NS	NS	NS	NS	NS	N/A		7.62E-04	2.58E-03 J	2.66E-04	7.08E-04	1.30E-04	1.88E-04	1.07E-03 J	1.45E-02 J	7.70E-03 J
	PCB-172 22'33'455'-HpCB	NS	NS	NS	NS	NS	N/A		3.73E-04	1.34E-03	1.26E-04	4.19E-04	5.05E-05	7.43E-05	6.13E-04	7.05E-03 J	3.29E-03 J
	PCB-192 233'455'6-HpCB	NS	NS	NS	NS	NS	N/A		1.06E-06 U	2.83E-06 U	9.02E-07 U	1.16E-06 U	3.29E-07 U	1.87E-07 U	1.05E-06 U	1.30E-05 U	5.96E-06 U
	PCB-180/193 ...-HpCB	NS	NS	NS	NS	NS	N/A		7.06E-03 J	2.54E-02 J	2.24E-03 J	6.57E-03 J	7.64E-04	1.15E-03	1.16E-02 J	1.22E-01 J	5.46E-02 J
	PCB-191 233'44'5'6-HpCB	NS	NS	NS	NS	NS	N/A		9.18E-05	3.55E-04	3.78E-05	9.96E-05	1.56E-05	2.21E-05	1.44E-04	1.94E-03	9.01E-04
	PCB-170 22'33'44'5-HpCB	NS	NS	NS	NS	NS	N/A		1.91E-03 J	6.88E-03 J	6.57E-04	2.22E-03 J	3.15E-04	4.58E-04	2.91E-03 J	4.04E-02 J	1.98E-02 J
	PCB-190 233'44'56-HpCB	NS	NS	NS	NS	NS	N/A		4.48E-04	1.63E-03	1.37E-04	5.71E-04	6.55E-05	1.01E-04	5.74E-04	8.95E-03 J	4.39E-03 J
	PCB-189 233'44'55'-HpCB	NS	NS	NS	NS	NS	N/A		1.06E-04	3.58E-04	4.44E-05	1.58E-04	2.18E-05	3.26E-05	1.54E-04	2.49E-03	1.23E-03
	PCB-202 22'33'55'66'-OcCB	NS	NS	NS	NS	NS	N/A		3.70E-04	1.30E-03	1.24E-04	2.70E-04	1.47E-05	2.41E-05	6.40E-04	5.10E-03 J	1.81E-03
	PCB-201 22'33'45'66'-OcCB	NS	NS	NS	NS	NS	N/A		1.69E-04	6.43E-04	5.53E-05	1.08E-04	7.03E-06	1.17E-05	2.91E-04	2.61E-03	9.31E-04
	PCB-204 22'344'566'-OcCB	NS	NS	NS	NS	NS	N/A		7.06E-07 J	1.21E-06 U	1.10E-06	6.31E-07 U	2.16E-07 U	1.26E-07 U	8.61E-07 J	4.90E-06 U	5.37E-06
	PCB-197 22'33'44'66'-OcCB	NS	NS	NS	NS	NS	N/A		3.66E-05	1.36E-04	1.29E-05	1.97E-05	1.75E-06	2.54E-06	6.51E-05	5.80E-04	2.20E-04
	PCB-200 22'33'4566'-OcCB	NS	NS	NS	NS	NS	N/A		1.71E-04	6.84E-04	5.08E-05	1.25E-04	7.41E-06	1.25E-05	3.23E-04	2.78E-03	8.90E-04
	PCB-198/199 ...-OcCB	NS	NS	NS	NS	NS	N/A		1.50E-03	5.97E-03 J	4.50E-04	1.08E-03	5.88E-05	1.05E-04	2.93E-03 J	2.41E-02 J	7.70E-03 J
	PCB-196 22'33'44'56'-OcCB	NS	NS	NS	NS	NS	N/A		5.13E-04	2.29E-03 J	1.67E-04	3.55E-04	2.48E-05	4.25E-05	9.90E-04	9.59E-03 J	3.00E-03 J
	PCB-203 22'344'55'6-OcCB	NS	NS	NS	NS	NS	N/A		8.60E-04	3.45E-03 J	2.54E-04	6.34E-04	3.98E-05	6.04E-05	1.56E-03	1.33E-02 J	4.50E-03 J
	PCB-195 22'33'44'56-OcCB	NS	NS	NS	NS	NS	N/A		4.79E-04	1.50E-03	1.04E-04	3.03E-04	1.71E-05	3.03E-05	8.68E-04	6.17E-03 J	2.71E-03 J
	PCB-194 22'33'44'55'-OcCB	NS	NS	NS	NS	NS	N/A		1.16E-03	4.24E-03 J	3.12E-04	8.80E-04	4.64E-05	7.97E-05	2.13E-03 J	1.73E-02 J	6.94E-03 J
	PCB-205 233'44'55'6-OcCB	NS	NS	NS	NS	NS	N/A		7.12E-05	2.57E-04	2.19E-05	5.59E-05	2.74E-06	5.34E-06	1.32E-04	1.09E-03	3.99E-04
