PHASE II COMPREHENSIVE SITE ASSESSMENT

NEW BEDFORD HIGH SCHOOL CAMPUS AT THE PARKER STREET WASTE SITE

NEW BEDFORD, MASSACHUSETTS

Release Tracking Number: 4-15685

VOLUME 1 OF 2

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EXECUTIVE SUMMARY

TRC Environmental Corporation (TRC) prepared this Phase II Comprehensive Site Assessment (CSA) Report on behalf of the City of New Bedford (City) for the New Bedford High School (NBHS) Campus property, which is a portion of the Parker Street Waste Site (PSWS). The Site as defined for the purposes of this Phase II CSA is focused on the NBHS campus. Under the Massachusetts Contingency Plan (MCP; 310 CMR 40.0000) the Site is tracked by the Massachusetts Department of Environmental Protection (MassDEP) under Release Tracking Number (RTN) 4-15685. Response actions at this Site are presently conducted under a Special Project designation due to logistical complexities.

A prior Interim Phase II CSA Report was previously submitted in July 2009 for both the NBHS campus and the Walsh Field Athletic Complex (Walsh Field). This NBHS Phase II CSA Report builds on and supplements the information previously presented in the Interim Phase II CSA Report for the NBHS Campus. Walsh Field is not included in this submittal.

The NBHS Phase II CSA includes data collected by Vanasse Hangen Brustlin, Incorporated (VHB), the BETA Group, Incorporated (BETA) and TRC. In July 2001, VHB collected 22 soil samples from 15 sampling locations at the Site. All samples were analyzed for polychlorinated biphenyls (PCBs), Resource Conservation and Recovery Act (RCRA) 8 metals, and three of the samples were also analyzed for semi-volatile organic compounds (SVOCs), and extractable petroleum hydrocarbons (EPH). Between September 2004 and February 2006, BETA advanced 343 soil borings plus collected an additional 12 surface soil samples (0-6 inches) at the Site. The suite of analyses is described in detail in this Phase II CSA, but generally included PCBs, RCRA 8 metals, total lead, SVOCs, herbicides, pesticides, and volatile organic compounds (VOCs), as well as general petroleum analyses (i.e., Diesel Range Organics [DRO] and Gasoline Range Organics [GRO]). To supplement the prior work, TRC advanced 481 borings, including surface soil sampling, at the Site between late July 2008 and May 2010, with soil samples collected and analyzed for the following:

Summary of TRC soil sampling conducted between July 2008 and May 2010	
Analysis[1]	**Number of Analyses[2]**
PCBs	590
Polyaromatic hydrocarbons (PAHs)	361
MCP metals and mercury	263
Individual metals	1,160
VOCs	2
PCB Homologs	10
EPH	1
Volatile Petroleum Hydrocarbons (VPH)	1

Notes:
[1]Does not include quality control (QC) samples.
[2]See Section 3.1.1 for laboratory method citations.

The additional soil sampling conducted by TRC addresses the sampling recommended in the prior July 2009 Interim Phase II CSA to refine the delineation of impacted areas and to support remedial planning.

The Site is impacted by the presence of fill variously impacted by PCBs, polycyclic aromatic hydrocarbons (PAHs), and metals (for example arsenic, lead, and cadmium). TRC also conducted a targeted soil investigation to evaluate the potential presence of chlorinated dioxins/dibenzofurans and dioxin-like PCB congeners. The fill material appears to be attributable to historical waste disposal activities associated with the PSWS, formerly located in the vicinity of the NBHS campus. The chemical profile of fill materials found at some locations of the Site are similar to those of industrial landfills indicating that the fill material is associated with dumping from industrial sources.

Immediate Response Action (IRA) activities that have been conducted or initiated at the Site are described in Section 6.0 of this report, and are tracked by RTN 4-21847, RTN 4-21872, and RTN 4-22409. IRA activities for RTNs 4-21847 and 4-21872 have been completed. IRA activities for RTN 4-22409 address a potential Substantial Release Migration/Critical Exposure Pathway matter at the Site, which is described in a separate section of the Phase II CSA Report due to the unique technical aspects of that work.

For potential fill related impacts (e.g., PAHs, metals, PCBs), soil sampling was the primary means of identifying, evaluating, and delineating impacts. The majority of TRC's soil investigations consisted of direct push soil borings using track-, truck-, or dolly-mounted drill rigs to sample soil and observe subsurface soil conditions. Surface soil samples were collected using hand tools. The soil investigation was supplemented by groundwater monitoring to confirm the absence of significant impact to groundwater noted by the prior consultant and noted by TRC in other areas of the PSWS, such as the nearby Keith Middle School (KMS). Environmental sampling directed toward potential fill-related impacts was conducted by TRC from July 2008 through May 2010. Following TRC's sampling activities, all sampling locations were professionally surveyed by a qualified surveying firm.

Analysis of samples collected from water seeping into the lower level floors of the NBHS Mechanical Room (Room Number B-114) indicated the presence of chlorinated VOCs. The lower level floor seeps appeared to be associated with groundwater, and based on that assumption an IRA was initiated following timely reporting to MassDEP on January 28, 2010, which is tracked under RTN 4-22409. At that time, the analytical results for the seep samples suggested the potential for chlorinated VOCs to be present in indoor air in the building. As noted in this Phase II CSA, several IRA related reports have been submitted to MassDEP and posted on the City's website to document these activities. Environmental sampling associated with this IRA includes the seep water, groundwater (including 10 wells installed beneath the floor slab of NBHS), soil gas, and indoor air, as well as storm and sanitary sewers, much of which was conducted on an expedited basis. A separate discussion of the results of environmental sampling associated with this IRA, the focus of which was to evaluate if VOCs may be entering the NBHS from beneath the school, are included in this Phase II CSA.

For the purpose of characterizing human health risk, the Site is treated as 11 separate exposure areas based on current known uses of those areas. The Site was divided into the following exposure points based on current activities known to be occurring: HS-1(Children's Playground Area), HS-2 (Fenced Playing Field Area), HS-3 (Unfenced Playing Field Area), HS-4 (Gym Area), HS-5 (Flag Pole Area), HS-6 (House Area), HS-7 (Student Congregating Area), HS-8 (Junior High School Gym Class Area), HS-9 (Beneath Pavement/Building Areas), HS-10 (Tree

Belts Area), and HS-11 (Miscellaneous Samples of Unknown Location. The risk characterization performed also addresses the chlorinated dioxins/dibenzofuran and dioxin-like PCB congener soil sampling results, and the VOCs associated with the RTN 4-22409 IRA.

Method 1/Method 2 was utilized initially to evaluate soil impacts to support remedial planning. The delineation sampling investigations were performed to determine pre-defined excavation boundaries for the lateral and vertical extent necessary to achieve the remedial goal (i.e., exposure point concentrations [EPCs] less than or equal to Method 1/Method 2 S-1 soil standards). Method 2 soil standards were developed for chemicals lacking promulgated MCP Method 1 soil standards using methods and assumptions described in 310 CMR 40.0983 and 40.0884 of the MCP. The use of Method 2 to develop Method 1 S-1/GW-2 and S-1/GW-3 soil standards for dibenzofuran, carbazole, 1,2,3-trichlorobenzene, 4-bromophenyl phenyl ether, 4-methylphenol, alpha-BHC, benzoic acid, endosulfan sulfate, and dinoseb was documented in the Interim Phase II CSA Report in Appendix F. Such standards are referenced in the discussions of chemical concentrations as Method 1 cleanup standards and tabulated accordingly. The results were later verified by Method 3, which was adopted to characterize risk for this Phase II CSA to address the potential additional pathways introduced with the identification of the RTN 4-22409 IRA condition (e.g., indoor air).

A Stage I environmental screening was performed to assess potential risk to the environment because materials with the potential to bioaccumulate (e.g., PCBs and lead) were discovered within 2 feet of the ground surface. However, there is limited potential for environmental receptors (other than typical urban fauna such as pigeons or rodents) to be present at the Site due to the highly urbanized character of the Site location.

Based on the results of the Interim Phase II CSA, TRC has developed the following conclusions:

- The Site is underlain by deposits of potentially impacted fill material associated with historical and undocumented waste management practices.

- Environmental media known to be potentially impacted include soil, groundwater, subslab soil vapor and indoor air.

- It is currently safe for people to occupy NBHS and use the campus around the school. The evaluation assumed that someone spends 8 hours per day, 5 days per week for 27 years in NBHS. There is no significant risk to the health of building occupants.

- Outside the high school, staff, students, and visitors use the campus for various reasons. Activities include people walking across the campus, participating in outdoor gym classes, or cutting grass. TRC considered how people use the campus in evaluating whether people could potentially be exposed to chemicals in the surface soil (soil that is not beneath pavement). TRC determined that the potential exposures to surface soils in the 0 to 1 foot depth zone do not pose a significant risk, considering the possibility of inhaling dust, eating a small amount of surface soil, and coming into skin contact with surface soil. In reaching this conclusion, TRC considered how often and at what intensity high school staff (such as faculty and maintenance personnel), students, and visitors may use the campus.

- No Imminent Hazard (IH) conditions exist at the Site based on data collected through November 2010.

- Soil EPCs for PAHs and lead are associated with Hazard Indices (HIs) greater than 1 and/or Excess Lifetime Cancer Risks (ELCRs) greater than 1×10^{-5} for current and future Site conditions in the top 3 feet of soil. As a result, a Condition of No Significant Risk does not exist for potential soil impacts at the Site under current and future use scenarios. Remedial actions are needed to achieve Site closure.

- The exposure points and chemicals determined to pose a potential significant risk to human health under current conditions, applicable to the top 3 feet of soil, are:

  - HS-3: lead (older child/teenage student, daycare child and adult staff)
  - HS-4: PCBs and lead (daycare child)
  - HS-5: lead (older child/teenage student and daycare child)
  - HS-6: benzo(a)pyrene and lead (older child/teenage student, daycare child and adult staff)
  - HS-8: lead (daycare child)
  - HS-10: lead (daycare child)

- Under future conditions, the 0 to 15 feet soil interval at exposure points HS-1, HS-2 and HS-7 is associated with a condition of No Significant Risk.

- The exposure points and chemicals determined to pose a significant risk to human health under future conditions, applicable to the top 15 feet of soil, are:

  - HS-3: lead (older child/teenage student, daycare child, adult staff and construction worker)
  - HS-4: PCBs and lead (daycare child and construction worker)
  - HS-5: lead (daycare child and construction worker)
  - HS-6: benzo(a)pyrene and lead (older child/teenage student, daycare child, adult staff and construction worker)
  - HS-8: lead (daycare child)
  - HS-9: lead (older child/teenage student, daycare child and construction worker)
  - HS-10: lead (older child/teenage student, daycare child and construction worker)
  - Hot Spot SB-308 (3.5'): benzo(a)pyrene, dibenz(a,h)anthracene, benzo(a)anthracene, benzo(b)fluoranthene, indeno(1,2,3-cd)pyrene and lead (older child/teenage student, daycare child, adult staff and construction worker)
  - HS-11: lead (daycare child and construction worker)
  - Hot Spot MW-27: trichloroethene and vinyl chloride (construction worker)

- Exposure point HS-11 represents composite samples collected from the Site by BETA in 2006, for which depth and location are unknown. These samples clearly demonstrate that pesticides and herbicides are not of concern at the NBHS area, and reinforce the finding

that PAHs and metals are the principal impacts in soil at the Site. Because the locations of the BETA PAH and metals concentrations are not known, TRC performed addition investigative work to identify potential data gaps, which were addressed by the additional soil sampling and analysis. The soil data from that additional sampling effort were included in the overall risk characterization.

TRC performed soil sampling for polychlorinated dibenzo-p-dioxins (dioxins), polychlorinated dibenzofurans (furans) and dioxin-like polychlorinated biphenyls (PCBs) (collectively referred to as dioxin-like compounds or congeners) in 2010 using a site-wide approach. The sampling locations targeted were previously sampled locations that TRC identified as being likely, under an estimated worst case scenario, to have the highest concentrations of dioxins, furans, and dioxin-like PCBs based on a review of all soil data. The site-wide EPCs for the various soil depth intervals, expressed as the contribution of Toxicity Equivalents (Total TEQs) for dioxin-like compounds, were used under an estimated worst case scenario in conjunction with the depth-specific EPCs calculated for each exposure area to evaluate cumulative potential risks and hazards. Under a site-specific Method 3 risk characterization approach and worst case scenario, a condition of No Significant Risk is indicated for dioxin and dioxin-like compounds.

- The biased sampling approach adopted for dioxin-like compounds was intended to avoid underestimating risk from exposure to dioxins in campus soil and, in all likelihood, results in overestimating risk.

- The soil data reviewed by TRC indicate that PCBs are the only chlorinated dioxin/dibenzofuran precursor compounds at PSWS. There is no other indication in the available analytical data of the presence of any other chlorinated organic compounds with the potential to serve as chlorinated dioxin/dibenzofuran precursors in significant concentrations.

- Groundwater from sub-slab monitoring well MW-27 is associated with a Condition of Significant Risk for dermal contact by construction workers. Remedial actions are needed to achieve Site closure for this condition.

- No chlorinated VOC groundwater results greater than the MCP Method 1 GW-2 groundwater standards were found in groundwater located within 30 feet of the NBHS building. VOC results in groundwater greater than the MCP Method 1 GW-2 groundwater standards beneath the Mechanical Room do not extend beyond the limits of the Mechanical Room, indicating that a complete vapor intrusion pathway is not present elsewhere in the NBHS building. Chlorinated VOC groundwater data from beneath the Mechanical Room of the NBHS building (MW-27 and MW-28) exceed MCP Method 1 GW-2 groundwater standards, indicating a potentially complete vapor intrusion pathway in this area of the building. Soil vapor concentrations at subslab soil vapor sampling point PVP-6, located beneath the Mechanical Room, do not exceed soil vapor screening criteria; however, indoor air concentrations in the Mechanical Room exceed Indoor Air Threshold Values (IATVs) due to the presence of a groundwater seep in this room. groundwater standards

- The Mechanical Room is under a strong negative pressure with air from the room vented to the outside of the NBHS building, which works to prevent the migration of VOCs that enter the Mechanical Room from the groundwater seep to adjoining rooms. Therefore, VOCs detected in excess of IATVs in the indoor air of other areas of the NBHS building are present as a result of other indoor VOC sources (e.g., VOC-containing products in the auto shop, etc.), not as a consequence of vapor intrusion. Nevertheless, for the exposures expected in the Mechanical Room, a condition of No Significant Risk exists relative to vapor intrusion/indoor air.

- A condition of No Significant Risk exists for groundwater at the Site under current and future use scenarios, except as described above for VOCs in MW-27/28 (Mechanical Room). The groundwater EPC for total lead in monitoring well MW-5 exceeds the MCP Method 1 GW-3 groundwater standard. However, the dissolved lead result for this well did not exceed the MCP Method 1 GW-3 groundwater standard.

- The EPC for benzo(a)pyrene in soil at sample location SB-308 (3.5') exceeds the MCP Upper Concentration Limit (UCL) of 300 mg/kg. No other soil EPC exceeds its respective MCP UCL. Individual concentrations detected in groundwater at the Site also did not exceed MCP UCLs.

- With regard to public welfare, no community in the vicinity of the Site is believed to be currently experiencing, or expected to experience, significant adverse impacts as a result of the degradation of public or private resources directly attributable to the soil and groundwater impacts at the Site. No other non-pecuniary effects are known to be present, or to be accruing, due to soil and groundwater impacts at this Site. Individual concentrations in groundwater at the Site did not exceed MCP UCLs. However, benzo(a)pyrene in hot spot SB-308 soil exceeded the MCP UCL of 300 mg/kg for this contaminant. Based on this information a condition of Significant Risk to public welfare exists at the Site.

- A Stage I Environmental Risk Characterization (ERC) indicated no significant soil exposure pathways exist at the Site and groundwater data indicate a condition of No Significant Risk to environmental receptors. Therefore, no further ecological investigation at the Site is warranted.

- Remedial actions need to be undertaken to achieve Site closure.

1.0 INTRODUCTION

TRC Environmental Corporation (TRC) prepared this Phase II Comprehensive Site Assessment (CSA) Report on behalf of the City of New Bedford (City) for the New Bedford High School (NBHS) Campus property, which is a portion of the Parker Street Waste Site (PSWS). The Site as defined for the purposes of this Phase II CSA is focused on the NBHS campus. A prior Interim Phase II Comprehensive Site Assessment (CSA) was submitted in July 2009 for both the New Bedford High School campus and the Walsh Field Athletic Complex. This NBHS Phase II CSA builds on and supplements the information previously presented in the Interim Phase II CSA for the NBHS Campus. Walsh Field is not included in this submittal since a Response Action Outcome (RAO) for that property is in preparation for submittal.

The Site occupies approximately 35.4 acres in New Bedford, Massachusetts and is located on the north side of Parker Street, between Hathaway Boulevard on the west and Liberty Street on the east, and a skating rink facility to the north. The Site location is shown on Figure 1-1. Response actions at this Site are conducted under a Special Project designation due to logistical complexities.

The Site is impacted by the presence of fill variously impacted by polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), and metals (for example arsenic, lead, and cadmium). TRC also recently conducted a soil investigation to evaluate the potential presence of chlorinated dioxins/dibenzofurans and dioxin-like PCB congeners, the results of which are also discussed herein

The fill material appears to be attributable to historic disposal activities at the PSWS.

This Phase II CSA Report focuses on the NBHS campus portion of the Site in order to support remedial planning activities. This NBHS Phase II CSA contains analytical results for samples collected through November 2010. Additional soil sampling recommended in the prior July 2009 Interim Phase II CSA Report to refine the delineation of impacted areas and support remedial planning was completed and is described herein.

Immediate Response Action (IRA) activities conducted or initiated on the Site are described in Section 3.3 of this report, and are tracked by RTN 4-21847, RTN 4-21872, and RTN 4-22409.

The investigative work completed at the Site by TRC builds on and supplements previous assessment work at the Site conducted by Vanasse Hangen Brustlin, Incorporated (VHB) and the BETA Group, Incorporated (BETA). The results of TRC's investigative work were evaluated with respect to regulatory requirements under the MCP, and fulfill the data requirements for a Phase II CSA under the MCP (310 CMR 40.0830). A subset of samples were evaluated with respect to regulatory requirements under the Toxic Substances Control Act (TSCA) (include CFR reference). TRC analytical data were also obtained consistent with the most recent edition of the Massachusetts Department of Environmental Protection (MassDEP) Compendium of Analytical Methods (CAM) and in consultation with US EPA.

1.1 Special Project Designation

The disposal site has a Special Project Designation, in accordance with 310 CMR 40.0060. On behalf of the City, VHB submitted an application to MassDEP for a Special Project Designation on August 27, 2001. The Special Project Designation was granted for the disposal site on December 20, 2001. On June 2, 2007 MassDEP granted a five-year extension of the Special Project Designation based on an application for extension submitted by TRC.

The Disposal Site has not yet been Tier Classified, consistent with 310 CMR 40.0064 of the MCP. Public involvement meetings are held on a regular basis to inform concerned citizens of the project status. Public involvement meetings are broadcast on local public access television and include visual presentations by the Licensed Site Professional (LSP); interpretive services are provided for Portuguese and Spanish speaking attendees.

1.2 Objectives

This Interim Phase II CSA Report evaluates the nature and extent of Site conditions, contains a risk characterization, and evaluates possible additional response actions per the MCP (310 CMR 40.0833). Work performed at the Site by TRC addressed data gaps and supplemented previous work at the Site conducted by VHB and BETA in order to refine the delineation of impacted areas and support remedial planning. Summaries of VHB's and BETA's work are contained in the following documents:

- VHB, 2001 *Result of Surface Soil Sampling, New Bedford High School, New Bedford, Massachusetts.* Prepared for: City of New Bedford, Department of Public Schools. Prepared by: Vanasse Hangen Brustlin, Inc., Watertown, Massachusetts, August 23, 2001.

- BETA, 2006b – *Summary of Analytical Data, New Bedford High School, New Bedford, Massachusetts.* Prepared for: City of New Bedford, Department of Environmental Stewardship, 133 William Street, New Bedford, Massachusetts. Prepared by: BETA Group, Inc., Norwood, Massachusetts. June 9, 2006.

- TRC, 2008a **–** *Data Summary Report, New Bedford High School, New Bedford, Massachusetts*. Prepared for: City of New Bedford, Department of Environmental Stewardship, 133 William Street, New Bedford, Massachusetts. Prepared by: TRC, Lowell, Massachusetts. December 2008.

As noted previously, data collected to evaluate the IRA Substantial Release Migration/Critical Exposure Pathway assessment activities performed at the Site, tracked under RTN 4-22409, are also included.

This report is subject to the Limitations presented in Appendix A. Public notice letters are included in Appendix B. Other appendices provided herein include Appendix C (Field Logs), Appendix D (New Bedford High School Substantial Release Migration/Critical Exposure

Pathway Tables and Figures), Appendix E (Laboratory Data Reports), Appendix F (Method 3 Human Health Risk Characterization Tables), and Appendix G (Chemical Characteristics).

2.0 DISPOSAL SITE BACKGROUND INFORMATION

2.1 Disposal Site Information

Consistent with 310 CMR 40.0835(4)(a) of the MCP, the following table summarizes disposal site information.

Site/Disposal Site Name	Parker Street Waste Site
Address	East of Hathaway Boulevard and North of Parker Street
City	New Bedford
Release Tracking Number	4-15685
Latitude/Longitude	41.642686°/-70.946229°
UTM Coordinates	Northing: 4611923 meters; Easting: 337873 meters

2.1.1 Site Demographics

Based on information obtained from Lawrence Oliveira, Chief Administrator for Finance & Operations New Bedford Public Schools, there are approximately 303 full and part-time employees at the Site (Oliveira, 2009). The population density in the vicinity of the Site is expected to be approximately 9,537 persons/square mile (). Based on this estimate, there are expected to be approximately 14,592 persons living within ½ -mile of the Site.

2.1.2 Land Uses Surrounding the Site

Land uses at properties surrounding the Site are as follows:

- The Walsh Field is located to the south of the Site across Parker Street;
- City Yard is located south of Parker Street to the east of Walsh Field;
- A church is located at the intersection of Parker Street and Hathaway Boulevard;
- An apartment complex and indoor rock climbing gym are located across Parker Street from the southwest corner of the Site;
- The Keith Middle School (KMS) is located to the west of the Site across Hathaway Boulevard;
- The Hetland Memorial Skating Rink is located to the north of the Site;
- Department of Public Infrastructure (DPI)/Department of Public Facilities (DPF) storage area that is located east of the Site across Liberty Street; and
- The Oakgrove Cemetery located to the east of the Site beyond the DPI/DPF storage area.

2.1.3 Institutions within 500 feet of Site

Based on Site reconnaissance and review of topographic maps, there are no institutions within 500 feet of the Site. The MCP defines an institution as, "any publicly or privately owned hospital, health care facility, orphanage, nursing home, convalescent home, educational facility, or correctional facility where such facility in whole or in part provides overnight housing."

2.1.4 Natural Resources within 500 feet of Site

Based on review of a MassDEP Priority Resource Map (Figure 2-1), there are no drinking water supply wells, surface water bodies, vegetated wetlands, or areas of critical environmental concern (ACECs) on the Site. The Site and the surrounding area are connected to the municipal water supply.

There is a small isolated wetland immediately to the north of the NBHS in the rear of the Hetland Rink. There is also a wetland located in the rear (west) of the KMS. Both are estimated to be within 500 feet of the Site.

2.2 Disposal Site Maps

Consistent with 310 CMR 40.0835(4)(b), the following table summarizes the disposal site maps and other supporting figures that are provided as part of this Phase II CSA Report.

Figure 1-1	Site Location Map
Figure 2-1	MassDEP Priority Resource Map
Figure 2-2	Disposal Site Map – New Bedford High School
Figure 3-1	Estimated Groundwater Contour Map
Figure 3-2	NBHS Campus Fill Thickness
Figure 3-3	FEMA Floodplain Map
Figure 4-1	Soil Exceedance Summary Map (Exposure Points 1, 2, 3, 4, 6, 7, 8)
Figure 4-2	Soil Exposure Point Summary Map (Exposure Point 5)
Figure 4-3	Soil Exposure Point Summary Map (Exposure Points 9, 10)
Figure 5-1	Schematic Conceptual Site Model

2.3 Disposal Site History

Consistent with 310 CMR 40.0835(4)(c), the following presents an updated Site Description and Site History.

2.3.1 Site Description

The Disposal Site tracked by RTN 4-15685 encompasses an area in the vicinity of NBHS. The focus of this Phase II CSA is an approximately 35.4-acre area within the PSWS and is identified by the City of New Bedford Assessor as the following parcels: map 75 block 12, map 69 block 345, and map 70 block 1. The Site is located on the north side of Parker Street between

Hathaway Boulevard on the west and Liberty Street on the east, and south of the Hetland Rink Property.

Properties in the vicinity of the Site include a state-owned ice arena (Hetland Rink), City-owned storage yards and maintenance facilities, a New Bedford Housing Authority complex, a church, the KMS, vacant land, single family residences and two stores. The Universal Transverse Mercator (UTM) coordinates for the Site are 4,612,139 meters north and 337,806 meters east in Zone 19. The latitude and longitude of the Site are 41.644559 latitude and -70.947316 longitude. A MassDEP Priority Resource Map is provided as Figure 2-1, which includes 500-foot and ½-mile radii for the Site boundaries.

Review of the United States Geological Survey (USGS) Topographic Quadrangles for New Bedford South dated 1977 and New Bedford North dated 1979 indicates that the Site is located at approximately 90 feet above mean sea level (amsl). Site topography is level with hills to the east and west. New Bedford Harbor is located approximately 1.3 miles east of the Site.

NBHS consists of a single 529,192 square foot building (with a footprint of approximately 233,903 square feet) surrounded by paved parking areas, lawn and landscaped areas for recreational use, and paved tennis courts. Approximately 48-percent of the Site is covered by impervious surfaces (e.g., pavement or building). An ice skating rink and isolated wetland area, located along Durfee Street, exist beyond the northern boundary of the NBHS property. The NBHS building has three main sections: (1) the gym; (2) the auditorium; and (3) the "Houses". The gym is located at the southern end of the campus. The grassy area in front (west) of the gym is used for outdoor gym classes. Fenced playing fields (a volley ball court, baseball field, and basketball and tennis courts) are located to the rear (east) of the gym. To the north of the gym is the main entrance to the high school, marked by a flag pole and traffic circle. The auditorium is housed in this central portion of the NBHS building. An unfenced field, used as a practice area, is located to the rear (east) of the auditorium. Further to the north are the classrooms, arranged as a series of four "Houses" (A-Block) around a central core (B-Block). The grassy outdoor areas to the east of the "Houses" is a congregating area for students. The grassy field to the north of the "Houses", between two large parking lots, is used for gym classes by the KMS, which is located to the west of the Site across Hathaway Boulevard.

NBHS is presently heated via natural gas-fired boilers. Back-up electric power is provided by a natural gas fueled generator. The boilers were formerly fired using fuel oil stored in underground storage tanks (USTs), which were removed in 1999 (Oliveira, 2009). Building maintenance, high school science laboratories, and the wood and automotive shops store very small quantities of regulated substances on site. Small quantities of small arms ammunition are stored and utilized at an indoor shooting range.

A MassDEP 21-E Site Priority Resource Map is provided as Figure 2-1. Figure 2-2 presents current Site conditions.

This Phase II CSA Report discusses analytical results by defined potential exposure areas HS-1 through HS-10 located at the Site. The boundaries of each exposure area are indicated on Figure 2-2.

For the purposes of the current risk characterization, the Site was divided into the following distinct potential exposure points:

- HS-1: Children's Playground Area
- HS-2: Fenced Playing Field Area
- HS-3: Unfenced Playing Field Area
- HS-4: Gym Area
- HS-5: Flag Pole Area
- HS-6: House Area
- HS-7: Student Congregating Area
- HS-8: Junior High School Gym Class Area
- HS-9: Beneath Pavement/Building Area
- HS-10: Tree Belts Area
- HS-11: Miscellaneous Samples of Unknown Location

2.3.2 Site History

Based on review of historical USGS topographic maps from 1941 and 1949, wetlands were located at the Site prior to activity associated with the PSWS. In the 1941 (1936 survey data) map and 1949 (1948 survey data) map, the Site is still illustrated as wetland.

Based on review of historical aerial photographs, the Site was subject to land disturbance or disposal activity in the 1930s and 1960s. The chemical profile of fill materials found at some locations of the Site are similar to those of industrial landfills indicating that the fill material is associated with dumping from industrial sources. NBHS was constructed between 1970 and 1972. Soils displaced for construction of the building's foundation were reportedly transported across Hathaway Boulevard to what was then vacant land (the present-day location of the KMS). In 1994, much of the stockpiled soil was used for grading to create the Former Andrea McCoy Soccer Field (Former McCoy Field) across Hathaway Boulevard from the Site (McCoy Field PCB Approval Tech Support Document, U.S.E.P.A. dated August 24, 2005). During an environmental investigation of the Former McCoy Field as a possible location for a middle school in 2000, concentrations of PCBs above regulatory reporting criteria were detected, triggering a reporting condition to MassDEP. MassDEP assigned RTN 4-15685 to the Site.

Following the detection of PCBs at the Former McCoy Field, additional investigations of the surrounding area (New Bedford High School, properties adjacent to KMS, Walsh Field) were undertaken by BETA on behalf of the City in connection with a conditional approval issued by the United States Environmental Protection Agency (EPA) (PCB Risk-Based Cleanup and Disposal Approval, McCoy Field (New Keith Middle School), New Bedford, MA, USEPA August 24, 2005). Additional investigations included soil sampling at the NBHS property (see BETA, 2006b).

2.3.3 Petroleum and Hazardous Substance Storage History

Historical landfilling activities occurred at the Site in the 1930s and 1960s. The Site was an undeveloped wetland prior to such activities.

The NBHS is presently heated via natural gas-fired boilers, and back-up power is provided by a natural gas generator. The boilers were formerly fired using fuel oil stored in underground storage tanks (USTs), which were removed in 1999 (Oliveira, 2009). Building maintenance, high school science laboratories, and the wood and automotive shops store very small quantities of regulated substances on site. Small quantities of small arms ammunition are stored and utilized at an indoor shooting range.

2.3.4 Previous Subsurface Investigations

In July 2001, VHB collected 22 soil samples from 15 sampling locations at the Site (VHB, 2001). All samples were analyzed for PCBs, RCRA 8 metals, and three of the samples were also analyzed for semi-volatile organic compounds (SVOCs), and extractable petroleum hydrocarbons (EPH). On or about May 6, 2010, these data were brought to TRC's attention by the City. The samples were identified as SS-1 to SS-15 by VHB. Due to TRC having utilized the same identification designations prior to knowledge of the VHB samples, a "V" has been added to the sample identifications (e.g., SS-1 became VSS-1) to avoid confusion going forward.

BETA conducted subsurface environmental investigations at the Site between September 2004 and February 2006. During that time, BETA advanced 343 soil borings and collected 12 surface soil samples (0-6 inches) at the Site. Of these 343 sampling locations, BETA observed fill at 276 (BETA, 2006b). Soil samples were submitted for the following laboratory analyses:

Analysis	Number of Analyses
PCBs	259
RCRA 8 Metals	158
Total Lead only	56
SVOCs/PAHs	67
Herbicides	6
Pesticides	6
VOCs	6
Diesel Range Organics	6
Gasoline Range Organics	6

Notes:
PCBs – polychlorinated biphenyls
RCRA – Resource Conservation and Recovery Act
SVOCs – semi-volatile organic compounds
PAHs – polycyclic aromatic hydrocarbons
VOCs – volatile organic compounds

The results of laboratory analyses are discussed in Section 4.0 relative to applicable MCP regulatory standards. BETA identified the following impacts (BETA, 2006b):

- PCBs
- arsenic
- barium
- cadmium
- chromium
- lead
- mercury
- PAHs (specifically: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, indeno(1,2,3-cd) pyrene, phenanthrene, and pyrene).

2.4 Phase I Information Updates

A Phase I Initial Site Investigation (ISI) has not been prepared for the Site. This Phase II CSA fulfills the requirements of a Phase I ISI, as set forth in 310 CMR 40.0483, as summarized below:

Phase I ISI- Information Types	Section(s) of Interim Phase II CSA
General Disposal Site Information	2.1
Disposal Site Map	2.2
Disposal Site History	2.3
Site Hydrogeological Characteristics	3.0
Nature and Extent of Contamination	4.0
Migration Pathways and Exposure Potential	5.0 and 7.0
Evaluation of Immediate Response Actions	6.0

3.0 SITE HYDROGEOLOGICAL CHARACTERISTICS

Environmental site investigation activities described in the Phase II CSA were conducted by TRC on behalf of the City between July 2008 and November 2010. Information and observations relative to Site geology and hydrogeology are summarized below.

3.1 Relevant TRC Subsurface Investigations/Documentation

The majority of TRC's environmental investigations consisted of direct push soil borings using track-, truck-, or dolly-mounted drill rigs to sample soil and observe subsurface soil conditions. Surface soil samples were collected using hand tools. Drilling services and equipment were provided by New England Geotech, LLC (New England Geotech) of Jamestown, Rhode Island. Copies of associated soil boring logs for the environmental investigations conducted after December 2008 and documented herein by TRC are provided in Appendix C. Soil sampling was the primary means of identifying and delineating Site impacts. In addition, TRC installed and sampled seven groundwater monitoring wells at the Site in 2008 and 2009 to evaluate metals, PCBs, and PAHs.

The investigative approach was intended to evaluate the presence or absence of fill, the horizontal and vertical extent of such fill or related impacts. In general, soil borings were advanced and soil samples were collected until native overburden was encountered unless refusal was encountered first. Where native material was submitted for laboratory analysis, two samples of native material from two different depths were typically collected in borings selected to characterize the native horizon. The lower native sample was retained for analysis contingent upon the results of the upper native horizon analysis in an attempt to delineate the vertical extent of impacts, if present, without having to remobilize sampling teams. The contingent native material was not analyzed if the native material interval above it was found to be un-impacted (below Method I criteria) based on laboratory analysis or as otherwise directed by the TRC LSP. TRC also collected some relatively shallow soil samples to supplement data previously collected by others to close potential data gaps and to support an evaluation of potential risks.

Supplemental environmental sampling was conducted by TRC from July 2008 through May 2010 to add to previous work at the Site by others, to refine the delineation of impacted areas and support remedial planning. TRC conducted delineation soil sampling along concentric rings (i.e., step-out sampling) around sampling locations identified for potential excavation, based on prior sampling results. Delineation samples were sent for laboratory analysis for potential COCs within the exposure point area for the initial step-out delineation samples. If the initial step-out delineation sample results indicated results below the MCP Method 1 soil standard, subsequent step-out delineation sample laboratory analyses did not include them. Supplemental investigation and step-out delineation sampling activities were conducted within each exposure point area to identify the lateral and vertical extent of excavation to achieve the remedial goal (i.e., Exposure Point Concentrations [EPCs] less than or equal to Method 1/Method 2 S-1 soil standards, which were later verified via Method 3). Based on the risk characterization results, the supplemental sampling investigations were focused on a vertical depth of up to three feet below ground surface, targeting currently accessible soils. For the areas targeted as being considered for excavation, the excavation limits were determined by recalculating the EPCs for each targeted area after the samples within the excavation boundaries were eliminated from the

data set, confir70ming that a condition of No Significant Risk would be achieved for the targeted areas following excavation.

Figure 2-2 illustrates the locations investigated by TRC at the Site, using the above-described techniques. The sampling locations were surveyed by Land Planning, Incorporated of Hanson, Massachusetts (Land Planning) following TRC's sampling activities.

TRC conducted field screening of soil samples consisting of visual and olfactory observations, jar headspace readings using a calibrated photoionization detector (PID), and professional judgment, consistent with TRC Standard Operating Procedures (SOPs) and general industry practice. TRC employed the MassDEP jar headspace technique (MassDEP, 1996) to screen for the presence of volatile organic compounds (VOCs) in soil. TRC also evaluated and logged the geologic character of the soil samples consistent with the Burmeister (1958) method.

Soil samples for PCB Aroclor and homolog analyses were submitted to Northeast Analytical Laboratories (NEA) of Schenectady, New York. Soil samples for MCP metals and mercury, PAHs, and Toxicity Characteristic Leaching Procedure (TCLP) metals analyses were submitted to Con-Test Analytical Laboratory (Con-Test) of East Longmeadow, Massachusetts. All samples were submitted under chain-of-custody.

A summary of all Site analytical data is also provided herein.

3.1.1 New Bedford High School Soil Investigations

TRC advanced 481 borings, including surface soil sampling, at the Site between late July 2008 and May 2010, supplementing the prior work conducted by VHB and BETA (see Section 2.3.4). Soil samples were collected and submitted for the following laboratory analyses:

Summary of soil sampling conducted between July 2008 and May 2010	
Analysis	**Number of Analyses[1]**
PCBs[2]	590
SVOCs/PAHs[3]	361
MCP Metals and mercury[4]	263
Individual metals[5]	1160
VOCs[6]	2
PCB Homologs[7]	10
EPH[8]	1
VPH[9]	1

Notes:
[1]Does not include quality control (QC) samples.
[2]Polychlorinated biphenyls (PCBs) as Aroclors by SW-846 Method 8082.
[3]Polyaromatic hydrocarbons (PAHs) by SW-846 Method 8270C.
[4]Massachusetts Contingency Plan (MCP) Metals/Hg – antimony, arsenic, barium, beryllium, cadmium, chromium, lead, nickel, selenium, silver, thallium, vanadium, zinc and mercury by SW-846 Methods 6010B/7471A.
[5]Individual metals were analyzed by SW-846 Methods 6010B/7471A in support of impacted soil delineation efforts.
[6]Volatile Organic Carbon by SW-846 Method 8260B.
[7]PCB homologhomologue analysis by SW-846 Method 680.
[8]Extractable petroleum hydrocarbons (EPH) by MassDEP Method
[9]Volatile petroleum hydrocarbons (VPH) by the MassDEP Method.

Soil and groundwater samples for PCB Aroclor and homolog analyses were submitted to NEA. Soil and groundwater samples for MCP metals and mercury, PAHs and dibenzofuran analyses were submitted to Con-Test. All samples were submitted under chain-of-custody.

Soil boring details and soil boring logs for samples taken by TRC through December 2008 were included in the Interim Phase II. A summary of soil boring and the soil boring logs are provided in Appendix C for borings taken from January 2009 to May 2010. Boring logs were not prepared for surface soil samples collected with hand tools.

3.1.1.1 Dioxin Investigative Sampling

On April 15, 2010, TRC conducted soil investigative sampling for polychlorinated dibenzo-p-dioxins (PCDDs), polychlorinated dibenzofurans (PCDFs) and dioxin-like PCBs (collectively referred to as dioxin and dioxin-like compounds), as outlined in the Proposed New Bedford High School Dioxin Investigation Technical Approach Memorandum from TRC to the City dated March 30, 2010. A total of sixteen samples were collected from five sampling locations and analyzed for dioxins by SW-846 Method 8290 and PCB congeners by SW-846 Method 1668A by Analytical Perspectives of Wilmington, North Carolina. All samples were also analyzed for PCBs as Aroclors by NEA, and PAHs, MCP metals and mercury by Con-Test.

Dioxin and dioxin-like compounds may be formed as part of a burning/combustion process under appropriate conditions. Data collected to date indicate that ash is present in impacted fill at the PSWS. The five sampling locations targeted were previously sampled locations that TRC identified as being likely, under an estimated worst case scenario, to have the highest concentrations of dioxins and dioxin-like compounds based on a review of all soil data. The soil data reviewed by TRC indicate that PCBs are the only chlorinated dioxin/dibenzofuran precursor compounds at PSWS. There is no other indication in the available analytical data of the presence of any other chlorinated organic compounds with the potential to serve as chlorinated dioxin/dibenzofuran precursors in significant concentrations, based on analysis for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides, and PCBs conducted by others (VHB and BETA) and TRC.

This evaluation of target sample locations was based on the evaluation of existing chemical signatures and geographic coverage within the population of previous sample locations. The soil sampling program was designed to collect samples from biased high ("worst case") locations at the Site. Soil sample locations with concentrations greater than regulatory limits for PCBs, PAHs, and/or metals were selected for review. Sample locations were selected based on the presence of ash/cinders, metals enrichment, and PAHs; PCB concentrations greater than regulatory limits; and to provide geographic coverage. The worst case biased sampling approach was intended to avoid underestimating risk from exposure to dioxins in Site soil and, in all likelihood resulted in overestimating risk. At each sample location, a sample was taken of the top one foot soil interval, the one to three foot soil interval, and the historic fill.

At sample location HG-2, a sample of the 5-7 foot interval was also analyzed for VOCs, EPH and VPH by Con-Test due to an elevated field screening PID reading of 67 parts per million by volume (ppmv) and an observation of an oil globules and staining.

The results of the dioxin and dioxin-like compound investigative sampling are discussed separately in Section 4.1.1.12.

3.1.2 Groundwater Investigation

Following installation, TRC collected groundwater samples from ten PSWS monitoring wells. Groundwater samples were collected on the following dates; August 19, 2008 (MW-4 through MW-6), September 6, 2008 (MW-7 and MW-8B), March 10, 2009 (MW-WFB4, MW-WFE5), March 11, 2009 (MW-WFC13), and April 23, 2009 (MW-HH-13, MW-HRC-33). The monitoring well locations are identified on Figure 2-2. Additional groundwater investigations were performed in connection with the IRA Substantial Release Migration/Critical Exposure Pathway response actions discussed in Section 6.3.

Groundwater samples were collected following EPA Region I low stress (low flow) sampling guidelines (USEPA, 1996). During purging activities, water quality parameters were monitored using a YSI 600XL Sonde and 650 MDS data logger and a LaMotte 2020 turbidity meter. Water quality parameters were recorded on groundwater sampling log forms which are included in Appendix C. Groundwater samples were collected after water quality parameters had stabilized in accordance with the low flow guidance, or after one hour of purging if parameters did not stabilize. A modification of the low flow guidance was the use of peristaltic pumps to collect the samples.

3.1.3 Groundwater Elevation Survey

On March 13, 2009, TRC conducted a synoptic water level gauging event to assess groundwater flow direction and gradient at the entire PSWS. The synoptic round included 13 monitoring wells on the Site and surrounding properties (as shown on Figure 3-1). Ten of the wells were installed by TRC between July 2008 and February 2009; three monitoring wells were installed by BETA in August and November 2006 on the KMS property to support long-term monitoring activities at that portion of the PSWS. All wells except MW-WFB4 were constructed as flush-mount installations with the well screen set across the water table, based on observations made during boring advancement. Monitoring well MW-WFB4 was installed approximately four inches beneath the ground surface to be unobtrusive to sports activities since it was located in the middle of an athletic field. All TRC wells were installed utilizing the services of New England Geotech. All monitoring wells were surveyed by Land Planning following installation. The well construction information, depth to water, and calculated water elevations are summarized below.

Well ID	Date of Installation	Location	Reference Elevation (ft AMSL)	Depth to Water (ft)	Calculated Water Elevation (ft AMSL)
MW-1	8/31/2006	KMS	94.09	9.85	84.24
MW-2	8/31/2006	KMS	94.03	9.31	84.72
MW-3	11/17/2006	KMS	93.47	9.35	84.12
MW-4	7/31/2008	NBHS	84.53	1.75	82.78
MW-5	7/30/2008	NBHS	84.55	1.95	82.6
MW-6	7/28/2008	NBHS	84.74	1.41	83.33

Well ID	Date of Installation	Location	Reference Elevation (ft AMSL)	Depth to Water (ft)	Calculated Water Elevation (ft AMSL)
MW-7	8/21/2008	NBHS	91.10	8.51	82.59
MW-8A	8/21/2008	NBHS	89.35	3.06	86.29
MWTRC-1	1/20/2009	Former KJHS	85.59	4.89	80.7
MWTRC-2	1/21/2009	Former KJHS	85.25	4.50	80.75
MW-WFB4	2/25/2009	Walsh Field	85.15	4.35	80.8
MW-WFE5H	2/25/2009	Walsh Field	84.99	4.41	80.58
MW-WFC13	2/25/2009	Walsh Field	84.18	3.94	80.24

Notes:
KMS – Keith Middle School
KJHS –Former Keith Junior High School (i.e., New Andrea McCoy Field)
AMSL – above mean sea level
ft – feet

On April 3, 2009, TRC installed two additional wells (MW-HRC-33 and MW-HH-13) at the Site to further evaluate potential groundwater impacts. On May 23, 2009, TRC collected synoptic water level measurements when the wells were sampled. The wells were constructed as flush-mount installations with the well screen set across the water table, based on observations made during boring advancement. All TRC wells were installed utilizing the services of New England Geotech. All monitoring wells were surveyed by Land Planning following installation. The well construction information, depth to water, and calculated water elevations are summarized below.

Well ID	Date of Installation	Location	Reference Elevation (ft AMSL)	Depth to Water (ft)	Calculated Water Elevation (ft AMSL)
MW-HRC-33	4/3/2009	NBHS	86.09	3.95	82.14
MW-HH-13	4/3/2009	NBHS	87.85	4.00	83.85

Notes:
AMSL – above mean sea level
ft – feet
NBHS – New Bedford High School

3.2 Site Geologic/Hydrogeologic Conditions

3.2.1 Site Geology

The Site is underlain by topsoil and up to approximately 8 feet of anthropogenic fill material that includes sandy material with ash. In places, the ash fill includes broken glass, brick fragments, rubber, slag, coal, cinders, plastic and/or metallic fragments. Location of the top and bottom of fill material is varied throughout the Site, ranging from 0.5 to 8.0 feet below ground surface Figure 3-2 depicts fill thickness at the Site. In some places no fill was identified. Anthropogenic fill materials are underlain by approximately 0.25 to 6.0 feet of native dark brown organic peat material, mixed with silt and clay in places from the wetland that predates the development of the area. Native soils below the organic peat layer are characterized by gray fine silty sands with trace gravel and/or medium sand in places.

Observation of Site soils and review of historic topographic maps indicates that surficial geology at the Site consists of glacial outwash sediments. Drumlins flank the Site to the east and west.

Based on review of the USGS Bedrock Geologic Map of Massachusetts (Zen et al., 1983), bedrock beneath the Site is light gray, pinkish-gray to tan, mafic-poor granite known as Alaskite (Zagr). Soil boring activities were terminated in native material unless refusal was encountered first. Direct push methods were employed to sample Site soils to characterize the presence of fill materials and the horizontal and vertical extents of soil impacts, if any. Bedrock was not assessed during this investigation. The boring methods employed were sufficient to assess the vertical extent of Site impacts (see Section 4.0).

3.2.2 Site Hydrogeology

As discussed in Section 3.1.3, TRC conducted a synoptic groundwater monitoring round on March 13, 2009 to determine groundwater flow direction and gradient across the study area. Figure 3-1 shows the water table elevation throughout the study area. The groundwater flows predominantly to the southeast at a gradient of about $2x10^{-3}$ ft/hr. The groundwater aquifer is unconfined and is present about 10 feet below ground surface. The unconfined aquifer is composed of ash fill, organic peat, and/or glacial outwash sediments (listed from the ground surface down, as typically observed). The aquifer thickness is not known. This aquifer is not considered potentially productive, as shown in Figure 2-1.

Based on literature values, the peat layer is expected to exhibit low hydraulic conductivity, on the range of 10^{-6} to 10^{-3} centimeters per second (cm/sec) while glacial outwash deposits having relatively less fine material could exhibit a hydraulic conductivity range of 10^{-3} to 15 cm/sec (Fetter, 1980). The hydraulic conductivity of the ash fill material is more difficult to estimate, since the material is heterogeneous in nature and typical approximate ranges of such fill are not found in the available technical references; however, a study of the hydraulic conductivity of ash-sand mixtures indicates that the hydraulic conductivity of the ash fill could be as low as approximately $4.4x10^{-5}$ cm/sec (Pathan et al., 2003) with higher hydraulic conductivities (10^{-1} cm/sec; Fetter, 1980) possible depending on the relative amounts of sand and ash. Since the deposition is fairly loose, based on observations made during boring advancement, the hydraulic conductivity of the fill material is estimated to be higher relative to the underlying peat layer.

The City receives an average of 47.34 inches of precipitation annually (www.fedstats.gov). Infiltration of rainwater to the aquifer is expected to be lower at the Site relative to other nearby areas given that the Site has more impervious surfaces (Section 2.3.2). There are no surface water bodies on the Site.

3.2.3 Flooding Potential

As shown in Figure 3-3, the Site is not within the 100-year or 500-year flood plains and flooding potential appears to be low.

4.0 NATURE AND EXTENT OF CHEMICAL IMPACTS

Per 310 CMR 40.0835(4)(f) of the MCP, the following presents an analysis of the current nature and extent of compounds detected in soil and groundwater for the Site, located between Hathaway Boulevard and Liberty Street in New Bedford, Massachusetts. This section summarizes the results of chemical analyses for soil and groundwater samples collected at the Site by TRC and samples collected during previous assessments conducted by VHB and BETA. The current nature and extent of VOCs related to the IRA Substantial Release Migration / Critical Exposure Pathway are discussed in Section 6.3.3.

As discussed in Section 6.0 of this Report, the MCP Method 1 soil categories S-1, S-2 and S-3 currently apply to Site soil. Based on the available information, groundwater categories GW-2 and GW-3 apply to groundwater beneath this Site. An MCP Method 3 Risk Characterization, which considers both current and foreseeable future use of the Site, has been completed for this Site and is presented in Section 7.0 of this Report.

4.1 Analytical Results

The following is a discussion of the results of laboratory analysis for soil and groundwater samples collected at the Site. Analytical results indicate soil and groundwater impacts consistent with the Site's historic use as a dump. Groundwater impacts relative to the IRA Substantial Release Migration/ Critical Exposure Pathway are discussed in Section 6.3. Tables summarizing the results of chemical analysis for soil and groundwater samples collected at the Site are provided in Tables 4-1 through Table 4-14 of this report organized by the defined exposure areas illustrated in Figure 2-2. Where duplicate samples were collected, the maximum results are cited below. Copies of the laboratory data reports that were not previously submitted are provided in Appendix D.

4.1.1 Soil Analytical Results

The nature and extent of impacted soil is discussed as separate exposure point areas based on the identification of varied activities and uses throughout the different areas of the Site, and in consideration of future remedial actions. The exposure point area boundaries and sample locations are illustrated in Figure 2-2.

Supplemental environmental sampling was conducted by TRC to address data gaps and supplement previous work at the Site by BETA, and to refine the delineation of impacted areas and support remedial planning, as previously described in Section 3.1. Supplemental sampling results are discussed separately from delineation sampling results in the following sections, since the delineation sampling results were not utilized to characterize baseline risk as described in Section 6.

In locations where soils have been previously excavated under an IRA, as described in Section 6.0, the sample results are not included in the tables of results. These excavated sample locations continue to be identified in Figure 2-2. The total number of soil samples submitted for laboratory analysis by TRC and others per exposure point area include the following:

Parameter	Number of Analyses[1]										
	EP-1	**EP-2**	**EP-3**	**EP-4**	**EP-5**	**EP-6**	**EP-7**	**EP-8**	**EP-9**	**EP-10**	**EP-11**
PCBs[2]	9	96	33	86	68	70	12	78	96	195	
PCB Homologs[3]		2		1		1			4	1	
PAHs[4]	7	64	22	15	5	63	12	7	50	72	6
SVOCs[5]				8	16	5		21		22	
VOCs[6]		2	1							3	
Pesticides											6
Herbicides											6
GRO[7]		3	1							3	
EPH[8]										1	
Lead	6	76	65	80	23	87	12	43	62	176	15
Chromium	6	76	28	23	77	93	12	43	62	139	15
Cadmium	6	76	22	78	23	85	12	43	62	142	15
Arsenic	6	76	22	23	23	80	12	37	62	135	15
Barium	6	76	28	23	6	85	12	37	62	139	15
Selenium	5	66	16	21	23	19	12	37	62	52	15
Silver	5	66	16	21	23	19	12	37	62	52	15
Mercury	5	66	16	21	6	25	12	37	62	52	
Beryllium	3	62	16	14	23	14	12	7	62	25	
Nickel	3	62	16	14	6	14	12	7	62	25	
Vanadium	3	62	16	14	6	14	12	7	62	25	
Zinc	3	62	16	14	6	14	12	7	62	25	
Antimony	3	62	16	11	23	14	12	7	39	19	
Thallium	3	62	16	14	6	14	12	7	24	19	
Hexavalent Chromium						12					
pH						12					
ORP[9]						12					

Notes:
[1]Does not include quality control (QC) samples and samples previously excavated under an IRA.
[2]Polychlorinated biphenyls as Aroclors
[3]PCB homologue analysis.
[4]Polycyclic aromatic hydrocarbons.
[5]Semivolatile Organic Carbon.
[6]Volatile Organic Carbon.
[7]Gasoline Range Organics
[8]Extractable petroleum hydrocarbons (EPH) by MassDEP Method
[9]Oxidation Reduction Potential.

A portion of the supplemental sampling was performed at BETA sampling locations that were only analyzed for PCBs, and a composite was collected from two or three locations for the analysis of metals. If the BETA results indicated elevated levels of metals in a composite sample, then TRC collected individual samples in the vicinity of the sample locations that were previously composited by BETA to further evaluate those sample locations.

The discussion of the nature and extent of impacted soil focuses on the 0 to 1 foot below ground surface horizon, 1 to 3 feet below ground surface horizon, and greater than 3 feet below ground surface horizon. The 0 to 1 foot horizon is considered to be directly accessible with a high potential for contact by people. The 1 to 3 feet horizon is considered to be not immediately accessible and has a lower potential for contact by people (potential for contact by maintenance or construction personnel when performing activities that require digging below the ground surface exists). In some exposure point areas, the intervals of some samples collected by BETA encompass more than one soil horizon. For discussion purposes, where the sample interval includes surficial soil (for example sampling interval 0 to 2 feet), the sampling interval was considered to be part of the 0 to 1 foot soil horizon. Where a sample interval does not include surficial soil (for example 0.5 to 1.5 feet), the sampling interval was considered to be part of the 1 to 3 feet soil horizon. The BETA data, and their respective interval assignments, are included in Tables 4-1 through 4-14.

All analyses of soil samples submitted by TRC for PAHs, PCB Aroclors, and MCP metals and mercury, were conducted in accordance with the MassDEP Compendium of Analytical Methods (CAM). Analyses of soil samples submitted by TRC for PCB homologs were conducted in accordance with EPA Method 680.

Samples submitted by BETA for metals analyses were analyzed for the RCRA 8 metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver). BETA also submitted soil samples for analysis of PCB Aroclors, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, herbicides, total petroleum hydrocarbons (TPH), TCLP metals, flashpoint, reactivity, and dibenzofuran. See Section 2.3.3 for a summary of BETA soil sampling and analytical assignments.

Method 1/Method 2 was utilized initially to evaluate soil impacts to support remedial planning. The delineation sampling investigations were performed to determine pre-defined excavation boundaries for the lateral and vertical extent necessary to achieve the remedial goal (i.e., EPCs less than or equal to Method 1/Method 2 S-1 soil standards). Method 2 soil standards were developed for chemicals lacking tabulated MCP Method 1 soil standards using methods and assumptions described in 310 CMR 40.0983 and 40.0884 of the MCP. The use of Method 2 to develop Method 1 S-1/GW-2 and S-1/GW-3 soil standards for dibenzofuran, carbazole, 1,2,3-trichlorobenzene, 4-bromophenyl phenyl ether, 4-methylphenol, alpha-BHC, benzoic acid, endosulfan sulfate, and dinoseb was documented in the Interim Phase II in Appendix F. Such standards are referenced in the discussions of chemical concentrations as Method 1 standards and tabulated accordingly. The results were later verified by Method 3, which was adopted to characterize risk for this Phase II CSA.

The soil chemical concentration units in the following discussion are in milligrams per kilogram (mg/kg). The discussion is presented by soil exposure point area (see Figure 2-2). A summary of the results of the dioxin and dioxin-like compound sampling is discussed separately in Section 4.1.1.12. Laboratory detection limits were below the Method 1 standards, unless otherwise noted and discussed in the following sections.

4.1.1.1 New Bedford High School Children's Playground Area Soil Results (HS-1)

For soil samples taken from the NBHS Children's Playground Area at the Site, identified as Exposure Point Area HS-1 on Figure 2-2, the laboratory results did not indicate the detection of any chemicals at concentrations that exceed the MCP Method 1 soil standards. The laboratory reporting limits were below MCP Method 1 soil standards for all analytes. A summary of the NBHS Children's Playground Area (HS-1) soil analytical results for detected chemicals only is included in Table 4-1.

No samples were collected from the greater than 3 feet below ground surface horizon.

New Bedford High School Children's Playground Area (HS-1) Soil PAH Results

For soil samples taken in the 0 to 1 foot below ground surface horizon and the 1 to 3 foot below ground surface horizon, the analytical results did not indicate the detection of any PAHs at concentrations above laboratory reporting limits.

New Bedford High School Children's Playground Area (HS-1) Soil Metals Results

For soil samples taken in the 0 to 1 foot below ground surface horizon and the 1 to 3 feet below ground surface horizon, the analytical results did not indicate the detection of any MCP Metals or mercury at concentrations exceeding the MCP Method 1 soil standards.

New Bedford High School Children's Playground Area (HS-1) Soil PCB Results

For soil samples taken in the 0 to 1 foot below ground surface horizon and the 1 to 3 feet below ground surface horizon, the analytical results did not indicate the detection of total PCBs at concentrations above laboratory reporting limits.

New Bedford High School Children's Playground Area (HS-1) Delineation Sampling Results

Soil EPCs under baseline condition indicate a condition of No Significant Risk has been achieved for soil within the 0 to 3-foot interval under current and future use scenarios for the area identified as HS-1, therefore no delineation sampling was performed in this area.

4.1.1.2 New Bedford High School Fenced Playing Field Area Soil Results (HS-2)

For soil samples taken from the NBHS Fenced Playing Field Area at the Site, identified as Exposure Point Area HS-2 on Figure 2-2, the laboratory results did not indicate the detection of

any chemicals at concentrations that exceed the MCP Method 1 soil standards with the exception of total PCBs, two PAHs [benzo(a)pyrene and dibenz(a,h)anthracene], and four MCP metals (arsenic, cadmium, chromium, lead, and nickel). The laboratory reporting limits were below MCP Method 1 soil standards for all analytes except dibenz(a,h)anthracene in SS-19 (1 foot). A summary of the NBHS Fenced Playing Field Area (HS-2) soil analytical results for detected chemicals only is included in Table 4-2.

New Bedford High School Fenced Playing Field Area (HS-2) Soil PAH Results

For soil samples taken in the 0 to 1 foot below ground surface horizon, the analytical results did not indicate the detection of any PAHs at concentrations exceeding the MCP Method 1 soil standards.

For soil samples taken in the 1 to 3 feet below ground surface horizon, the analytical results did not indicate the detection of any PAHs at concentrations exceeding the MCP Method 1 soil standards, with the following exceptions:

- benzo(a)pyrene at sampling locations SS-13 (2.16 mg/kg), SS-21 (3.93 mg/kg), SS-26 (3.09 mg/kg), and SS-24 (5.28 mg/kg).

- dibenz(a,h)anthracene at sampling location SS-21 (0.722 mg/kg) and SS-24 (0.780 mg/kg).

The samples taken in the greater than three feet below ground surface horizon were not analyzed for PAHs.

New Bedford High School Fenced Playing Field Area(HS-2) Soil Metals Results

For soil samples taken in the 0 to 1 foot below ground surface horizon, the analytical results did not indicate the detection of any MCP Metals or mercury at concentrations exceeding the MCP Method 1 soil standards, with the following exceptions:

- cadmium at sampling locations SS-19 (5.29 mg/kg) and SS-20 (2.74 mg/kg).

- chromium at seven sampling locations (SS-15, SS-16, SS-17, SS-18, SS-19 at 0.5 feet, SS-19 at 1 foot, and SS-20) at concentrations ranging from 30.2 mg/kg (SS-19 at 1 foot) to 68.1 mg/kg (SS-19 at 0.5 feet).

- lead at sampling locations SS-14 (363 mg/kg), SS-16 (342 mg/kg), and SS-19 (671 mg/kg).

- nickel at seven sampling locations (SS-15, SS-16, SS-17, SS-18, SS-19 at 0.5 feet, SS-19 at 1 foot, and SS-20) at concentrations ranging from 21.4 mg/kg (SS-19 at 1 foot) to 33.6 mg/kg (SS-15).

For soil samples taken in the 1 to 3 feet below ground surface horizon, the analytical results did not indicate the detection of any MCP Metals or mercury at concentrations exceeding the MCP Method 1 soil standards, with the following exceptions:

- cadmium at sampling locations SS-26 (2.43 mg/kg) and SS-32 (2.32 mg/kg).
- lead at ten sampling locations (HRG-25, SS-13, SS-22, SS-24, SS-27, SS-26, SS-28, SS-29, SS-31, and SS-32) at concentrations ranging from 302 mg/kg (SS-31) to 890 mg/kg (SS-27).
- nickel at sampling location SS-26 (25.7 mg/kg).

For soil samples taken in the greater than three feet below ground surface horizon, the analytical results did not indicate the detection of any MCP Metals or mercury at concentrations exceeding MCP Method 1 soil standards, with the following exceptions:

- arsenic at sampling location SB-367 (22.1 mg/kg at 5-6 feet).
- cadmium at sampling location SB-366 (9.17 mg/kg at 4 feet).
- chromium, assumed to be chromium VI, at sampling location SB-366 (44.3 mg/kg at 4 feet).
- lead at sampling locations SB-366 (2,360 mg/kg at 4 feet) and SB-367 (425 mg/kg at 5-6 feet).
- nickel at sampling location SB-367 (49.3 mg/kg at 5-6 feet).

New Bedford High School Fenced Playing Field Area (HS-2) Soil PCB Results

For soil samples taken in the 0 to 1 foot below ground surface horizon, the analytical results did not indicate the detection of total PCBs at concentrations exceeding the MCP Method 1 soil standards with the exception of sampling locations SS-16 (3.43 mg/kg), SS-19 (4.93 mg/kg), and SS-28 (4.19 mg/kg).

For soil samples taken in the 1 to 3 feet below ground surface horizon, the analytical results did not indicate the detection of total PCBs at concentrations exceeding the MCP Method 1 soil standards with the exception of sampling locations HRG-27 (3.79 mg/kg), SS-28 (2.25 mg/kg), and SS-32 (18.5 mg/kg).

For soil samples taken in the greater than three feet below ground surface horizon, the analytical results did not indicate the detection of PCBs above laboratory reporting limits at any sampling locations.

New Bedford High School Fenced Playing Field Area (HS-2) Soil TPH Results

For the soil samples taken in the 1 to 3 feet below ground surface horizon, the analytical results did not indicate the detection of TPH at concentrations exceeding the MCP Method 1 soil standards. Samples were analyzed for the gasoline range organics (GRO) only. The samples taken in the 0 to 1 foot below ground surface horizon and the greater than 3 feet below ground surface horizon were not analyzed for TPH.

New Bedford High School Fenced Playing Field Area (HS-2) Soil VOC Results

For the one soil sample (HRG-25) taken in the 1 to 3 feet below ground surface horizon, the analytical results did not indicate the detection of VOCs at concentrations exceeding the MCP Method 1 soil standards. No samples taken in the 0 to 1 foot below ground surface horizon and the greater than 3 feet below ground surface horizon were analyzed for VOCs. PID field screening conducted by TRC during soil boring advancement did not indicate the presence of VOCs.

New Bedford High School Fenced Playing Field Area (HS-2) Delineation Sampling Results

Soil EPCs under baseline condition indicate a condition of No Significant Risk has not been achieved for soil under current and future use scenarios for the area identified as HS-2. Therefore one area was targeted for impacted soil delineation at sampling location SS-32.

At sample locations SS-32, samples were collected and analyzed at four delineation sample locations in a grid pattern having a 4-foot lateral separation around the original sampling point (sample identified as SS-32A, SS-32B, SS-32C, and SS-32D) at 0-1 foot and 1-3 foot intervals and analyzed for total PCBs. The analytical results for the delineation samples did not indicate the detection of PCBs above MCP Method 1 soil standards, therefore the impacted area was determined to be bound by the sample locations SS-32A, SS-32B, SS-32C, and SS-32D.

4.1.1.3 New Bedford High School Unfenced Playing Field Area Soil Results (HS-3)

For soil samples taken from the NBHS Unfenced Playing Field Area at the Site, identified as Exposure Point Area HS-3 on Figure 2-2, the laboratory results did not indicate the detection of any chemicals at concentrations that exceed the MCP Method 1 soil standards with the exception of three PAHs [benzo(a)pyrene, benzo(b)fluoranthene, and dibenz(a,h)anthracene] and five MCP metals (arsenic, barium, chromium, lead, and nickel). The reporting limits were below MCP Method 1 soil standards for all analytes. A summary of the NBHS Unfenced Playing Field Area (HS-3) soil analytical results for detected chemicals only is included in Table 4-3.

New Bedford High School Unfenced Playing Field Area (HS-3) Soil PAH Results

For soil samples taken in the 0 to 1 foot below ground surface horizon, the analytical results did not indicate the detection of any PAHs at concentrations exceeding the MCP Method 1 soil standards.

For soil samples taken in the 1 to 3 feet below ground surface horizon, the analytical results did not indicate the detection of any PAHs at concentrations exceeding the MCP Method 1 soil standards, with the following exceptions:

- benzo(a)pyrene at sampling locations SS-36 (3.07 mg/kg), and SS-37 (6.76 mg/kg).
- benzo(b)fluoranthene at sampling location SS-37 (7.26 mg/kg).
- dibenz(a,h)anthracene at sampling location SS-37 (1.01 mg/kg).

For soil samples taken in the greater than three feet below ground surface horizon, the analytical results did not indicate the detection of PAHs at concentrations exceeding the MCP Method 1 soil standards.

New Bedford High School Unfenced Playing Field Area (HS-3) Soil Metals Results

For soil samples taken in the 0 to 1 foot below ground surface horizon, the analytical results did not indicate the detection of any MCP Metals or mercury at concentrations exceeding the MCP Method 1 soil standards.

For soil samples taken in the 1 to 3 feet below ground surface horizon, the analytical results did not indicate the detection of any MCP Metals or mercury at concentrations exceeding the MCP Method 1 soil standards, with the following exceptions:

- arsenic at sampling location SS-36 (23.1 mg/kg at 2 feet and 21.8 mg/kg at 1-3 feet).
- barium at sampling location SB-360 (2,750 mg/kg).
- chromium, assumed to be chromium VI, at sampling location SB-360 (39.2 mg/kg).
- lead at sampling locations SS-36 (1,270 mg/kg), SS-37 (302 mg/kg), SS-38 (605 mg/kg at 1.5 feet, 865 mg/kg at 1-3 feet), SS-40 (819 mg/kg), SB-360 (39,600 mg/kg).
- nickel at sampling location SS-36 (43.9 mg/kg).

For soil samples taken in the greater than three feet below ground surface horizon, the analytical results did not indicate the detection of any MCP Metals or mercury at concentrations exceeding MCP Method 1 soil standards, with the following exceptions:

- lead at sampling location SB-360 (6,870 mg/kg at 5 feet).
- nickel at sampling location SB-360 (21.5 mg/kg at 5 feet).

New Bedford High School Unfenced Playing Field Area (HS-3) Soil PCB Results

For soil samples taken in the 0 to 1 foot below ground surface horizon, the 1 to 3 feet below ground surface horizon, and the greater than three foot below ground surface horizon the analytical results did not indicate the detection of PCBs at concentrations exceeding the MCP Method 1 soil standards.

New Bedford High School Unfenced Playing Field Area (HS-3) Soil TPH Results

For the soil sample (HRJ.75-17) taken in the 1 to 3 feet below ground surface horizon, the analytical results did not indicate the detection of TPH at concentrations above laboratory reporting limits. The sample was analyzed for GRO only. No samples taken in the 0 to 1 foot and greater than 3 feet below ground surface horizons were analyzed for TPH.

New Bedford High School Unfenced Playing Field Area (HS-3) Soil VOC Results

For the soil sample (HRJ.75-17) taken in the 1 to 3 feet below ground surface horizon, the analytical results did not indicate the detection of VOCs at concentrations exceeding the MCP Method 1 soil standards. No samples taken in the 0 to 1 foot and greater than 3 feet below ground surface horizons were analyzed for VOCs. PID field headspace screening conducted by TRC during boring advancement did not indicate the presence of VOCs.

New Bedford High School Unfenced Playing Field Area (HS-3) Delineation Sampling Results

Soil EPCs under baseline condition indicate a condition of No Significant Risk has not been achieved for soil under current and future use scenarios for the area identified as HS-3. Therefore, two areas were targeted for impacted soil delineation sampling at sample locations SS-36 and SB-360.

At sample location SS-36, samples were collected and analyzed at seventeen delineation sample locations in a grid pattern having a 4-foot lateral separation around the original sampling point (sample locations identified as SS-36A, SS-36B, SS-36C, SS-36D, SS-36E, SS-36F, SS-36G, SS-36H, SS-36I, SS-36J, SS-36L, SS-36N, SS-36O, SS-36R, SS-36S, SS-36V, and SS-36W) at 0-1 foot and 1-3 foot intervals, as needed, and analyzed for lead. The impacted area was determined to be bound by samples SS-36E, SS-36I, SS-36V, and SS-36W.

At sample location SB-360, samples were collected and analyzed at twenty-one delineation sample locations in a grid pattern having a 4-foot lateral separation around the original sampling point (sample locations identified as SB-360A, SB-360B, SB-360C, SB-360D, SB-360E, SB-360F, SB-360G, SB-360I, SB-360J, SB-360K, SB-360L, SB-360M, SB-360N, SB-360O, SB-360Q, SB-360R, SB-360S, SB-360U, SB-360V, SB-360W, and SB-360X) at 1-3 foot intervals, and analyzed for barium, chromium, and lead. The impacted area was determined to be bound by samples SB-360D, SB-360V, SB-360W, and SB-360X.

4.1.1.4 New Bedford High School Gym Soil Results (HS-4)

For soil samples taken from the area to the west of the New Bedford High School Gym at the Site, identified as Exposure Point Area HS-4 on Figure 2-2, the laboratory results did not indicate the detection of any chemicals at concentrations that exceed the MCP Method 1 soil standards with the exception of total PCBs, four PAHs [benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenz(a,h)anthracene], and six MCP metals (arsenic, barium,

cadmium, chromium, lead, and nickel). The laboratory reporting limits were below MCP Method 1 soil standards for all analytes except for PCBs in HF44 and HI43. A summary of the New Bedford High School Gym Area (HS-4) soil analytical results for detected chemicals only is included in Table 4-4.

New Bedford High School Gym (HS-4) Soil PAH Results

For soil samples taken in the 0 to 1 foot below ground surface horizon, the analytical results did not indicate the detection of any PAHs at concentrations exceeding the MCP Method 1 soil standards.

For soil samples taken in the 1 to 3 feet below ground surface horizon, the analytical results did not indicate the detection of any PAHs at concentrations exceeding the MCP Method 1 soil standards, with the following exceptions:

- benzo(a)anthracene at composite sampling location HF44+HG44 (7.9 mg/kg).
- benzo(a)pyrene at composite sampling locations HF35+HF40 (2.8 mg/kg), and composite HF44+HG44 (6.9 mg/kg).
- benzo(b)fluoranthene at composite sampling location HF44+HG44 (8.9 mg/kg).
- dibenz(a,h)anthracene at composite sampling location HF44+HG44 (0.71 mg/kg).

For soil samples taken at depths greater than the three feet below ground surface, the analytical results did not indicate the detection of any PAHs at concentrations exceeding the MCP Method 1 cleanup standards, with the exception of sampling locations NBHS-1 (benzo(a)pyrene at 2.86 mg/kg), and SB-365 (benzo(a)pyrene at 2.91 mg/kg).

New Bedford High School Gym (HS-4) Soil Metals Results

For soil samples taken in the 0 to 1 foot below ground surface horizon, the analytical results did not indicate the detection of any MCP Metals or mercury at concentrations exceeding the MCP Method 1 soil standards.

For soil samples taken in the 1 to 3 feet below ground surface horizon, the analytical results did not indicate the detection of any MCP Metals or mercury at concentrations exceeding the MCP Method 1 soil standards, with the following exceptions:

- cadmium at composite sampling locations HF35+HF40 (3.67 mg/kg), HF43+HE44 (8.59 mg/kg), HH44+HI44 (2.24 mg/kg), and HJ42+HF31 (4.92 mg/kg).
- chromium at composite sampling locations HH43+HI42 (36 mg/kg), HJ42+HF31 (36 mg/kg), and SS-12 (96 mg/kg).

- lead at six composite sampling locations (HF35+HF40, HF43+HE44, HH43+HI42, HH44+HI44, HJ44+HI43, and HJ42+HF31) at concentrations ranging from 351 mg/kg (HH44+HI44) to 1,910 mg/kg (HF43+HE44).

For soil samples taken at depths greater than three feet below ground surface, the analytical results did not indicate the detection of any MCP metals or mercury at concentrations exceeding the MCP Method 1 soil standards, with the following exceptions:

- arsenic at NBHS-1 (34.0 mg/kg at 8 feet), SB-365 (53.4 mg/kg at 5-7 feet).
- barium at SB-365 (1,500 mg/kg at 5-7 feet).
- cadmium at NBHS-1 (8.78 mg/kg at 8 feet), SB-365 (5.59 mg/kg at 5-7 feet).
- chromium at NBHS-1 (154 mg/kg at 8 feet), SB-365 (43.5 mg/kg at 5-7 feet).
- lead at NBHS-1 (2,780 mg/kg at 8 feet), SB-365 (1,590 mg/kg at 5-7 feet).
- nickel at NBHS-1 (173 mg/kg at 8 feet), SB-365 (47.9 mg/kg at 5-7 feet).

New Bedford High School Gym (HS-4) Soil PCB Results

For soil samples taken in the 0 to 1 foot below ground surface horizon, the analytical results did not indicate the detection of PCBs at concentrations above laboratory reporting limits.

For soil samples taken in the 1 to 3 feet below ground surface horizon, the analytical results did not indicate the detection of total PCBs at concentrations exceeding the MCP Method 1 soil standards with the exception of sampling locations HF31 (2.55 mg/kg) and HF40 (25.5 mg/kg).

For soil samples taken at depths greater than three feet below ground surface horizon, the analytical results did not indicate the detection of PCBs at concentrations exceeding the MCP Method 1 standards.

New Bedford High School Gym (HS-4) Delineation Sampling Results

Soil EPCs under baseline condition indicate a condition of No Significant Risk has not been achieved for soil under current and future use scenarios for the area identified as HS-4. Therefore, four areas were targeted for soil delineation sampling at sample locations HF-31, HF-40, HF-43 and HE-44.

At sample location HF-31, samples were collected and analyzed at six delineation sample locations in a grid pattern having a 10-foot lateral separation around the original sampling point (sample locations identified as HF-31A, HF-31B, HF-31C, HF-31D, HF-31G, and HF-31H) at 0-1 foot and 1-3 foot intervals and analyzed for PCBs, cadmium, and lead. The area delineated as being impacted was determined to be bounded by samples HF-31A, HF-31B, HF-31G, and HF-31H.

At sample location HF-40, samples were collected and analyzed at ten delineation sample locations in a grid pattern having a 6-foot lateral separation around the original sampling point (sample locations identified as HF-40A, HF-40B, HF-40C, HF-40D, HF-40E, HF40F, HF-40G, HF-40H, HF-40I, and HF-40J) at 0-1 foot and 1-3 foot intervals and analyzed for PCBs, cadmium, and lead. The area delineated as being impacted was determined to be bounded by samples HF-40C, HF-40D, HF-40E, and HF-40I.

At sample location HF-43, samples were collected and analyzed at five delineation sample locations in a grid pattern having a 10-foot lateral separation around the original sampling point (sample locations identified as HF-43A, HF-43B, HF-43D, HF-43G, and HF-43H,) at 0-1 foot and 1-3 foot intervals and analyzed for PCBs, cadmium, and lead. The area delineated as being considered for excavation was determined to be bounded by samples HF-43A, HF-40B, HF-40G, and HF-40H.

At sample location HE-44, samples were collected and analyzed at three delineation sample locations in a grid pattern having a 10-foot lateral separation around the original sampling point (sample locations identified as HE-44B, HE-44C, and HE-44F) at 0-1 foot and 1-3 foot intervals and analyzed for PCBs, cadmium, and lead. The area delineated as being impacted was determined to be bounded by samples HE-44C, HE-44F, and pavement.

4.1.1.5 New Bedford High School Flag Pole Soil Results (HS-5)

For soil samples taken from the area around the New Bedford High School Flag Pole at the Site, identified as Exposure Point Area HS-5 on Figure 2-2, the laboratory results did not indicate the detection of any chemicals at concentrations that exceed the MCP Method 1 soil standards with the exception of total PCBs, four PAHs [benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenz(a,h)anthracene], and eight MCP metals (arsenic, barium, cadmium, chromium, lead, mercury, nickel and zinc). The laboratory reporting limits were below MCP Method 1 soil standards for all analytes except for PCBs in HB-25, dibenz(a,h)anthracene in Comp SS-13-AQ, benzo(a)pyrene and dibenz(a,h)anthracene in Comp SS-13 U,Z,AA,AB. A summary of the NBHS Flag Pole Area (HS-5) soil analytical results for detected chemicals only is included in Table 4-5.

<u>New Bedford High School Flag Pole (HS-5) Soil PAH Results</u>

For soil samples taken in the 0 to 1 foot below ground surface horizon, the analytical results did not indicate the detection of any PAHs at concentrations exceeding the MCP Method 1 soil standards.

For soil samples taken in the 1 to 3 feet below ground surface horizon, the analytical results did not indicate the detection of any PAHs at concentrations exceeding the MCP Method 1 soil standards, with the following exceptions:

- benzo(a)anthracene at sampling locations composite SS-13-A,F,S,T (17 mg/kg) and composite SS-13-Q,R,C,D (10 mg/kg).

- benzo(a)pyrene at twelve sampling locations (composite HA29+HB29; composite HB25+HB26; composite HB28+HB27; composite SS-13-A,F,S,T; composite SS-13-AI, BA,BB,BC,BD; composite SS-13-AQ,; composite SS-13-AS,AT,AU,AV; composite SS-13-AW,AX,AY,AZ; composite SS-13-M,N,O,P; composite SS-13-Q,R,C,D; composite S-13-V,W,X,Y, and VSS-13) at concentrations ranging from 2.1 mg/kg (composite S-13-V,W,X,Y) to 11 mg/kg (composite SS-13-Q,R,C,D).

- benzo(b)fluoranthene at sampling locations composite HB28+HB27 (7.5 mg/kg), composite SS-13-A,F,S,T (13 mg/kg), and composite SS-13-Q,R,C,D (8.4 mg/kg).

- dibenz(a,h)anthracene at eight sampling locations (composite SS-13-A,F,S,T; composite SS-13-AI,BA,BB,BC,BD; composite SS-13-AS,AT,AU,AV; composite SS-13-AW,AX,AY,AZ; composite SS-13-G,H,I,J; composite SS-13-M,N,O,P; composite SS-13-Q,R,C,D;and composite S-13-V,W,X,Y) at concentrations ranging from 0.72 mg/kg (composite SS-13-M,N,O,P) to 2.7 mg/kg (composite SS-13-A,F,S,T).

For soil samples taken at depths greater than three feet below ground surface, the analytical results did not indicate the detection of any PAHs at concentrations exceeding the MCP Method 1 cleanup standards.

New Bedford High School Flag Pole (HS-5) Soil Metals Results

For soil samples taken in the 0 to 1 foot below ground surface horizon, the analytical results did not indicate the detection of any MCP Metals or mercury at concentrations exceeding the MCP Method 1 soil standards, with the exception of lead at sampling location VSS-13 (1,010 mg/kg).

For soil samples taken in the 1 to 3 feet below ground surface horizon, the analytical results did not indicate the detection of any MCP Metals or mercury at concentrations exceeding the MCP Method 1 soil standards, with the following exceptions:

- arsenic at composite sampling locations HB23+HB27 (91 mg/kg), SS-13-A,F,S,T (31 mg/kg), SS-13-E,L,K,B (48 mg/kg), and SS-13-U,Z,AA,AB (27 mg/kg).

- barium at composite sampling location HB25+HB26 (1,010 mg/kg).

- cadmium at 13 sampling locations (composite HA29+HB29; composite HB23+HB27; composite HB25+HB26; composite HB28+HB27; composite SS-13-A,F,S,T; composite SS-13-AC,AD,AE,AF; composite SS-13-AI,BA,BB,BC,BD; composite SS-13-AS,AT,AU,AV; composite SS-13-E,L,K,B; composite SS-13-G,H,I,J, composite SS-13-M,N,O,P; composite SS-13-U,Z,AA,AB; and composite SS-13-V,W,X,Y) at concentrations ranging from 2.1 mg/kg (composite SS-13-AC,AD,AE,AF) to 82 mg/kg (composite HB23+HB27).

- chromium, assumed to be chromium VI, at 12 sampling locations (composite HA29+HB29; composite HB23+HB27; composite HB25+HB26; composite

HB28+HB27; composite SS-13- AI,BA,BB,BC,BD; composite SS-13-AS,AT,AU,AV; composite SS-13-AW,AX,AY,AZ; composite SS-13-E,L,K,B; composite SS-13-G,H,I,J; composite SS-13-M,N,O,P; composite SS-13-U,Z,AA,AB; and composite SS-13-V,W,X,Y) at concentrations ranging from 31 mg/kg (composite SS-13-AI,BA,BB,BC,BD) to 143 mg/kg (composite HB23+HB27).

- mercury at sampling location composite SS-13-E,L,K,B (76 mg/kg).

- lead at 63 out of 74 sampling locations at concentrations ranging from 320 mg/kg (SS-13-AC) to 11,000 mg/kg (SS-13-W).

For soil samples taken at depths greater than three feet below ground surface, the analytical results did not indicate the detection of any MCP metals or mercury at concentrations exceeding the MCP Method 1 soil standards, with the following exceptions at sampling location SB-349: lead (571 mg/kg at 8 feet); nickel (48.1 mg/kg at 8 feet and 39.3 mg/kg at 11 feet); and zinc (2,670 mg/kg at 8 feet).

New Bedford High School Flag Pole (HS-5) Soil PCB Results

For soil samples taken in the 0 to 1 foot below ground surface horizon, the analytical results did not indicate the detection of PCBs at concentrations exceeding the MCP Method 1 soil standards with the exception of sampling locations HS-6 (3.11 mg/kg) and SB-349 (4.22 mg/kg).

For soil samples taken in the 1 to 3 feet below ground surface horizon, the analytical results did not indicate the detection of total PCBs at concentrations exceeding the MCP Method 1 soil standards with the exception of sampling locations HA-29 (2.63 mg/kg), HB-26 (5.17 mg/kg), HB-27 (3.37 mg/kg), HB-28 (2.80 mg/kg), HB-29 (6.48 mg/kg), SS-13-AF (12.6 mg/kg), SS-13-AI (2.24 mg/kg), SS-13-AM (4.56 mg/kg), SS-13-AO (4.87 mg/kg), SS-13-AQ (5.48 mg/kg), SS-13-AX (2.21 mg/kg), and SS-13-J (2.75 mg/kg).

For soil samples taken at depths greater than three feet below ground surface horizon, the analytical results did not indicate the detection of PCBs at concentrations exceeding the MCP Method 1 standards.

New Bedford High School Flag Pole (HS-5) Delineation Sampling Results

Soil EPCs under baseline condition indicate a condition of No Significant Risk has not been achieved for soil under current use scenarios for the area identified as HS-5. This exposure point area is being considered for covering by pavement to prevent direct contact exposure to impacted soil, therefore no delineation sampling was performed in this area.