	PCB-208 22'33'455'66'-NoCB	NS	NS	NS	NS	NS	N/A		8.75E-04	2.86E-03 J	5.23E-04	4.65E-04	2.71E-05	6.95E-05	2.41E-03 J	7.15E-03 J	4.22E-03 J
	PCB-207 22'33'44'566'-NoCB	NS	NS	NS	NS	NS	N/A		1.23E-04	4.33E-04	9.99E-05	7.49E-05	4.92E-06	1.14E-05	1.61E-04	1.52E-03	6.65E-04
	PCB-206 22'33'44'55'6-NoCB	NS	NS	NS	NS	NS	N/A		2.16E-03 J	6.91E-03 J	1.17E-03	1.11E-03	6.39E-05	1.51E-04	6.12E-03 J	1.37E-02 J	9.25E-03 J
	PCB-209 DeCB	NS	NS	NS	NS	NS	N/A		3.94E-03 J	1.05E-02 J	2.62E-03 J	1.77E-03	1.10E-04	3.08E-04	1.23E-02 J	2.25E-02 J	1.29E-02 J
	Mono-CBs	N/A	N/A	N/A	N/A	N/A	N/A		8.63E-06	3.82E-05	6.91E-05	1.57E-05	8.73E-07 U	8.10E-07	2.63E-05	3.66E-04	2.25E-04
	Di-CBs	N/A	N/A	N/A	N/A	N/A	N/A		6.26E-05	3.62E-04	1.75E-04	9.37E-05	2.61E-06	3.69E-06	1.13E-04	2.25E-03 J	1.70E-03
	Tri-CBs	N/A	N/A	N/A	N/A	N/A	N/A		2.90E-04 J	1.85E-03 J	1.61E-04 J	3.75E-04 J	7.51E-05 J	1.51E-04	3.81E-04 J	9.11E-03 J	1.20E-02 J
	Tetra-CBs	N/A	N/A	N/A	N/A	N/A	N/A		7.40E-03 J	5.41E-02	5.24E-03 J	1.46E-02	8.65E-03	1.38E-02	7.64E-03 J	3.13E-01	4.34E-01
	Penta-CBs	N/A	N/A	N/A	N/A	N/A	N/A		7.75E-02 J	3.22E-01	3.36E-02	1.21E-01	3.52E-02	5.08E-02	9.32E-02	2.44E+00	2.00E+00
	Hexa-CBs	N/A	N/A	N/A	N/A	N/A	N/A		7.45E-02	2.42E-01	3.03E-02	1.04E-01	1.94E-02	2.86E-02	8.92E-02	1.65E+00	1.06E+00 J
	Hepta-CBs	N/A	N/A	N/A	N/A	N/A	N/A		2.10E-02	7.39E-02	6.43E-03	1.95E-02 J	2.37E-03	3.64E-03	3.35E-02	3.62E-01	1.70E-01 J
	Octa-CBs	N/A	N/A	N/A	N/A	N/A	N/A		5.33E-03 J	2.05E-02	1.55E-03	3.83E-03	2.21E-04	3.74E-04	9.94E-03 J	8.26E-02	2.91E-02
	Nona-CBs	N/A	N/A	N/A	N/A	N/A	N/A		3.16E-03	1.02E-02	1.79E-03	1.65E-03	9.59E-05	2.32E-04	8.69E-03	2.24E-02	1.41E-02
	De-CB	N/A	N/A	N/A	N/A	N/A	N/A		3.94E-03 J	1.05E-02 J	2.62E-03	1.77E-03	1.10E-04	3.08E-04	1.23E-02 J	2.25E-02 J	1.29E-02 J
	Total PCBs [a]	2	2	3	3	2	1		*1.93E-01 J*	*7.35E-01 J*	*8.19E-02 J*	*2.67E-01 J*	*6.61E-02 J*	*9.79E-02 J*	*2.55E-01 J*	*4.90E+00 J*	*3.73E+00 J*
	Total PCBs [b]	2	2	3	3	2	1		*1.93E-01 J*	*7.35E-01 J*	*8.19E-02 J*	*2.66E-01 J*	*6.61E-02 J*	*9.79E-02 J*	*2.55E-01 J*	*4.90E+00 J*	*3.73E+00 J*
	Dioxin-like PCB TEQs (ND=0 EMPC=EMPC)	2.0E-05	2.0E-05	5.0E-05	5.0E-05	2.0E-05	N/A		*3.1E-06 J*	*1.3E-05 J*	*2.0E-06 J*	*6.5E-06 J*	*8.3E-07 J*	*1.6E-06 J*	*4.8E-06 J*	*1.1E-04 J*	*7.3E-05 J*
	Dioxin-like PCB TEQs (ND=DL/2; EMPC=EMPC)	2.0E-05	2.0E-05	5.0E-05	5.0E-05	2.0E-05	N/A		*3.1E-06 J*	*1.3E-05 J*	*2.0E-06 J*	*6.6E-06 J*	*8.4E-07 J*	*1.7E-06 J*	*4.8E-06 J*	*1.1E-04 J*	*7.3E-05 J*