4.1.1.6 New Bedford High School House Area Soil Results (HS-6)

For soil samples taken from the area around the New Bedford High School Houses at the Site, identified as Exposure Point Area HS-6 on Figure 2-2, the laboratory results did not indicate the detection of any chemicals at concentrations that exceed the MCP Method 1 soil standards with

the exception of total PCBs, eight PAHs [benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, indeno(1,2,3-cd)pyrene, naphthalene, and phenanthrene], dibenzofuran, and five MCP metals (arsenic, barium, cadmium, chromium, and lead). The laboratory reporting limits were below MCP Method 1 soil standards for all analytes except for dibenz(a,h)anthracene and acenaphthylene in HH-13. A summary of the NBHS House Area (HS-6) soil analytical results for detected chemicals only is included in Table 4-6.

New Bedford High School House Area (HS-6) Soil PAH Results

For soil samples taken in the 0 to 1 foot below ground surface horizon, the analytical results did not indicate the detection of any PAHs at concentrations exceeding the MCP Method 1 soil standards.

For soil samples taken in the 1 to 3 feet below ground surface horizon, the analytical results did not indicate the detection of any PAHs at concentrations exceeding the MCP Method 1 soil standards, with the following exceptions:

- benzo(a)anthracene at sampling locations composite HD19+HD20+HD21 (33 mg/kg), HF-14 (25 mg/kg), HH-13 (400 mg/kg), and HD-20 (14.6 mg/kg).
- benzo(a)pyrene at sampling locations composite HD19+HD20+HD21 (33 mg/kg), composite HD22+HC22+HB22 (4.5 mg/kg), HF-14 (25 mg/kg), HH-13 (360 mg/kg), HD-20 (12.0 mg/kg), and HD-21 (4.94 mg/kg).
- benzo(b)fluoranthene at sampling location composite HD19+HD20+HD21 (25 mg/kg), HF-14 (34 mg/kg), HH-13 (460 mg/kg), and HD-20 (17.3 mg/kg).
- benzo(k)fluoranthene at sampling location HH-13 (200 mg/kg).
- chrysene at sampling location HH-13 (280 mg/kg).
- indeno(1,2,3-cd)pyrene at composite sampling location HD19+HD20+HD21 (22 mg/kg), HF-14 (14 mg/kg), and HH-13 (140 mg/kg).
- naphthalene at sampling location HH-13 (53 mg/kg).
- phenanthrene at sampling location HH-13 (1,000 mg/kg).

For the soil sample taken at a depth greater than three feet below ground surface, the analytical results did not indicate the detection of any PAHs at concentrations exceeding the MCP Method 1 standards.

New Bedford High School House Area (HS-6) Soil Metals Results

For soil samples taken in the 0 to 1 foot below ground surface horizon, the analytical results did not indicate the detection of any MCP Metals or mercury at concentrations exceeding the MCP Method 1 soil standards.

For soil samples taken in the 1 to 3 feet below ground surface horizon, the analytical results did not indicate the detection of any MCP Metals or mercury at concentrations exceeding the MCP Method 1 soil standards, with the following exceptions:

- arsenic at sampling locations composite HD22+HC22+HB22 (33 mg/kg), HF-14 (23 mg/kg), HH-13 (25 mg/kg), HD-20 (34.6 mg/kg), and HD-21 (24.2 mg/kg).

- barium at sampling locations HF-14 (6,700 mg/kg), HH-13 (2,910 mg/kg), and HD-21 (3,520 mg/kg).

- cadmium at sampling locations composites HD19+HD20+HD21 (6.51 mg/kg) and HD22+HC22+HB22 (4.71 mg/kg), HF-14 (12 mg/kg), HH-13 (4.81 mg/kg), HD-20 (2.36 mg/kg), and HD-21 (5.67 mg/kg).

- chromium, assumed to be chromium VI, at sampling locations composite HD19+HD20+HD21 (77 mg/kg), composite HD22+HC22+HB22 (52 mg/kg), HF-14 (1,290 mg/kg), HH-13 (1,100 mg/kg), HD-20 (53.9 mg/kg), and HD-21 (595 mg/kg).

- lead at sampling locations composite HD19+HD20+HD21 (1,220 mg/kg), composite HD22+HC22+HB22 (1,020 mg/kg), HF-14 (650 mg/kg), HH-13 (333 mg/kg), HD-20 (4,000 mg/kg), HD-21 (1,740 mg/kg), and HD-23 (928 mg/kg).

For the soil sample taken at a depth greater than three feet below ground surface, the analytical results did not indicate the detection of any MCP Metals or mercury at concentrations exceeding the MCP Method 1 soil standards.

Four surficial soil samples were taken at sample locations HH13 and HF14 in order to determine if total chromium concentrations detected were present in the trivalent or hexavalent valence state. The soil samples (SSHH-13B1 through SSHH-13B4) were collected from 0 to 12 inches bgs and submitted for the laboratory analysis of total chromium, hexavalent chromium, pH and oxidation-reduction potential (ORP). The data supported a finding that the total chromium was present in the trivalent state, and that an imminent hazard did not exist.

Additional samples were taken at four sample locations to determine if total chromium was present in the trivalent or hexavalent valence state in the deeper soils and fill material. At sample locations HH-13AA, HH-13BB, HH-13CC, and HH13DD, soil samples were collected in the 1-3 feet below ground surface horizon, and of the fill material encountered at greater than 3 feet below ground surface, and submitted for the laboratory analysis of total chromium, hexavalent chromium, pH and ORP. The data supported a finding that the total chromium was almost

exclusively present in the trivalent state in the 1-3 feet below ground surface horizon, and in the fill material encountered at greater than 3 feet.

New Bedford High School House Area (HS-6) Soil PCB Results

For soil samples taken in the 0 to 1 foot below ground surface horizon, the analytical results did not indicate the detection of total PCBs at concentrations exceeding the MCP Method 1 soil standards.

For soil samples taken in the 1 to 3 feet below ground surface horizon, the analytical results did not indicate the detection of total PCBs at concentrations exceeding the MCP Method 1 soil standards with the exception of sampling locations: HD-19 (18.7 mg/kg), HD-22 (5.44 mg/kg and 2.42 mg/kg sampled 12/29/2004 and 4/9/2009, respectively), HD-23 (4.16 mg/kg), and SS-52 (3.18 mg/kg).

For the soil sample taken at a depth greater than three feet below ground surface, the analytical results did not indicate the detection of PCBs above laboratory reporting limits.

New Bedford High School House Area (HS-6) Delineation Sampling Results

Soil EPCs under baseline conditions indicate a condition of No Significant Risk has not been achieved for soil within the 0 to 3-foot interval under current and future use scenarios for the area identified as HS-6. Therefore, five areas were targeted for impacted soil delineation sampling at sample locations HD-19, HD-20, HD-21, HF-14, and HH-13.

The delineation sampling at sample locations HD-19, HD-20, and HD-21 merged into a single excavation, where the adjacent delineation is bound by samples from the adjacent delineation.

- At sample location HD-19, samples were collected and analyzed at four delineation sample locations in a grid pattern having a 10-foot lateral separation around the original sampling point (sample locations identified as HD-19A, HD-19B, HD-19C, and HD-19D) at 0-1 foot and 1-3 foot intervals and analyzed for PCBs, PAHs, MCP Metals and mercury. The impacted area was determined to be bound by samples HD-19A, HD-19B, HD-19D, and HD-20E.

- At sample location HD-20, samples were collected and analyzed at eight delineation sample locations in a grid pattern having a 5-foot lateral separation around the original sampling point (sample locations identified as HD-20A, HD-20B, HD-20C, HD-20D, HD-20E, HD-20F, HD-20G, and HD-20H) at 0-1 foot and 1-3 foot intervals and analyzed for PCBs, PAHs, arsenic, barium, cadmium, chromium, and lead. The impacted area was determined to be bound by samples HD-19C, HD-21E, HD-20F, and pavement.

- At sample location HD-21, samples were collected and analyzed at eleven delineation sample locations in a grid pattern having a 5-foot lateral separation around the original sampling point (sample locations identified as HD-21A, HD-21B, HD-21C, HD-21D, HD-21E, HD-21F, HD-21G, HD-21H, HD-21I, and HD-21J) at 0-1 foot and 1-3 foot intervals and analyzed for PCBs, PAHs, arsenic, barium, cadmium, chromium, and lead,

as needed. The impacted area was determined to be bound by samples HD-21F, HD-20G, HD-22, and pavement.

At sample location HF-14, samples were collected and analyzed at seven delineation sample locations in a grid pattern having a 6-foot lateral separation around the original sampling point (sample locations identified as HF-14A, HF-14B, HF-14D, HF-14E, HF-14G, HF-14H, and HF-14I) at 0-1 foot and 1-3 foot intervals and analyzed for PCBs, PAHs, arsenic, barium, cadmium, chromium, and lead. The impacted area was determined to be bound by samples HF-14B, HF-14H, and pavement.

At sample location HH-13, samples were collected and analyzed at ten delineation sample locations in a grid pattern having a 5-foot lateral separation around the original sampling point (sample locations identified as HH-13A, HH-13B, HH-13C, HH-13D, HH-13E, HH-13F, HH-13G. HH-13H, HH-13I, and HH-13J) at 0-1 foot and 1-3 foot intervals and analyzed for PCBs, PAHs, arsenic, barium, cadmium, chromium, and lead. The impacted area was determined to be bound by samples HH-13E, HH-13F, HH-13G, and HH-13H.

4.1.1.7 New Bedford High School Student Congregating Area Soil Results (HS-7)

For soil samples taken from the New Bedford High School Student Congregating Area at the Site, identified as Exposure Point Area HS-7 on Figure 2-2, the laboratory results did not indicate the detection of any chemicals at concentrations that exceed the MCP Method 1 soil standards with the exception of four MCP metals (cadmium, chromium, lead and nickel). The laboratory reporting limits were below MCP Method 1 soil standards for all analytes. A summary of the NBHS Student Congregating Area (HS-7) soil analytical results for detected chemicals only is included in Table 4-7. New Bedford High School Student Congregating Area (HS-7) Soil PAH Results

For soil samples taken in the 0 to 1 foot below ground surface horizon, the analytical results did not indicate the detection of any PAHs at concentrations exceeding the MCP Method 1 soil standards.

For soil samples taken in the 1 to 3 foot below ground surface horizon, the analytical results did not indicate the detection of any PAHs at concentrations exceeding the MCP Method 1 soil standards.

For soil samples taken in the greater than 3 feet below ground surface horizon, the analytical results did not indicate the detection of any PAHs at concentrations exceeding the MCP Method 1 soil standards.

New Bedford High School Student Congregating Area (HS-7) Soil Metals Results

For soil samples taken in the 0 to 1 foot below ground surface horizon, the analytical results did not indicate the detection of any MCP Metals or mercury at concentrations exceeding the MCP Method 1 soil standards with the following exceptions:

- cadmium at SB-363 (2.78 mg/kg).
- chromium, assumed to be chromium VI, at SB-363 (34.1 mg/kg).

For soil samples taken in the 1 to 3 foot below ground surface horizon, the analytical results did not indicate the detection of any MCP Metals or mercury at concentrations exceeding the MCP Method 1 soil standards with the exception of lead at SB-362 (487 mg/kg).

For soil samples taken in the greater than 3 feet below ground surface horizon, the analytical results did not indicate the detection of any MCP Metals or mercury at concentrations exceeding the MCP Method 1 soil standards with the following exceptions:

- cadmium at SB-362 (5.77 mg/kg at 6.5 feet).
- chromium, assumed to be chromium VI, at SB-362 (47.7 mg/kg at 6.5 feet).
- lead at SB-262 (448 mg/kg at 5 feet, 319 mg/kg at 6.5 feet).
- nickel at SB-362 (40.3 mg/kg at 6.5 feet).

New Bedford High School Student Congregating Area (HS-7) Soil PCB Results

For soil samples taken in the 0 to 1 foot below ground surface horizon, the 1 to 3 foot below ground surface horizon, and the greater than 3 feet below ground surface horizon the analytical results did not indicate the detection of total PCBs at concentrations exceeding the MCP Method 1 soil standards.

New Bedford High School Student Congregating Area (HS-7) Delineation Sampling Results

Soil EPCs under baseline condition indicate a condition of No Significant Risk has been achieved for soil under current and future use scenarios for the area identified as HS-7, therefore no delineation sampling was performed in this area.

4.1.1.8 New Bedford High School Junior High Gym Class Area Soil Results (HS-8)

For soil samples taken from the area used for Junior High Gym Class at the Site, identified as Exposure Point Area HS-8 on Figure 2-2, the laboratory results did not indicate the detection of any chemicals at concentrations that exceed the MCP Method 1 soil standards with the exception of total PCBs, five PAHs [benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene], and seven MCP metals (arsenic, barium, cadmium, chromium, lead, nickel and vanadium). The laboratory reporting limits were below MCP Method 1 soil standards for all analytes at all locations except for dibenz(a,h)anthracene in HG4+HG3, PCBs in HG-5, dibenz(a,h)anthracene in HI3+HH3, and PCBs in HK6+HL7. A

summary of the New Bedford High School Junior High Gym Class Area (HS-8) soil analytical results for detected chemicals only is included in Table 4-8.

New Bedford High School Junior High Gym Class Area (HS-8) Soil PAH Results

For soil samples taken in the 0 to 1 foot below ground surface horizon, the analytical results did not indicate the detection of any PAHs at concentrations exceeding the MCP Method 1 soil standards, with the following exceptions:

- benzo(a)anthracene at sampling location composite HI2.5+HJ2.5 (40 mg/kg).
- benzo(a)pyrene at sampling location composite HI2.5+HJ2.5 (33 mg/kg).
- benzo(b)fluoranthene at sampling location composite HI2.5+HJ2.5 (45 mg/kg).
- dibenz(a,h)anthracene at sampling location composite HI2.5+HJ2.5 (3.3 mg/kg) and VSS-1 (1.2 mg/kg).
- indeno(1,2,3-cd)pyrene at sampling location composite HI2.5+HJ2.5 (9.8 mg/kg).

For soil samples taken in the 1 to 3 feet below ground surface horizon, the analytical results did not indicate the detection of any PAHs at concentrations exceeding the MCP Method 1 cleanup standards, with the following exceptions:

- benzo(a)anthracene at composite sampling locations HG2.5+HH2.5 (10 mg/kg), HI3+HH3 (26 mg/kg), and HJ5+HK5 (16 mg/kg).
- benzo(a)pyrene at eight sampling locations (HG-2, composite HG2.5+HH2.5, composite HH4+HI4, composite HI3+HH3, composite HI6+HH6, composite HJ5+HK5, composite HJ8+HI8, and HL-4) at concentrations ranging from 2.2 mg/kg (HG-2) to 21 mg/kg (HI3+HH3).
- benzo(b)fluoranthene at composite sampling locations HG2.5+HH2.5 (13 mg/kg), HH4+HI4 (9 mg/kg), HI3+HH3 (32 mg/kg), and HJ5+HK5 (9.8 mg/kg).

For soil samples taken at depths greater than the three feet below ground surface, the analytical results did not indicate the detection of any PAHs at concentrations exceeding the MCP Method 1 soil standards.

New Bedford High School Junior High Gym Class Area (HS-8) Soil Metals Results

For soil samples taken in the 0 to 1 foot below ground surface horizon, the analytical results did not indicate the detection of any MCP Metals or mercury at concentrations exceeding MCP Method 1 soil standards, with following exceptions:

- cadmium at composite sampling location HI2.5+HJ2.5 (4.53 mg/kg).

- chromium, assumed to be chromium VI, at composite sampling locations HI2.5+HJ2.5 (62 mg/kg) and VSS-15 (35 mg/kg).

- lead at sampling location HH-3 (693 mg/kg) and composite sampling location HI2.5+HJ2.5 (866 mg/kg).

For soil samples taken in the 1 to 3 feet below ground surface horizon, the analytical results did not indicate the detection of any MCP Metals or mercury at concentrations exceeding the MCP Method 1 soil standards, with the following exceptions:

- arsenic at sampling locations composite HH8+HG8 (22 mg/kg) and composite HK6+HJ6 (35 mg/kg).

- barium at seven sampling locations (composite HG7+HH7, composite HH4+HI4, composite HH8+HG8, composite HH9+HI9, composite HJ8+HI8, composite HJ9+HK8, and HL4) at concentrations ranging from 1,210 mg/kg (HH4+HI4) to 5,110 mg/kg (HH8+HG8).

- cadmium at 23 sampling locations (HG-2, composite HG2.5+HH2.5, composite HG4+HG3, composite HG3+HG4, composite HG6+HG5, composite HG7+HH7, composite HG10+HG9, composite HH4+HI4, composite HH5+HI5, composite HH8+HG8, composite HH9+HI9, composite HH10+HI10, composite HI3+HH3, composite HI6+HH6, composite HI7+HJ7, composite HJ4+HK4, composite HJ5+HK5, composite HJ8+HI8, composite HJ9+HK8, HJ10, composite HK2.5+HM2.5, composite HK6+HJ6, and HL4) at concentrations ranging from 2.09 mg/kg (HG3+HG4) to 18 mg/kg (HJ8+HI8).

- chromium at 20 sampling locations (HG-2, composite HG2.5+HH2.5, composite HG4+HG3, composite HG7+HH7, composite HG10+HG9, composite HH4+HI4, composite HH8+HG8, composite HH9+HI9, composite HH10+HI10, composite HI3+HH3, composite HI6+HH6, composite HI7+HJ7, composite HJ4+HK4, composite HJ5+HK5, composite HJ8+HI8, composite HJ9+HK8, HJ10, composite HK2.5+HM2.5, composite HK6+HJ6, and HL-4) at concentrations ranging from 36 mg/kg (HK2.5+HM2.5) to 741 mg/kg (HJ8+HI8).

- lead at 22 sampling locations (HG-2, composite HG2.5+HH2.5, composite HG4+HG3, composite HG3+HG4, composite HG6+HG5, composite HG7+HH7, composite HG10+HG9, composite HH4+HI4, composite HH5+HI5, composite HH8+HG8, composite HH9+HI9, composite HI3+HH3, composite HI6+HH6, composite HI7+HJ7, composite HJ4+HK4, composite HJ5+HK5, composite HJ8+HI8, composite HJ9+HK8, HJ10, composite HK2.5+HM2.5, composite HK6+HJ6, and HL-4) at concentrations ranging from 354 mg/kg (HG3+HG4) to 4,380 mg/kg (HI3+HH3).

For soil samples taken at depths greater than three feet below ground surface, the analytical results did not indicate the detection of any MCP metals or mercury at concentrations exceeding the MCP Method 1 soil standards, with the following exceptions at sampling location SB-350 at five feet below ground surface; arsenic (59.8 mg/kg), barium (7,430 mg/kg), cadmium (4.74

mg/kg), chromium (1,370 mg/kg), lead (638 mg/kg), nickel (167 mg/kg), and vanadium (602 mg/kg).

New Bedford High School Junior High Gym Class Area (HS-8) Soil PCB Results

For soil samples taken in the 0 to 1 foot below ground surface horizon, the analytical results did not indicate the detection of total PCBs at concentrations exceeding the MCP Method 1 soil standards with the exception of sampling location HS-2 (6.51 mg/kg).

For soil samples taken in the 1 to 3 feet below ground surface horizon, the analytical results did not indicate the detection of total PCBs at concentrations exceeding the MCP Method 1 soil standards with the exception of twenty-seven sampling locations (HG-2, HG-2.5, HG-3, HG-4, HG-7, HG-8, HG-9, HH-2.5, HH-3, HH-4, HH-5, HH-7, HH-8, HH-9, HI-3, HI-4, HI-5, HI-6, HI-7, HI-8, HI-9, HI-10, HJ-2.5, HJ-7, HJ-9, HK-2.5, and HL-4) at concentrations ranging from 2.11 mg/kg (HG-7) to 19.8 mg/kg (HG-2.5).

For soil samples taken at depths greater than three feet below ground surface, the analytical results did not indicate the detection of PCBs at concentrations exceeding the MCP Method 1 cleanup standards.

New Bedford High School Junior High Gym Class Area (HS-8) Delineation Sampling Results

Soil EPCs under baseline condition indicate a condition of No Significant Risk has not been achieved for soil under current and future use scenarios for the area identified as HS-8. Two areas were targeted for impacted soil delineation sampling at sample locations HI-10 and HJ-10.

At sample location HI-10, samples were collected and analyzed at four delineation sample locations in a grid pattern having a 10-foot lateral separation around the original sampling point (samples HI-10A, HI-10B, HI-10C, and HI-10E) at 0-1 foot and 1-3 foot intervals and analyzed for PCBs.

At sample location HJ-10, samples were collected and analyzed at five delineation sample locations in a grid pattern having a 10-foot lateral separation around the original sampling point (samples HJ-10A, HJ-10B, HJ-10C, HJ-10D, and HJ-10F) at 0-1 foot and 1-3 foot intervals and analyzed for PCBs, cadmium, chromium and lead.

The delineation at sample locations HI-10 and HJ-10 was discontinued given the extent of impacted soil.

4.1.1.9 New Bedford High School Beneath Pavement/Building Areas Soil Results (HS-9)

A discrete "Hot Spot" area, where the concentrations of COCs are substantially higher than those present in the surrounding area, was identified at the NBHS Beneath Pavement/Building Areas at sample location SB-308 (3.5 feet). The analytical results for the Hot Spot are discussed separately in the following section.

For the remainder of the soil samples taken from Beneath Pavement/Building Areas at the Site, identified as Exposure Point Area HS-9 on Figure 2-2, the laboratory results did not indicate the detection of any chemicals at concentrations that exceed the MCP Method 1 soil standards at any locations with the exception of five PAHs [benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene], and eight MCP metals (antimony, arsenic, barium, cadmium, chromium, lead, nickel, and zinc). The reporting limits were below MCP Method 1 soil standards for all analytes except for dibenz(a,h)anthracene in SB-281(8 feet), SB-285(3.5 feet), SB-287(14 feet), SB-289(3.5 feet), SB-293(9 feet), SB-300(8 feet), SB-303(10 feet), and SB-311(6 feet), and antimony in SB-304(5 feet) and SB-307(16 feet). A summary of the NBHS Beneath Pavement/Building Areas (HS-9) soil analytical results for detected chemicals only is included in Table 4-9.

No samples were collected in the 0 to 1 foot below ground surface horizon in Exposure Point Area HS-9 to avoid potential interferences from artificial material immediately beneath the surface. This is not considered to be a significant data gap relative to the findings of this Phase II because HS-9 soils are below paved surfaces or buildings and therefore, not immediately accessible.

New Bedford High School Beneath Pavement/Building Areas (HS-9) Soil "Hot Spot" Results

At soil sample location SB-308 (3.5 feet), a Hot Spot was identified due to concentrations of PAHs 100-fold above concentrations typically found in this area of the Site. The analytical results are discussed herein, independently of the rest of the NBHS Beneath Pavement/Building Areas analytical results.

The analytical results at SB-308 (3.5 feet) did not indicate the detection of any chemical concentrations exceeding the MCP Method 1 cleanup standards, with the following exceptions: PAHs including benzo(a)anthracene at 644 mg/kg, benzo(a)pyrene at 564 mg/kg, benzo(b)fluoranthene at 635 mg/kg, benzo(k)fluoranthene at 257 mg/kg, chrysene at 587 mg/kg, dibenz(a,h)anthracene at 143 mg/kg, fluoranthene at 1,300 mg/kg, indeno(1,2,3-cd)pyrene at 400 mg/kg, 2-methylnaphthalene at 146 mg/kg, naphthalene at 354 mg/kg, phenanthrene at 1,310 mg/kg, and pyrene at 1,050 mg/kg, and lead at 503 mg/kg.

New Bedford High School Beneath Pavement/Building Areas (HS-9) Soil PAH Results

No samples were taken in the 1 to 3 feet below ground surface horizon.

For soil samples taken in the greater than 3 feet below ground surface horizon, the analytical results did not indicate the detection of any PAHs at concentrations exceeding the MCP Method 1 soil standards at any location, with the following exceptions:

- benzo(a)anthracene at sampling locations SB-274 (35.9 mg/kg at 4 feet), SB-283 (10.4 mg/kg at 3.5 feet), and SB-287 (10.2 mg/kg at 4 feet).
- benzo(a)pyrene at sampling locations SB-274 (29.5 mg/kg at 4 feet), SB-279 (2.70 mg/kg at 4 feet), SB-283 (9.5 mg/kg at 3.5 feet), and SB-287 (8.80 mg/kg at 4 feet).
- benzo(b)fluoranthene at sampling locations SB-274 (31.3 mg/kg at 4 feet), SB-283 (9.39 mg/kg at 3.5 feet), and SB-287 (9.21 mg/kg at 4 feet).
- dibenz(a,h)anthracene at sampling locations SB-274 (6.41 mg/kg at 4 feet), SB-279 (0.77 mg/kg at 4 feet), and SB-283 (2.27 mg/kg at 3.5 feet).
- indeno(1,2,3-cd)pyrene at sampling locations SB-274 (24.3 mg/kg at 4 feet) and SB-283 (9.27 mg/kg at 3.5 feet).

New Bedford High School Beneath Pavement/Building Areas (HS-9) Soil Metals Results

For soil samples taken in the 1 to 3 feet below ground surface horizon, the analytical results did not indicate the detection of any MCP Metals or mercury at concentrations exceeding the MCP Method 1 soil standards at any location, with the following exceptions:

- lead at sampling locations SB-302 (2,440 mg/kg), SB-307 (589 mg/kg), SB-310 (443 mg/kg), and NBHS-6 (322 mg/kg).
- chromium, assumed to be chromium VI, at sampling location NBHS-6 (31.0 mg/kg).
- nickel at sampling location SB-307 (35.2 mg/kg).

For soil samples taken in the greater than 3 feet below ground surface horizon, the analytical results did not indicate the detection of any MCP Metals or mercury at concentrations exceeding the MCP Method 1 soil standards, with the following exceptions:

- antimony at sampling location SB-285 (226 mg/kg at 3.5 feet).
- arsenic at 10 sampling locations (SB-274 at 4 feet, SB-279 at 4 feet, SB-280 at 4 feet, SB-281 at 4 feet, SB-285 at 3.5 feet, SB-287 at 4 feet, SB-289 at 6 feet, SB-293 at 9 feet,

SB-294 at 4 feet, and SB-303 at 5 feet) at concentrations ranging from 21.3 mg/kg (SB-280 at 4 feet) to 44.5 mg/kg (SB-281 at 4 feet).

- barium at sampling locations SB-274 (1,240 mg/kg at 4 feet), SB-287 (1,810 mg/kg at 4 feet), SB-294 (1,920 mg/kg at 4 feet), and SB-303 (1,960 mg/kg at 5 feet).

- cadmium at 17 sampling locations (SB-273 at 5.5 feet, SB-274 at 4 feet, SB-277 at 4 feet, SB-279 at 4 feet, SB-280 at 4 feet, SB-281 at 4 feet, SB-283 at 3.5 feet, SB-285 at 3.5 feet, SB-287 at 4 feet, SB-289 at 3.5 feet, SB-293 at 9 feet, SB-294 at 4 feet, SB-294 at 8.5 feet, SB-294 at 12 feet, SB-296 at 5 feet, SB-297 at 8 feet, and SB-307 at 6 feet) at concentrations ranging from 2.08 mg/kg (SB-277 at 4 feet) to 84.3 mg/kg (SB-287 at 4 feet).

- chromium at 10 sampling locations (SB-274 at 4 feet, SB-279 at 4 feet, SB-281 at 4 feet, SB-283 at 3.5 feet, SB-285 at 3.5 feet, SB-287 at 4 feet, SB-289 at 3.5 feet, SB-289 at 6 feet, SB-294 at 4 feet, and SB-311 at 6 feet) at concentrations ranging from 30.4 mg/kg (SB-283 at 3.5 feet) to 302 mg/kg (SB-287 at 4 feet).

- lead at 21 sampling locations (SB-273 at 5.5 feet, SB-274 at 4 feet, SB-275 at 4 feet, SB-277 at 4 feet, SB-279 at 4 feet, SB-280 at 4 feet, SB-281 at 4 feet, SB-283 at 3.5 feet, SB-285 at 3.5 feet, SB-287 at 4 feet, SB-289 at 3.5 feet, SB-293 at 6.5 feet, SB-293 at 9 feet, SB-294 at 4 feet, SB-294 at 8.5 feet, SB-296 at 5 feet, SB-297 at 6 feet, SB-298 at 4 feet, SB-303 at 5 feet, SB-305 at 4 feet, and SB-311 at 6 feet) at concentrations ranging from 330 mg/kg (SB-275 at 4 feet) to 4,970 mg/kg (SB-281 at 4 feet).

- nickel at 11 sampling locations (SB-274 at 4 feet, SB-279 at 4 feet, SB-281 at 4 feet, SB-283 at 3.5 feet, SB-285 at 3.5 feet, SB-287 at 4 feet, SB-289 at 6 feet, SB-293 at 9 feet, SB-294 at 4 feet, SB-303 at 5 feet, and SB-311 at 6 feet) at concentrations ranging from 21.5 mg/kg (SB-283 at 3.5 feet) to 113 mg/kg (SB-274 at 4 feet).

- zinc at sampling locations SB-287 (3,540 mg/kg at 4 feet) and SB-293 (4,500 mg/kg at 9 feet).

New Bedford High School Beneath Pavement/Building Areas (HS-9) Soil PCB Results

For soil samples taken in the 1 to 3 feet below ground surface horizon, the analytical results did not indicate the detection of total PCBs at concentrations exceeding the MCP Method 1 soil standards.

For soil samples taken in the greater than 3 feet below ground surface horizon, the analytical results did not indicate the detection of total PCBs at concentrations exceeding the MCP Method 1 soil standards, with the exception of sampling locations SB-277 (15.2 mg/kg at 4 feet), SB-285 (7.50 mg/kg at 4 feet), SB-286 (7.19 mg/kg at 4 feet), SB-289 (2.93 mg/kg at 3.5 feet), SB-312 (19.7 mg/kg at 5 feet), and SB-313 (6.32 mg/kg at 5 feet).

New Bedford High School Beneath Pavement/Building Areas (HS-9) Delineation Results

Soil EPCs under baseline condition indicate a condition of No Significant Risk has not been achieved for soil under current and future use scenarios for the area identified as HS-9. One area was targeted for impacted soil delineation sampling at sample location SB-308.

At sample location SB-308, samples were collected and analyzed at seven delineation sample locations in a grid pattern having a 5-foot lateral separation around the original sampling point (samples SB-308A, SB-308B, SB-308C, SB-308D, SB-308F, SB-308H, and SB-308I). Where a weathered asphalt layer was not observed, samples were collected at the 3 to 4-foot interval and analyzed for PAHs to determine the lateral extent of potential impacts. In locations where a weathered asphalt layer was observed (sample locations SB-308B, SB-308C, and SB-308D), a sample was collected above and below the layer in order to determine the vertical extent of potential impacts. The impacted area was determined to be bound by samples SB-308A, SB-308F, SB-308H, and SB-308I.

4.1.1.10 New Bedford High School Tree Belts Soil Results (HS-10)

For soil samples taken from the NBHS Tree Belts at the Site, identified as Exposure Point Area HS-10 on Figure 2-2, the laboratory results did not indicate the detection of any chemicals at concentrations that exceed the MCP Method 1 soil standards with the exception of total PCBs, five PAHs [benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene], and six MCP metals (arsenic, barium, cadmium, chromium, lead, and nickel). The reporting limits were below MCP Method 1 soil standards for all analytes except for PCBs in HD-10. A summary of the New Bedford High School Tree Belts Area (HS-10) soil analytical results for detected chemicals only is included in Table 4-10.

New Bedford High School Tree Belts (HS-10) Soil PAH Results

For soil samples taken in the 0 to 1 foot below ground surface horizon, the analytical results did not indicate the detection of any PAHs at concentrations exceeding the MCP Method 1 soil standards.

For soil samples taken in the 1 to 3 feet below ground surface horizon, the analytical results did not indicate the detection of any PAHs at concentrations exceeding the MCP Method 1 soil standards, with the following exceptions:

- benzo(a)anthracene at sampling locations composite HA10+HA9 (28 mg/kg), composite HA38+HA40 (8.2 mg/kg), and composite HC16+HC15+HC14 (31 mg/kg), and HRO-30 (10.3 mg/kg).

- benzo(a)pyrene at 18 sampling locations (composite HA8+HA5, composite HA10+HA9, composite HA33+HA35, composite HA38+HA40, composite HA43+HA44, composite HB7+HB9, composite HB12+HB16, composite HB39+HB40 HB-40, composite HC13+HC12+HD12, composite HC16+HC15+HC14, composite HD13+HD14+HD15, composite HD22+HC22+HB22, composite HE10+HF10, HRC-33L, HRC-33M, HRC-

33N, HRO-30,) at concentrations ranging from 2.04 mg/kg (HRC-33L) to 30 mg/kg (composite HC16+HC15+HC14).

- benzo(b)fluoranthene at sampling locations composite HA10+HA9 (19 mg/kg), composite HA38+HA40 (7.1 mg/kg), composite HC13+HC12+HD12 (7.8 mg/kg), composite HC16+HC15+HC14 (42 mg/kg), and HRO-30 (8.97 mg/kg).

- dibenz(a,h)anthracene at sampling locations composite HA38+HA40 (0.85 mg/kg), and VSS-3 (1.2 mg/kg).

- indeno(1,2,3-cd)pyrene at sampling locations composite HA10+HA9 (7.4 mg/kg) and composite HC16+HC15+HC14 (14 mg/kg).

For soil samples taken at depths greater than three feet below ground surface, the analytical results did not indicate the detection of any PAHs at concentrations exceeding the MCP Method 1 cleanup standards, with the following exceptions at sampling location SB-364 at 6 feet: benzo(a)anthracene (27.1 mg/kg), benzo(a)pyrene (21.3 mg/kg), benzo(b)fluoranthene (23.4 mg/kg), dibenz(a,h)anthracene (1.6 mg/kg), and indeno(1,2,3-cd)pyrene (11.1 mg/kg).

New Bedford High School Tree Belts (HS-10) Soil Metals Results

For soil samples taken in the 0 to 1 foot below ground surface horizon, the analytical results did not indicate the detection of any MCP Metals or mercury at concentrations exceeding the MCP Method 1 soil standards at any location, with the exception of the following:

- cadmium at sample location HRC-33M (4.08 mg/kg).

- chromium, assumed to be chromium VI, at sample location VSS-14 (32 mg/kg).

- lead at sample locations HRC-33L (322 mg/kg), HRC-33M (834 mg/kg), and HRC-33N (517 mg/kg).

For soil samples taken in the 1 to 3 feet below ground surface horizon, the analytical results did not indicate the detection of any MCP Metals or mercury at concentrations exceeding the MCP Method 1 soil standards at any location, with the following exceptions:

- arsenic at nine sampling locations (composite HB12+HB16, composite HB23+HB27, composite HC16+HC15+HC14, composite HD13+HD14+HD15, composite HD22+HC22+HB22, composite HE10+HF10, HB-10, HC-22, and HRK-33A) at concentrations ranging from 21 mg/kg (composite HE10+HF10) to 100 mg/kg (HB-10).

- barium at six sampling locations (composite HB7+HB9, composite HB12+HB16, composite HC16+HC15+HC14, composite HD13+HD14+HD15, composite HE10+HF10, and HA-19) at concentrations ranging from 1,590 mg/kg (HB7+HB9) to 15,400 mg/kg (HC16+HC15+HC14).

- cadmium at 17 sampling locations (composite HA41+HA42, composite HB7+HB9, composite HB10+HD10, composite HB12+HB16, composite HB23+HB27, composite HB31+HB32, composite HB39+HB40, composite HB41+HB42, composite HC13+HC12+HD12, composite HC16+HC15+HC14, composite HD13+HD14+HD15, composite HD22+HC22+HB22, composite HE10+HF10, HA-19, HB-10, HC-22, and HRC-33N) at concentrations ranging from 2.03 mg/kg (composite HB31+HB32) to 82 mg/kg (composite HB23+HB27).

- chromium at 12 sampling locations (composite HB7+HB9, composite HB10+HD10, composite HB12+HB16, composite HB23+HB27, composite HC13+HC12+HD12, composite HC16+HC15+HC14, composite HD13+HD14+HD15, composite HD22+HC22+HB22, composite HE10+HF10, HA-19, HB-10, and VSS-14) at concentrations ranging from 47 mg/kg (HB-10) to 2,050 mg/kg (composite HD13+HD14+HD15).

- lead at 15 sampling locations (composite HA41+HA42, composite HA43+HA44, composite HB7+HB9, composite HB10+HD10, composite HB12+HB16, composite HB23+HB27, composite HB31+HB32, composite HB39+HB40, composite HB41+HB42, composite HC13+HC12+HD12, composite HC16+HC15+HC14, composite HD13+HD14+HD15, composite HD22+HC22+HB22, composite HE10+HF10, SB-270, HA-19, HB-10, HB-22, HB-39, HB-40, HC-22, HRC-33L, HRC-33M, HRC-33N, HRK-33A, HRN-26, and VSS-14) at concentrations ranging from 304 mg/kg (composite HB41+HB42) to 10,000 mg/kg (HRC-33N).

- nickel at sampling location SB-272 (22.0 mg/kg).

For soil samples taken at depths greater than the three feet below ground surface, the analytical results did not indicate the detection of any MCP Metals or mercury at concentrations exceeding the MCP Method 1 standards at any location, with the exception of the following:

- arsenic at sampling location SB-359 (65.5 mg/kg at 4 feet and 195 mg/kg at 8 feet).

- barium at sampling location SB-359 (1,490 mg/kg at 8 feet).

- cadmium at sampling locations SB-359 (2.33 mg/kg at 4 feet and 8.81 at 8 feet) and SB-364 (2.32 at 6 feet and 2.03 at 9.5 feet).

- chromium at sampling locations SB-359 (92.5 mg/kg at 8 feet) and SB-364 (35.4 mg/kg at 6 feet).

- lead at sampling locations SB-359 (802 mg/kg at 4 feet and 2,710 mg/kg at 8 feet) and SB-364 (2,350 mg/kg at 6 feet).

- nickel at sampling location SB-359 (94.1 mg/kg at 8 feet).

- zinc at sampling location SB-359 (2,980 mg/kg at 8 feet).

New Bedford High School Tree Belts (HS-10) Soil PCB Results

For soil samples taken in the 0 to 1 foot below ground surface horizon, the analytical results did not indicate the detection of total PCBs at concentrations at any location exceeding the MCP Method 1 soil standards with the exception of sampling locations HA-9 (18.8 mg/kg), HA-10 (3.21 mg/kg), HB-9 (9.00 mg/kg), HB-10 (5.14 mg/kg), and VSS-14 (2.76 mg/kg).

For soil samples taken in the 1 to 3 feet below ground surface horizon, the analytical results did not indicate the detection of total PCBs at concentrations at any location exceeding the MCP Method 1 soil standards with the exception of fifteen sampling locations (HA-4, HA-35, HB-16, HC-12, HC-15, HC-23, HD-12, HD-14, HD-15, HRC-33, HA-9, HA-10, HB-10, HB-39, and VSS-14) at concentrations ranging from 2.60 mg/kg (HA-35) to 40 mg/kg (HRC-33).

New Bedford High School Tree Belts (HS-10) Soil TPH Results

For soil samples taken in the 1 to 3 feet below ground surface horizon, the analytical results did not indicate the detection of TPH at concentrations exceeding the MCP Method 1 soil standards. The samples were analyzed for GRO only. No samples taken in the 0 to 1 foot below ground surface horizon or the greater than 3 feet below ground surface horizon were analyzed for TPH. TPH was detected above laboratory reporting limits at sampling location HRA-33 (GRO at 12.3 mg/kg).

New Bedford High School Tree Belts (HS-10) Soil VOC Results

For soil samples taken in the 1 to 3 feet below ground surface horizon, the analytical results did not indicate the detection of VOCs at concentrations exceeding the MCP Method 1 soil standards. No samples taken in the 0 to 1 foot below ground surface horizon or the greater than 3 feet below ground surface horizon were analyzed for VOCs.

New Bedford High School Tree Belts (HS-10) Delineation Sampling Results

Soil EPCs under baseline condition indicate a condition of No Significant Risk has not been achieved for soil under current and future use scenarios for the area identified as HS-10. Therefore, nine areas were targeted for soil delineation sampling at sample locations HB-39, HB-40, HA-19, HB-23, HC-22, SB-270, HRC-33, HE-10, HF-10, and HD-14.

The delineation sampling at sample locations HB-39 and HB-40 merged into a single impacted area, where the adjacent delineation is bound by samples from the adjacent delineation.

- At sample location HB-39, samples were collected and analyzed at three delineation sample locations in a grid pattern having a 5-foot lateral separation around the original sampling point (sample locations identified as HB-39A, HB-39C, and HB-39D) at 0-1 foot and 1-3 foot intervals and analyzed for arsenic, barium, cadmium, chromium, and lead, as needed. The impacted area was determined to be bound by samples HB-39A, HB-39D, HB-40Q, and pavement.

- At sample location HD-40, samples were collected and analyzed at twelve delineation sample locations in a grid pattern having a 5-foot lateral separation around the original sampling point (sample locations identified as HB-40A, HB-40C, HB-40D, HB-40E, HB-40G, HB-40H, HB-40I, HB-40K, HB-40M, HB-40O, HB-40Q, and HB-40S) at 0-1 foot and 1-3 foot intervals and analyzed for PCBs, PAHs, arsenic, barium, cadmium, chromium, and lead, as needed. The impacted area was determined to be bound by samples HB-40H, HB-39C, HB-41, and pavement.

At sample location HA-19, samples were collected and analyzed at thirteen delineation sample locations in a grid pattern having a 5-foot lateral separation around the original sampling point (sample locations identified as HA-19A, HA-19B, HA-19C, HA-19D, HA-19E, HA-19F, HA-19G, HA-19I, HA-19K, HA-19M, HA-19O, HA-19Q, and HA-19S) at 0-1 foot and 1-3 foot intervals and analyzed for PCBs, arsenic, barium, cadmium, chromium, and lead. The impacted area was determined to be bound by samples HA-19D, HA-19S, and pavement.

At sample location HB-23, soils remaining following the excavation of PCB-impacted soils performed under an IRA at sample location HB-23 (see a description of IRA activities at HB-23 in Section 3.3.3) were analyzed for arsenic, barium, cadmium, chromium and lead (sample locations HB-23B, HB-23C, HB-23G, HB-23H, and HB-23I). The laboratory results indicated that two separate delineations were needed at sample locations HB-23C and HB-23I.

- At sample location HB-23C, sample were collected and analyzed at three delineation sample locations in a grid pattern having a 10-foot lateral separation around the original sampling point (HB-23G, HB-23F, and HB-23B) at 0-1 foot and 1-3 foot intervals and analyzed for arsenic, barium, cadmium, chromium and lead.

- At sample location HB-23I, samples were collected and analyzed at four delineation sample locations in a grid pattern having a 10-foot lateral separation around the original sampling point (sample locations identified as HB-23K, HB-23L, HB-23M, and HB-23N) at the 1-3 foot interval and analyzed for lead.

- On or about May 6, 2010, data from Vanasse Hangen Brustlin, Inc. (VHB) were discovered by the City and brought to TRC's attention. The data included sample VSS-14 which was identified as being in the vicinity of the HB-23C and HB-23I excavations. Following an evaluation of the VSS-14 sample results, the impacted area was enlarged to include this sample location. The HB-23C and HB-23I impacted areas merged, and the impacted area was determined to be bound by samples HB-23N, HB-23G, HB-23M, previously excavated soils, and pavement.

At sample location HC-22, samples were collected and analyzed at seven delineation sample locations in a grid pattern having a 5-foot lateral separation around the original sampling point (sample locations identified as HC-22A, HC-22B, HC-22C, HC-22D, HC-22E, HC-22F, and HC-22H) at 0-1 foot and 1-3 foot intervals and analyzed for PCBs, arsenic, barium, cadmium, chromium, and lead. The impacted area was determined to be bound by samples HC-22C, HC-22E, HC-22H, and pavement.

At sample location SB-270, samples were collected and analyzed at twelve delineation sample locations in a grid pattern having a 5-foot lateral separation around the original sampling point (sample locations identified as SB-270A, SB-270B, SB-270D, SB-270E, SB-270F, SB-270H, SB-270I, SB-270J, SB-270K, SB-270M, SB-270Q, and SB-270U) at 0-1 foot and 1-3 foot intervals and analyzed for lead. The impacted area was determined to be bound by samples SB-270J, SB-270U, and pavement.

At sample location HRC-33, samples were collected and analyzed at eight delineation sample locations in a grid pattern having a 5-foot lateral separation around the original sampling point (samples HRC-33A, HRC-33B, HRC-33C, HRC-33D, HRC-33E, HRC-33F, HRC-33I and HRC-33J) at 0-1 foot and 1-3 foot intervals and analyzed for PCBs. The delineation was discontinued given the extent of impacted soil.

At sample locations HE-10 and HF-10, samples were collected and analyzed at six delineation sample locations in a grid pattern having a 10-foot lateral separation around the original sample points (samples HE-10B, HE-10C, HE-10D, HF-10B, HF-10C, and HF-10D) at 0-1 foot and 1-3 foot intervals and analyzed for PCBs, PAHs, arsenic, barium, cadmium, chromium, and lead. The delineation was discontinued given the extent of impacted soil.

At sample location HD-14, samples were collected and analyzed at four delineation sample locations in a grid pattern having a 10-foot lateral separation around the original sample points (samples HD-14A, HD-14B, HD-14C, and HD-14D) at 0-1 foot and 1-3 foot intervals and analyzed for PCBs. The delineation was discontinued given the extent of impacted soil

4.1.1.11 New Bedford High School, Miscellaneous. Samples of Unknown Location (HS-11)

For several soil samples collected by BETA, data concerning the sampling location(s) or the sample depth(s) were not available. These samples were conceptually grouped together in a separate exposure point area (HS-11) for discussion herein.

For the soil samples associated with Exposure Point Area HS-11, the laboratory results did not indicate the detection of chemicals at concentrations that exceed the MCP Method 1 soil standards with the exception of three PAHs (benzo(a)anthracene, benzo(a)pyrene, and dibenz(a,h)anthracene), four MCP metals (arsenic, cadmium, chromium, and lead), and TPH DRO. The laboratory reporting limits were below MCP Method 1 soil standards for all analytes. A summary of the miscellaneous NBHS soil samples (HS-11) analytical results for detected chemicals only is included in Table 4-11. As previously noted, the conclusions of the Method 1 analysis were later supported by a Method 3 risk analysis.

New Bedford High School Miscellaneous Samples (HS-11) Soil PAH Results

For soil samples taken from Exposure Point Area HS-11, the analytical results did not indicate the detection of any PAHs at concentrations exceeding the MCP Method 1 soil standards, with the following exceptions:

- benzo(a)anthracene at composite sampling location Comp-13 (9.0 mg/kg).
- benzo(a)pyrene at composite sampling locations Comp-1 (3.8 mg/kg), Comp-13 (4.3 mg/kg), HS Comp-10 (2.2 mg/kg), and HS Comp-12 (4.2 mg/kg).
- dibenz(a,h)anthracene at composite sampling locations Comp-13 (0.83 mg/kg) and HS Comp-12 (0.88 mg/kg).

New Bedford High School Miscellaneous Samples (HS-11) Soil RCRA-8 Metals Results

For soil samples taken from Exposure Point Area HS-11, the analytical results did not indicate the detection of any RCRA-8 Metals at concentrations exceeding the MCP Method 1 soil standards, with the following exceptions:

- arsenic at composite sampling locations Comp-1 (24.4 mg/kg), Comp-5 (24.7 mg/kg), and Comp-7 (24.9 mg/kg).
- cadmium at five composite sampling locations (Comp-9, Comp-11, HS Comp-2, HS Comp-10, and HS Comp-12) at concentrations ranging from 2.10 mg/kg to 42 mg/kg.
- chromium, assumed to be chromium VI, at composite sampling locations Comp-1 (47.8 mg/kg), Comp-5 (34.7 mg/kg), Comp-7 (37.1 mg/kg), and Comp-11 (33.5 mg/kg).
- lead at 14 composite sampling locations (Comp-1, Comp-3, Comp-5, Comp-7, Comp-9, Comp-11, HA Comp-2, HS Comp-4, HS Comp-6, HS Comp-8, HS Comp-10, HS Comp-12, and HS Comp-16) at concentrations ranging from 328 mg/kg to 2,670 mg/kg.

New Bedford High School Miscellaneous Samples (HS-11) Soil TPH Results

For soil samples taken from Exposure Area HS-11, the analytical results did not indicate the detection of TPH at concentrations exceeding the MCP Method 1 soil standards, with the exception for DRO at composite sampling location Comp-1 (3,800 mg/kg).

New Bedford High School Miscellaneous Samples (HS-11) Soil Pesticide Results

For soil samples taken from Exposure Area HS-11, the analytical results did not indicate the detection of pesticides at concentrations exceeding the MCP Method 1 soil standards.

New Bedford High School Miscellaneous Samples (HS-11) Soil Herbicides Results

For soil samples taken from Exposure Area HS-11, the analytical results did not indicate the detection of any herbicides at concentrations exceeding the MCP Method 1 soil standards.

4.1.1.12 Dioxin Investigative Sampling Results

On April 15, 2010, TRC conducted soil investigative sampling for polychlorinated dibenzo-p-dioxins (PCDDs) and polychlorinated dibenzofurans (PCDFs) (collectively referred to as dioxin compounds). A total of sixteen samples were collected from five sample locations and analyzed for chlorinated dioxins by SW-846 Method 8290, PCB congeners by SW-846 Method 1668A. All samples were also analyzed for PCBs as Aroclors, PAHs, and MCP metals (including mercury). The five sampling locations (HB-26, HF-14, HF-31D, HF-40, and HG-2) are identified on Figure 2-2.

The sampling locations were five previous sample locations TRC estimated as worst case scenarios based on a review of all soil data collected. This evaluation of sample locations was based on existing chemical signature and geographic coverage within the population of previous sample locations (see Section 3.1.1.1). The intent was to support a qualitative correlation (e.g., to document the co-occurrence of PCBs) and to efficiently target potential high concentration dioxin and dioxin-like compounds areas in lieu of a larger sampling program.

At each sample location a sample was taken of the top one foot soil interval, the one to three foot soil interval, and the historic fill. At sample location HG-2, a sample of the 5-7 foot interval was also analyzed for VOCs, EPH and VPH due to a screening PID reading of 67 ppmv and an observation of oil globules and staining.

For soil samples taken from the April 2010 dioxin investigative sampling, the PCB, PAH, and MCP metals (including mercury) laboratory results were generally consistent with prior sampling results, and indicated the detection of chemicals at concentrations that exceed the MCP Method 1 soil standards including total PCBs as Aroclors, three PAHs [benzo(a)pyrene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene], and five MCP metals (arsenic, cadmium, chromium, lead, and nickel). Levels of dioxins in site soil were consistent with background concentrations for soils in urban areas, even in the presence of PCB detections. (Birmingham 1990; Pearson et al, 1990; Creaser et al, 1990; Duarte-Davidson, et al, 1997; and Hyeon Im, et al, 2002).

The sum of dioxin-like PCB Congeners Toxicity Equivalents (TEQs) and dioxin TEQs (collectively, the "TEQ Summation") exceeded the MCP Method 1 standards in two of the five samples taken in the 0 to 1 foot below ground surface horizon at sample locations HB-26 and HG-2. In the 1 to 3 foot below ground surface horizon the TEQ Summation for all five sampling locations exceeded the MCP Method 1 standard at concentrations ranging from 23.45 picograms per gram (pg/g) (HF-14) to 300.88 pg/g (HG-2). In the greater than three feet below ground surface horizon the TEQ Summation for all five sampling locations exceeded the MCP Method 1 standard at concentrations ranging from 22.09 pg/g (HF-31D) to 221.21 pg/g (HG-2).

Under a site-specific Method 3 risk characterization approach, the sum of dioxin-like PCB Congeners Toxicity Equivalents (TEQs) and dioxin TEQs from the sampling are associated with No Significant Risk.

A summary of the soil analytical results is included in Table 4-12 with the exception of the VOC, EPH, and VPH sample results for sample location HG-2 (5-7 feet), which are included in Table 4-13.

4.1.2 Groundwater Analytical Results

Groundwater samples were collected from seven Site monitoring wells in 2008 and 2009, following installation of the wells. Groundwater samples were collected on the following dates: August 19, 2008 (MW-4 through MW-6), September 6, 2008 (MW-7 and MW-8B), and April 23, 2009 (MW-HH-13, MW-HRC-33). Groundwater samples were submitted for laboratory analysis of EPH, PAHs, PCBs, and both total and dissolved MCP Metals and mercury, to evaluate the groundwater. A discussion of groundwater analytical results relative to the IRA activities is included in Section 6.0.

Groundwater samples were collected using peristaltic pumps and dedicated polyethylene tubing. During purging of Site groundwater monitoring wells, TRC monitored dissolved oxygen, temperature, oxidation/reduction potential, conductivity, pH, turbidity, and depth to water.

The results of all laboratory analysis of Site groundwater samples are provided in Table 4-14. Where duplicate samples were collected, the maximum results are cited below. Monitoring well locations are depicted in Figure 2-2.

Tabulated groundwater analytical results are compared below to MCP Method 1 GW-2 or GW-3 groundwater standards based on the current land use and location. The groundwater sampling techniques employed by TRC were described previously in Section 3.1.3.

4.1.2.1 Groundwater PAH Results

Analysis of groundwater for PAHs was conducted on samples from groundwater monitoring wells (MW-4, MW-5, MW-6, MW-7, MW-8B, MW-HH-13, and MW-HRC-33) in accordance with the MassDEP Compendium of Analytical Methods. The analytical results for the groundwater samples did not indicate the detection of any PAHs at concentrations exceeding their MCP Method 1 groundwater standards. The PAH laboratory reporting limits were below all Method 1 groundwater standards.

4.1.2.2 Groundwater PCB Results

Analysis of groundwater for PCB Aroclors was conducted on samples from all groundwater monitoring wells in accordance with the MassDEP Compendium of Analytical Methods. The analytical results for the groundwater samples did not indicate the detection of any PCBs at concentrations exceeding their MCP Method 1 groundwater standards for the GW-3 or GW-2 category. The PCB laboratory reporting limits were below all Method 1 groundwater standards.

4.1.2.3 Groundwater MCP Metals and Mercury Results

Analysis of groundwater for total and dissolved MCP metals and mercury was conducted on samples from all groundwater wells in accordance with MassDEP Compendium of Analytical Methods. The analytical results for the groundwater samples did not indicate the detection of any MCP metals or mercury at concentrations exceeding their MCP Method 1 groundwater standards for the GW-3 category, with the exception of the detection of total lead in MW-5 at 19.2 µg/L, and MW-HRC-33 at 10.5 µg/L, which exceeds the GW-3 standard of 10 µg/L. The analytical results for dissolved lead at MW-5 and MW-HRC-33 did not indicate the presence of lead above the laboratory reporting limit of 8.0 µg/L and 7.5 µg/L, respectively. Lead was not detected above the laboratory reporting limit for any other groundwater sample submitted.

The detection of lead in groundwater monitoring well MW-5 and MW-HRC-33 is most likely attributable to the lead being adsorbed to, or contained in, particulates in the groundwater sample. During groundwater sample collection for MW-5, final field turbidity values for groundwater monitoring wells, MW-4, MW-6, MW-7 and MW-8B were between 0.68 and 5.4 nephelometric turbidity units (NTUs) at the time of metals sample collection. However, during the groundwater sample collection of monitoring well MW-5, a final field turbidity value of 270 NTU was observed. For all groundwater monitoring wells sampled, groundwater samples were taken for total lead, and dissolved lead (sample field filtered). Given the relatively high turbidity value observed during the sampling of groundwater monitoring well MW-5, and lead being undetected in the field filtered sample for MW-5, the detection of total lead at MW-5 at 19.2 µg/L is associated with particulates in the groundwater sample. Although the turbidity value observed during the sampling of MW-HRC-33 was within the range of the reading for other samples (2.81 NTUs), given that lead was undetected in the dissolved metals sample, the detection of total lead at 10.5 µg/L is associated with particulates in the sample.

The MCP metals and mercury laboratory reporting limits were below all MCP Method 1 groundwater standards.

4.2 Extent of Site Impacts

This section describes the horizontal and vertical extent of impacts for chemicals of concern identified during TRC's subsurface investigations and during previous assessments conducted by VHB and BETA, as presented in previous reports for the Site. The extent of impacts relative to the IRA SRM /CEP are discussed in Section 6.3.3.2.

4.2.1 Soil

As noted in Section 4.1.1, chemicals detected in soil samples collected from the Site in excess of MCP Method 1 soil standards include PCBs, metals (arsenic, barium, cadmium, chromium, lead, mercury, nickel, vanadium, and zinc), dibenzofuran, diesel range organics (DRO), and various PAHs. A discussion of dioxin investigative results is included separately in Section 4.1.1.12. The discussion of the extent of chemical impacts focuses on Site chemicals that are indicative of a group of compounds (i.e., benzo(a)pyrene for the PAH group of chemicals) and/or drive

remedial actions contemplated at the Site, and include the following: arsenic, cadmium, chromium, lead, benzo(a)pyrene, and PCBs.

Soil chemicals in excess of MCP Method 1 soil standards identified at the Site include PAHs [benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, 2-methylnapthalene, naphthalene, phenanthrene, and pyrene], metals (antimony, arsenic, barium, cadmium, chromium, lead, nickel, mercury, vanadium, and zinc), PCBs, and TEQ Summation. Tables summarizing the results of chemical analysis for soil samples collected at the Site are provided in Tables 4-1 through Table 4-13 of this report. Chemical concentrations of arsenic, cadmium, chromium, lead, benzo(a)pyrene, and total PCBs are mapped in Figures 4-1 to 4-3 for sample locations where one of these chemical concentration exceeds a regulatory criteria at the Site for investigative sample only (as noted previously, this does not include delineation soil samples). Fill thickness isopleth contours are provided in Figure 3-2 and discussed in Section 3.2.1 based on fill thickness estimates from observations made during advancement of soil borings.

Arsenic. Arsenic was detected in soils above MCP Method 1 soil standards in the 0 to 1 foot horizon, 1 to 3 feet soil horizon, and the greater than 3 feet horizon. In the 0 to 1 foot horizon, arsenic exceeded MCP Method 1 soil standards at one sample location (HH-13B) located at the northwest portion of the House Area (HS-6). In the 1 to 3 feet horizon, arsenic exceeded MCP Method 1 soil standards in the western central and northwest portions of the Site. Additional results above MCP Method 1 soil standards were observed at the Unfenced Playing Field Area (HS-3) at sample location SS-36, and in two locations in the Tree Belts (HS-10) in the southern portion of the Site at sample locations HB-40A and HB40C and at sample location HRK33A. In the greater than 3 foot horizon, arsenic exceeded MCP Method 1 soil standards across the Site with two exceptions: an area in the southern portion of the Site and an area in the northeastern corner of the Site.

Barium. Barium was detected in soils above MCP Method 1 soil standards in the 0 to 1 foot horizon, 1 to 3 feet soil horizon, and the greater than 3 feet horizon. In the 0 to 1 foot horizon barium exceeded the MCP Method 1 soil standards at one location (HH-13B) located in the northwest portion of the House Area (HS-6). In the 1 to 3 feet horizon, barium exceeded MCP Method 1 soil standards in the northwestern portion of the Site, with a concentration in excess of the barium UCL at sample locations HH-13J and HC16+HC15+HC14[1], and in the eastern portion of the Unfenced Playing Field Area (HS-6) in the vicinity of sample location SB-360. In the greater than 3 feet horizon, barium exceeded MCP Method 1 soil standards in the northern portion of the Site at two sample locations (SB-287 and SB-350), along the easterly boundary in the vicinity of sample location SB-294, as well as in the southern portion of the Site at four sample locations (SB-274, SB-365, SB-303, and SB-359).

Cadmium. Cadmium was detected in soils above MCP Method 1 soil standards in the 0 to 1 foot, 1 to 3 feet, and greater than 3 feet horizons. In the 0 to 1 foot horizon, cadmium exceeded the MCP Method 1 soil standards in one location located along the northern boundary of the campus in the vicinity of sample location HI2.5+HJ2.5, in the western and northern portions of

[1] The concentrations that exceed the UCL is are individual sample concentrations and do not represent an exposure point concentration in excess of the UCL.

the Site at five sample locations (HA-19D, HD-21C, HH-13B, HJ-10F, and SB-363), and in the southern portion of the Site at three sample locations (SS-19, SS-20, and HRC-33M). In the 1 to 3 feet horizon, cadmium exceeded the MCP Method 1 soil standards in the western, northern, and southwestern portions of the campus, with an isolated area in the Fenced Playing Field Area (HS-2) in the vicinity of sample location SS-26. In the greater than 3 feet horizon, cadmium exceeded the MCP Method 1 soil standards in a number of locations across the Site. Areas below the MCP Method 1 soil standards were in the northeast corner, and the eastern portion of the Site in the Unfenced Playing Field Area (HS-3).

Chromium. Chromium was detected in soils above the total chromium based MCP Method 1 soil standards in the 0 to 1 foot, 1 to 3 feet, and greater than 3 feet horizons. In the 0 to 1 foot horizon, chromium exceeded MCP Method 1 soil standards in the northeastern portion of the Site at eight sample locations (VSS-14, HB-23I, HH-13B, HH-13H, HJ-10F, VSS-15, SB-363, and HI2.5+HJ2.5), and in the southwestern portion of Fenced Playing Field Area (HS-2) in the vicinity of six sample location (SS-15, SS-16, SS-17, SS-18, SS-19 and SS-20). In the 1 to 3 feet horizon, chromium exceeded the MCP Method 1 soil standards in the northwestern portion of the Site, an isolated area in the Unfenced Playing Field Area (HS-3) at three sample locations (SB-360, SB-36-A, and SB-360F), and three isolated areas in the southwestern portion of the Site at seven sample locations (HJ42+HF31, HH43+HI42, HB40A, HB-40C, HB-40D, HB-40E, and HB-40H). In the greater than 3 feet horizon, chromium exceeded the MCP Method 1 soil standards across the Site, with two areas below the MCP Method 1 soil standards: the northeastern corner of the Site, and the Unfenced Playing Field Area (HS-3) located on the eastern portion of the Site. In the vicinity of sample location HH-13 where relatively higher concentrations of chromium were observed, an evaluation of the predominant species (valence state) of chromium was performed. The evaluation included the analysis of soils for hexavalent chromium, pH and oxidation reduction potential. The evaluation identified that the chromium was present almost exclusively as trivalent chromium.

Lead. Lead was detected in soils above MCP Method 1 soil standards in the 0 to 1 foot, 1 to 3 feet, and the greater than 3 feet horizons. In the 0 to 1 foot horizon, lead exceeded the MCP Method 1 soil standards across the western half of the Site at sixteen sample locations. In the 0 to 1 foot horizon in the eastern half of the Site, lead exceeded the MCP Method 1 soil standards at one sample location (SS-36N) located in the Unfenced Playing Field Area (HS-3). In the 1 to 3 feet horizon, lead exceeded the MCP Method 1 soil standards across the Site. UCLs in the 1 to 3 foot horizon were exceeded in a number of individual sample locations in the northeast portion of the Site, at two isolated sample locations (HB-40C, and HRC-33N) and an area in the vicinity of sample location SB-360[2]. In the greater than 3 feet horizon, lead exceeded MCP Method 1 soil standards across the Site, with the exception of an area in the northeast corner of the Site. UCLs in the greater than 3 foot horizon were exceeded in individual samples in the vicinity of SB-305, SB-294, SB-281, SB-360 and SB-287[3].

[2] The concentrations that exceed the UCL are individual sample concentrations and do not represent exposure point concentrations in excess of the UCL.
[3] The concentrations that exceed the UCL are individual sample concentrations and do not represent exposure point concentrations in excess of the UCL.

Benzo(a)pyrene. Benzo(a)pyrene was detected above MCP Method 1 soil standards predominantly in the 1 to 3 feet, and greater than 3 feet horizons. In the 0 to 1 foot horizon, benzo(a)pyrene was detected above MCP Method 1 soil standards in two areas in the Junior High Gym Class area (HS-8) in the vicinity of sample locations HI-10 and HI2.5+HJ2.5 only. In the 1 to 3 feet horizon, benzo(a)pyrene exceeded MCP Method 1 soil standards across the Site, with the exception of an area in the northwest corner of the Site. The benzo(a)pyrene UCL was exceeded at sample location HH13 located in the northwest corner of the House Area (HS-6) in the 1 to 3 feet horizon. In the greater than 3 feet horizon, benzo(a)pyrene exceeded MCP Method 1 soil standards in the western portion of the Site at seven sample locations (SB-274, SB-365, NBHS-1, SB-364, SB-287, SB-283, SB-279), and in the southern portion of the Site at three sample locations (SB-308, SB-308A, and SB-308F). The UCL was exceeded at sample location SB-308 in the greater than 3 feet horizon.

PCBs. PCBs were detected in soils above MCP Method 1 soil standards in the 0 to 1 foot, 1 to 3 feet, and greater than 3 feet horizons. In the 0 to 1 foot horizon, and the 1 to 3 foot horizon, PCBs exceeded the MCP Method 1 soil cleanup standard across the western two-thirds of the Site, although with greater frequency in the 1 to 3 foot horizon than the 0 to 1 foot horizon. In the greater than 3 feet horizon, PCBs exceeded the MCP Method 1 soil standards in the northwest corner of the Site at four sample locations (SB-285, SB-286, SB-289, and SB-364), and west of the center of the high school building at two sample locations (SB-312, and SB-313).

4.2.2 Groundwater

The results of the analysis of groundwater at the Site for PAHs, EPH, PCBs, both total and dissolved MCP metals and mercury did not indicate the presence of potential impacts in excess of the MCP Method 1 groundwater standards with the exception of total lead at MW-5 which is located near the center of the Site, and MW-HRC-33 which is located near the center of the southern border of the Site. As discussed in Section 4.1.2.3, the total lead concentration is most likely attributable to the lead being adsorbed to, or contained in, particulates in the groundwater sample, and not likely to be dissolved phase lead.

The locations of monitoring wells sampled for PAHs, PCBs and metals are presented on Figure 2-2. Groundwater sampling results for PAHs, PCBs, and metals are presented on Table 4-14 and were discussed previously in Section 4.1.2.

5.0 FATE AND TRANSPORT ANALYSIS

Consistent with 310 CMR 40.0835(4) (e), the following section provides an analysis of the fate and transport of chemicals identified at the Site. This section summarizes environmental fate and transport characteristics of identified chemicals and identifies existing and potential migration pathways of oil and hazardous material (OHM) at the Site. The fate and transport of chemicals relative to the IRA Substantial Release Migration / Critical Exposure Pathway are discussed in Section 6.3.4.

5.1 Environmental Fate and Transport Characteristics

Compounds identified in Site soil and groundwater include PAHs, PCBs, arsenic, barium, cadmium, chromium, lead, mercury, nickel, vanadium, and zinc (see Tables 4-1 to 4-14) based on TRC's subsurface investigations and during previous assessments conducted by BETA. The distribution of site impacts is influenced, in part, by factors such as the physical and chemical properties of the chemicals, the nature and location of sources, and Site characteristics such as geology, hydrology, and topography. Characteristics of these compounds that affect mobility, stability, volatility, persistence, and bioaccumulative potential are discussed herein. Chemical characteristics are summarized in a table provided in Appendix G.

5.1.1 Fate and Transport Related Properties

To evaluate the fate and transport of chemicals in the environment, it is important to identify the physical and chemical properties that influence fate and transport processes. Chemicals that are structurally similar tend to exhibit like behavior in the environment and as such are grouped into classes. Classes of chemicals detected in soil at the Site include PAHs, PCBs, and metals.

General definitions of physical properties are discussed below, followed by a description of the characteristics of each chemical class.

Specific Gravity. The specific gravity of a chemical is the ratio of the mass of a given volume of the chemical to an equal volume of water at a specified temperature, usually 4 degrees Celsius (°C). Specific gravity is a relative measure of density. Compounds with specific gravities greater than 1.0, if they are immiscible with water, can separate as a sinking phase. Immiscible compounds with specific gravities less than 1.0 tend to float on water. The majority of the impacts identified at the Site includes various chemicals with specific gravities greater than 1.0 indicating the potential to sink in water.

Water Solubility. The solubility of a chemical in water is the maximum amount of chemical that can dissolve in pure water at a specific temperature and pressure. Water solubility is a general predictor of a chemical's potential mobility and distribution in the environment. Chemicals with moderate to high solubility (greater than 100 milligrams per liter [mg/L]) can readily leach from soils into groundwater, and once there, are generally mobile. Compounds that are highly soluble in water are less likely to volatilize from water and may be more susceptible to microbial degradation. Impacts like the PCBs, PAHs and metals detected at the Site generally exhibit a relatively low level of water solubility.

Vapor Pressure. The vapor pressure of a liquid or solid is a relative measure of its volatility in its pure form. This value expresses the pressure of the vapor phase of a compound in equilibrium with its liquid or solid phase of the compound at a given temperature. Vapor pressure is important in evaluating migration of chemicals to air from other environmental media; factors such as temperature, wind speed, water solubility and degree of adsorption also play a key role. Chemicals with vapor pressures greater than 10 millimeters of mercury (mm Hg) are considered to be highly volatile. Impacts like the PCBs, PAHs and metals detected at the Site generally exhibit a relatively low vapor pressure.

Henry's Law Constant. The Henry's Law Constant is another measure of chemical volatility. It is expressed as a ratio of the concentration of a chemical in air to the chemical's concentration in water (i.e., dissolved state). The higher the Henry's Law Constant value, the greater the tendency to volatilize. In general, compounds with values above 10^{-5} atmospheres-cubic meter per mole (atm-m^3/mol) are considered highly volatile and have a greater potential for movement into groundwater. Impacts like the PCBs, PAHs and metals detected at the Site generally exhibit a relatively low Henry's Law Constant (low volatility).

Organic Carbon Partition Coefficient (K_{oc}). This value is a measure of the relative sorption potential of organic compounds. K_{oc} reflects the tendency of an organic compound to be adsorbed onto soils and sediments and is generally independent of soil properties. This value is expressed as the ratio of the amount of a compound adsorbed per unit weight of organic carbon, to the concentration of the compound in aqueous solution at equilibrium. Chemicals with a high K_{oc} (greater than 1,000 milliliters per gram [mL/g]) may exhibit a high sorption potential in soils and are less likely to leach into groundwater. K_{oc} values less than 100 mL/g indicate that the chemical has a high potential to leach into groundwater. Impacts like the PCBs and PAHs detected at the Site generally exhibit a relatively high K_{oc} values and tend to exhibit high sorption potential and limited potential to leach.

Log K_{ow} (log octanol/water partition coefficient). This value is a measure of the tendency of a compound to partition between an organic phase (octanol) and an aqueous phase. Log K_{ow} relates indirectly to water solubility and directly to soil adsorption. Chemicals with low partition coefficients (log K_{ow} less than 1) have high water solubilities and low adsorption coefficients, and would, therefore, be expected to have a high potential to leach into groundwater. Organic chemicals detected Site generally exhibit relatively high K_{oc} values and tend to exhibit high sorption potential and limited potential to leach. Impacts like the PCBs and PAHs detected in soil are more likely to bind to soil, based on their log K_{ow} values.

5.1.2 Contaminant Types

Chemical classes detected at the Site include PAHs, PCBs, and metals. The chemicals detected in excess of MCP Method 1 soil standards are attributable to PSWS fill.

Polycyclic Aromatic Hydrocarbons (PAHs). PAHs are the product of incomplete combustion of fossil fuels. They are also components of petroleum and coal. Compounds of this class generally have low mobility in soil and possess very low aqueous solubility. Therefore,

compounds in this class are not likely to be conveyed in the dissolved phase in groundwater and have low relative mobility. PAHs have a tendency to strongly partition (adsorb) to soils and soil organic phases.

Polychlorinated Biphenyls (PCBs). PCBs are a mixture of up to 209 chlorinated compounds which do not occur naturally in the environment. PCB oils were commonly used as fire-resistant dielectric fluids in high voltage transformers, and are additionally associated with hydraulic equipment and lubricants among many other uses. The manufacture of PCBs in the United States was terminated in 1977. PCBs have a very low solubility in water; they strongly partition (adsorb) to soils and soil organic phases, and have a strong tendency for bioaccumulation.

Arsenic. Arsenic occurs naturally in rocks and soil, water, air, and plants and animals. It can further enter the environment through natural activities such as volcanic action, erosion of rocks and forest fires, or through human actions. Industrial arsenic is currently used as a wood preservative, but arsenic is also used in paints, dyes, metals, drugs, soaps and semi-conductors. Arsenic can also come from certain pesticides and animal feeding operations. Industry practices such as copper smelting, mining and coal burning also contribute to arsenic in our environment. Arsenic was one of the primary ingredients in pesticides before synthetic organic pesticides were available, and has also been found in herbicides. Arsenic has a low solubility in water and low potential for transport via groundwater in the dissolved phase.

Barium. Barium is a naturally-occurring metal in the sulfate mineral barite. Barium compounds are used by the oil and gas industry to make drilling muds. Barium compounds are used to make paint, bricks, ceramics, glass, and rubber. Some barium compounds that enter the environment during industrial processes dissolve easily in water and can be found in lakes, rivers, and streams. Some barium compounds can spread over great distances due to their water-solubility. However, barium forms insoluble salts with components in the environment such as carbonate and sulfate; therefore, barium is not mobile and poses little risk of environmental transport from soil to groundwater.

Cadmium. Cadmium is a naturally-occurring metal and always occurs in combination with zinc. About three-fourths of cadmium is used in Ni-Cd batteries, most of the remaining one-fourth is used mainly for pigments, coatings and plating, and as stabilizers for plastics. Cadmium has a very low solubility in water and little potential for transport via dissolved phase.

Chromium. Chromium is a naturally-occurring metal and was mainly used in alloys such as stainless steel, in chrome plating and in ceramics. Chromium plating was once widely used to give steel a polished silvery mirror coating. Chromium is used in metallurgy to impart corrosion resistance and a shiny finish; as dyes and paints, as a catalyst in dyeing and in the tanning of leather. Chromium has a very low solubility in water and little potential for transport via the dissolved phase.

Chromium is present in the environment in several different forms, the most common forms being the metal form chromium(0), chromium(III), and chromium(VI). Chromium(III) occurs naturally in the environment and is an essential nutrient. Chromium(VI) and chromium(0) are generally produced by industrial processes. Chromium(III) is far more prevalent in the

environment than chromium(VI), as chromium(VI) requires extreme pH and Eh conditions that rarely exist in the natural environment to predominate over chromium(III).

Lead. Lead is a naturally-occurring metal and is also a very commonly employed industrial chemical, and has been used in gasoline, paints, solders, glazes, electronics, batteries, lead-arsenate pesticides, ammunition shot and sinkers. Lead is dispersed throughout the environment primarily as a result of human activities. Due to lead's persistence in the environment and toxicity, the use of lead has been eliminated or strictly regulated. Lead has a very low solubility in water and little potential for transport via the dissolved phase.

Mercury. Mercury is a naturally-occurring metal with very low solubility in water and a tendency to bioaccumulate. Metallic mercury is a liquid at room temperature and is used to produce chlorine gas and caustic soda, and is widely used in thermometers, dental fillings and batteries.

Nickel. Nickel is a naturally-occurring metal and the major use of nickel is in the preparation of alloys. A majority of the nickel is used to make stainless steel with other industrial uses being the manufacture of alloy steels, rechargeable batteries, catalysts and other chemicals, coinage, foundry products, and plating. Nickel has a very low solubility in water and little potential for transport via the dissolved phase.

Vanadium. Vanadium is a naturally-occurring metal with very low solubility in water. Vanadium is used in many alloys, primarily in steel used for automobile parts, springs, and ball bearings.

Zinc. Zinc is a naturally-occurring metal with very low solubility in water and a tendency to bioaccumulate. Zinc is used in paint, rubber, dyes, wood preservatives, ointments, batteries, and used in rust prevention.

5.2 Migration Pathways

Figure 5-1 presents a schematic conceptual site model that illustrates, on a site-specific basis, how chemicals entered the environment, how the chemicals were transported at the Site, and the potential for exposure to human and environmental receptors, as currently supported by the available data, information on chemicals identified at the Site, and chemicals properties. An analysis of the potential migration pathways as they relate to the chemicals identified at the Site is presented in the following sections.

5.2.1 Soil

Chemicals detected at the Site above their MCP Method 1 soil standards were PAHs, PCBs, dibenzofuran, and certain metals. All chemicals of concern identified to date tend to exhibit strong partitioning tendencies and limited potential to leach, and/or low solubility and have low likelihood of migrating with groundwater and leaching through the soil.

The chemicals of concern are also highly persistent (do not readily degrade) and chemicals like PCBs have a strong tendency for bioaccumulation. However, since the Site topography is relatively flat and there are no on-Site surface water bodies, the potential for transport of impacted soil to surface water bodies is limited.

Future development of the Site or future maintenance activities could disturb soils making these soils available for fugitive dust transport and stormwater runoff if engineering controls and work practices are not implemented during activities that could disturb the soil.

5.2.2 Groundwater

The results of the analysis of groundwater at the Site for EPH, PAHs, PCBs, both total and dissolved MCP metals and mercury did not indicate the presence of potential impacts in excess of the MCP Method 1 groundwater standards with the exception of total lead at monitoring well MW-5, which is located near the center of the Site, and MW-HRC-33 which is located near the center of the southern border of the Site. As discussed in Section 4.1.2.3, the total lead concentration detected in groundwater at monitoring well MW-5 and MW-HRC-33 is most likely attributable to the lead being adsorbed to, or contained in, particulates in the groundwater sample, and not likely to be dissolved phase lead.

Lead has a specific gravity of 11.34 but does not tend to migrate in pure phase form, which is a solid under most typical environmental conditions. Additionally, lead is nearly insoluble in water and strongly partitions to solid phases. Therefore lead is likely to be largely immobile in groundwater. Based on the nature of lead, it is not expected to migrate significantly from its current distribution.

VOCs are discussed in Section 6.3.4 relative to the IRA SRM/CEP.

5.2.3 Air

Chemicals of concern identified at the Site generally exhibit relatively low vapor pressures and therefore, are not likely to migrate to air from other environmental media. VOCs relative to the IRA SRM/CEP are discussed in Section 6.3.4. VOC air impacts are limited to the Mechanical Room at NBHS.

5.2.4 Surface Water

No surface water bodies are located on the Site or in the vicinity of the Site.

5.2.5 Sediment

No surface water bodies and associated sediment are on Site.

5.2.6 Food Chain

No ecologically viable habitats are located on the Site. A small wooded area containing both forested upland and an isolated forested wetland is present to the north of the Site on the property of the adjacent ice rink and represents the only undeveloped habitat in the vicinity of the Site. A significant part of the Site is either paved, or under the footprint of existing structures, and the Site is in a heavily urbanized, thickly settled location.

6.0 DISCUSSION OF IMMEDIATE RESPONSE ACTIONS

The following summarizes Immediate Response Actions (IRA) undertaken at the Site, including a complete discussion of the Immediate Response Action Substantial Release Migration/Critical Exposure Pathway related response actions and associated data collection/evaluation.

6.1 IRA Sample Location HB-23

The following describes IRA activities conducted at the HB-23 soil sample location. Prior IRA-related regulatory reporting for HB-23 is documented in TRC 2009b and 2009c.

On March 10, 2009, TRC, on behalf of the City, conducted soil sampling at the HB-23 portion of the NBHS grounds (west side of campus along Hathaway Boulevard) to delineate the extent of PCBs in soil and to determine the extent of required soil removal.

TRC's environmental investigation consisted of direct push soil borings using a truck-mounted drill rig to sample soil and observe subsurface soil conditions. Drilling services and equipment were provided by New England Geotech. TRC completed a total of 10 soil borings and collected a total of twenty soil samples.

The protocol for the delineation sampling called for the collection of five soil samples (0 to 1 foot and 1 to 3 feet in depth) centered at the HB-23 location (designated "A") and within ten feet of the HB-23A sampling location to the north, east, south and west (designated "B" through "E"). The protocol further called for the collection of five additional "outer ring" samples twenty feet from the HB-23A sampling location (designated "F" through "J"). "Outer ring" samples were also collected from the 0 to 1 and 1 to 3 feet intervals. All samples were collected on March 10, 2009 and the "A" through "E" samples were authorized for PCB Aroclor analysis by NEA. The "F" through "J" samples were held at the laboratory, pending the results of the "A" through "E" sample analysis.

Total PCB concentrations were below the MCP Method 1 S-1/GW-2 and S-1/GW-3 soil standards (2 mg/kg) at three of the five initial surface soil sample locations (HB-23B through HB-23D). However, at locations HB-23A and HB-23E, concentrations of 45.9 mg/kg and 13.5 mg/kg were detected in the 0 to 1 foot interval, respectively. Due to the detection of PCBs at levels greater than 10 mg/kg within the top 12 inches of soil at the HB-23A and HB-23E locations, a potential Imminent Hazard (IH) condition per 310 CMR 40.0321(2)b was reported to MassDEP on [date] and the "G" through "I" samples were immediately authorized for analysis. HB-23G was authorized primarily to determine the extent of PCBs in the 1 to 3 foot interval, while HB-23H and HB-23I, which flanked HB-23A and HB-23E, were authorized to determine the lateral extent of PCBs in surficial soil (0 to 1 foot). Analytical results from the additional samples located in the vicinity of HB-23 indicated that concentrations of PCBs above IH thresholds were confined to a polygonal area within the landscaped area along Hathaway Boulevard, encompassing a total of 568 square feet to a depth of 3 feet. The lateral extent of the excavation area was defined by PCB samples HB-23H to the northeast, HB-23G to the southeast, HB-23C to the south, HB-23B to the west, and HB-23I to the northwest (see Figure 2-2).

Based on the IH evaluation for the HB-23 area, the estimated potential cancer risk for the young child recreational user did exceed the MCP risk limit for an IH due to an excess lifetime cancer risk (ELCR) with a value of 2E-05. The noncarcinogenic hazard quotient of 10 met the MCP hazard index (HI) limit of 10. The IH was identified at the HB-23 area primarily due to the potential ingestion and dermal contact exposure pathways with PCB-containing surface soil. This triggered a 2-hour regulatory reporting obligation to the MassDEP in accordance with 310 CMR 40.0321(2) and 310 CMR 40.0311(7). The IH-related reporting condition was reported to the MassDEP by TRC in conjunction with the City on March 19, 2009. MassDEP orally approved IRA assessment and removal activities and assigned RTN 4-21847.

In May 2009, TRC submitted an IRA Plan and Imminent Hazard Analysis to MassDEP on behalf of the City in accordance with 310 CMR 40.0424. The IRA Plan (TRC, 2009b) outlined the plans for sampling and soil removal as previously detailed in this section.

On March 28, 2009, with oral approval from MassDEP, D. W. White Construction, Incorporated of Acushnet, Massachusetts (DW White) excavated PCB-impacted soils in the vicinity of the HB-23 area under TRC field supervision. Approximately 63.1 cubic yards of excavated soils were loaded directly into five roll-off containers lined with 6-mil polyethylene sheeting. All soils were excavated up to the staked excavation boundaries and down to 3 feet below grade. The dimensions of the excavation area were intended to be protective of potential soil exposure, consistent with the assumptions in TRC's IH evaluation.

The excavated area was backfilled on March 28, 2009. Approximately 2.5 vertical feet of backfill was placed into the open excavation, followed by approximately 0.5 vertical feet of loam which was used to grade the area to the original surface elevation.