Summary of Analytical PCB Congener Results for Soil Samples -- April 2010
New Bedford High School
New Bedford, Massachusetts

Notes:

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
EMPC - Estimated Maximum Possible Concentration. An EMPC represents an upper bound on a congener concentration when all criteria for detection of the congener were not met. This value represents the theoretical maximum possible content of dioxins and furans in the sample.
J - Estimated value.
N/A - Not applicable.
NS - No MassDEP standards exist for this analyte.
U - Compound was not detected at specified quantitation limit. When this happens, the result is referred to as a "non-detect," or "ND."
UJ - Estimated non-detect.
Values in **Bold** indicate the compound was detected.
Values shown in Bold and shaded type exceed one or more of the listed MassDEP Method 1 standards.
Values shown in Bold and shaded type exceed TSCA but are less than the listed Method 1 standards.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TSCA - Toxic Substances Control Act criteria.
TEQ – the Toxic Equivalent concentration (TEQ) for each sample. It is calculated by summing concentration data for all dioxin, furan, and PCB congeners that are believed to harm human health in the same way as the congener commonly referred to as dioxin (2,3,7,8-tetrachlorodibenzo-p-dioxin). These congeners are sometimes referred to as "dioxin-like." See the TRC memorandum for additional details.
TEQ is calculated for each sample using Toxic Equivalency Factors (TEFs) for each dioxin-like congener defined by MassDEP and the World Health Organization. TEFs are used to mathematically change concentrations of the individual congeners into a single equivalent concentration of dioxin. EMPCs were included in TEQ estimates to avoid underestimating exposure to dioxin-like congeners. Results below detection limits, or "non-detects" (NDs), were included as either ½ the detection limit (referred to as "ND= DL/2") or by setting the concentration to 0 (referred to as "ND=0"). TEQs change only very slightly when these two different assumptions were used for results below detection limits. The higher TEQ (calculated using the ND=DL/2 assumption) was used to estimate the risk from dioxin-like congeners.
(a) - Calculated by summation of PCB homolog groups.
(b) - Calculated by summation of individual congeners.
* - For reference purposes only.



APPROXIMATE GRAPHIC SCALE
0' 25' 50' 100'

PARKER STREET WASTE SITE
NEW BEDFORD, MASSACHUSETTS

PCDD/PCDF
NBHS SOIL SAMPLING LOCATIONS

TRC
Wannalancit Mills
650 Suffolk Street
Lowell, MA 01854
(978) 970-5600

FIGURE
1

DRAWN BY: HWB
CHECKED BY: JBS
DATE: APRIL 2009

FILE: T:\E_CAD\110265\PARKER ST WASTE SITE-2.dwg