A composite waste characterization soil sample (i.e., HB-23-Disposal) was collected from the excavated soils and submitted for laboratory analysis of VOCs, SVOCs, total PCBs, PAHs, total petroleum hydrocarbons (TPH), and RCRA 8 metals. An additional soil sample was collected for Toxicity Characteristic Leaching Procedure (TCLP) metals analysis, contingent upon total metals results. All waste characterization analyses were conducted by ConTest.

The lined and covered roll-off containers containing the excavated soils were transported under a Bill of Lading to the Shawmut Avenue Transfer Station, owned by the City and located at 1103 Shawmut Avenue, New Bedford, Massachusetts, for temporary storage consistent with 310 CMR 40.0034(4) of the MCP.

The results of the HB-23-Disposal waste characterization sample were received following transport to the Shawmut Avenue Transfer Station. The sample exhibited a cadmium concentration of 18.1 mg/kg. The cadmium concentration exceeded the threshold for reuse via thermal processing. TCLP analysis was subsequently performed for all 8 RCRA metals. The TCLP analytical results did not exceed the 1.0 mg/L identified as the regulatory level for cadmium by MassDEP in 310 CMR 30.125. However, sample HB-23-Disposal also exhibited a total PCB concentration of 59.9 mg/kg. The EPA was notified of the PCB result and to discuss subsequent actions. The lined and covered roll-off containers were labeled with an EPA PCB label. Given that the total PCB concentration of the soil was greater than 50 mg/kg, the soil was

considered a hazardous waste under 310 CMR 30.131 and was also regulated under the Toxic Substances Control Act (TSCA), and was sent for disposal at a TSCA-regulated facility.

On June 25, 2009, TRC oversaw the loading and transportation of the HB-23 area soils from the Transfer Station to the CWM Chemical Services, LLC chemical and industrial waste management facility in Model City, New York. Norman's Enterprises Construction Corporation (Norman's Enterprises) of New Bedford, Massachusetts conducted transfer activities in preparation for off-site disposal. Triumvirate Environmental, Incorporated (Triumvirate) of Somerville, Massachusetts provided transportation services to the approved TSCA-regulated disposal facility.

The five lined and covered roll-offs temporarily stored at the Shawmut Avenue Transfer Station did not meet specifications for transportation of the hazardous waste, but served to provide secure temporary storage until a suitable disposal facility was selected. As a result, the soil was removed from the polyethylene lined roll-offs, temporarily stockpiled on pavement on several layers of 6-mil polyethylene sheeting and subsequently loaded into three trucks by Norman's Enterprises. The weatherproof covering was removed and the entire content of each roll-off, including the polyethylene liner, was transferred onto the staged polyethylene sheeting. Care was taken to ensure that the polyethylene liner of each roll-off was not compromised prior to transferring the soil material and remained intact during the transfer activities. At no point during any of the soil transfer activities was a polyethylene liner compromised and therefore, no confirmatory wipe sampling was deemed necessary for any of the roll-offs. A front-end loader was then used to transfer the stockpiled soil into three trucks for off-site transportation and disposal. All of the soil transfer activities were conducted at the Shawmut Avenue Transfer Station.

On June 25, 2009, the three trucks transported a total of approximately 84 tons of soil from the Shawmut Avenue Transfer Station to the Model City, New York facility in accordance with United States Department of Transportation (DOT), EPA and MassDEP regulations. All soil transportation was conducted by a licensed hauler and was handled under Uniform Hazardous Waste Manifest documentation (EPA Form 8700-22).

On July 20, 2009, TRC submitted an IRA Completion Report and Imminent Hazard Evaluation to MassDEP on behalf of the City in accordance with 310 CMR 40.0427. The IRA Completion Report served to document soil excavation activities undertaken to remove the PCB impacted soil from the HB-23 area of NBHS, and its subsequent disposal in Model City, New York (TRC, 2009c). Further actions are required to achieve a condition of No Significant Risk in this area, as discussed in section 4.1.1.10 of this report.

6.2 IRA Sample Location HH-13

The following describes IRA activities conducted at the HH-13 soil sample location. Prior IRA-related regulatory reporting for HH-13 is documented in TRC 2009d.

As discussed below, RTN 4-21872 was triggered on April 2, 2009 by the detections of arsenic and chromium at concentrations that could pose an IH under 310 CMR 40.0321(2)(b) in surface

soil (0 to 1 foot in depth) at the HH-13 area of the Site. Additional soil sampling and an IH evaluation indicated that an IH does not exist at the HH-13 area. TRC submitted an IRA Completion Report for this reportable condition in June 2009 (TRC, 2009d).

On March 11, 2009, TRC, on behalf of the City, conducted soil sampling at sampling location HH-13, located on the NBHS grounds, to delineate the extent of previously detected concentrations of PAHs including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, indeno(1,2,3-cd)pyrene, naphthalene, and phenanthrene, and metals (arsenic, barium, cadmium, chromium, and lead) at concentrations in excess of Method 1 S-1 soil cleanup standards. TRC conducted additional soil sampling to further characterize/delineate soil impacts in this area to support remedial planning.

TRC's environmental investigation consisted of direct push soil borings using a truck-mounted drill rig to sample soil and observe subsurface soil conditions. Drilling services and equipment were provided by New England Geotech. Surface soil samples were also collected by TRC using hand tools as part of the IRA assessment activities.

The delineation sampling of four "inner ring" soil borings within ten feet of the original HH-13 sampling location to the northwest, southwest, southeast, and northeast (designated HH-13A through HH-13D) was conducted. Four "outer ring" borings were also drilled approximately twenty feet from the original HH-13 sampling location (designated HH-13E through HH-13H). The inner and outer "ring" borings are illustrated on Figure 2-2. TRC collected soil samples from each of the eight locations from the 0 to 1 foot interval to assess the extent of the potential IH condition and to support the preparation of an IH evaluation.

TRC initially authorized the laboratory to proceed with the analysis of the four "inner ring" soil samples for PAH, total PCBs, and selected metals (arsenic, barium, cadmium, chromium, and lead) analyses as part of the characterization/delineation effort to support remedial planning. The laboratory was instructed to hold the "outer ring" soil samples pending "inner ring" analytical results. Based on the results of the "inner ring" samples, TRC instructed the laboratory to proceed with the analysis of the four "outer ring" samples for the same metals suite as the "inner ring" samples.

Con-Test conducted PAH and metals analyses. NEA conducted the PCB analysis.

Initial metals results indicated concentrations of arsenic (40 mg/kg) and chromium (1,960 mg/kg) in the top foot of soil at soil sampling location HH-13B. These concentrations equal (in the case of arsenic) or exceed (in the case of chromium) the threshold concentrations for a condition that "could pose" an IH (310 CMR 0321[2] [b]).

The potential IH condition triggered a 2-hour regulatory reporting obligation to the MassDEP in accordance with 310 CMR 40.0321(2) (b) and 310 CMR 40.0311(7). TRC reported the condition to MassDEP via telephone on April, 2, 2009. MassDEP orally approved IRA assessment activities and assigned RTN 4-21872.

The results of laboratory analysis of soil samples collected from the area immediately to the north of House #2 of the NBHS in March and April 2009 are summarized in Table 3-6. None of the delineation samples analyzed in this area indicated concentrations at or above the MassDEP threshold that could pose an IH per 310 CMR 40.0321(2)(b) with the exception of the soil sample collected at sample location HH-13B, as previously identified.

The potential IH threshold value for total chromium (200 mg/kg within 1 foot of surface) is based on the potential presence of hexavalent chromium (i.e. chromium VI). In the absence of hexavalent chromium speciation data, the speciation IH threshold applies to chromium. Therefore, on April 10, 2009, TRC collected four soil samples from 0 to 1 foot below ground surface in the area of HH-13B (see Figure 2-2) to assess the type of chromium in the soil (sample designations SS-HH-13-B1,SS-HH-13-B2, SS-HH-13-B3, and SS-HH-13-B4). These soil samples were collected using hand tools and were analyzed for total chromium, hexavalent chromium, pH and ORP.

The chromium speciation data collected in close proximity to HH-13B indicated that chromium VI was not present at concentrations above the analytical reporting limit in the samples. Therefore, chromium was evaluated as chromium III. However, in order to be health-protective by conservatively evaluating the chromium data and the associated risk and hazard, chromium was also evaluated as chromium VI.

An IH evaluation was performed on the data and concluded that an IH does not exist. On June 1, 2009, TRC submitted an IRA Completion Report to MassDEP on behalf of the City in accordance with 310 CMR 40.0427. The IRA Completion Report (TRC, 2009d) served to document the activities undertaken to evaluate the chromium findings and concludes that an IH condition does not exist. Further actions are required to achieve a condition of No Significant Risk in this area, as discussed in section 4.1.1.6 of this report.

6.3 IRA Substantial Release Migration / Critical Exposure Pathway

The following describes IRA Substantial Release Migration (SRM)/Critical Exposure Pathway (CEP) related response actions and associated data collection/evaluation for RTN 4-22409.

A SRM condition was discovered during investigation of water pooled on the floor of the Mechanical Room (B-114) of the NBHS building. TRC collected several samples of the pooled water, which appeared to be seeping through cracks or seams in the floor. Analytical results for these samples suggest the potential for chlorinated volatile organic compounds (VOCs) to be present in indoor air in the building, which triggered a reporting condition and the initiation of IRA assessment activities. A complete discussion of potential impacts evaluated as part of this IRA is included in this section.

The results of prior IRA investigation activities conducted are detailed in the following TRC documents:

- *Immediate Response Action Plan – New Bedford High School Substantial Release Migration / Critical Exposure Pathway, 230 Hathaway Boulevard, New Bedford, Massachusetts.* March 2010 (TRC 2010a)
- *Immediate Response Action Status Report - New Bedford High School Substantial Release Migration / Critical Exposure Pathway, 230 Hathaway Boulevard, New Bedford, Massachusetts.* May 2010 (TRC 2010b).
- *Immediate Response Action Status Report - New Bedford High School Substantial Release Migration / Critical Exposure Pathway, 230 Hathaway Boulevard, New Bedford, Massachusetts.* November 2010 (TRC 2010c).

A summary of the activities and findings is presented herein.

6.3.1 NBHS SRM/CEP Background

On December 2, 2009, TRC collected aqueous samples from four locations (BRM-S-1 through BRM-S-3 and FIP-S-1) where water had pooled on the floor of the Mechanical Room of the NBHS building (see Appendix D, Figure 2). The pooled water appeared to have seeped into the Mechanical Room through cracks and seams in the concrete floor. Based on elevation data collected by TRC, the elevation of the groundwater table is generally higher than the elevation of the lower floor surfaces of the Mechanical Room, and the seepage appears to be associated with groundwater. The aqueous samples were analyzed for VOCs, EPH, PAHs, PCBs, and total and dissolved metals. The results of the analyses indicated the concentration of vinyl chloride (VC) in seep sample BRM-S-3 (2.1 micrograms per liter; µg/L) was greater than the MCP Method 1 GW-2 groundwater standard of 2 µg/L. All other concentrations for all parameters in all samples were below MCP Method 1 GW-2 groundwater standards (see Appendix D, Table 1).

To verify the detection of VC, TRC re-sampled the pooled water for VOCs on January 7, 2010. Chlorinated VOCs were not detected in two out of four samples (BRM-S-1 and BRM-S-2). In sample BRM-S-3 the concentrations of cis-1,2-DCE and VC were greater than their corresponding MCP Method 1 GW-2 groundwater standards. All other concentrations were below MCP Method 1 GW-2 groundwater standards (see Appendix D, Table 1).

On January 6 and 7, 2010, TRC collected groundwater samples for VOC analysis from monitoring wells MW-4, MW-5, MW-6, and MW-7 installed at the Site in 2008 (see Appendix D, Figure 2). Chlorinated VOCs were not detected in two out of the four aforementioned monitoring wells (MW-4 and MW-6). Chlorinated VOCs were not detected above MCP Method 1 GW-2 standards in MW-5 or MW-7, except concentrations of tetrachloroethylene (PCE; 63 µg/L) and VC (3.4 µg/L) in the sample from MW-7, located in front of NBHS near the flagpole (see Appendix D, Table 2).

In parallel with the aforementioned investigation activities, TRC evaluated building structural features that might influence fate and transport in the groundwater beneath the NBHS building. The structural evaluation revealed an extensive underdrain system beneath the building, directing

groundwater to the storm sewer during high groundwater events. NBHS engineering plans indicate that the storm and sanitary sewers run in proximity to monitoring well MW-7 (see Appendix D, Figure 2).

On January 28, 2010 at approximately 3:30 PM, TRC advised the City's Department of Environmental Stewardship that the seep and impacted water and the underdrain system represented two potential Conditions of Substantial Release Migration (SRM) as defined in 310 CMR 40.0006:

- Releases to the groundwater that have migrated or are expected to migrate more than 200 feet per year; and
- Releases to the groundwater or to the vadose zone that have resulted or are within one year likely to result in the discharge of vapors into school buildings or occupied residential dwellings.

Either of these conditions constitute a 72-hour regulatory reporting obligation to the MassDEP in accordance with 310 CMR 40.0313(5). The SRM conditions described above were reported to the MassDEP by TRC via telephone in conjunction with the City's Department of Environmental Stewardship on January 29, 2010 at approximately 11:05 AM. MassDEP orally approved the IRAs at the Site, and assigned RTN 4-22409. The orally-approved IRA included the following:

- Monitoring of indoor air locations, including the Mechanical Room, for VOCs with expedited analysis. Recognizing that indoor air in the Mechanical Room may reflect materials stored in this area, MassDEP suggested that an inventory of chemicals stored at the NBHS building, relocation of indoor chemical sources, and ventilation of the Mechanical Room would be appropriate prior to re-sampling in this area
- Re-sampling of seeps in the Mechanical Room; and
- Sealing of the floor seep.

6.3.2 Response Action Summary

The following is a summary of response actions taken in relation to the IRA.

6.3.2.1 Analysis for a Potential Imminent Hazard

TRC evaluated whether the VOC concentrations in the seep were associated with a potential IH Condition based on fate and transport modeling of seep-water VOC concentrations to indoor air concentrations. TRC modeled the potential air concentrations in the Mechanical Room where the seeps were located. TRC calculated concentrations of chlorinated VOCs in the air using the equation in the EPA's *Risk Management Program Guidance for Offsite Consequence Analysis* (EPA, 2009) to calculate evaporation rates of water and VOCs as functions of air velocity over the pooled seep water to estimate the mass balance for all detected compounds. The initial risk evaluation based on the modeled indoor air concentrations concluded that an IH condition was not present (TRC, 2010a).

TRC also collected indoor air data in the field using a photoionization detector (PID) and TCE- and VC-specific Draeger tubes, neither of which indicated the presence of measurable VOC impacts in the breathing zone in the Mechanical Room where the seep water was present. The Draeger Tube field screening activity included TCE tubes, with a measuring range from 2 to 50 ppmv and VC tubes, with a measuring range from 0.5 to 5 ppmv. Twenty-one locations were sampled, including one location several inches above seep BRM-S-3. The lower end of these ranges is adequate to determine that an IH condition is not present.

6.3.2.2 Indoor Air Sampling

On Saturday and Sunday, January 30 and 31, 2010, TRC collected five (5) indoor air samples for VOCs analysis. Samples TRC-IA-1 through TRC-IA-5 were collected over a 24-hour period using evacuated stainless steel canisters and analyzed by EPA Method TO-15. Since the sampling took place over the weekend, the NBHS Heating, Ventilating and Air Condition (HVAC) system was not in operation. All sample locations are illustrated on Appendix D, Figure 2. A summary of all indoor air sampling data is provided in Appendix D, Table 3.

On January 30, 2010, following the collection of indoor air samples at NBHS, TRC re-sampled the four seep locations and analyzed the samples for VOCs. All measured concentrations were below MCP Method 1 GW-2 groundwater standards. These results are summarized in Appendix D, Table 1.

At the direction of MassDEP, the indoor air sample in the Mechanical Room was collected at the soonest possible time after the SRM condition was reported to MassDEP on January 29, 2010. The MassDEP was informed by TRC that immediate sampling of the Mechanical Room did not allow for relocation of products stored in the Mechanical Room that may have contributed to VOC concentrations measured in sample TRC-IA-1 prior to collecting the indoor air sample. Sampling was conducted pursuant to the MassDEP requirement despite the MassDEP-acknowledged potential for biased analytical results to evaluate the current indoor conditions, regardless of source.

On February 3, 2010, TRC personnel conducted an initial inventory of chemical products stored at the NBHS building focused on the Mechanical Room and nearby locations (e.g., boiler room, engineers' offices, etc). TRC also compiled available Material Safety Data Sheet (MSDS) information. Where the chemical makeup of commercial products was not clearly marked, TRC referred to the MSDS for the product. Benzene and chlorinated solvent content was noted in a number of products. The potential for additional other interior (e.g., organic solvent containing products such as adhesives and ambient (i.e., vehicle exhaust) sources also exists.

The detection of chlorinated solvents in seep water and groundwater beneath and in the Mechanical Room constitutes a CEP[4]. TRC evaluated the initial indoor air results by performing a preliminary site-specific risk and hazard calculation for each room where an indoor air sample had been collected assuming a chronic worker scenario (8 hours of exposure per day, 250 days

[4] Section 40.0006 of the MCP defines a Critical Exposure Pathway (CEP) as a route by which subsurface contamination results in measurable concentrations of indoor air contamination in a school or residence.

per year for 27 years) (TRC, 2010a). The calculations indicated that risks and hazards were less than the MCP Risk Limits of an ELCR of 1 x 10^{-5} and a Hazard Index (HI) of 1 for each room evaluated. The preliminary evaluation indicated that, based on the sampling conducted in January 2010, there was no IH condition or chronic risk/hazard above MCP risk limits associated with potential indoor air exposures.

On April 20, 2010, TRC collected twelve (12) indoor air samples for analysis of VOCs via EPA Method TO-15. Samples were collected over a 24-hour period using evacuated stainless steel canisters. Since the sampling took place over the April school vacation week, the NBHS HVAC system was not in operation.

Sample TRC-IA-1 (Mechanical Room) exhibited the presence of benzene, cis-1,2-DCE, TCE, and VC above the screening thresholds. Sample TRC-IA-15 (Lecture Room) exhibited benzene, PCE, and total xylenes in excess of screening thresholds. Based on these data, the potential for some of the VOCs in indoor air to originate from subsurface impacts exists. However, given the proximity of sample location TRC-IA-15 to the Auto Shop (D-116), the potential also exists for VOCs in indoor air to originate from other sources, such as aerosol brake cleaning products and degreasing products. On May 6, 2010, TRC evaluated the types of products used and/or stored in the Auto Shop that might contribute to the VOC concentrations measured in the indoor air sample collected from the nearby Lecture Room (TRC, 2010b). The evaluation supported the potential for VOCs in indoor air to originate from other sources, such as aerosol brake cleaning products and degreasing products.

TRC provided an updated site-specific risk evaluation in Appendix E of the IRA Status Report submitted on May 24, 2010. TRC evaluated the indoor air results by performing site-specific risk and hazard calculations for each room where an indoor air sample had been collected. The risk hazard calculations assume a chronic worker exposure scenario (8 hours of exposure per day, 250 days per year for 27 years). The calculations indicated that risks and hazards are less than the MCP Risk Limits of an ELCR of 1E-05 and a HI of 1 for each room evaluated. The site-specific risk and hazard calculation protocol is consistent with that conducted for the neighboring KMS for VOCs and PCBs.

The evaluation indicated that, based on the sampling conducted in January and April 2010, there is no IH condition or chronic risk/hazard above MCP risk limits associated with current indoor air exposures. All compounds detected in indoor air were included in the risk and hazard calculations even though some of the detections may be associated with VOC sources unrelated to vapor intrusion. To assist in distinguishing the relative contribution of vapor intrusion to the measured indoor air concentrations, fate and transport modeling of soil gas to indoor air concentrations conducted for the Lecture Room (TRC-IA-15) and Classroom A-3-112 indicates that only a small fraction, if any, of the measured indoor air concentrations may be associated with a complete vapor intrusion pathway.

6.3.2.3 Soil Vapor Sampling

On February 15, 2010 during the February school vacation, TRC collected soil vapor samples from temporary sample points installed at 11 locations throughout A-, C-, and D-Blocks of the

NBHS building. The sample locations were designed to provide screening information to evaluate potential subslab vapor in the vicinity of A-, C- and D-Blocks.

On February 19, 2010 during the February school vacation, TRC selected eight (8) locations for the installation of permanent soil gas sampling points. The permanent soil gas sampling points were installed consistent with the construction details provided in Appendix D, Figure 2. Seven of the eight locations (PVP-1 through PVP-5, PVP-7 and PVP-8) had been previously used as temporary soil vapor sample locations. The eighth location (PVP-6) was installed in the Mechanical Room after a precautionary survey of the area for utilities by ground penetrating radar (GPR).

On April 9, 2010, TRC collected a soil vapor sample (PVP-6) from the permanent soil gas point in the Mechanical Room. A soil vapor sample was not previously collected for the Mechanical Room during the February 2010 sampling event due to utility obstructions.

All eight permanent soil gas points were sampled by TRC on April 20, 2010, using evacuated stainless steel canisters and analyzed by EPA Method TO-15.

Due to the presence of VOCs in soil vapors above threshold screening levels in the Mechanical Room and Auto Shop, and VOCs in indoor air above threshold screening levels in the Mechanical Room and Lecture Room adjacent to the Auto Shop, TRC evaluated seep mitigation measures (Mechanical Room) and conducted supplemental investigation activities (Mechanical Room and Auto Shop / Lecture Room area).

During a supplemental survey of floor drains in the vicinity of the Mechanical Room on April 21, 2010, traps in three of the 3-inch floor drains were found to be dry. These drains were located in rooms B-104, B-126 and B-133. To eliminate the potential pathway for vapor migration into the building, drain plugs were deployed in each of these drains.

Previously unidentified floor cracks were observed by TRC during a supplemental survey performed on April 21, 2010. The majority of the cracks appeared to be surficial in nature. Two cracks were sealed with a silicone sealant to prevent potential migration of subslab vapors. The two now-sealed cracks are located within the NBHS building in the Kitchen (B-134) and a corridor (B-124).

The results of the soil vapor analysis are summarized in Appendix D, Table 4. The sample locations are illustrated on Appendix D, Figure 2. A discussion of all soil vapor sampling results is included in Section 6.3.3.7.

6.3.2.4 Survey of Potential Vapor Migration Pathways

TRC identified a range of possible vapor migration pathways and potential CEP mitigation measures. The following potential pathways were identified:

- Groundwater seepage through floor cracks;
- Vapor intrusion through floor cracks;

- Vapor migration through and around drains; and
- Migration of VOCs via the HVAC system at the NBHS building.

On February 11, 2010, TRC personnel screened annular spaces in and around drains and floor cracks throughout the first floor of the NBHS building using a parts per billion (ppb) RAE Systems, Incorporated (RAE) low-level PID. TRC also measured floor drain dimensions and determined that all floor drain lines are 3-inches in diameter. The survey identified two floor cracks, 45 drains, two sumps (the elevator shaft and dish room hatch) and one instance of pipes emerging from the floor (Fry-o-Lator). TRC noted several instances where VOC readings at the drain or crack exceeded background concentrations.

During the supplemental survey of floor drains in the vicinity of the Mechanical Room on April 21, 2010, traps in three of the 3-inch floor drains were found to be dry. Floor drains in the building are constructed with traps that typically hold standing water sufficient to prevent air migration through the drain system into the building. The traps in floor drains, if used infrequently, could potentially dry out over time, allowing vapors to migrate from the sewer system into NBHS. These drains were located in rooms B-104, B-126 and B-133. To eliminate the potential pathway for vapor migration into the building, drain plugs were deployed in each of these drains.

A TRC Certified Industrial Hygienist (CIH) with expertise in HVAC systems and indoor air evaluations visited the NBHS building, on February 11, 2010. Field data were collected with pressure differential instrumentation, a velometer for air flow measurements, and smoke testing for visual evaluation of air flow directions. Pressure differentials, in inches of water, were measured to determine the differences in pressure between the Mechanical Room and adjacent areas. Air flow measurements were also taken in open doorways, drains, and other possible migration pathways.

TRC noted that the Mechanical Room is under strong negative pressure relative to adjacent hallways and rooms when air handling equipment is operating. With the air handling units (AHUs) off, the pressure remains negative, but to a lesser degree. The primary sources of this negative pressure are operating fans and air handling equipment in the room. A secondary source of negative pressure is the chimney effect induced by the former incinerator stack. Smoke testing of the AHUs, the condensate drains, floor drains, doorways and cracks in the seep area showed that there was a strong negative pressure and that air was drawn into the intake side of the AHUs. This negative pressure draws air into the Mechanical Room and mitigates a potential migration of air from the Mechanical Room to other areas of the building.

6.3.2.5 Sampling of Storm Drains

On February 3, 2010, TRC field personnel collected aqueous samples for VOC analysis from ten storm drain manholes at the Site. The selected manholes are in-line or downstream of potential inflows from the NBHS underdrain system. Samples HS-D-1 through HS-D-9, as well as HS-ST-1, were collected from manhole locations at NBHS as illustrated on Figure 1 in Appendix D. The sample locations were selected to evaluate whether the underdrains beneath the Site had direct groundwater into the storm sewer via the footing drains.

The results of the storm drain manhole aqueous sampling and laboratory analysis found that VOCs were not detected in nine of the ten manholes sampled on February 3, 2010 (TRC, 2010b). VOCs were detected in the sample collected from the one manhole that serves both the storm sewer system and the sanitary sewer system at the Site (HS-D-5) The results of which are discussed further herein.

6.3.2.6 Sampling and Inspection of Sanitary Sewer

During the February school vacation on February 17, 2010, TRC collected aqueous samples from the NBHS sanitary sewer system. The five selected sanitary sewer manholes are in-line/downstream of potential inflows from the NBHS building. Samples LS-MH-1 and SS-MH-1 through SS-MH-4 were collected from the manhole locations as illustrated on Appendix D, Figure 2. Sample locations were selected to evaluate potential sources of the chlorinated solvent concentrations (which were below MCP Method 1 GW-2 standards) observed in the February 3, 2010 sample collected from the combined sanitary/storm manhole (HS-D-5).

The results of the sanitary sewer manhole aqueous sample analysis indicate that VOCs were below MCP Method 1 GW-2 groundwater standards in four of the five sanitary sewer manholes, and VOCs were not detected in the fifth manhole (TRC, 2010a). Chlorinated solvents cis-1,2-DCE and trans-1,2-DCE were only detected in two sanitary sewer manholes samples (SS-MH-3 and SS-MH-4). Sanitary sewer sample SS-MH-3 was collected immediately upstream from the combined sewer manhole (MH-4). Sanitary sewer sample SS-MH-4 was collected to verify previously obtained results from sample HS-D-5.

A comparison of groundwater elevation contours to sewer line elevation data indicates that the vitrified clay sanitary sewer line serving the NBHS building intersects the groundwater table in the vicinity of SS-MH-3. On March 9, 2010, in an effort to evaluate the potential for infiltration of groundwater into the sanitary sewer line, the City conducted a video camera investigation of the majority of the sanitary sewer line between manholes MH-2 (location of sample SS-MH-1) and MH-5 (manhole located between samples SS-MH-3 and SS-MH-4). The recording of the camera investigation was reviewed by TRC on March 28, 2010 (TRC, 2010b).

Due to the amount of flowing water within the sanitary line, it was not feasible to determine whether groundwater was infiltrating the pipe during the camera investigation. However, mineral deposits noted along the bottom and sides of the pipe section in several locations indicate historic infiltration of groundwater. In addition, damage to the sanitary sewer line was observed in two locations. The damage to the pipe in these areas was judged to be significant enough to allow infiltration of groundwater to the sanitary line.

6.3.2.7 Well Installation and Groundwater Sampling

On February 15, 2010 (during the February school vacation), TRC installed nine additional monitoring wells (MW-11 through MW-19) around the perimeter of A-, B- and C-Blocks at the NBHS building. TRC collected groundwater samples for VOC analysis from the newly installed wells, and concurrently sampled all existing TRC monitoring wells on the Site from February 17

through February 19, 2010. All groundwater well locations are illustrated on Appendix D, Figure 2. The results of all IRA related groundwater analyses are summarized in Appendix D, Table 2.

On April 2, 2010, TRC installed five (5) monitoring wells in the vicinity of the flagpole island surrounding monitoring well MW-7 in order to evaluate the lateral extent of groundwater impacts observed in MW-7. TRC developed these wells and collected samples for VOC analysis and concurrently sampled several existing TRC wells on the Site in the vicinity of the Mechanical Room. A total of ten (10) monitoring wells were sampled for VOCs during the period from April 7 through April 9, 2010. The analytical results from the wells in the vicinity of MW-7 show that the area around MW-7 appears to be where a relatively small area of chlorinated VOC impacts have come to be located.

6.3.2.8 Groundwater Elevation Gauging

On February 17, 2010, TRC gauged the monitoring wells throughout the Site. Consistent with historic well gauging data, the groundwater flows from north to south across the Site. In addition, localized groundwater mounding was observed in the vicinity of the B-Block, immediately north of the Mechanical Room.

The extensive underdrain system throughout the underside of the NBHS building appears to direct groundwater to the storm sewer during high water events, and appears to influence the contour of the water table.

TRC gauged the new and previously installed monitoring wells prior to collection of groundwater samples on April 7, 2010 and a change in the groundwater conditions was observed. According to preliminary data available from the National Oceanic and Atmospheric Administration (NOAA), the City received 6.84 inches of rainfall in the approximately two week period and a total of 11.77 inches of rainfall in the one month period prior to well gauging activities on April 7, 2010. The significant amount of rainfall prior to the April 7, 2010 gauging event was an indication that the groundwater table, at a minimum, was at a seasonal high elevation. Further evaluation of the groundwater elevation at the Site was undertaken to better understand average groundwater elevations and groundwater elevation fluctuations at the Site.

TRC conducted a third synoptic well gauging event at the Site on May 17, 2010. As anticipated, a drop in the groundwater elevation throughout the Site when compared to the April 7, 2010 gauging event was observed and attributed to less precipitation over that timeframe. In addition, the groundwater mounding, present in the vicinity of the Mechanical Room in February 2010, was no longer present based on the May 17, 2010 gauging results. Groundwater flow continued to generally trend from north to south across the Site, while shifting to a more southwesterly direction in the southern portion of the campus.

TRC conducted a fourth synoptic well gauging event at the Site on September 7, 2010. Groundwater elevation data, including the previous synoptic well gauging events, are provided in Appendix D, Table 7. TRC prepared a revised interpreted groundwater contour map, illustrated in Appendix D, Figure 4. Previous estimated groundwater elevation contour maps are presented

in TRC's IRA Plan (TRC, 2010a) and first IRA Status Report (TRC, 2010b). The groundwater contour map depicts a drop in the groundwater elevation throughout the Site when compared to the May 17, 2010 gauging event. Groundwater flow continues to generally trend from north to south across the Site, while shifting to a more southerly direction in the southern portion of the campus.

6.3.3 Nature and Extent of VOC Impacts

The following presents an analysis of the current nature and extent of VOCs associated with the SRM/CEP IRA.

6.3.3.1 Groundwater VOC Analytical Results

During a period from January 2010 through November 2010, 56 groundwater samples were collected from 33 monitoring wells. TRC collected groundwater samples for VOC analysis in accordance with low-flow sampling techniques. The groundwater samples were submitted to Alpha Analytical, Inc. (Alpha) of Westborough, Massachusetts for analysis of VOCs by Method 8260B. The analytical results are summarized in Appendix D, Table 2 and the monitoring well locations are shown in Appendix D, Figure 2. Analytical results are compared to MCP Method 1 GW-2 and GW-3 groundwater standards.

The following summarizes results observed in excess of MCP Method 1 GW-2 groundwater standards:

- **MW-24.** Monitoring well MW-24, located approximately 300 feet south (downgradient) of MW-7, was sampled three times in 2010. VC was detected at concentrations ranging from 1.2 µg/L to 4.8 µg/L, exceeding the 2 µg/L MCP Method 1 GW-2 groundwater cleanup in one of the three samples.

- **MW-27.** Monitoring well MW-27, located in the Mechanical Room, was sampled in September and October 2010. Droplets of a non-aqueous phase liquid were observed during well development. Trichloroethene (TCE) was detected at concentrations ranging from 4,500 µg/L to 31,000 µg/L, exceeding the 30 µg/L MCP Method 1 GW-2 groundwater standard in both of the samples. Cis-1,2-dichloroethylene was detected at concentrations ranging from 290 µg/L to 4,100 µg/L, exceeding the 100 µg/L MCP Method 1 GW-2 groundwater standard in both of the samples. Trans-1,2 dichloroethylene (trans 1,2-DCE) was detected at 700 µg/L in one sample, exceeding the 90 µg/L MCP Method 1 GW-2 groundwater standard. It was not detected in the other sample. Vinyl chloride was detected at 550 µg/L in one sample, exceeding the 2 µg/L MCP Method 1 GW-2 groundwater standard. It was not detected in the other sample, although the detection limit was elevated to 100 µg/L.

- **MW-28.** Monitoring well MW-28, located in the Mechanical Room downgradient from MW-27 and upgradient from the basement seeps, was sampled in September and October 2010. VC was detected at concentrations ranging from 3.8 µg/L to 9.7 µg/L, exceeding the 2 µg/L MCP Method 1 GW-2 groundwater standard in both samples.

Additional groundwater samples were collected from seeps in the basement area of the NBHS Mechanical Room. During a period from December 2009 through January 2010, 12 seep (i.e., groundwater) samples were collected from 4 seep locations. The samples were submitted to Alpha for analysis of VOCs by Method 8260B. The analytical results are summarized in Appendix D, Table 1 and the seep locations are shown in Appendix D, Figure 2. Analytical results are compared to MCP Method 1 GW-2 and GW-3 groundwater standards. The following summarizes results observed in excess of MCP Method 1 GW-2 groundwater standards:

- **Seep BRM-S-3.** Seep BRM-S-3 was sampled three times. In the first sample, collected on December 2, 2009, vinyl chloride was measured at 2.1 µg/L, slightly exceeding the 2 µg/L MCP Method 1 GW-2 groundwater standard. The seep was resampled on January 7, 2010, at which time vinyl chloride was detected at 34 µg/L and cis-1,2-dichloroethylene was detected at 180 µg/L, compared to the 100 µg/L MCP Method 1 GW-2 groundwater standard. All results were below the MCP Method 1 GW-2 groundwater standard used for comparison when the seep was resampled on January 30, 2010.

6.3.3.2 Groundwater VOC Extent

The observed chlorinated VOC concentrations in groundwater are clustered in two areas: the Mechanical Room (MW-27, MW-28, and the basement seep) and the vicinity of the flagpole (MW-7 and MW-24). All other locations were below MCP Method 1 GW-2 standards.

Chlorinated VOCs in groundwater is limited to the vicinity of the Mechanical Room (MW-27, MW-28, and the basement seep). All samples for chlorinated VOCs were below Method 1 GW-2 groundwater standards in the other monitoring wells located within the NBHS building. Adjacent MW-27D was constructed with a deeper screened interval of 12 to 17 feet, with the bottom of the well set at the bedrock surface. Chlorinated VOCs were not detected in MW-27D, indicating VOC groundwater impacts are limited to the shallow groundwater in the vicinity of the Mechanical Room.

Chlorinated VOC impacts in the vicinity of the flagpole (MW-7 and MW-24) are also well defined. All chlorinated VOCs were below Method 1 GW-3 standards, except tetrachloroethyene and vinyl chloride. Monitoring wells located to the east (MW-20, MW-21, and MW-30) and west (MW-23) of MW-7 and MW-24 do not exceed Method 1 GW-2 standards for any VOCs. MW-7D was constructed adjacent to MW-7 with a screened interval of 21 to 31 feet and the bottom of the well was set at the bedrock surface. All MW-7D results were below Method 1 GW-2 standards.

A comparison of groundwater elevation contours to sewer line elevation data indicates that the vitrified clay sanitary sewer line intersects the groundwater table in the vicinity of sewer manhole HS-MH-3. Chlorinated VOCs have been detected in samples collected from two manholes located downgradient from this point.

6.3.3.3 Non-Aqueous Phase Liquid Analytical Results

The droplets of NAPL observed during development of MW-27 on August 30, 2010 were collected in a sample jar that was submitted to Contest for a fingerprint analysis using Method SW-846 8260B. The analytical results summarized in Appendix D, Table 6 indicate that the primary component of the NAPL was TCE (220,000 mg/L) with lower concentrations of cis-1,2 DCE, 1,1,2,2-tetrachloroethane, 1,2,4-trichlorobenzene, and several other organic compounds also present.

6.3.3.4 Non-Aqueous Phase Liquid Extent

Monitoring wells were installed to the north, east, and west, of MW-27 and a deep well was installed at the bedrock surface adjacent to MW-27. As noted herein, results from groundwater samples collected from monitoring wells located east (MW-32) and south (MW-28) of MW-27, deep well MW-27D, and in monitoring wells located to the west (MW-31) or north (MW-33) of MW-27 were all below Method 1 GW-2 standards. These results suggest that the NAPL droplets exist only in the shallow groundwater immediately adjacent to MW-27 and do not extend significantly to the north, south, east, or west.

6.3.3.5 Indoor Air Analytical Results

Analysis of indoor air samples for VOCs was conducted in association with the IRA/SRM/CEP investigation activities. During a period from January 2010 through August 2010, twenty (20) indoor air samples were collected from 15 locations within NBHS. The samples were submitted to Alpha for analysis of VOCs by Method TO-15. The analytical results are summarized in Appendix D, Table 3 and the sample locations are shown in Appendix D, Figure 2. Analytical results were compared to the June 26, 2008 MassDEP Draft Indoor Air Threshold Values (IATVs).

VOCs in indoor air are not regulated under the MCP unless they are associated with intrusion of subsurface environmental impacts. Results in excess of an IATV are not regarded, without concurring data, as demonstrating the existence of vapor intrusion. Rather, the IATVs are used to identify circumstances where other lines of evidence should be pursued. The following discussion of indoor air sampling results at NBHS considers the significance of these results in the context of multiple lines of evidence in the following seven locations:

- **Mechanical Room.** The Mechanical Room was sampled in January, April, and August 2010. VC, trans-1,2-DCE, cis-1,2-dichloroethene, chloroform, 1,2-dichloroethane, benzene, carbon tetrachloride, bromodichloromethane, TCE, and xylenes were detected at concentrations above corresponding IATVs. Different results were observed in each of the three sampling events. No single analyte exceeded IATVs in all three events. Although potential sources of indoor air impacts were discovered in products maintained in the Mechanical Room, because many of these analytes were also detected in groundwater or soil vapor samples from the vicinity of the Mechanical Room, it is possible that the indoor air sample results are related to vapor intrusion at this location/

- **Classroom A-112-3.** Classroom A-112-3 was sampled in January, April, and August 2010. In the first (January 2010) sample, VC, trans-1,2-DCE, cis-1,2-dichloroethene, benzene, carbon tetrachloride, and TCE were detected above their corresponding IATVs. In subsequent samples, only carbon tetrachloride was detected. Because the VOC concentrations detected in the January 2010 sample from Classroom A-112-3 were not present in two subsequent rounds and were not detected in soil gas or groundwater samples collected near this location, the January indoor air sample results are not considered to be indicative of vapor intrusion at this location.

  Carbon tetrachloride was detected at concentrations of 0.566 ug/m^3 and 0.624 ug/m^3 in the April and August 2010 samples. Both results were slightly above the 0.54 ug/m^3 IATV. The IATV for carbon tetrachloride was set at the 50th percentile of typical indoor air samples in the MassDEP database. Ten of the 20 indoor air samples collected at NBHS exceeded this IATV, suggesting that the 50th percentile of carbon tetrachloride is very close to the 50th percentile in the MassDEP database of typical indoor air concentrations. Therefore, carbon tetrachloride concentrations at NBHS are considered consistent with indoor air background.

- **Classroom A-115-4.** Classroom A-115-4 was sampled in April 2010. Carbon tetrachloride was detected at a concentration of 0.629 ug/m^3, slightly above the 0.54 ug/m^3 IATV for carbon tetrachloride. As discussed above, carbon tetrachloride concentrations at NBHS are consistent with indoor air background.

- **Classroom A-105-3.** Classroom A-105-3 was sampled in April 2010. Carbon tetrachloride was detected at a concentration of 0.541 ug/m^3, slightly above the 0.54 ug/m^3 IATV for carbon tetrachloride. As discussed above, carbon tetrachloride concentrations at NBHS are consistent with indoor air background.

- **Classroom A-116-1.** Classroom A-116-1 was sampled in April 2010. Carbon tetrachloride was detected at a concentration of 0.610 ug/m^3, slightly above the 0.54 ug/m^3 IATV for carbon tetrachloride. As discussed above, carbon tetrachloride concentrations at NBHS are consistent with indoor air background.

- **Classroom A-112-2.** Classroom A-112-2 was sampled in April 2010. Carbon tetrachloride was detected at a concentration of 0.578 ug/m^3, slightly above the 0.54 ug/m^3 IATV for carbon tetrachloride. As discussed above, carbon tetrachloride concentrations at NBHS are consistent with indoor air background.

- **Lecture Room D-120.** Lecture Room D-120 was sampled in April and August 2010. In the April sample, 1,1,1-trichloroethane, benzene, PCE, and xylenes were detected at concentrations above the IATVs. In the August indoor air sample from this room, only carbon tetrachloride was detected above IATVs (at a concentration of 0.679 ug/m^3 that is consistent with indoor air background). The April 2010 sample results were not repeated in a subsequent indoor air sample. Soil gas and groundwater samples do not show elevated concentrations of those compounds. The nearby auto shop classroom, however,

does use products containing such compounds. Therefore, April indoor air sample results are not considered to be indicative of vapor intrusion at this location.

6.3.3.6 Indoor Air Extent

Chlorinated VOC concentrations above screening levels and associated with potential subsurface impacts have been observed in indoor air samples within the Mechanical Room only, although products containing such compounds are also present in the Mechanical Room. As discussed further herein, elevated concentrations of VOCs detected in other indoor air sample locations within NBHS do not appear to be associated with soil or groundwater impacts since corroborating soil vapor and groundwater results are not present.

6.3.3.7 Soil Vapor Analytical Results

Analysis of soil vapor for VOCs was conducted in association with the IRA/SRM/CEP investigation activities. During a period from February 2010 through April 2010, 20 soil vapor samples were collected from 12 locations within NBHS (the sample locations are shown in Appendix D, Figure 2). The samples were submitted to Alpha for analysis of VOCs by Method TO-15. The analytical results, summarized in Appendix D, Table 4, were compared to IATVs divided by an attenuation factor used by MassDEP to evaluate vapor intrusion potential[5]. These criteria were exceeded in the following location:

- **PVP-6.** Subslab vapor sampling point PVP-6, located in the Mechanical Room, was sampled twice in April 2010. In the first sample, 1,1-dichloroethene (1,1-DEC), cis-1,2-DCE, PCE, trans-1,2-DCE, TCE, and VC were detected at concentrations exceeding screening values. With the exception of PCE, the same compounds present above screening values were observed in the second (March 2010) sample.

6.3.3.8 Soil Vapor Extent

Chlorinated VOCs concentrations above screening levels have been observed in soil vapor samples collected from the Mechanical Room only. Soil vapor concentrations from other sample locations within NBHS did not exceed the screening criteria.

6.3.4 VOC Fate and Transport Analysis

Consistent with 310 CMR 40.0835(4) (e), the following section provides an analysis of the fate and transport of VOCs at the Site. This section summarizes environmental fate and transport characteristics of identified VOCs and identifies existing and potential migration pathways for VOCs at the Site.

[5] Criteria are based on MassDEP, Indoor Air Threshold Values (IATV), May 28, 2009 and divided by the Infinite source indoor attenuation coefficient, MCP Risk-Based Levels for Soil and Groundwater, February 2008.

6.3.4.1 Chemical Properties

To evaluate the fate and transport of VOCs in the environment, it is important to identify the physical and chemical properties that influence fate and transport processes. General definitions of physical properties are discussed below, followed by a description of the characteristics of each VOC of concern.

- **Specific Gravity.** The specific gravity of a chemical is the ratio of the mass of a given volume of the chemical to an equal volume of water at a specified temperature, usually 4 degrees Celsius (°C). Specific gravity is a relative measure of density. Compounds with specific gravities greater than 1.0, if they are immiscible with water, will separate as a sinking phase. Immiscible compounds with specific gravities less than 1.0 will tend to float on water. The majority of the VOCs detected at the Site includes chlorinated VOCs (predominantly tetrachloroethylene and trichloroethene) with specific gravities greater than 1.0 indicating the potential to sink in water, with the exception of vinyl chloride with a specific gravity less than 1.0.

- **Water Solubility.** The solubility of a chemical in water is the maximum amount of chemical that will dissolve in pure water at a specific temperature and pressure. Water solubility is a general predictor of a chemical's potential mobility and distribution in the environment. Chemicals with moderate to high solubility (greater than 100 milligrams per liter [mg/L]) can readily leach from soils into groundwater, and once there, are generally mobile. Compounds that are highly soluble in water will be less likely to volatilize from water and may be more susceptible to microbial degradation. VOCs detected at the Site generally exhibit a relatively high level of water solubility.

- **Vapor Pressure.** The vapor pressure of a liquid or solid is a relative measure of its volatility in its pure form. This value expresses the pressure of the vapor phase of a compound in equilibrium with its liquid or solid phase of the compound at a given temperature. Vapor pressure is important in evaluating migration of chemicals to air from other environmental media; factors such as temperature, wind speed, water solubility and degree of adsorption also play a key role. Chemicals with vapor pressures greater than 10 millimeters of mercury (mm Hg) are considered to be highly volatile. VOCs detected at the Site generally exhibit high vapor pressure.

- **Henry's Law Constant.** The Henry's Law Constant is another measure of chemical volatility. It is expressed as a ratio of the concentration of a chemical in air to the chemical's concentration in water (i.e., dissolved state). The higher the Henry's Law Constant value, the greater the tendency to volatilize. In general, compounds with values above 10^{-5} atmospheres-cubic meter per mole (atm-m^3/mol) are considered highly volatile and have a greater potential for movement into groundwater. VOCs detected at the Site generally exhibit a relatively high Henry's Law Constant.

- **Organic Carbon Partition Coefficient (K_{oc}).** This value is a measure of the relative sorption potential of organic compounds. K_{oc} reflects the tendency of an organic compound to be adsorbed onto soils and sediments and is generally independent of soil

properties. This value is expressed as the ratio of the amount of a compound adsorbed per unit weight of organic carbon, to the concentration of the compound in aqueous solution at equilibrium. Chemicals with a high K_{oc} (greater than 1,000 milliliters per gram [mL/g]) may exhibit a high sorption potential in soils and are less likely to leach into groundwater. K_{oc} values less than 100 mL/g indicate that the chemical has a high potential to leach into groundwater. Organic chemicals detected at the Site generally exhibit a relatively low K_{oc} value and tend to exhibit a low sorption potential and a high potential to leach.

- **Log K_{ow} (log octanol/water partition coefficient).** This value is a measure of the tendency of a compound to partition between an organic phase (octanol) and an aqueous phase. Log K_{ow} relates indirectly to water solubility and directly to soil adsorption. Chemicals with low partition coefficients (log K_{ow} less than 1) have high water solubilities and low adsorption coefficients, and would, therefore, be expected to have a high potential to leach into groundwater. VOCs detected at the Site generally exhibit relatively low K_{oc} values and tend to exhibit low sorption potential and a high potential to leach. The VOCs detected in soil are less likely to bind to soil, based on their log K_{ow} values.

VOCs detected at the Site include several chlorinated VOCs, most notably tetrachloroethylene, trichloroethene and vinyl chloride. At the Site, the VOC compounds detected in excess of MCP Method 1 GW-2 standards have not been identified as being attributable to a known source.

- **Tetrachloroethlyene.** Tetrachloroethylene's production and use as a dry cleaning agent, degreasing agent and as a chemical intermediate in the production of fluorocarbons may result in its release to the environment through various waste streams. If released to soil, tetrachloroethylene is expected to have moderate mobility based upon K_{oc} value and tetrachloroethylene has often been detected in groundwater. Biodegradation is expected to occur slowly in soils under both aerobic and anaerobic conditions. If released into water, tetrachloroethylene is not expected to adsorb to suspended solids and sediment in water based upon the K_{oc} data. The biodegradation half-lives of tetrachloroethylene in aerobic and anaerobic waters were reported as 180 and 98 days, respectively. The general population may be exposed to tetrachloroethylene via inhalation of ambient air, ingestion of food and drinking water.

- **Trichloroethene.** Trichloroethene**'s** production and use in degreasing operations as well as in plastics, appliances, jewelry, automobile, plumbing fixtures, textiles, paper, glass and printing industries may result in its release to the environment through various waste streams. If released to soil, trichloroethene is expected to have high mobility based upon its K_{oc} value. Cometabolic biodegradation of trichloroethene has been reported under aerobic conditions where additional nutrients have been added. Under anaerobic conditions, as might be seen in flooded soils, sediments or aquifer environments, trichloroethene is slowly biodegraded via reductive dechlorination; the extent and rate of degradation is dependent upon the strength of the reducing environment. If released into water, trichloroethene is not expected to adsorb to suspended solids and sediment based on the K_{oc} value. Extensive monitoring data indicate that the general population may be

exposed to trichloroethene via inhalation of ambient air, ingestion of food and drinking water, and dermal contact with this compound and other consumer products containing trichloroethene**.** Trichloroethene is widely detected in groundwater.

- **Vinyl Chloride.** Vinyl chloride's production and use in the manufacture of polyvinyl chloride (PVC) and other chlorinated compounds may result in its release to the environment through various waste streams. Vinyl chloride is also an anaerobic biodegradation product of higher chlorinated compounds such as tetrachloroethylene and trichloroethene. If released to soil, vinyl chloride is expected to have high mobility based upon the K_{oc} value. Biodegradation is expected to occur slowly in the environment under both aerobic and anaerobic conditions. If released into water, vinyl chloride is not expected to adsorb to suspended solids and sediment in water based upon the K_{oc} value. The general population may be exposed to vinyl chloride via inhalation of ambient air, ingestion of food and drinking water.

6.3.4.2 Migration Pathways

An analysis of the potential migration pathways as they relate to the VOCs identified at the Site is presented below.

- **Groundwater**

The results of the analysis of groundwater at the Site for VOCs indicate concentrations of several chlorinated VOCs, most notably trichloroethene, tetrachloroethylene, and vinyl chloride. The observed chlorinated VOC concentrations in groundwater are clustered in two areas: the Mechanical Room (MW-27, MW-28, and the basement seep) and the vicinity of the flagpole (MW-7 and MW-24). The origins of the chlorinated VOC impacts in these two areas are unknown and are presumed to be unconnected.

Groundwater flow is generally to the south, as shown in Figure 3-1. Flow under the footprint of NBHS is complicated due to the underdrain system that, during high water table events, directs groundwater away from the center of the building and to the municipal storm drain system. Because the depth to groundwater is relatively shallow, groundwater flow is also diverted by subsurface structures (e.g., basement areas) and subsurface utilities.

Groundwater flow direction in the vicinity of the Mechanical Room (MW-27, MW-28, and the basement seep) is generally to the south, although the basement extends below the water table during most of the year, diverting shallow groundwater at that location either to the east or the west. Notable considerations include:

- A deeper monitoring well, MW-27D, was constructed several feet from MW-27 to determine whether there has been any downward migration of dissolved or non-aqueous phase impacts, if any, at this location. MW-27D was constructed with a screened interval of 12 to 17 feet, with the bottom of the well set at the bedrock surface. Chlorinated VOCs were not detected in the deep well adjacent

to MW-27 (MW-27D), indicating that impacts in this area are limited to the shallow groundwater.

- The elevated concentration detected in the groundwater sample collected from MW-27 on September 9, 2010 appears to be very limited in extent. Samples from monitoring wells located east (MW-32) and south (MW-28) of MW-27 did not detect chlorinated VOCs above Method 1 GW-2 standards. Chlorinated VOCs were not detected in monitoring wells located to the west (MW-31) or the north (MW-33) of MW-27.

- Seeps into basement area of the mechanical room indicate migration and transformation of the chlorinated VOCs detected in upgradient monitoring well MW-27. The chlorinated VOC concentrations observed in seep BRM-S-3 are consistent with those observed in nearby monitoring well MW-28.

Groundwater flow direction in the vicinity of the flagpole (MW-7 and MW-24) is generally to the south. Chlorinated VOCs detected in monitoring wells located to the east (MW-20, MW-21, and MW-30) and west (MW-23) of MW-7 and MW-24 do not exceed MCP Method 1 GW-2 groundwater standards. Notable aspects of the groundwater migration include:

- A 3-foot layer of peat was observed at a depth of 10 to 13 feet during drilling for MW-7 (see the boring logs provided in Appendix C). This depth interval is below the water table during periods of high ground water but during periods of low groundwater, the water table has been observed within the peat layer. It is likely, due to the high concentrations of organic carbon in the peat, that a significant portion of the chlorinated VOCs have partitioned from the groundwater to the peat.

- A deep monitoring well, MW-7D, was constructed next to MW-7 to determine whether there has been any downward migration of chlorinated VOCs detected at this location. MW-7D was constructed with a screened interval of 21 to 31 feet, with the bottom of the well set at the bedrock surface. Chlorinated VOCs detected below MCP Method 1 GW-2 groundwater standards were observed in a groundwater sample collected from this well.

- Chlorinated VOCs may be migrating to or from a sanitary sewer line. A comparison of groundwater elevation contours to sewer line elevation data indicates that the vitrified clay sanitary sewer line intersects the groundwater table in the vicinity of sewer manhole HS-MH-3. Chlorinated VOCs have been detected in samples collected from two manholes located downgradient from this point (see the discussion in Appendix D).

- **Indoor Air**

  Chlorinated VOC concentrations above screening levels were observed in indoor air samples within the Mechanical Room. As discussed herein, the Mechanical Room is under strong negative pressure relative to the adjacent rooms, therefore the concentrations are not expected to migrate to other rooms within NBHS. VOCs detected in other indoor air sample locations within NBHS are not associated with soil or groundwater impacts.

- **Soil Vapor**

  Chlorinated VOC concentrations above screening levels have been observed in soil vapor samples collected from below the slab of the Mechanical Room. Vapor migration into the Mechanical Room is possible. The same VOCs have been observed in indoor air within the Mechanical Room and are contained within products located in the Mechanical Room. Lateral migration of soil vapors beneath the slab is also possible. Soil vapor concentrations from other sample locations within NBHS did not exceed the screening criteria.

6.3.4.3 Potential for Vapor Intrusion

A vapor intrusion pathway requires VOC impacts in the subsurface and a pathway for the VOCs to migrate to indoor air. At NBHS, groundwater intrusion and/or vapor intrusion have occurred within the Mechanical Room, where chlorinated VOCs have been detected in groundwater, soil vapors, basement seeps, and indoor air.

The extent of potential VOC impacts in groundwater and soil vapors are also discussed herein. Appendix D presents the results of an extensive evaluation of indoor air, soil vapors, and groundwater in the vicinity of NBHS to evaluate vapor intrusion in other areas of NBHS.

Groundwater impacts in excess of MCP Method 1 GW-2 groundwater standards are limited to the vicinity of the Mechanical Room and thereby the potential for vapor intrusion is limited to this area.

7.0 HUMAN HEALTH RISK CHARACTERIZATION AND EXPOSURE ASSESSMENT

This section was prepared per 310 CMR 40.0835(4) g and h of the MCP and Appendix F of the MassDEP *Guidance for Disposal Site Risk Characterization* (MassDEP, 1995) and provides a risk characterization for the Site. The risk characterization addresses human and environmental receptors reasonably expected to be at and near the Site. As discussed herein, a Method 3 approach was selected to characterize human health risk at the campus. Because residential use is not contemplated by the City and an Activity and Use Limitation (AUL) will be placed on the property prohibiting future residential use of the Site, adult and child residential receptors are not quantitatively evaluated in the risk characterization.

Supporting information applicable to the risk characterization is contained in Appendix F of this report as follows: Appendix F-1 (Medium-Specific Sampling Data), Appendix F-2 (ProUCL Documentation for 95% Upper Confidence Limits), Appendix F-3 (Risk and Hazard Calculations for the 0 to 1 Foot Soil Interval), Appendix F-4 (Risk and Hazard Calculations for the 0 to 3 Feet Soil Interval), Appendix F-5 (Risk and Hazard Calculations for the 0 to 15 Feet Soil Interval), Appendix F-6 (Risk and Hazard Calculations for Groundwater), and Appendix F-7 (Risk and Hazard Calculations for Indoor Air).

The following references were also utilized: MassDEP 1995, MassDEP 2002a, MassDEP 2002b, MassDEP 2002c, MassDEP 2002d, MassDEP 2003, MassDEP 2007a, MassDEP 2002, MassDEP 2007c, MassDEP 2008, EPA 1997a, EPA 1997b, EPA 2002, EPA 2006, EPA 2010 and VDEQ.

7.1 Adequacy of Site Characterization

7.1.1 Impacted Media

At the Site, environmental media known to be potentially impacted include soil, groundwater, subslab soil vapor and indoor air. As described in Sections 2 and 3, soil, groundwater, subslab soil vapor and indoor air impacts were evaluated during environmental investigations at the Site by BETA between 2004 and 2006 (soil only) and by TRC between 2008 and 2010 (soil, groundwater, soil vapor, and indoor air). All groundwater data collected for the Site were considered in the Method 3 risk characterization. However, only those soil data collected to define nature and extent of potential site impacts were used in this risk characterization. The samples used to define nature and extent were used in a preliminary risk evaluation to determine the soil compounds and locations contributing to potential risks. Based on the results of the preliminary risk evaluation, delineation soil samples identified in applicable subsections of Section 4 were collected. The delineation soil samples were not used to characterize risks and hazards at the Site because doing so would bias the exposure point concentrations since the delineation locations were sampled multiple times during delineation activities.

As described in Section 6.3.3.1, chlorinated VOC groundwater data collected beneath the Mechanical Room of the NBHS building (MW-27 and MW-28) exceed MCP Method 1 GW-2 groundwater standards, indicating a potentially complete vapor intrusion pathway in this area of

the building. No other results greater than the MCP Method 1 GW-2 groundwater standards were found in groundwater located within 30 feet of the NBHS building. Soil vapor concentrations at subslab soil vapor sampling point PVP-6, located beneath the Mechanical Room, do not exceed soil vapor screening criteria; however, indoor air concentrations in the Mechanical Room exceed Indoor Air Threshold Values (IATVs) due to the presence of a groundwater seep and/or products contained in this room. VOC results in groundwater greater than the MCP Method 1 GW-2 groundwater standards in the vicinity of the Mechanical Room do not extend beyond the limits of the Mechanical Room, indicating that a complete vapor intrusion pathway is not present elsewhere in the NBHS building. In addition, the Mechanical Room is under a strong negative pressure with air from the room vented to the outside of the NBHS building, which prevents the migration of VOCs from the Mechanical Room to adjoining rooms. Therefore, VOCs detected in excess of IATVs in the indoor air of other areas of the NBHS building are present as a result of other indoor VOC sources (e.g., VOC-containing products in the auto shop, etc.), not as a consequence of vapor intrusion, and are not quantitatively evaluated in the risk characterization.

The Mechanical Room is not considered an "occupied" space because the frequency of use of this area is considered low by adults (less than 2 hours per day on a continuing basis or an 8-hour shift on a sporadic basis) and children would only be present as infrequent visitors, as this room is typically locked to prevent access by unauthorized individuals. Therefore, VOCs in indoor air within the Mechanical Room are not quantitatively evaluated in the risk characterization. However, to provide a perspective on the potential risk and hazard associated with the limited worker exposure to chlorinated VOCs in air within the Mechanical Room, see the discussion in Section 7.9 (Uncertainty Analysis). Risk and hazard calculations for indoor air are provided in Appendix F-7.

Indoor air sampling has taken place at the NBHS building related to building materials containing PCBs in a program overseen by EPA. For additional information, see TRC, 2006a; TRC, 2006b; TRC, 2008c; and TRC, 2009a. These indoor air data are further discussed in the Section 7.9 (Uncertainty Analysis).

7.1.1.1 Soil

Impacts detected in soils at the Site in excess of their MCP Method 1 S-1 soil standards include PCBs, metals (antimony, arsenic, barium, cadmium, chromium, lead, mercury, nickel, vanadium, and zinc), and various PAHs as described in Section 4.1.1.

PAH related impacts in soil in excess of MCP Method 1 S-1 soil standards include benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, 2-methylnapthalene, naphthalene, phenanthrene, and pyrene. Other impacts include DRO, metals (antimony, arsenic, barium, cadmium, chromium, lead, nickel, mercury, vanadium, and zinc), PCBs and total TEQs.

Tables summarizing the results of laboratory analyses for soil samples collected at the Site are provided in Tables 4-1 through Table 4-13 of this report.

7.1.1.2 Groundwater

No non-VOC impacts were detected at the Site in excess of the MCP Method 1 GW-2 groundwater standards with the exception of total lead at monitoring wells MW-5 and MW-HRC-33. As discussed in Section 4.1.2.3, the total lead concentration is attributable to the lead being adsorbed to, or contained in, particulates in the groundwater sample (i.e., turbidity), and not likely to be dissolved phase lead.

7.1.2 Extent of Impacts

The nature and extent analysis is provided in Section 4. The nature and extent has been sufficiently delineated to support conclusions and opinions regarding the source, nature, extent, and potential impacts at the Site and to support conceptual remedial planning. Additional sampling has been performed to delineate the extent of potential site impacts in order to support detailed remedial planning, remedial volume estimates, and/or comprehensive remedial action implementation. These delineation samples are also discussed in Section 4.

7.1.2.1 Horizontal and Vertical Extent

The horizontal and vertical extent of soil impacts are described in Section 4. In general, the horizontal and vertical extent of PAHs, metals, and PCBs in soil at the Site is generally consistent with the presence of fill-related material. The horizontal and vertical extent of soil impacts detected above MCP Method 1 S-1 soil standards has been characterized via laboratory analysis and field screening (visual, olfactory, jar headspace, and professional judgment). For soil from the 0 to 1 foot horizon, data indicate that the surficial soils were comparatively less impacted or un-impacted. Soil impacts at the Site are mapped in Figures 4-1 to 4-3. Fill thickness contours are provided in Figure 3-2.

The horizontal and vertical extent of groundwater impacts are described in Section 4. The results of the analysis of groundwater at all locations of the NBHS portion of the Site for PAHs, PCBs, both total and dissolved MCP metals and mercury indicated that all compounds are below MCP Method 1 standards, with the exception of total lead at MW-5 and MW-HRC-33. As discussed in Section 4.1.2.3, the total lead concentration is most likely attributable to the lead being adsorbed to, or contained in, particulates in the groundwater sample, and not likely to be dissolved phase lead contamination. In general, the lack of groundwater impacts from the impacts associated with fill (PAHs, PCBs, metals) is consistent with the contaminant properties, namely the high sorption potential and limited potential to leach, and/or low solubility of the chemicals.

7.1.2.2 Background Concentrations

Site-specific background concentrations were not characterized in soil and groundwater.

For the purposes of this Phase II CSA and risk characterization, background concentrations for VOCs, PCBs, SVOCs (other than PAHs), pesticides and herbicides are considered to be non-

detect. Background concentrations for petroleum-related compounds (e.g., TPH, GRO and DRO) are also considered to be non-detect.

Even though the presence of fill containing coal, coal ash or wood ash is present at the Site, background concentrations of metals and PAHs selected for use in the risk characterization are MassDEP "Natural Soil" background concentrations as presented in the *Technical Update Background Levels of Polycyclic Aromatic Hydrocarbons and Metals in Soil* (MassDEP, 2002).

7.1.2.3 Existing or Potential Migration Pathways

Existing and potential migration pathways were discussed in Section 5.2. Figure 5-1 illustrates the potential migration pathways for the Site.

7.1.3 Representativeness

The nature and extent discussion is presented in Section 4. The nature and extent is characterized sufficiently to evaluate risk, support conceptual remedial planning, and select remedial actions for the Site. As noted previously, additional sampling was performed to delineate the extent of potential impacts at locations with elevated soil concentrations to support detailed remedial planning, remedial volume estimates, and/or comprehensive remedial action implementation. These delineation samples are also discussed in Section 4.

TRC also conducted a data assessment for samples collected by TRC, which is summarized in Section 8.

7.1.4 Compounds of Potential Concern

Compounds of Potential Concern (COPCs) for the risk characterization were identified by: a) screening concentrations against available or available background values, b) eliminating results with low detection frequencies, and c) eliminating those results that are considered laboratory contaminants and not related to potential site impacts. In addition, contaminants that were not reported above laboratory reporting limits were also removed from further consideration as COPCs. Compounds eliminated from the list of soil COPCs based on the comparison of detected concentrations to the MassDEP native soil background concentrations are provided in Tables 7-1 through 7-34. All compounds detected in groundwater and summarized in Tables 7-35 (site-wide shallow groundwater) and 7-36 (MW-27) were considered COPCs, even if present below MCP standards.

The following table summarizes the COPCs at the Site and the media in which they were detected.

Compounds of Potential Concern	
Compounds	**Affected Media**
Benzene	Soil
Chlorobenzene	Groundwater
1,2-Dichlorobenzene	Groundwater

Compounds of Potential Concern	
Compounds	**Affected Media**
1,3-Dichlorobenzene	Groundwater
1,4-Dichlorobenzene	Groundwater
cis-1,2-Dichloroethene	Groundwater
trans-1,2-Dichloroethene	Groundwater
p-Isopropyltoluene	Groundwater
Tetrachloroethene	Groundwater
Toluene	Soil
1,2,3-Trichlorobenzene	Soil
1,2,4-Trichlorobenzene	Soil
Trichloroethene	Groundwater
Trimethylbenzene isomers	Soil
Vinyl chloride	Groundwater
GRO/DRO	Soil
C11-C22 Aromatics	Soil
C19-C36 Aliphatics	Soil
Polycyclic Aromatic Hydrocarbons	Soil and Groundwater
Polychlorinated Biphenyls	Soil and Groundwater
Dioxin Total TEQs	Soil
4-Bromophenyl phenyl ether	Soil
4-Methylphenol	Soil
Benzoic acid	Soil
bis(2-Ethylhexyl)phthalate	Soil
Butyl benzyl phthalate	Soil
Dimethyl phthalate	Soil
4,4’-DDD	Soil
4,4’-DDE	Soil
4,4’-DDT	Soil
Carbazole	Soil
Dibenzofuran	Soil
Dinoseb	Soil
Endosulfan sulfate	Soil
Antimony	Soil
Arsenic	Soil and Groundwater
Barium	Soil and Groundwater
Beryllium	Soil
Cadmium	Soil
Chromium	Soil and Groundwater
Lead	Soil and Groundwater
Mercury	Soil
Nickel	Soil and Groundwater
Selenium	Soil
Silver	Soil and Groundwater
Thallium	Groundwater
Vanadium	Soil
Zinc	Soil and Groundwater

7.2 Site Activities and Uses (Current and Foreseeable Future)

7.2.1 Current Uses

The Site is bounded by Hathaway Boulevard, Liberty Street and Parker Street to the west, east and south, respectively. An ice skating rink and isolated wetland area, located along Durfee Street, exist along the northern boundaries of the NBHS property. There are numerous paved parking areas, roadways, and sidewalks/paths throughout the campus. The NBHS building is comprised of three main buildings: (1) the gym; (2) the auditorium; and (3) the "Houses". The gym building is located at the southern end of the campus. The grassy area in front (west) of the gym building is also used for outdoor gym classes. Fenced Playing Field Areas (a volley ball court, baseball field, and basketball and tennis courts) are located to the rear (east) of the gym building. To the north of the gym building is the main entrance to the high school, marked by a flag pole and traffic circle. The auditorium is housed in this central portion of the NBHS building. An unfenced field, used as a practice area, is located to the rear of the auditorium. Further to the north are the classrooms, arranged as a series of four "Houses" around a central core. A day care center operates at the NBHS building each weekday morning between the end of September and early May and uses the Children's Playground Area for outdoor playtime in the rear of the building (east side) when the weather is not inclement. The grassy outdoor areas to the east of the "Houses" are used as a congregating area by the students. The grassy field to the north of the "Houses", between two large parking lots, is used as a gym class area by the KMS, located across Hathaway Boulevard. Athletic teams use the fenced and unfenced fields for practices and games between mid-March and late November each year. Playing seasons for most athletic sports are approximately 18 weeks in length, which includes a 13-week season plus 5 weeks for pre-season and post-season play. Other non-paved areas of the Site can also be accessed during a similar time frame, before the ground freezes and becomes snow covered.

The only occupied building on the parcel is the NBHS building. However, based on the analysis of groundwater, subslab soil vapor and indoor air data, the vapor intrusion pathway is incomplete at the NBHS building; the localized area of the Mechanical Room is not an "occupied" space, contains products with COPCs, and is also under negative pressure, preventing the migration of VOCs to adjoining occupied spaces. Therefore, no quantitative evaluation of indoor air has been provided, except as discussed in the Section 7.9 (Uncertainty Analysis) for the limited worker potential exposure to VOCs within the Mechanical Room. In addition, student/staff exposures to PCBs in air associated with building materials are also discussed in Section 7.9.

The Site is located in a residential area with residential neighborhoods located within walking distance. Current potential child and adult receptors include:

- students (older children and teenagers);
- daycare children (ages 3 to 5);
- teachers and teacher's aides, and coaches;
- parents and other visitors (including young children);
- groundskeepers;

- plant engineers; and
- resource officers and outdoor duty officers.

For the purposes of the current risk characterization and consistent with the previous portions of this report, the Site was divided into the following soil exposure points based on current activities known to be occurring:

- HS-1: Children's Playground Area
- HS-2: Fenced Playing Field Area
- HS-3: Unfenced Playing Field Area
- HS-4: Gym Area
- HS-5: Flag Pole Area
- HS-6: House Area
- HS-7: Student Congregating Area
- HS-8: Junior High School Gym Class Area
- HS-9: Beneath Pavement/Building Areas
- HS-10: Tree Belts
- Hot Spot: SB-308 (3.5')
- HS-11: Miscellaneous Samples of Unknown Location

Soils within the HS-9 exposure area, including hot spot SB-308 (3.5'), were not evaluated for current exposures since soils within these areas are currently inaccessible due to the presence of pavement. For all other exposure points, analytical results for surface soil (less than 3 feet below ground surface) were combined to generate exposure point concentrations. HS-11 includes results for composite samples collected by BETA in 2006, for which the locations and depths of the individual samples have not been provided. These samples are grouped and evaluated separately given the uncertainty in their respective locations.

Note that additional soil sampling for polychlorinated dibenzo-p-dioxins (dioxins), polychlorinated dibenzofurans (furans) and dioxin-like polychlorinated biphenyls (PCBs) (collectively referred to as dioxin-like compounds or congeners) was conducted by TRC in 2010 using a site-wide approach. The sampling locations targeted were previously sampled locations that TRC identified as being likely to have the estimated worst case concentrations of dioxins, furans, and dioxin-like PCBs based on a review of all soil data. The site-wide exposure point concentrations for the various soil depth intervals, expressed as the contribution of Toxicity Equivalents (Total TEQs) for dioxin-like compounds, were used in conjunction with the depth-specific EPCs calculated for each exposure area to evaluate cumulative risks and hazards.

7.2.2 Foreseeable Future Uses

The City has no plans to change the land use of the NBHS parcel in the foreseeable future. Therefore, future receptors are anticipated to be the same as current receptors, with the addition of future construction and utility workers engaging in improvements or repairs at the Site. Construction workers are additionally evaluated for exposures to shallow groundwater.

There are also no plans for development at the Site (e.g., senior housing, hospitals, etc.) that would incorporate overnight housing (in whole or in part).

There are no plans for cultivation of soil at the Site in the foreseeable future, although this would not preclude such activity in an engineered system (e.g., raised bed with imported clean soil, isolated from impacted site media).

Because residential use is not contemplated by the City and an AUL will be placed on the property prohibiting future residential use of the NHBS parcel, adult and child residential receptors are not quantitatively evaluated in the risk characterization.

There are no private drinking water wells within 500 feet of the Site and the area is serviced by the municipal water supply system. The local aquifer does not qualify as a GW-1 category groundwater resource and is therefore, highly unlikely to be developed as a potable supply. However, low volume irrigation use of local groundwater could occur in the foreseeable future, but is still considered unlikely due to the nature and scale of anticipated future development scenarios.

All of the exposure points identified (HS-1 through HS-11) plus hot spot HB-308 (3.5') were evaluated for future exposures. For each future exposure point, soil analytical results, regardless of depth or location beneath pavement or other barriers, were combined to generate exposure point concentrations. Sample location SB-308 (3.5'), sampled from beneath the paved parking area to the south of the gym building along Parker Street, was identified as a hot spot due to elevated concentrations of PAHs.

For future construction worker exposures to shallow groundwater, two exposure points were identified: site-wide shallow groundwater and MW-27 groundwater. MW-27 was evaluated as a separate groundwater hot spot due to the concentrations of chlorinated VOCs, primarily trichloroethene and vinyl chloride.

7.3 Imminent Hazards

An Imminent Hazard (IH) is not present at this Site. This determination is based on a review of criteria for site conditions "deemed to pose" an IH under 310 CMR 40.0321(1) and the criteria for site conditions that "could pose" an IH under 310 CMR 40.0321(2). IRAs conducted on Site to date are summarized in Section 6.0. The results of TRC's review of conditions "deemed to pose" or that "could pose" an IH are set forth below.

7.3.1 Criteria for Releases Deemed to Pose an Imminent Hazard – 310 CMR 40.0321(1)

Site conditions are not known to have resulted in the presence of impacts within buildings, structures, or underground utility conduits at a concentration equal to or greater than 10-percent of the Lower Explosive Limit (LEL), as set forth in 310 CMR 40.0321(1)(a). Neither the City nor TRC have received reports or complaints of persistent odors in ambient or indoor air potentially attributable to potential site impacts.

The chemicals detected at the Site either do not possess reactive or explosive characteristics consistent with 310 CMR 40.0321(1)(b), or the chemicals are not present at concentrations or in situations expected to threaten safety.

The potential impacts detected at the Site do not appear to be related to impacts to a roadway that could endanger public safety as set forth in 310 CMR 40.0321(1)(c).

Potential site impacts did not result in immediate and acute adverse impacts to freshwater or saltwater fish populations consistent with 310 CMR 40.0321(e). The Site is not near a fresh or salt water waterway.

7.3.2 Criteria for Release that Could Pose an Imminent Hazard – 310 CMR 40.0321(2)

There are no reports of the potential impacts detected at the Site resulting in detections in a private drinking water supply well at a concentration equal to or greater than ten-times the GW-1 Reportable Concentration (RC) per 310 CMR 40.0321(2)(a); the GW-1 reporting category does not apply to this Site. In addition, no private drinking water supply wells are known to be present within 500 feet of the Site. The Site and surrounding area are supplied potable water by the municipality.

To demonstrate that an IH condition associated with surficial soil does not exist at the Site, Tables 7-1 through 7-9 summarize the surficial soil data available for each exposure point area except HS-9, where surface soils are covered by pavement or buildings, and HS-11, where the depth and location of the sampling locations are unknown. Table 7-10 provides the site-wide total TEQs exposure point concentration. For each exposure point area, the data are representative of the 0 to 1 foot surface interval as the most applicable to actual exposures occurring at the Site.

For all exposure points, the 0 to 1 foot exposure point concentrations are less than the MCP Method 1 soil standards, except for the site-wide total TEQs. Therefore, Method 3 risk calculations, presented in Appendix F-3, were performed to document that cumulative risks and hazards for the 0 to 1 foot soil interval do not present an IH condition. The assumptions and methods used for these calculations are discussed in detail in Section 7.6.1. Based on these calculations, no IH condition exists at the Site. A summary of the cumulative risks and hazards for the 0 to 1 foot soil interval for each applicable human receptor is presented in Table 7-37. IRAs have been conducted to address conditions that “could pose” an IH, as summarized in Section 6.0.

7.4 Groundwater and Soil Categorization

The following sets forth the applicable groundwater and soil categories at the Site. This categorization was prepared consistent with 310 CMR 40.0932, 310 CMR 40.0933, and Table 40.0933(9) of the MCP.

7.4.1 Groundwater Categories

The groundwater categories for this Site were determined pursuant to 310 CMR 40.0932, research of available documentation, and through the use of MassDEP Priority Resources Map (Figure 2-1). Based on the available information, groundwater categories GW-2 and GW-3 apply to groundwater beneath this Site for the following reasons:

- **GW-2.** Groundwater beneath the Site is located less than 15 feet bgs and, in places, is within 30 feet of the existing occupied NBHS buildings. Consistent with 310 CMR 40.0932(b) of the MCP, potential future development of the Site by the construction of additional buildings was considered to meet the GW-2 criteria under future use conditions.

- **GW-3.** All groundwater is thought to eventually discharge to surface water bodies per the MCP (310 CMR 40.0932 (2)); therefore, groundwater category 3 (GW-3) is also relevant to the entire Site.

7.4.2 Soil Categories

Consistent with 310 CMR 40.0933(4), the applicability of the MCP soil categories was determined based on consideration of the frequency of Site use, intensity of activities and the accessibility of the soil, as well as human receptor characteristics.

Current adult frequency of use at the Site is determined to be "High" due to the potential for adults to be working full days (8 hours or more) at the Site. Adult intensity of activity is determined to be "High" because much of the Site lacks pavement or other barriers, and soil impact is located at depths less than three feet below grade and recreational athletic activities are known to occur at the campus. Because the Site is near residential areas and used as a school with athletic facilities, children are expected to be frequent visitors to the Site under current conditions; therefore, frequency of Site use by children is determined to be "High". The intensity of use by children is also expected to be "High" because the Site is largely unpaved and is heavily used for school-related and recreational activities.

Potentially impacted soil at the Site is present within the 0 to 3 feet depth interval as well as the 3 to 15 feet depth interval (based on field observations and sampling). Potential soil impacts within the top three feet are therefore considered *accessible*, consistent with 310 CMR 40.0933(4)(c)(2), and soil within the 3 to 15 foot interval is considered *potentially accessible*. Potentially impacted soil located beneath paved parking areas, roadways, and buildings is considered *isolated*.

Based on the above-summarized information, and Table 40.0933(9) of the MCP, soil categories S-1, S-2 and S-3 currently apply to Site soil. As previously stated, an AUL will be placed on the property prohibiting future residential use of the NHBS parcel.

7.5 Hazard Identification

For the Hazard Identification, soil and groundwater analytical data were reviewed to identify COPCs, as presented on Tables 6-1 through 6-36. Site data were evaluated for the presence of hot spots. As previously stated, soil sampling location SB-308 (3.5') was identified as a future hot spot due to the presence of elevated concentrations of PAHs. Monitoring well MW-27 analytical data were evaluated separately due to detections of trichloroethene (31,000 µg/L) and vinyl chloride (550 µg/L) and their localized impact beneath the Mechanical Room.

Soil and groundwater analytical data collected at the Site between 2004 and 2010 have been considered as part of this Method 3 risk characterization. These data are discussed in Section 4. Data for soil are presented in Tables 7-1 through 7-10 for the 0 to 1 foot soil interval, Tables 7-11 through 7-21 for the 0 to 3 feet interval and Tables 7-22 through 7-34 for the 0 to 15 feet interval. The 0 to 1 foot and 0 to 3 feet soil interval data were used to evaluate current exposures. The 0 to 15 feet soil interval data were used to evaluate the future scenarios. Groundwater data presented in Table 7-35 (site-wide shallow groundwater) and Table 7-36 (monitoring well MW-27) were used for the evaluation of future direct contact excavation worker exposures. Sample-specific data for soil and groundwater data are provided in Appendix F-1. For compounds detected in multiple analyses (e.g., naphthalene detected in VPH, EPH and SVOC analyses), the analysis that resulted in the more conservative EPC (i.e., the higher result, which is more health protective) was quantitatively evaluated.

7.6 Exposure Assessment

Consistent with the requirements of 310 CMR 40.0923, the Exposure Assessment requires the identification of all current and reasonably foreseeable activities and uses associated with a site and a description of how these uses and activities could result in the exposure of human receptors to the COPCs present. Receptors and exposure pathways applicable to this risk characterization are discussed in this section as well as the exposure assumptions used for each receptor, developed to estimate the frequency and intensity of the exposure.

Section 7.2.1 identifies receptor populations that may be present at the Site, based on information obtained through interviews with school officials and observations made during visits to the Site. The identified receptors include:

- students (older children and teenagers);
- daycare children (ages 3 to 5);
- teachers, teacher's aides, and coaches;
- parents and other visitors (including young children);
- groundskeepers;
- plant engineers; and
- resource officers and outdoor duty officers.

Each of these receptor populations may be exposed to potentially impacted soil during outdoor activities. Students (older children and teenagers) may be outdoors before and after school each school day, for outdoor classes a few times each week (e.g., half-hour gym class) and during after school activities (e.g., band or athletic practice/games during fall and spring). Students may also be present at the school during summer camps or for recreational activities (e.g., playing tennis during vacation). Daycare children have less than one hour of scheduled outdoor playtime each day (currently occurring at the HS-1 area) when the weather is not inclement. The daycare center operates five half-days per week from late September to mid-May. Though children attending the daycare are less exposed than the older students, the young children represent a population with greater developmental sensitivity than older children, teenagers and adults.

Teachers and teacher's aides may be exposed in a similar manner as students, however, gym teachers in particular may be outdoors at the campus for a greater amount of time each day than students while staffing sequential classes, and possibly coaching athletic teams or staffing summer camps. Teachers and teacher's aides may also be exposed for a greater number of years than students and daycare children who tend to be present at the campus for only a few years. Parents and other visitors to the Site are likely exposed to a lesser extent in frequency and duration than students and staff. Other visitors may include individuals using the public tennis courts or the Unfenced Playing Field Area for weekend soccer games.

Groundskeepers reportedly maintain the grounds at the campus (e.g., mowing, mulching and planting) one to two days per week from the end of April until the beginning of November. Based on the information provided, staff teaching outdoor gym classes, coaching athletic teams and staffing summer camps are likely to be more exposed than groundskeepers.

Plant engineers are reported to be exposed occasionally during facility upgrades or repairs that may require limited soil movement (e.g., installation of concrete pads). Resource officers spend time outdoors before and after school each day, while an outdoor duty officer patrols the exterior grounds five days per week on a rotating basis (i.e., different people perform this function on different days).

To estimate a worst-case scenario of the receptor populations present at the campus, older child/teenage students, daycare children, adult staff (representative of the most exposed teachers/aides and groundskeepers) and construction workers (conservatively representative of plant engineers) were quantitatively evaluated in the risk characterization. All receptors were evaluated for exposures to all three soil depth intervals (0 to 1, 0 to 3 and 0 to 15 feet), except for the construction worker which was evaluated solely for exposures to the 0 to 15 feet soil interval.

7.6.1 Exposure Assumptions

For the purposes of this Method 3 risk characterization, older child/teenage students, daycare children, adult staff and construction workers were selected for quantitative evaluation via incidental ingestion of soil, dermal contact with soil and the inhalation of fugitive dusts associated with Site soil. Construction workers were additionally evaluated for exposure to shallow groundwater via dermal contact and the inhalation of VOCs originating from shallow groundwater into an excavation trench. Exposure assumptions applicable to the receptors are

provided on the risk calculation spreadsheets presented in Appendices F-3 through F-6. The following provides a description of the exposure assumptions used for the identified receptors.

- **Older Child/Teenage Student.** For the 11 to 18 year-old older child/teenage student, exposures are assumed to occur over a total of 18 weeks, during the spring and fall when the ground is not frozen and school is in session. During this 18-week period, outdoor exposures are assumed to occur 5 days per week for 1 hour per day. The exposure duration for non-cancer endpoints of toxicity was averaged over 18 weeks. The average weight of the child was set at 51.4 kilograms (kg). Incidental ingestion of soil was set at 50 milligrams per day (mg/day). Dermal contact with COPCs in soil was evaluated using a soil adherence factor of 0.14 milligrams per square centimeter (mg/cm^2), which assumes exposure via the face, hands, forearms, lower legs, and feet (approximate body surface area of 5,410 cm^2). For the fugitive dust pathway, methods and assumptions consistent with the MassDEP Technical Update "Characterization of Risks Due to Inhalation of Particulates by Construction Workers" (July 2008) were used including a PM_{10} of 60 micrograms per cubic meter (ug/m^3). Inhalation rates used are age-specific values provided by MassDEP in the 1995 risk assessment guidance document.

- **Daycare Child.** For the 3 to 5 year-old daycare child, exposures are assumed to occur over a total of 18 weeks, during the spring and fall when the ground is not frozen and school is in session. During this 18-week period, outdoor exposures are assumed to occur 5 days per week for 1 hour per day. The exposure duration for non-cancer endpoints of toxicity was averaged over 18 weeks. The average weight of the child was set at 15.5 kg. Incidental ingestion of soil was set at 100 mg/day. Dermal contact with COPCs in soil was evaluated using a soil adherence factor of 0.35 mg/cm^2, which assumes exposure via the face, hands, forearms, lower legs, and feet (approximate body surface area of 2,422 cm^2). For the fugitive dust pathway, methods and assumptions consistent with the MassDEP Technical Update "Characterization of Risks Due to Inhalation of Particulates by Construction Workers" (July 2008) were used including a PM_{10} of 60 ug/m^3. Inhalation rates used are age-specific values provided by MassDEP in the 1995 risk assessment guidance document.

- **Adult Staff.** For the adult staff, exposures are assumed to occur over a total of 30 weeks, during the spring, summer and fall. During this 30-week period, outdoor exposures are assumed to occur 5 days per week for 4 hours per day. The exposure duration for non-cancer endpoints of toxicity was averaged over 27 years. The average weight of the adult was set at 61.1 kg. Incidental ingestion of soil was set at 50 mg/day. Dermal contact with COPCs in soil was evaluated using a soil adherence factor of 0.03 mg/cm^2 and a body surface area of 3,473 cm^2. As with the child, methods and assumptions consistent with the MassDEP Technical Update "Characterization of Risks Due to Inhalation of Particulates by Construction Workers" (July 2008) were used for the fugitive dust pathway including an inhalation rate of 60 liters/minute.

- **Construction Worker.** Exposure could occur during excavations that expose contaminated soil and groundwater. Potential exposures to soil and trench air COPCs are assumed to occur 8 hours/day for 130 days/year. The exposure duration for non-cancer

endpoints was averaged over 0.5 years (182 days). Workers are identified as adults (58 kg average body weight) involved in physical activities equivalent to an average inhalation rate of 20 m^3/day. Inhalation of fugitive dusts outdoors by adult workers was evaluated using a PM_{10} of 60 µg/m^3. The incidental ingestion rate of soil was set at 100 mg/day. Dermal contact with soil COPCs was assumed via the face, hands, forearms, and feet (approximate surface area of 3,477 cm^2) using a soil adherence factor of 0.29 mg/cm^2. Excavations were assumed to proceed down to the water table. Contact with shallow groundwater was conservatively assumed to occur 8 hours/day for 65 days/year. Dermal contact with groundwater COPCs was also assumed to occur via the face, hands, forearms, and feet, consistent with soil exposures.

7.6.2 Estimation of Chemical Intake

To evaluate the risk of harm to human health, the intake of each COPC must be estimated, a process which involves assessing the amount of material in contact with the receptor and the amount actually available for absorption by the body. This assessment is achieved through the calculation of an average daily dose (ADD) for each COPC and for each route of exposure. Compound-specific and exposure route-specific Relative Absorption Factors (RAFs) are used in the ADD equations to convert an exposure (amount) to a dose (amount per unit body weight).

The general average daily dose (ADD) equation used to calculate intake is as follows and is consistent with that provided in MADEP's *Guidance for Disposal Site Risk Characterization (July, 1995)*:

$$\text{ADD} = \frac{\text{Total Amount of Chemical Taken In}}{(\text{Body Weight}) * (\text{Averaging Period})}$$

The specific ADD equations for the various exposure pathways evaluated are provided below:

Incidental Ingestion of Soil

$$\text{ADD} = \frac{(\text{EPC})*(\text{Ingestion Rate})*(\text{Exposure Frequency})*(\text{Exposure Period})*\text{RAF}}{(\text{Body Weight})*(\text{Averaging Period})}$$

Dermal Contact with Soil

$$\text{ADD} = \frac{(\text{EPC})*(\text{Surface Area})*(\text{Exposure Frequency})*(\text{Exposure Period})*(\text{AdherenceFactor})*\text{RAF}}{(\text{Body Weight})*(\text{Averaging Period})}$$

Dermal Contact with Groundwater

$$\text{ADD} = \frac{(\text{EPC})*(\text{Surface Area})*(\text{Exposure Frequency})*(\text{Exposure Duration})*(\text{Exposure Period})*\text{RAF}*K_p}{(\text{Body Weight})*(\text{Averaging Period})}$$

Inhalation of Trench Air

$$\text{ADD} = \frac{(\text{EPC})*(\text{Exposure Time})*(\text{Exposure Frequency})*(\text{Exposure Duration})}{(\text{Averaging Period})}$$

For the fugitive dust pathway, equations presented in *Characterization of risks due to inhalation of particulates by construction workers (Revised Technical Update; 2008)* were used. The equations used are as follows:

Inhalation of Fugitive Dust – GI System

$$ADD/LADD=\frac{(EPC)*1.5*(InhalationRate)*RAF*(ExposureDuration)*(ExposureFrequency)*(ExposurePeriod)*PM_{10}}{(Body\ Weight)*(Averaging\ Period)}$$

Inhalation of Fugitive Dust – Respiratory System

$$ADD/LADD=\frac{(EPC)*0.5*(InhalationRate)*RAF*(ExposureDuration)*(ExposureFrequency)*(ExposurePeriod)*PM_{10}}{(Body\ Weight)*(Averaging\ Period)}$$

Exposure assumptions and the specific equations used to calculate ADDs are provided on the calculation spreadsheets presented in Appendices F-3 through F-6.

7.6.3 Exposure Point Concentrations

Exposure point concentrations (EPCs) for soil and groundwater were determined for the Site consistent with 310 CMR 40.0926 and supporting MassDEP guidance.

An EPC is the measured or estimated amount of a constituent in the environmental medium of concern at the point of human contact. Based on MassDEP (1995) guidance, the EPCs for the environmental media typically correspond to the arithmetic mean of the reported results for each data set for areas of contiguous impacts that do not show evidence over which people average their exposure. However, when soil or groundwater sample locations are not evenly distributed over the Site, or concentrations are highly variable over the Site, or where exposure frequencies are higher in some areas than others, the arithmetic mean may not represent the average exposure concentration and, in cases of extremely high concentrations, a hot spot evaluation may be warranted. According to 310 CMR 40.0926(3), consideration of the observed distribution of the data, sampling strategy, graphical representation of analytical results, and/or statistical analyses with sufficient power and confidence may be used to demonstrate that the arithmetic mean concentration is unlikely to underestimate the average concentration at the exposure point.

For this Site, arithmetic average concentrations have been primarily used as EPCs; however, in those instances where individual chemicals were present at concentrations greater than ten times applicable S-1/GW-2 or S-1/GW-3 standards or where greater than 25 percent of the analytical results for an individual contaminant exceeded an applicable standard, EPCs that represent the 95-percent upper confidence limit of the arithmetic mean were calculated using USEPA's ProUCL software version 4.00.02 (USEPA, 2006). The 95-percent upper confidence limit recommended by the ProUCL software was selected as the EPC in these cases. For small data sets, the maximum detected concentration was used as the EPC. EPCs were calculated for soil and groundwater current and future use scenarios. Tables provided in Appendix F-1 present the individual samples used to generate the EPCs for each exposure point.

Tables 7-1 through 7-34 present the soil EPCs (i.e., maximum, arithmetic mean or 95-percent upper confidence limit on the arithmetic mean) for the current and future scenarios. Groundwater EPCs are summarized in Tables 7-35 and 7-36.

Trench air EPCs were modeled for all volatile compounds detected in shallow groundwater. For this pathway, a model developed by the Virginia Department of Environmental Quality (VDEQ) for groundwater encountered at depths less than 15 feet below ground surface has been used. Detailed information concerning the model can be found at www.deq.state.va.us/vrprisk/raguide.html. The modeling of soil gas EPCs to trench air concentrations is presented in Appendix F-6.

7.7 Dose-Response Assessment

The Dose-Response Assessment is designed to evaluate the potential non-carcinogenic (threshold) and carcinogenic (non-threshold) effects of COPCs and describes the effects observed in humans and/or laboratory animals following the intake of a specific dose of the compound. The information from the Dose-Response Assessment is used in conjunction with information from the Exposure Assessment to estimate the risk and hazard generated by each COPC from an exposure.

The toxicity values used in this Dose-Response Assessment of COPCs producing non-carcinogenic effects are the Reference Doses (RfDs) for oral and dermal exposures and Reference Concentrations (RfCs) for inhalation exposures. The chronic RfD and RfC values are based upon a 70-year lifetime exposure, and used to evaluate commercial worker exposures. Subchronic RfD and RfC values are based on defined, less than lifetime exposures and are appropriate for use in evaluating excavation worker-related risks.

The U.S. EPA has developed a system for classifying chemicals according to the likelihood that the compound is a human carcinogen. This system groups chemicals into five classes based upon the weight-of-evidence (of carcinogenicity) of the available data. Consistent with MassDEP risk characterization guidelines, class A, B, and C carcinogens are evaluated in a Method 3 risk characterization. Slope factors (SFs), for the oral and dermal exposure routes, and unit risks (URs), for the inhalation route, are used in this risk characterization to calculate cancer risks.

Relative Absorption Factors (RAFs) are used to account for differences between the method of administration in the study on which the RfD or SF is based and the site-specific routes of exposure. These values vary with the medium and route of exposure.

Total chromium data were evaluated as chromium (III) due to site-specific speciation data gathered as part of the follow-up delineation sampling at locations with elevated total chromium concentrations. The site-specific chromium speciation data is discussed in Section 3.3.2.

The RfD, RfC, SF, UR and RAF values used in this risk characterization are the same as those values used by MassDEP in the development of the MCP numerical standards (MassDEP, 2009), except for the following compounds:

- 1,2,4-Trimethylbenzene: toxicity values and RAFs for C9-C10 aromatics, as specified by MassDEP, were used as this compound is present as part of this hydrocarbon fraction;

- GRO: toxicity values and RAFs for C9-C10 aromatics, as specified by MassDEP, were used as this is the most toxic fraction that may be present in a gasoline-range mixture;

- DRO: toxicity values and RAFs for C11- C22 aromatics, as specified by MassDEP, were used as this is the most toxic fraction that may be present in a diesel-range mixture;

- Dibenzofuran (carcinogen class D): an oral RfD (4E-03 mg/kg-day) provided by EPA's Superfund Technical Support Center was used; the RfC was calculated from the RfD assuming a body weight of 70 kg and an inhalation weight of 20 m^3/day; RAFs were calculated using default assumptions for SVOCs, as presented by MassDEP (1995);

- 4-Bromodiphenyl ether: the oral RfD for tetrabromodiphenyl ether was selected as a surrogate for 4-bromodiphenyl ether, adjusted downward 10-fold for uncertainty in the use of this surrogate (1E-05 mg/kg-day); the RfC was calculated from the RfD assuming a body weight of 70 kg and an inhalation weight of 20 m^3/day; RAFs were calculated using default assumptions for VOCs, as presented by MassDEP (1995)

- 1,2,3-Trichlorobenzene; toxicity values and RAFs for 1,2,4-trichlorobenzene, as specified by MassDEP, were used as a surrogate for this structurally similar compound;

- Endosulfan sulfate: toxicity values and RAFs for endosulfan, as specified by MassDEP, were used as a surrogate for this structurally similar compound;

- Butyl benzyl phthalate: the oral RfD presented in the Integrated Risk Information System (IRIS) was used (2E-01 mg/kg-day); the RfC was calculated from the RfD assuming a body weight of 70 kg and an inhalation weight of 20 m^3/day; RAFs were calculated using default assumptions for SVOCs, as presented by MassDEP (1995);

- 4-Methylphenol: the oral RfD presented in the Health Effects Assessment Summary Tables (HEAST) was used (5E-03 mg/kg-day); the RfC was calculated from the RfD assuming a body weight of 70 kg and an inhalation weight of 20 m^3/day; RAFs were calculated using default assumptions for SVOCs, as presented by MassDEP (1995);

- Dinoseb: the oral RfD presented in the Integrated Risk Information System (IRIS) was used (5E-03 mg/kg-day); the RfC was calculated from the RfD assuming a body weight of 70 kg and an inhalation weight of 20 m^3/day; RAFs were calculated using default assumptions for SVOCs, as presented by MassDEP (1995); and

- Carbazole: noncancer toxicity values and RAFs specified by MassDEP for other carcinogenic PAHs were adopted for carbazole; the slope factor presented in HEAST (0.02 $(mg/kg\text{-}day)^{-1}$) was used.

Chronic and subchronic RfDs and RfCs, SFs and URs, as well as medium-specific RAFs, are provided on the calculation spreadsheets presented in Appendices F-3 through F-6.

7.8 Risk Characterization

To characterize the risk of harm to human health from potential soil and groundwater exposures, carcinogenic risks and non-carcinogenic hazards were estimated using the EPC for each COPC present at each exposure point for each receptor, and the cumulative receptor risk values were compared to the MassDEP Risk Limits to assess whether a condition of "No Significant Risk" exists.

To estimate non-carcinogenic hazards, the Hazard Quotient for each COPC was calculated by dividing the Average Daily Dose (ADD) computed in the Exposure Assessment by the RfD or RfC identified in the Dose-Response Assessment. The cumulative Hazard Index (HI) for each receptor was subsequently calculated by summing the COPC hazard quotients for the exposure pathways applicable to each receptor. This HI is called a Screening HI and provides a conservative estimate of the true hazard because it assumes additivity even though COPCs may exert effects on different organ systems and/or through different mechanisms of action. The Screening HI was first compared to the Cumulative Receptor Non-Carcinogenic Risk Limit (Cumulative Receptor Hazard Index) of 1 (310 CMR 40.0993(6)) to characterize the risk of harm to human health, and to establish whether a condition of "No Significant Risk" exists at the Site. If the Screening HI was less than 1, no further discussion was necessary to characterize noncancer hazard. However, if the Screening HI exceeded the Risk Limit of 1, the Screening HI was segregated by target organ, as described in MassDEP guidance (MassDEP, 1995). Each target organ HI was then compared to the Risk Limit of 1 to establish whether a condition of "No Significant Risk" exists at the Site.

To calculate the Excess Lifetime Cancer Risk (ELCR) for each COPC, the Lifetime Average Daily Dose (LADD) estimated in the Exposure Assessment is multiplied by the SF or UR identified in the Dose-Response Assessment. The ELCR for each COPC is then summed to calculate the Total ELCR for each exposure pathway. The Total Site Cancer Risk for each receptor is subsequently computed by summing the Total ELCR values for the exposure pathways applicable to each receptor. The Total Site Cancer Risk is then compared to the Total Site Cancer Risk Limit of 1×10^{-5} (CMR 40.0993(6)) to characterize the risk of harm to human health, and to establish whether a condition of "No Significant Risk" exists, as defined in 310 CMR 40.0993(7).

The risks and hazards estimated for each receptor and exposure point are summarized in Table 7-37 (Imminent Hazard), Table 7-38 (Current Scenario) and Table 7-39 (Future Scenario).

As shown on Table 7-37, a condition of No Significant Risk exists for the 0 to 1 foot soil interval for older child/teenage students, daycare children, and adult staff.

Table 7-38 identifies that under current conditions, the 0 to 3 feet soil interval at exposure points HS-1, HS-2 and HS-7 is associated with a condition of No Significant Risk. The exposure points

and chemicals determine to pose a significant risk to human health under current conditions, applicable to the top 3 feet of soil, are:

- HS-3: lead (older child/teenage student, daycare child and adult staff)
- HS-4: PCBs and lead (daycare child)
- HS-5: lead (older child/teenage student and daycare child)
- HS-6: benzo(a)pyrene and lead (older child/teenage student, daycare child and adult staff)
- HS-8: lead (daycare child)
- HS-10: lead (daycare child)

Table 7-39 identifies that under future conditions, the 0 to 15 feet soil interval at exposure points HS-1, HS-2 and HS-7 is associated with a condition of No Significant Risk. The exposure points and chemicals determined to pose a significant risk to human health under future conditions, applicable to the top 15 feet of soil, are:

- HS-3: lead (older child/teenage student, daycare child, adult staff and construction worker)
- HS-4: PCBs and lead (daycare child and construction worker)
- HS-5: lead (daycare child and construction worker)
- HS-6: benzo(a)pyrene and lead (older child/teenage student, daycare child, adult staff and construction worker)
- HS-8: lead (daycare child)
- HS-9: lead (older child/teenage student, daycare child and construction worker)
- HS-10: lead (older child/teenage student, daycare child and construction worker)
- Hot Spot SB-308 (3.5'): benzo(a)pyrene, dibenz(a,h)anthracene, benzo(a)anthracene, benzo(b)fluoranthene, indeno(1,2,3-cd)pyrene and lead (older child/teenage student, daycare child, adult staff and construction worker)
- HS-11: lead (daycare child and construction worker)
- Hot Spot MW-27: trichloroethene and vinyl chloride (construction worker)

HS-11 represents composite samples collected from the NBHS campus by BETA in 2006, for which depth and location are unknown. These samples clearly demonstrate that pesticides and herbicides are not of concern at the NBHS area, and reinforce the finding that PAHs and metals are generally present across the campus. Because the locations of the PAH and metal exceedances are not known, further work was performed to identify potential data gaps which were filled through additional soil sampling and analysis. The results of these supplemental investigation efforts are summarized in Section 4 and the soil data were included in this risk characterization.

7.8.1 Applicable or Suitably Analogous Public Health Standards

As part of the evaluation of the condition of "No Significant Risk" of harm to human health (as defined in 310 CMR 40.0993(7)), the MCP requires a comparison of EPCs to Applicable or Suitably Analogous Public Health Standards (310 CMR 40.0993(3)). Such standards include, but are not limited to, Massachusetts *Air Quality Standards* promulgated in 310 CMR 6.00, Massachusetts *Surface Water Quality Standards* promulgated in 314 CMR 4.00, and Massachusetts *Drinking Water Quality Standards* promulgated in 310 CMR 22.00.

As noted in Section 7.1, the Site is not considered to be part of a potentially productive aquifer. Therefore, comparison of COPC groundwater concentrations to MassDEP *Drinking Water Standards* is not required for the evaluation of significant risk of harm to human health. In addition, air and surface water quality standards are not considered applicable to the Site.

7.9 Uncertainty Analysis

Risk characterizations are subject to a number of uncertainties. As a result, risk estimates derived from the equations and assumptions in this risk characterization should not be interpreted as absolute estimates of the risks of harm to human health posed by potential exposures to COPCs reported at the Site.

General sources of uncertainty include:

- adequacy of the Site characterization;
- adequacy of the sampling plan;
- quality and treatment of the analytical data;
- accuracy of the exposure assumptions; and
- development of toxicity values (RfDs, RfCs, SFs, and URs).

Site-specific uncertainties are discussed below. As discussed below, conservative (health-protective) assumptions are selected for use in the risk characterization process which generally leads to overestimation, rather than underestimation, of Site risks and hazards.

7.9.1 Hazard Identification

Sampling was conducted with bias, targeting areas and depths that were likely to have elevated concentrations of OHM based on field screening and observations. This type of sampling strategy is commonly used for site characterization. However, the soil data set may over-represent the impacts present across the property, resulting in an overestimation of the risks and hazards. Due to the heterogeneous nature of the fill material present at the Site, some areas with fill impacts may not have been characterized by the investigative efforts. However, any unidentified areas of fill impacts should be minimal since more than 1,000 soil samples were collected during the Phase II investigation at the Site.

7.9.2 Dose-Response Assessment

In the Dose-Response Assessment, Uncertainty and Modifying Factors, applied to toxicity information to obtain RfD and RfC values, are used to account for the following uncertainties, which, in turn, can add to the overall uncertainty of the risk characterization findings:

- the use of dose-response information from effects observed at high doses to predict the adverse health effects that may occur following exposure to the low levels expected from human contact with the COPCs in the environment;

- the use of dose-response information from short-term exposure studies to predict the effects of long-term exposures, and vice-versa;

- the use of dose-response information from animal studies to predict adverse health effects in humans; and

- the use of dose-response information from homogeneous animal populations or healthy human populations to predict the adverse health effects likely to be observed in the general population, consisting of individuals with a wide range of sensitivities.

In addition, the following practices result in additional uncertainties in the dose-response assessment:

- the use of oral toxicity values as surrogate toxicity values for the dermal route of exposure; and

- the use of surrogate toxicity values for compounds without assigned values, such as those used to characterize the petroleum hydrocarbon fractions.

7.9.3 Exposure Assessment

The Exposure Assessment focuses on the evaluation of non-carcinogenic and carcinogenic effects for an exposed individual. Conservative (health-protective) exposure assumptions, as recommended by MassDEP, were used such as values for intake rates, surface areas, and body weights. Exposure frequencies and exposure periods were default MassDEP values, or selected to conservatively represent site-specific exposure conditions. In addition, conservative assumptions were used in the modeling of trench air concentrations from groundwater. The use of such conservative exposure and modeling assumptions can potentially overestimate the estimate of the risk of harm from exposure to the fill and contribute to the uncertainty of the risk characterization.

For some compounds, maximum detected concentrations were used as EPCs which results in uncertainty in the evaluation and may over- or underestimate the true risks and hazards at the Site, depending on the representativeness of the samples selected for site characterization. Because sampling was biased towards areas of suspected or observed contamination, the dataset likely overestimates overall impacts at the Site.

7.9.4 Risk Characterization

Two potential exposure pathways were not factored into the cumulative risks and hazards presented in the Method 3 risk characterization. The first potential exposure pathway involves the inhalation of indoor air in the Mechanical Room of the NBHS building. Because the Mechanical Room is not an occupied space, risks and hazards associated with the inhalation of VOCs in indoor air were not quantified. However, conservatively assuming that maintenance workers spend one-half hour of each work day (250 days per year) in this room, the incremental risk and hazard would be an ELCR of 4E-07 and a HI of 0.008. Because these estimated values are negligible compared with the MassDEP criteria (i.e., ELCR of 1×10^{-5} and an HI of 1), the estimated risks and hazards associated with the VOC seep would not result in a change in the conclusions of the Method 3 risk characterization.

The second exposure pathway not quantitatively evaluated in the Method 3 risk characterization is the inhalation of PCBs released from building materials into indoor air. Indoor air PCBs were most recently sampled in 2008, prior to the most recent PCB abatement measures conducted in 2010 at the NBHS building. A comprehensive round of indoor air sampling for total PCBs is planned for 2011. The collection of indoor air PCB data is part of a separate investigation occurring at the NBHS building and is not discussed in this Phase II CSA report. Using the maximum detected total PCB concentration in 2008 (0.13 ug/m^3), the worst-case risk and hazard associated with total PCBs in indoor air is less than MassDEP criteria (ELCR of 1×10^{-5} and HI of 1). The risks and hazards are likely substantially lower than the MassDEP criteria since extensive mitigation measures have been implemented since the 2008 sampling event.

The risk calculation spreadsheets for these two indoor air pathways are contained in Appendix F-7.

7.10 Risk of Harm to Safety, Public Welfare, and the Environment

The following sections present a characterization of risk to safety, public welfare, and an environmental risk characterization.

7.10.1 Characterization of Risk to Safety

The risk of harm to safety, as described in 310 CMR 40.0960, was evaluated for the Site. The Site location does not contain the following items related to potential site impacts:

- There are no rusted or corroded drums or containers, open pits or lagoons, at the Site.
- There is no threat of fire or explosion, or the presence of explosive vapors from potential site impacts; and
- There are no uncontainerized materials exhibiting the characteristics of corrosivity, reactivity, or flammability.

Based on the above information, it was determined that the Site does not pose a risk to safety.

7.10.2 Risk to Public Welfare

A comparison of soil EPCs to MCP UCLs is presented in Table 7-40 for each exposure point area and hot spot. The benzo(a)pyrene soil EPC at "hot spot" SB-308 (3.5') exceeds the MCP UCL of 300 mg/kg. No other soil EPC exceeds its respective MCP UCL. Individual concentrations detected in groundwater at the Site also did not exceed MCP UCLs, as presented on Tables 7-35 (site-wide groundwater) and 7-36 (MW-27).

With regard to public welfare, no community in the vicinity of the Site is believed to be currently experiencing, or expected to experience, significant adverse impacts as a result of the degradation of public or private resources directly attributable to the soil and groundwater impacts at the Site. No other non-pecuniary effects are known to be present, or to be accruing, due to soil and groundwater impacts at this Site. Individual concentrations in groundwater at the Site did not exceed MCP UCLs. However, benzo(a)pyrene in hot spot SB-308 soil exceeded the MCP UCL of 300 mg/kg for this contaminant. Based on this information, response actions are necessary to achieve a condition of No Significant Risk.

7.10.3 Environmental Risk Characterization

This environmental risk characterization briefly describes the terrestrial habitat present at the NBHS campus and evaluates the quality of the habitat associated with the Site. This risk assessment represents a Stage I - Method 3 Environmental Risk Characterization (ERC) under the MCP and was conducted in accordance with the *Guidance for Disposal Site Risk Characterization, Method 3 - Environmental Risk Characterization.* Massachusetts Department of Environmental Protection. Interim Final Policy WSC/ORS-95-141, April 1996. The objectives of this Stage I screening ERC are to determine whether significant environmental exposure exists at the Site and whether additional investigation to assess environmental risks is warranted.

The Site is located within an urbanized setting that provides limited terrestrial habitat for ecological receptors. No aquatic or wetland habitats are present on the Site or in the vicinity of the NBHS. A small wooded area containing both forested upland and an isolated forested wetland is present to the north of the Site and represents the only undeveloped habitat in the vicinity of the Site. Based on a review of priority habitats (Natural Heritage Atlas, 13th Edition, MassGIS, 2008), no state-listed threatened, endangered or species of special concern are present at the Site or in the vicinity. In addition, Areas of Critical Environmental Concern (ACEC) are not located in the vicinity of the Site. Furthermore, due to the nearly level topographic conditions present at the Site, transport of surface soil chemicals to off-Site, sensitive, habitats such as ACECs or wetlands is extremely unlikely.

The fenced and unfenced playing fields containing areas of exposed soil and grass represent maintained, landscaped habitats that provide limited value for ecological receptors. Undeveloped land consisting of non-maintained areas of forest, scrub-shrub or grassland is not present at the fields. The existing buildings, driveways and parking areas associated with the

high school (as well as additional impervious areas consisting of basketball/tennis courts) comprise a significant area of impervious surfaces that are present within the campus. Currently, vegetation comprised primarily of maintained lawn is present in scattered patches throughout most of the campus while associated landscape plantings such as ornamental trees are typically present along the edges of parking areas and adjacent to buildings. These vegetated areas also represent maintained, landscaped habitats that provide limited value for ecological receptors. Undeveloped land consisting of non-maintained areas of forest, scrub-shrub or grassland is not present on the campus. Land use at the Site is not expected to change in the foreseeable future that would result in the establishment of more valuable habitats for terrestrial receptors.

Groundwater EPCs are summarized in Tables 7-35 and 7-36. As shown in these tables, the groundwater analysis indicates the presence of total lead in monitoring wells MW-5 (19.2 µg/L) and MW-HRC-33 (10.5 µg/L) in excess of Method 1 GW-3 groundwater criteria (10 µg/L). However, dissolved lead was not detected in MW-5 or MW-HRC-33 groundwater, indicating a condition of no significant risk to the environment for groundwater exposure pathways.

Therefore, in accordance with the ERC guidance, no significant soil exposure pathways exist at the Site and groundwater data indicate a condition of no significant risk to environmental receptors. Therefore, further ecological investigation at the Site is not warranted.

7.11 Conclusions

No IH condition currently exists at the Site. However, soil EPCs for PAHs and lead are associated with HIs greater than 1 and/or ELCRs greater than 1×10^{-5} for current and future Site conditions. As a result, a Condition of No Significant Risk does not exist for potential soil impacts at the Site under current and future use scenarios. In addition, a Condition of No Significant Risk does not exist for dermal contact by construction workers in connection with groundwater at MW-27.

With regard to public welfare, no community in the vicinity of the Site is believed to be currently experiencing, or expected to experience, significant adverse impacts as a result of the degradation of public or private resources directly attributable to the soil and groundwater impacts at the Site. No other non-pecuniary effects are known to be present, or to be accruing, due to soil and groundwater impacts at this Site. Individual concentrations in groundwater at the campus did not exceed MCP UCLs. However, benzo(a)pyrene in hot spot SB-308 soil exceeded the MCP UCL of 300 mg/kg for this contaminant. Based on this information a condition of No Significant Risk to public welfare does not exist at the Site.

A Stage I Environmental Risk Characterization indicated no significant soil exposure pathways exist at the Site and groundwater data indicate a condition of No Significant Risk to environmental receptors. Therefore, further ecological investigation at the Site is not warranted.

8.0 DATA ASSESSMENT

TRC's Lead Chemist coordinated, tracked, and oversaw sample analyses and validation of data produced. TRC validates PCB Aroclor soil and groundwater data in accordance with relevant EPA guidance to Tier II. VOC, metals, PAH and PCB homolog soil and groundwater analyses are evaluated for usability consistent with the Massachusetts Department of Environmental Protection (MassDEP) Compendium of Analytical Methods (CAM). Data usability evaluations and data validation are performed on an ongoing basis to support regulatory submittals where required.

Copies of laboratory reports not previously submitted are presented in Appendix E.

TRC's data management team incorporated electronic data deliverables (EDDs) from the analytical laboratory into TRC's proprietary Lowell Information System (LIS) database, and produced standardized analytical data tables with comparisons to relevant regulatory standards and other applicable criteria. All TRC data associated with soil and groundwater samples utilized for this report were reviewed. Data from BETA sampling activities were not reviewed, except on a limited basis in order to confirm or reject certain suspect data.

9.0 CONCLUSIONS

TRC completed this Phase II CSA Report for the NBHS portion of the disposal site tracked under RTN 4-15685. This Phase II CSA included collection and laboratory analyses of soil, groundwater, indoor air and soil gas samples to characterize the nature and extent of impacts at the Site. The Phase II CSA also includes an MCP Method 3 risk characterization to characterize the potential risk of harm to health, safety, public welfare and the environment posed by the Site.

Based on the results of the Phase II CSA, TRC has developed the following conclusions:

- The Site is underlain by deposits of potentially impacted fill material associated with historical and undocumented waste management practices.

- Environmental media known to be potentially impacted include soil, groundwater, subslab soil vapor and indoor air.

- It is currently safe for people to occupy NBHS and use the campus around the school. The evaluation assumed that someone spends 8 hours per day, 5 days per week for 27 years in NBHS. There is No Significant Risk to the health of building occupants.

- Outside the high school, staff, students, and visitors use the campus for various reasons. Activities include people walking across the campus, participating in outdoor gym classes, or cutting grass. TRC considered how people use the campus in evaluating whether people could potentially be exposed to chemicals in the surface soil (soil that is not beneath pavement). TRC determined that the potential exposures to surface soils in the 0 to 1 foot depth zone do not pose a significant risk, considering the possibility of inhaling dust, eating a small amount of surface soil, and coming into skin contact with surface soil. In reaching this conclusion, TRC considered how often and at what intensity high school staff (such as faculty and maintenance personnel), students, and visitors may use the campus.

- No Imminent Hazard conditions exist at the Site based on data collected through November 2010.

- Soil Exposure Point Concentrations (EPCs) for PAHs and lead are associated with Hazard Indices (HIs) greater than 1 and/or Excess Lifetime Cancer Risks (ELCRs) greater than 1×10^{-5} for current and future Site conditions in the top 3 feet of soil. As a result, a Condition of No Significant Risk does not exist for potential soil impacts at the Site under current and future use scenarios. Remedial actions are needed to achieve Site closure.

- The exposure points and chemicals determined to pose a significant risk to human health under current conditions, applicable to the top 3 feet of soil, are:

    - HS-3: lead (older child/teenage student, daycare child and adult staff)
    - HS-4: PCBs and lead (daycare child)

- HS-5: lead (older child/teenage student and daycare child)
- HS-6: benzo(a)pyrene and lead (older child/teenage student, daycare child and adult staff)
- HS-8: lead (daycare child)
- HS-10: lead (daycare child)

- Under future conditions, the 0 to 15 feet soil interval at exposure points HS-1, HS-2 and HS-7 is associated with a condition of No Significant Risk. The exposure points and chemicals determined to pose a significant risk to human health under future conditions, applicable to the top 15 feet of soil, are:

  - HS-3: lead (older child/teenage student, daycare child, adult staff and construction worker)
  - HS-4: PCBs and lead (daycare child and construction worker)
  - HS-5: lead (daycare child and construction worker)
  - HS-6: benzo(a)pyrene and lead (older child/teenage student, daycare child, adult staff and construction worker)
  - HS-8: lead (daycare child)
  - HS-9: lead (older child/teenage student, daycare child and construction worker)
  - HS-10: lead (older child/teenage student, daycare child and construction worker)
  - Hot Spot SB-308 (3.5'): benzo(a)pyrene, dibenz(a,h)anthracene, benzo(a)anthracene, benzo(b)fluoranthene, indeno(1,2,3-cd)pyrene and lead (older child/teenage student, daycare child, adult staff and construction worker)
  - HS-11: lead (daycare child and construction worker)
  - Hot Spot MW-27: trichloroethene and vinyl chloride (construction worker)

- Exposure point HS-11 represents composite samples collected from the Site by BETA in 2006, for which depth and location are unknown. These samples clearly demonstrate that pesticides and herbicides are not of concern at the NBHS campus, and reinforce the finding that PAHs and metals are the principal impacts in soil at the Site. Because the locations of the BETA PAH and metal concentrations in excess of Method 1 S-1soil standards are not known, TRC performed additional investigative work to identify potential data gaps, which were addressed by the additional soil sampling and analysis. The soil data from that additional sampling effort were included in the overall risk characterization.

- TRC performed soil sampling for polychlorinated dibenzo-p-dioxins (dioxins), polychlorinated dibenzofurans (furans) and dioxin-like polychlorinated biphenyls (PCBs) (collectively referred to as dioxin-like compounds or congeners) in 2010 using a site-wide approach. The sampling locations targeted were previously sampled locations that TRC identified as an estimated worst-case scenario for dioxins, furans, and dioxin-like PCBs based on a review of all soil data. The site-wide EPCs for the various soil depth intervals, expressed as the contribution of Toxicity Equivalents (Total TEQs) for dioxin-like compounds, were used in conjunction with the depth-specific EPCs calculated for

each exposure area to evaluate cumulative risks and hazards. Under a site-specific Method 3 risk characterization approach, the sum of dioxin-like PCB Congeners Toxicity Equivalents (TEQs) and dioxin TEQs from the sampling are associated with No Significant Risk.

- The biased sampling approach adopted for dioxin-like compounds was intended to avoid underestimating risk from exposure to dioxins in campus soil and, in all likelihood, results in overestimating risk.

- The soil data reviewed by TRC indicate that PCBs are the only chlorinated dioxin/dibenzofuran precursor compounds at PSWS. There is no other indication in the available analytical data of the presence of any other chlorinated organic compounds with the potential to serve as chlorinated dioxin/dibenzofuran precursors in significant concentrations.

- Groundwater from sub-slab monitoring well MW-27 groundwater is associated with a Condition of Significant Risk for dermal contact by construction workers. Remedial actions are needed to achieve Site closure for this condition.

- Chlorinated VOC groundwater data from beneath the Mechanical Room of the NBHS building (MW-27 and MW-28) exceed MCP Method 1 GW-2 groundwater standards, indicating a potentially complete vapor intrusion pathway in this area of the building. No other results greater than the MCP Method 1 GW-2 groundwater standards were found in groundwater located within 30 feet of the NBHS building. Soil vapor concentrations at subslab soil vapor sampling point PVP-6, located beneath the Mechanical Room, do not exceed soil vapor screening criteria; however, indoor air concentrations in the Mechanical Room exceed Indoor Air Threshold Values (IATVs) due to the presence of a groundwater seep and/or products containing COPCs in this room. VOC results in groundwater greater than the MCP Method 1 GW-2 groundwater standards beneath the Mechanical Room do not extend beyond the limits of the Mechanical Room, indicating that a complete vapor intrusion pathway is not present elsewhere in the NBHS building.

- The Mechanical Room is under a strong negative pressure with air from the room vented to the outside of the NBHS building, which works to prevent the migration of VOCs that enter the Mechanical Room from the groundwater seep to adjoining rooms. Therefore, VOCs detected in excess of IATVs in the indoor air of other areas of the NBHS building are present as a result of other indoor VOC sources (e.g., VOC-containing products in the auto shop, etc.), not as a consequence of vapor intrusion.

- The groundwater EPC for total lead in monitoring well MW-5 exceeds the MCP Method 1 GW-3 groundwater standard. However, the dissolved lead result for this well did not exceed the MCP Method 1 GW-3 groundwater standard. As a result, a Condition of No Significant Risk exists for groundwater at the Site under current and future use scenarios, except as described above for VOCs in MW-27/28.

- The EPC for benzo(a)pyrene in soil at soil sample location SB-308 (3.5') exceeds the MCP Upper Concentration Limit (UCL) of 300 mg/kg. No other soil EPC exceeds its respective MCP UCL. Individual concentrations detected in groundwater at the Site also did not exceed MCP UCLs.

- With regard to public welfare, no community in the vicinity of the Site is believed to be currently experiencing, or expected to experience, significant adverse impacts as a result of the degradation of public or private resources directly attributable to the soil and groundwater impacts at the Site. No other non-pecuniary effects are known to be present, or to be accruing, due to soil and groundwater impacts at this Site. Individual concentrations in groundwater at the Site did not exceed MCP UCLs. However, benzo(a)pyrene in hot spot SB-308 soil exceeded the MCP UCL of 300 mg/kg for this contaminant. Based on this information a condition of No Significant Risk to public welfare does not exist at the Site.

- A Stage I Environmental Risk Characterization indicated no significant soil exposure pathways exist at the Site and groundwater data indicate a condition of No Significant Risk to environmental receptors. Therefore, further ecological investigation the Site is not warranted.

- Remedial actions need to be undertaken to achieve Site closure.

10.0 PHASE II OUTCOME

In accordance with 310 CMR 40.0840, the following are possible outcomes upon completion of a Phase II CSA:

1. Comprehensive Remedial Actions are necessary at the Site to achieve a Response Action Outcome (RAO); or

2. The requirements of a Class A, B, or C RAO have been met, and a RAO Statement supported by information from the Phase II CSA report shall be submitted to the DEP.

Based on the findings of this Phase II CSA, comprehensive remedial actions are needed to achieve Site closure.

11.0 REFERENCES

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TABLES

TABLE 4-1
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Children's Playground Area (Exposure Point Area HS-1)
New Bedford, Massachusett

Analysis	Analyte						Sample Location:	PG-1	PG-2	PG-2A	PG-3		PG-4	PG-5	PG-6		SS-63	SS-64	SS-65
							Sample Depth (ft.):	0-0.5	0-0.5	1-3	0-0.5	0.5-1.5	0-0.5	0-0.5	0-0.5	0.5-3	0-0.5	0-0.5	0-0.5
							Sample Date:	2/22/2006	2/22/2006	4/7/2009	2/22/2006	2/22/2006	2/22/2006	2/22/2006	2/22/2006	2/22/2006	12/15/2008	12/15/2008	12/15/2008
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA												
Metals																			
(mg/kg)	Arsenic	20	20	20	20	20	N/A	NA	NA	2.78 U	NA	**1.22**	NA	NA	NA	**0.786**	3.02 U	4.64 U	3.75 U
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	**7.39**	NA	**43**	NA	NA	NA	**4.93**	**15.5**	**18.8**	**41.2**
	Cadmium	2	2	30	30	2	N/A	NA	NA	0.28 U	NA	**0.36**	NA	NA	NA	0.36 U	0.31 U	0.47 U	0.38 U
	Chromium	30	30	200	200	30	N/A	NA	NA	**2.74**	NA	**26**	NA	NA	NA	**1.72**	**3.84**	**5.45**	**8.43**
	Lead	300	300	300	300	300	N/A	NA	NA	**3.64**	NA	**3.24**	NA	NA	NA	**2.93**	**6.35**	**15.7**	**16.9**
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	**4.02**	**4.51**	**10.4**
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	**7.21**	**9.28** U	**11.9**
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	**26.0**	**27.6**	**32.3**

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.

U - Compound was not detected at specified quantitation limit.

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

RC - Reportable Concentration.

TSCA - Toxic Substances Control Act criteria.

Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.

TABLE 4-2
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Fenced Playing Field (EP2)
New Bedford, Massachusetts

Analysis	Analyte																	
							Sample Location:	HRA30	HRE-29		HRF-30	HRF-30A	HRG23	HRG25		HRG27		HRG29
							Sample Depth (ft.):	0.75-1	0.67-1	1-3	1-2	1-3	2.5-3	0.5-3	1-3	0.5-3	1-3	0.75-1
							Sample Date:	2/22/2006	2/22/2006	4/7/2009	2/22/2006	4/7/2009	2/21/2006	2/21/2006	4/7/2009	2/21/2006	4/7/2009	2/22/2006
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA											
VOCs																		
(mg/kg)	Acetone	50	400	50	400	6.0	N/A	NA	NA	NA	NA	NA	NA	**0.55**	NA	NA	NA	NA
	Chloromethane	NS	NS	NS	NS	100	N/A	NA	NA	NA	NA	NA	NA	**0.18**	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	**0.15**	NA	NA	NA	NA
	1,2,4-Trichlorobenzene	70	500	70	900	2	N/A	NA	NA	NA	NA	NA	NA	0.062 U	NA	NA	NA	NA
	1,2,3-Trichlorobenzene	400*	20*	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	0.062 U	NA	NA	NA	NA
PAHs																		
(mg/kg)	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	NA	0.183 U	NA	0.191 U	NA	NA	0.190 U	NA	0.188 U	NA
	Acenaphthylene	600	10	600	10	1	N/A	NA	NA	0.183 U	NA	0.191 U	NA	NA	**0.193**	NA	0.188 U	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	0.183 U	NA	0.191 U	NA	NA	**0.658**	NA	0.188 U	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	NA	0.183 U	NA	0.191 U	NA	NA	**1.86**	NA	0.188 U	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	NA	0.183 U	NA	0.191 U	NA	NA	**1.73**	NA	0.188 U	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	NA	0.183 U	NA	0.191 U	NA	NA	**1.85**	NA	0.188 U	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	0.183 U	NA	0.191 U	NA	NA	**1.02**	NA	0.188 U	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	NA	0.183 U	NA	0.191 U	NA	NA	**0.710**	NA	0.188 U	NA
	Chrysene	70	70	400	400	70	N/A	NA	NA	0.183 U	NA	0.191 U	NA	NA	**2.36**	NA	0.188 U	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	NA	0.183 U	NA	0.191 U	NA	NA	**0.321**	NA	0.188 U	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	0.183 U	NA	0.230	NA	NA	**3.11**	NA	0.188 U	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	0.183 U	NA	0.191 U	NA	NA	**0.386**	NA	0.188 U	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	NA	0.183 U	NA	0.191 U	NA	NA	**1.26**	NA	0.188 U	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	NA	0.183 U	NA	0.191 U	NA	NA	0.190 U	NA	0.188 U	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	0.183 U	NA	0.191 U	NA	NA	0.190 U	NA	0.188 U	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	NA	0.183 U	NA	0.234	NA	NA	**4.38**	NA	0.188 U	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	0.183 U	NA	0.370	NA	NA	**4.37**	NA	0.188 U	NA
PCBs																		
(mg/kg)	Aroclor 1254	2	2	3	3	2	1	**0.99**	**0.82**	0.0527 U	**1.1**	**0.234 J**	0.16 U	**0.30**	0.0559 U	**3.79**	0.0548 U	**0.64**
	Aroclor 1260	2	2	3	3	2	1	**0.94**	0.028 U	0.0527 U	0.029 U	0.0539 U	0.16 U	0.13 U	0.0559 U	0.11 U	0.0548 U	0.11 U
	Total PCBs	2	2	3	3	2	1	**1.93**	**0.82**	0.0527 U	**1.1**	**0.234 J**	0.31 U	**0.3**	0.0559 U	**3.79**	0.0548 U	**0.64**
PCB Homologs																		
(mg/kg)	Tetrachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Heptachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																		
(mg/kg)	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Arsenic	20	20	20	20	20	N/A	NA	NA	2.74 U	NA	2.86 U	NA	NA	**9.74**	NA	2.81 U	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	**6.64**	NA	11.1	NA	NA	**74.8**	NA	**15.2**	NA
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	NA	NA	0.28 U	NA	0.29 U	NA	NA	**0.53**	NA	0.29 U	NA
	Chromium	30	30	200	200	30	N/A	NA	NA	**1.96**	NA	2.13	NA	NA	**8.61**	NA	**2.84**	NA
	Lead	300	300	300	300	300	N/A	NA	NA	**3.51**	NA	5.77	NA	NA	**315**	NA	**7.06**	NA
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
GRO																		
(mg/kg)	Gasoline Range Organics	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	**17.3**	**17.3**	NA	NA	NA

Notes:
All units in mg/kg unless otherwise specified.
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
NS - No standard available for this compound.
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 Method 1 standards.
Values shown in bold and outlined exceed TSCA but are less than the listed Method 1 standards..
VOCs - Volatile Organic Compounds.
PAHs - Polynuclear Aromatic Hydrocarbons.
PCBs - Polychlorinated Biphenyls.
GRO - Gasoline Range Organics.
RC - Reportable Concentration.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.

TABLE 4-2
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Fenced Playing Field (EP2)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	HRG-29		HRI23	HRI27	HRI29	HRJ-26	HRJ-30	NBHS-SS-7	SB-366			
							Sample Depth (ft.):	1-3	1-3	2-3	1.25-3	1.5-3	2.5-4	2-3.5	0-0.5	1	1-3	4	7
							Sample Date:	4/7/2009	4/7/2009	2/21/2006	2/21/2006	2/21/2006	2/21/2006	2/21/2006	8/6/2008	2/26/2009	2/26/2009	2/26/2009	2/26/2009
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA		Field Dup										
VOCs																			
(mg/kg)	Acetone	50	400	50	400	6.0	N/A	NA	NA	NA	NA	0.36 U	NA	NA	NA	NA	NA	NA	NA
	Chloromethane	NS	NS	NS	NS	100	N/A	NA	NA	NA	NA	0.14 U	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	**0.26**	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trichlorobenzene	70	500	70	900	2	N/A	NA	NA	NA	NA	**0.17**	NA	NA	NA	NA	NA	NA	NA
	1,2,3-Trichlorobenzene	400*	20*	NS	NS	NS	N/A	NA	NA	NA	NA	**0.21**	NA	NA	NA	NA	NA	NA	NA
PAHs																			
(mg/kg)	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	0.191 U	0.188 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	0.191 U	0.188 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	0.191 U	0.188 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	**0.511**	**0.540**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	**0.528**	**0.472**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	**0.571**	**0.452**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	**0.506**	**0.389**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	**0.222**	0.188 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	70	70	400	400	70	N/A	**0.572**	**0.602**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	0.191 U	0.188 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	**0.782**	**0.701**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	0.191 U	0.188 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	**0.548**	**0.418**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	0.191 U	0.188 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	0.191 U	0.188 U	NA	NA	**0.260**	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	**0.768**	**0.788**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	**1.28**	**1.31**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs																			
(mg/kg)	Aroclor 1254	2	2	3	3	2	1	0.0561 U	0.0578 U	0.14 U	0.11 U	0.12 U	**0.25**	**0.25**	**0.102 J**	**0.282 J**	**0.238 J**	0.0587 U	0.220 UJ
	Aroclor 1260	2	2	3	3	2	1	0.0561 U	0.0578 U	0.14 U	0.11 U	0.12 U	**0.27**	**0.17**	0.0567 U	0.0632 U	**0.107 J**	0.0587 U	0.220 UJ
	Total PCBs	2	2	3	3	2	1	0.0561 U	0.0578 U	0.28 U	0.22 U	0.25 U	**0.52**	**0.42**	**0.102 J**	**0.282 J**	**0.345 J**	0.0587 U	0.220 UJ
PCB Homologs																			
(mg/kg)	Tetrachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Heptachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																			
(mg/kg)	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	**0.051**	**0.016**	**0.420**	**0.134**
	Arsenic	20	20	20	20	20	N/A	2.86 U	2.81 U	NA	NA	NA	NA	NA	NA	**3.68**	2.68 U	**12.0**	9.97 U
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	**29.6**	**26.4**	NA	NA	NA	NA	NA	NA	**40.4**	**21.7**	**783**	**153**
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	0.33 U	0.27 U	**0.64**	1.00 U
	Cadmium	2	2	30	30	2	N/A	0.29 U	0.29 U	NA	NA	NA	NA	NA	NA	0.33 U	0.27 U	**9.17**	1.00 U
	Chromium	30	30	200	200	30	N/A	**11.0**	**3.90**	NA	NA	NA	NA	NA	NA	**19.3**	**2.77**	**44.3**	**3.27**
	Lead	300	300	300	300	300	N/A	**84.2**	**56.2**	NA	NA	NA	NA	NA	NA	**28.3**	**37.5**	**2,360**	**56.2**
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	**8.83**	**2.57**	**15.7**	**14.4**
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	0.66 U	0.54 U	0.60 U	2.00 U
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	**18.4**	5.35 U	**23.2**	20.0 U
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	**33.7**	**28.2**	**958**	**375**
GRO																			
(mg/kg)	Gasoline Range Organics	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	**9.4**	NA	NA	NA	NA	NA	NA	NA

Notes:
All units in mg/kg unless otherwise specified.
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
NS - No standard available for this compound.
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 Method 1 standards.
Values shown in bold and outlined exceed TSCA but are less than the listed Method 1 standards..
VOCs - Volatile Organic Compounds.
PAHs - Polynuclear Aromatic Hydrocarbons.
PCBs - Polychlorinated Biphenyls.
GRO - Gasoline Range Organics.
RC - Reportable Concentration.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.

TABLE 4-2
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Fenced Playing Field (EP2)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	SB-367				SS-9	SS-10		SS-11	SS-11		SS-12		SS-13		SS-14	
							Sample Depth (ft.):	1	1-3	5-6	8-9	0-0.5	0-0.5	0.5-1	0-0.5	0.5	2	0.5	2	0.5	1.5	0.5	2
							Sample Date:	2/26/2009	2/26/2009	2/26/2009	2/26/2009	7/23/2001	7/23/2001	7/23/2001	7/23/2001	8/6/2008	8/6/2008	8/6/2008	8/6/2008	8/6/2008	8/6/2008	8/6/2008	8/6/2008
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA																
VOCs (mg/kg)	Acetone	50	400	50	400	6.0	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloromethane	NS	NS	NS	NS	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trichlorobenzene	70	500	70	900	2	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,3-Trichlorobenzene	400*	20*	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs (mg/kg)	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	0.173 U	0.182 U	0.180 U	0.177 U	0.202 U	**0.197**	0.205 U	0.178 U
	Acenaphthylene	600	10	600	10	1	N/A	NA	NA	NA	NA	NA	NA	NA	NA	0.173 U	0.182 U	0.180 U	0.177 U	0.202 U	**0.329**	0.205 U	0.178 U
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	0.173 U	0.182 U	0.180 U	0.177 U	0.202 U	**1.21**	0.205 U	0.178 U
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	0.173 U	**0.308**	0.180 U	0.177 U	0.202 U	**3.40**	0.205 U	**0.210**
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	NA	NA	NA	NA	NA	NA	NA	0.173 U	**0.299**	0.180 U	0.177 U	0.202 U	**2.16**	0.205 U	**0.217**
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	0.173 U	**0.292**	0.180 U	0.177 U	0.202 U	**2.41**	0.205 U	**0.186**
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	0.173 U	**0.257**	0.180 U	0.177 U	0.202 U	**1.20**	0.205 U	**0.200**
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	NA	NA	NA	NA	NA	NA	NA	0.173 U	0.182 U	0.180 U	0.177 U	0.202 U	**1.73**	0.205 U	0.178 U
	Chrysene	70	70	400	400	70	N/A	NA	NA	NA	NA	NA	NA	NA	NA	0.173 U	**0.313**	0.180 U	0.177 U	0.202 U	**2.55**	0.205 U	**0.212**
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	NA	NA	NA	NA	NA	NA	NA	0.173 U	0.182 U	0.180 U	0.177 U	0.202 U	**0.240**	0.205 U	0.178 U
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	0.173 U	**0.627**	**0.309**	0.177 U	**0.218**	**6.71**	0.205 U	**0.431**
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	0.173 U	0.182 U	0.180 U	0.177 U	0.202 U	**0.442**	0.205 U	0.178 U
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	0.173 U	**0.255**	0.180 U	0.177 U	0.202 U	**1.57**	0.205 U	**0.181**
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	0.173 U	0.182 U	0.180 U	0.177 U	0.202 U	0.180 U	0.205 U	0.178 U
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	0.173 U	0.182 U	0.180 U	0.177 U	0.202 U	0.180 U	0.205 U	0.178 U
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	NA	NA	NA	NA	NA	NA	NA	0.173 U	**0.673**	**0.193**	0.177 U	0.202 U	**5.85**	0.205 U	**0.280**
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	0.173 U	**0.725**	**0.330**	0.177 U	0.202 U	**5.53**	0.205 U	**0.428**
PCBs (mg/kg)	Aroclor 1254	2	2	3	3	2	1	**0.1160 J**	**0.0687 J**	0.0698 U	0.140 U	0.100 U	**0.111**	**0.116**	0.100 U	0.0500 U	**0.497 J**	**0.491 J**	0.0511 U	**0.0978 J**	**1.15 J**	0.0575 U	**0.945 J**
	Aroclor 1260	2	2	3	3	2	1	0.0567 U	0.0552 U	0.0698 U	0.140 U	0.100 U	0.100 U	0.100 U	0.100 U	0.0500 U	**0.101 J**	**0.188 J**	0.0511 U	**0.0629 J**	**0.795 J**	0.0575 U	0.0522 U
	Total PCBs	2	2	3	3	2	1	**0.116 J**	**0.0687 J**	0.0698 U	0.140 U	0.100 U	**0.111**	**0.116**	0.100 U	0.0500 U	**0.598 J**	**0.679 J**	0.0511 U	**0.1607 J**	**1.945 J**	0.0575 U	**0.945 J**
PCB Homologs (mg/kg)	Tetrachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Heptachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (mg/kg)	Mercury	20	20	30	30	20	N/A	**0.093**	**0.064**	**0.092**	0.034 U	0.08 U	**0.09**	**0.19**	0.07 U	0.015 U	**0.087**	**0.031**	0.019 U	**0.061**	**0.368**	**0.050**	**0.127**
	Arsenic	20	20	20	20	20	N/A	3.06 U	2.70 U	**22.1**	4.18 U	**2.06**	**1.61**	**2.29**	**1.85**	2.59 U	**2.87**	2.69 U	2.65 U	3.03 U	**3.87**	**4.46**	2.66 U
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	**41.8**	**29.7**	**382**	**14.6**	**18**	**19**	**23**	**27**	5.18 U	**84.3**	**9.17**	**11.9**	**19.5**	**77.6**	**88.2**	**53.0**
	Beryllium	100	100	200	200	100	N/A	0.31 U	0.27 U	**0.61**	0.42 U	NA	NA	NA	NA	0.26 U	0.28 U	0.27 U	0.27 U	0.31 U	0.27 U	0.31 U	0.27 U
	Cadmium	2	2	30	30	2	N/A	**0.38**	0.27 U	**0.70**	0.42 U	0.40 U	0.35 U	**0.42**	0.33 U	0.26 U	**0.43**	0.27 U	0.27 U	0.31 U	**0.74**	**1.09**	**0.36**
	Chromium	30	30	200	200	30	N/A	**10.0**	**4.19**	**27.2**	**7.33**	**5.03**	**4.13**	**5.28**	**9.76**	**2.02**	**9.51**	**2.58**	**1.92**	**5.74**	**13.0**	**15.6**	**5.27**
	Lead	300	300	300	300	300	N/A	**65.0**	**36.1**	**425**	**2.91**	**27**	**43**	0.35 U	**16**	**1.86**	**137**	**42.9**	**4.03**	**43.2**	**338**	**363**	**58.8**
	Nickel	20	20	700	700	20	N/A	**4.27**	**3.31**	**49.3**	**6.13**	NA	NA	NA	NA	**1.52**	**5.15**	**1.53**	**2.07**	**3.04**	**8.23**	**10.0**	**3.98**
	Silver	100	100	200	200	100	N/A	0.62 U	0.54 U	0.70 U	0.84 U	0.40 U	0.35 U	0.35 U	0.33 U	0.52 U	**0.85**	0.54 U	0.53 U	**0.86**	**1.16**	**1.31**	**0.86**
	Vanadium	600	600	1,000	1,000	600	N/A	**11.4**	5.40 U	**56.1**	**8.36**	NA	NA	NA	NA	5.18 U	**7.30**	5.38 U	5.30 U	**10.3**	**14.9**	**18.7**	**5.70**
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	**50.5**	**25.1**	**323**	**25.8**	NA	NA	NA	NA	**4.57**	**67.9**	**19.7**	**14.2**	**38.4**	**129**	**151**	**64.0**
GRO (mg/kg)	Gasoline Range Organics	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.

TABLE 4-2
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Fenced Playing Field (EP2)
New Bedford, Massachusetts

Analysis	Analyte							SS-15		SS-16			SS-17		SS-18		SS-19		
							Sample Depth (ft.):	0.5	2	0.5	1	2	0.5	1.5	0.5	2	0.5	1	2
							Sample Date:	8/6/2008	8/6/2008	8/6/2008	8/6/2008	8/6/2008	8/6/2008	8/6/2008	8/6/2008	8/6/2008	8/7/2008	8/7/2008	8/7/2008
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA												
VOCs (mg/kg)	Acetone	50	400	50	400	6.0	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloromethane	NS	NS	NS	NS	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trichlorobenzene	70	500	70	900	2	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,3-Trichlorobenzene	400*	20*	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs (mg/kg)	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	0.180 U	0.177 U	0.179 U	**0.200**	0.172 U	0.180 U	0.174 U	0.178 U	0.171 U	0.176 U	0.933 U	0.170 U
	Acenaphthylene	600	10	600	10	1	N/A	0.180 U	0.177 U	0.179 U	0.182 U	0.172 U	0.180 U	0.174 U	0.178 U	0.171 U	0.176 U	0.933 U	0.170 U
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	0.180 U	0.177 U	0.179 U	**0.845**	0.172 U	0.180 U	0.174 U	0.178 U	0.171 U	0.176 U	**0.964**	0.170 U
	Benzo(a)anthracene	7	7	40	40	7	N/A	0.180 U	0.177 U	0.179 U	**2.30**	0.172 U	0.180 U	0.174 U	0.178 U	0.171 U	0.176 U	**2.15**	0.170 U
	Benzo(a)pyrene	2	2	4	4	2	N/A	0.180 U	0.177 U	0.179 U	**1.99**	0.172 U	0.180 U	0.174 U	0.178 U	0.171 U	0.176 U	**1.89**	0.170 U
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	0.180 U	0.177 U	0.179 U	**2.11**	0.172 U	0.180 U	0.174 U	0.178 U	0.171 U	0.176 U	**2.24**	0.170 U
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	0.180 U	0.177 U	0.179 U	**1.06**	0.172 U	0.180 U	0.174 U	0.178 U	0.171 U	0.176 U	**1.43**	0.170 U
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	0.180 U	0.177 U	0.179 U	**0.978**	0.172 U	0.180 U	0.174 U	0.178 U	0.171 U	0.176 U	0.933 U	0.170 U
	Chrysene	70	70	400	400	70	N/A	0.180 U	0.177 U	0.179 U	**2.12**	0.172 U	0.180 U	0.174 U	0.178 U	0.171 U	0.176 U	**2.13**	0.170 U
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	0.180 U	0.177 U	0.179 U	**0.303**	0.172 U	0.180 U	0.174 U	0.178 U	0.171 U	0.176 U	0.933 U	0.170 U
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	0.180 U	0.177 U	0.179 U	**3.96**	0.172 U	0.180 U	0.174 U	0.178 U	0.171 U	0.176 U	**5.06**	0.170 U
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	0.180 U	0.177 U	0.179 U	**0.412**	0.172 U	0.180 U	0.174 U	0.178 U	0.171 U	0.176 U	0.933 U	0.170 U
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	0.180 U	0.177 U	0.179 U	**1.24**	0.172 U	0.180 U	0.174 U	0.178 U	0.171 U	0.176 U	**1.51**	0.170 U
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	0.180 U	0.177 U	0.179 U	0.182 U	0.172 U	0.180 U	0.174 U	0.178 U	0.171 U	0.176 U	0.933 U	0.170 U
	Naphthalene	40	500	40	1,000	4	N/A	0.180 U	0.177 U	0.179 U	0.182 U	0.172 U	0.180 U	0.174 U	0.178 U	0.171 U	0.176 U	0.933 U	0.170 U
	Phenanthrene	500	500	1,000	1,000	10	N/A	0.180 U	0.177 U	0.179 U	**3.25**	0.172 U	0.180 U	0.174 U	0.178 U	0.171 U	0.176 U	**4.42**	0.170 U
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	0.180 U	0.177 U	0.179 U	**3.41**	0.172 U	0.180 U	0.174 U	0.178 U	0.171 U	0.176 U	**4.48**	0.170 U
PCBs (mg/kg)	Aroclor 1254	2	2	3	3	2	1	0.0528 U	**0.0873 J**	0.0526 U	**3.43 J**	0.0500 U	0.0518 U	0.0507 U	0.0502 U	0.0500 U	0.0512 U	**4.93 J**	0.0500 U
	Aroclor 1260	2	2	3	3	2	1	0.0528 U	0.0520 U	0.0526 U	0.107 U	0.0500 U	0.0518 U	0.0507 U	0.0502 U	0.0500 U	0.0512 U	0.166 U	0.0500 U
	Total PCBs	2	2	3	3	2	1	0.0528 U	**0.0873 J**	0.0526 U	**3.43 J**	0.0500 U	0.0518 U	0.0507 U	0.0502 U	0.0500 U	0.0512 U	**4.93 J**	0.0500 U
PCB Homologs (mg/kg)	Tetrachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	NA	NA	**0.32**	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	NA	NA	**2.1**	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	NA	NA	**1.0**	NA	NA	NA	NA	NA	NA	NA	NA
	Heptachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	NA	NA	**0.036 J**	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	**3.5**	NA	NA	NA	NA	NA	NA	NA	NA
Metals (mg/kg)	Mercury	20	20	30	30	20	N/A	0.013 U	**0.181**	0.015 U	**0.313**	0.020 U	0.015 U	0.021 U	0.024 U	0.017 U	0.020 U	**0.616**	**0.017**
	Arsenic	20	20	20	20	20	N/A	**4.36**	2.66 U	**4.75**	**5.70**	2.58 U	**4.87**	2.61 U	**4.61**	2.56 U	**4.23**	**8.07**	2.55 U
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	**167**	**15.9**	**209**	**130**	**7.08**	**202**	**11.3**	**181**	**6.92**	**204**	**437**	**11.2**
	Beryllium	100	100	200	200	100	N/A	0.27 U	0.27 U	0.27 U	0.28 U	0.26 U	0.27 U	0.27 U	0.27 U	0.26 U	0.27 U	0.28 U	**0.47**
	Cadmium	2	2	30	30	2	N/A	**0.29**	0.27 U	0.27 U	**1.68**	0.26 U	0.27 U	0.27 U	0.27 U	0.26 U	0.27 U	**5.29**	0.26 U
	Chromium	30	30	200	200	30	N/A	**54.6**	**2.34**	**58.6**	**15.4**	**2.09**	**54.9**	**2.85**	**59.0**	**1.94**	**68.1**	**30.2**	**2.24**
	Lead	300	300	300	300	300	N/A	**0.97**	**13.7**	0.81 U	**342**	**4.07**	0.81 U	**2.78**	**0.87**	**2.31**	**4.02**	**671**	**4.41**
	Nickel	20	20	700	700	20	N/A	**33.6**	**2.25**	**29.1**	**10.0**	**1.87**	**23.3**	**2.12**	**25.1**	**2.42**	**30.9**	**21.4**	**2.70**
	Silver	100	100	200	200	100	N/A	**5.35**	**0.54**	**3.05**	**1.36**	0.52 U	**2.07**	0.53 U	**1.11**	**0.98**	**4.93**	**5.89**	**1.38**
	Vanadium	600	600	1,000	1,000	600	N/A	**39.1**	5.31 U	**49.2**	**14.1**	5.16 U	**48.0**	5.22 U	**47.2**	5.12 U	**50.3**	**24.6**	5.10 U
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	**24.0**	**14.9**	**30.0**	**190**	**6.75**	**30.4**	**8.27**	**30.5**	**7.51**	**49.6**	**562**	**9.06**
GRO (mg/kg)	Gasoline Range Organics	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
All units in mg/kg unless otherwise specified.
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
NS - No standard available for this compound.
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 Method 1 standards.
Values shown in bold and outlined exceed TSCA but are less than the listed Method 1 standards..
VOCs - Volatile Organic Compounds.
PAHs - Polynuclear Aromatic Hydrocarbons.
PCBs - Polychlorinated Biphenyls.
GRO - Gasoline Range Organics.
RC - Reportable Concentration.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.

TABLE 4-2
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Fenced Playing Field (EP2)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	SS-20				SS-21		SS-22		SS-23		SS-24		
							Sample Depth (ft.):	0.5	1	1	2	0.5	2	0.5	1.5	0.5	2	0.5	1.5	1-3
							Sample Date:	8/7/2008	8/7/2008	8/7/2008	8/7/2008	8/7/2008	8/7/2008	8/7/2008	8/7/2008	8/7/2008	8/7/2008	8/7/2008	8/7/2008	3/31/2009
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA			Field Dup										
VOCs																				
(mg/kg)	Acetone	50	400	50	400	6.0	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloromethane	NS	NS	NS	NS	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trichlorobenzene	70	500	70	900	2	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,3-Trichlorobenzene	400*	20*	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs																				
(mg/kg)	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	0.178 U	0.185 U	0.183 U	0.173 U	0.201 U	1.93	0.191 U	0.181 U	0.196 U	0.176 U	0.198 U	0.184 U	0.920
	Acenaphthylene	600	10	600	10	1	N/A	0.178 U	0.185 U	0.183 U	0.173 U	0.201 U	0.181 U	0.191 U	0.181 U	0.196 U	0.176 U	0.198 U	0.184 U	2.40
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	0.178 U	0.185 U	0.183 U	0.173 U	0.201 U	3.19	0.191 U	0.182	0.196 U	0.176 U	0.198 U	0.184 U	4.11
	Benzo(a)anthracene	7	7	40	40	7	N/A	0.178 U	0.473	0.228	0.173 U	0.398	4.16	0.191 U	0.789	0.196 U	0.176 U	0.198 U	0.184 U	6.33
	Benzo(a)pyrene	2	2	4	4	2	N/A	0.178 U	0.458	0.207	0.173 U	0.381	3.93	0.191 U	0.749	0.196 U	0.176 U	0.198 U	0.184 U	5.28
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	0.178 U	0.553	0.245	0.173 U	0.453	4.01	0.191 U	0.843	0.196 U	0.176 U	0.198 U	0.184 U	6.09
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	0.178 U	0.394	0.183 U	0.173 U	0.303	3.13	0.191 U	0.508	0.196 U	0.176 U	0.198 U	0.184 U	2.47
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	0.178 U	0.202	0.183 U	0.173 U	0.201 U	1.66	0.191 U	0.325	0.196 U	0.176 U	0.198 U	0.184 U	2.42
	Chrysene	70	70	400	400	70	N/A	0.178 U	0.460	0.185	0.173 U	0.404	4.05	0.191 U	0.795	0.196 U	0.176 U	0.198 U	0.184 U	5.98
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	0.178 U	0.185 U	0.183 U	0.173 U	0.201 U	0.722	0.191 U	0.181 U	0.196 U	0.176 U	0.198 U	0.184 U	0.780
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	0.178 U	0.984	0.521	0.173 U	0.826	10.3	0.191 U	1.31	0.196 U	0.176 U	0.266	0.184 U	12.1
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	0.178 U	0.185 U	0.183 U	0.173 U	0.201 U	1.37	0.191 U	0.181 U	0.196 U	0.176 U	0.198 U	0.184 U	3.20
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	0.178 U	0.425	0.183 U	0.173 U	0.334	3.41	0.191 U	0.585	0.196 U	0.176 U	0.198 U	0.184 U	3.35
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	0.178 U	0.185 U	0.183 U	0.173 U	0.201 U	0.392	0.191 U	0.181 U	0.196 U	0.176 U	0.198 U	0.184 U	1.52
	Naphthalene	40	500	40	1,000	4	N/A	0.178 U	0.185 U	0.183 U	0.173 U	0.201 U	0.658	0.191 U	0.181 U	0.196 U	0.176 U	0.198 U	0.184 U	2.55
	Phenanthrene	500	500	1,000	1,000	10	N/A	0.178 U	0.541	0.283	0.173 U	0.610	11.2	0.191 U	0.853	0.196 U	0.176 U	0.198 U	0.184 U	18.9
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	0.178 U	1.03	0.470	0.173 U	0.897	11.2	0.209	1.43	0.196 U	0.176 U	0.278	0.184 U	11.1
PCBs																				
(mg/kg)	Aroclor 1254	2	2	3	3	2	1	0.0519 U	0.307 J	0.500 J	0.0502 U	0.486 J	0.269 J	0.0543 U	0.654 J	0.0590 U	0.0522 U	0.0545 U	0.0524 U	0.0599 U
	Aroclor 1260	2	2	3	3	2	1	0.0519 U	0.0541 U	0.0517 U	0.0502 U	0.0564 U	0.0523 U	0.0543 U	0.142 J	0.0590 U	0.0522 U	0.0545 U	0.0524 U	0.0599 U
	Total PCBs	2	2	3	3	2	1	0.0519 U	0.307 J	0.500 J	0.0502 U	0.486 J	0.269 J	0.0543 U	0.796 J	0.0590 U	0.0522 U	0.0545 U	0.0524 U	0.0599 U
PCB Homologs																				
(mg/kg)	Tetrachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Heptachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																				
(mg/kg)	Mercury	20	20	30	30	20	N/A	0.026 U	0.081	0.086	0.019 U	0.117	0.021	0.050	0.263	0.044	0.020 U	0.056	0.022 U	NA
	Arsenic	20	20	20	20	20	N/A	4.65	3.13	3.36	2.59 U	4.51	2.72 U	3.80	4.12	3.55	2.64 U	3.19	2.76 U	7.05
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	244	44.1	56.2	9.38	56.4	14.9	36.4	174	39.2	9.27	22.2	14.4	277
	Beryllium	100	100	200	200	100	N/A	0.27 U	0.28 U	0.28 U	0.26 U	0.31 U	0.28 U	0.29 U	0.28 U	0.30 U	0.27 U	0.30 U	0.28 U	NA
	Cadmium	2	2	30	30	2	N/A	0.27 U	0.53	2.74	0.26 U	0.89	0.28 U	0.29 U	1.74	0.30 U	0.27 U	0.30 U	0.28 U	1.28
	Chromium	30	30	200	200	30	N/A	66.7	10.6	14.1	2.15	17.6	3.09	14.7	11.8	16.7	2.11	8.84	2.41	11.9
	Lead	300	300	300	300	300	N/A	1.75	77.7	79.6	2.82	115	19.1	36.1	355	21.9	3.50	31.5	9.45	401
	Nickel	20	20	700	700	20	N/A	29.5	6.58	8.95	2.41	9.71	3.39	8.27	9.98	9.02	2.57	6.17	2.79	NA
	Silver	100	100	200	200	100	N/A	5.31	2.44	3.01	1.07	4.36	1.31	2.78	3.11	2.56	1.04	1.91	1.17	NA
	Vanadium	600	600	1,000	1,000	600	N/A	59.3	14.6	16.1	5.17 U	19.6	5.43 U	19.9	11.6	20.3	5.28 U	14.3	5.52 U	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	39.4	48.1	80.3	8.34	84.4	23.4	33.2	174	25.1	7.90	21.8	17.1	NA
GRO																				
(mg/kg)	Gasoline Range Organics	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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New Bedford High School - Fenced Playing Field (EP2)
New Bedford, Massachusetts

Analysis	Analyte							SS-25		SS-26			SS-27			SS-28			SS-29	
							Sample Depth (ft.):	0.5	1.5	0.5	1.5	2	0.5	2	1-3	0.5	1.5	1.5	0.5	2
							Sample Date:	8/7/2008	8/7/2008	8/7/2008	8/7/2008	8/7/2008	8/7/2008	8/7/2008	3/31/2009	8/7/2008	8/7/2008	8/7/2008 Field Dup	8/7/2008	8/7/2008
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA													
VOCs																				
(mg/kg)	Acetone	50	400	50	400	6.0	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloromethane	NS	NS	NS	NS	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trichlorobenzene	70	500	70	900	2	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,3-Trichlorobenzene	400*	20*	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs																				
(mg/kg)	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	0.200 U	0.189 U	0.204 U	**0.652**	0.176 U	0.188 U	0.196 U	0.200 U	0.203 U	0.189 U	0.195 U	0.200 U	0.208 U
	Acenaphthylene	600	10	600	10	1	N/A	0.200 U	0.189 U	0.204 U	**0.271**	0.176 U	0.188 U	0.196 U	0.200 U	0.203 U	0.189 U	0.195 U	0.200 U	0.208 U
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	0.200 U	0.189 U	0.204 U	**2.23**	0.176 U	0.188 U	0.196 U	**0.224**	0.203 U	0.189 U	**0.214**	0.200 U	0.208 U
	Benzo(a)anthracene	7	7	40	40	7	N/A	0.200 U	**0.216**	0.204 U	**3.86**	0.176 U	0.188 U	**0.273**	**1.44**	**0.394**	**0.626**	**0.721**	0.200 U	0.208 U
	Benzo(a)pyrene	2	2	4	4	2	N/A	0.200 U	**0.214**	0.204 U	**3.09**	0.176 U	0.188 U	**0.254**	**1.26**	**0.372**	**0.599**	**0.657**	0.200 U	0.208 U
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	0.200 U	0.189 U	0.204 U	**3.10**	0.176 U	0.188 U	**0.298**	**1.85**	0.203 U	**0.639**	**0.724**	0.200 U	0.208 U
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	0.200 U	0.189 U	0.204 U	**2.49**	0.176 U	0.188 U	0.196 U	**0.712**	**0.352**	**0.461**	**0.463**	0.200 U	0.208 U
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	0.200 U	0.189 U	0.204 U	**1.26**	0.176 U	0.188 U	0.196 U	**0.640**	0.203 U	**0.224**	**0.265**	0.200 U	0.208 U
	Chrysene	70	70	400	400	70	N/A	0.200 U	**0.237**	0.204 U	**3.53**	0.176 U	0.188 U	**0.291**	**1.67**	**0.378**	**0.635**	**0.734**	0.200 U	0.208 U
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	0.200 U	0.189 U	0.204 U	**0.675**	0.176 U	0.188 U	0.196 U	**0.204**	0.203 U	0.189 U	0.195 U	0.200 U	0.208 U
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	0.200 U	**0.353**	0.204 U	**8.39**	0.176 U	0.188 U	**0.549**	**2.76**	**0.670**	**1.11**	**1.43**	0.200 U	0.208 U
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	0.200 U	0.189 U	0.204 U	**1.07**	0.176 U	0.188 U	0.196 U	0.200 U	0.203 U	0.189 U	0.195 U	0.200 U	0.208 U
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	0.200 U	0.189 U	0.204 U	**2.83**	0.176 U	0.188 U	**0.243**	**0.965**	**0.382**	**0.541**	**0.540**	0.200 U	0.208 U
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	0.200 U	0.189 U	0.204 U	**0.487**	0.176 U	0.188 U	0.196 U	0.200 U	0.203 U	0.189 U	0.195 U	0.200 U	0.208 U
	Naphthalene	40	500	40	1,000	4	N/A	0.200 U	0.189 U	0.204 U	**0.584**	0.176 U	0.188 U	0.196 U	0.200 U	0.203 U	0.189 U	0.195 U	0.200 U	0.208 U
	Phenanthrene	500	500	1,000	1,000	10	N/A	0.200 U	0.189 U	0.204 U	**8.55**	0.176 U	0.188 U	**0.350**	**1.54**	**0.640**	**0.781**	**1.01**	0.200 U	0.208 U
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	0.200 U	**0.412**	0.204 U	**7.93**	0.176 U	0.188 U	**0.521**	**2.75**	**0.729**	**1.09**	**1.28**	0.200 U	0.208 U
PCBs																				
(mg/kg)	Aroclor 1254	2	2	3	3	2	1	0.0592 U	**0.208 J**	0.0567 U	**1.31 J**	0.0519 U	**0.0882 J**	**0.462 J**	**0.197 J**	**4.19 J**	**2.25 J**	**0.576 J**	0.0578 U	**0.187 J**
	Aroclor 1260	2	2	3	3	2	1	0.0592 U	**0.0772 J**	0.0567 U	**0.343 J**	0.0519 U	0.0564 U	**0.175 J**	0.0537 U	0.110 U	0.0537 U	0.0582 U	0.0578 U	**0.245 J**
	Total PCBs	2	2	3	3	2	1	0.0592 U	**0.2852 J**	0.0567 U	**1.653 J**	0.0519 U	**0.0882 J**	**0.637 J**	**0.197 J**	**4.19 J**	**2.25 J**	**0.576 J**	0.0578 U	**0.432 J**
PCB Homologs																				
(mg/kg)	Tetrachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	0.027 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	**0.034**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	0.027 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Heptachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	0.041 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	**0.034**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																				
(mg/kg)	Mercury	20	20	30	30	20	N/A	**0.046**	**0.165**	**0.057**	**1.02**	**0.027**	**0.052**	**0.147**	NA	**0.107**	**0.343**	**0.725**	**0.059**	**0.792**
	Arsenic	20	20	20	20	20	N/A	**3.42**	**3.96**	**3.23**	**7.53**	2.64 U	2.82 U	**3.46**	**5.68**	3.04 U	**5.14**	**5.76**	2.99 U	**8.34**
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	**26.8**	**63.2**	**29.1**	**157**	**14.2**	**19.3**	**151**	**325**	**27.2**	**127**	**108**	**17.1**	**296**
	Beryllium	100	100	200	200	100	N/A	0.30 U	0.29 U	0.31 U	**0.29**	0.27 U	0.29 U	0.30 U	NA	0.31 U	0.29 U	**0.29**	0.30 U	**0.82**
	Cadmium	2	2	30	30	2	N/A	0.30 U	**0.69**	0.31 U	**2.43**	0.27 U	**0.42**	**0.73**	**1.17**	**0.39**	**1.72**	**1.66**	0.30 U	**0.72**
	Chromium	30	30	200	200	30	N/A	**15.7**	**10.5**	**16.9**	**13.5**	**2.24**	**6.33**	**7.85**	**7.09**	**6.99**	**11.5**	**15.8**	**5.19**	**13.0**
	Lead	300	300	300	300	300	N/A	**24.3**	**141**	**21.4**	**537**	**10.4**	**40.3**	**284**	**890**	**64.3**	**372**	**402**	**26.9**	**426**
	Nickel	20	20	700	700	20	N/A	**7.33**	**5.30**	**7.64**	**25.7**	**2.65**	**4.76**	**6.56**	NA	**4.56**	**8.12**	**9.19**	**3.28**	**12.4**
	Silver	100	100	200	200	100	N/A	**1.12**	**0.79**	**1.04**	**2.66**	**1.20**	**1.29**	**0.98**	NA	**0.89**	**1.47**	**1.69**	**0.68**	**1.19**
	Vanadium	600	600	1,000	1,000	600	N/A	**17.0**	**11.2**	**17.1**	**10.7**	5.27 U	**10.1**	**8.33**	NA	**11.1**	**10.4**	**12.6**	**9.87**	**23.4**
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	**24.3**	**140**	**22.7**	**279**	**28.1**	**79.7**	**244**	NA	**41.1**	**185**	**190**	**21.7**	**218**
GRO																				
(mg/kg)	Gasoline Range Organics	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
All units in mg/kg unless otherwise specified.
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
NS - No standard available for this compound.
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 Method 1 standards.
Values shown in bold and outlined exceed TSCA but are less than the listed Method 1 standards..
VOCs - Volatile Organic Compounds.
PAHs - Polynuclear Aromatic Hydrocarbons.
PCBs - Polychlorinated Biphenyls.
GRO - Gasoline Range Organics.
RC - Reportable Concentration.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.

TABLE 4-2
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Fenced Playing Field (EP2)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	SS-30		SS-31				SS-32			SS-32A		SS-32B	
							Sample Depth (ft.):	0.5	1.5	0.5	2	1-3	1-3	0.5	1.5	1-3	0-1	1-3	0-1	1-3
							Sample Date:	8/7/2008	8/7/2008	8/7/2008	8/7/2008	3/31/2009	3/31/2009	8/7/2008	8/7/2008	3/31/2009	2/26/2009	2/26/2009	2/27/2009	2/27/2009
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA	(b)					Field Dup							
VOCs																				
(mg/kg)	Acetone	50	400	50	400	6.0	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloromethane	NS	NS	NS	NS	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trichlorobenzene	70	500	70	900	2	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,3-Trichlorobenzene	400*	20*	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs																				
(mg/kg)	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	0.188 U	0.175 U	0.195 U	0.212 U	0.189 U	0.192 U	0.203 U	0.195 U	0.185 U	NA	NA	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	0.188 U	0.175 U	0.195 U	0.212 U	0.189 U	0.192 U	0.203 U	0.195 U	0.185 U	NA	NA	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	0.188 U	**0.663**	0.195 U	0.212 U	0.189 U	0.192 U	0.203 U	**0.570**	0.185 U	NA	NA	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	0.188 U	**0.965**	0.195 U	0.212 U	0.189 U	0.192 U	0.203 U	**1.44**	**0.204**	NA	NA	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	0.188 U	**0.758**	0.195 U	0.212 U	0.189 U	0.192 U	0.203 U	**1.27**	**0.202**	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	0.188 U	**0.751**	0.195 U	0.212 U	0.189 U	0.192 U	0.203 U	**1.47**	**0.240**	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	0.188 U	**0.454**	0.195 U	0.212 U	0.189 U	0.192 U	0.203 U	**1.11**	0.185 U	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	0.188 U	**0.372**	0.195 U	0.212 U	0.189 U	0.192 U	0.203 U	**0.542**	0.185 U	NA	NA	NA	NA
	Chrysene	70	70	400	400	70	N/A	0.188 U	**0.875**	0.195 U	0.212 U	0.189 U	0.192 U	0.203 U	**1.42**	**0.207**	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	0.188 U	0.175 U	0.195 U	0.212 U	0.189 U	0.192 U	0.203 U	**0.312**	0.185 U	NA	NA	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	0.188 U	**2.59**	0.195 U	0.212 U	0.189 U	0.192 U	0.203 U	**3.72**	**0.320**	NA	NA	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	0.188 U	**0.286**	0.195 U	0.212 U	0.189 U	0.192 U	0.203 U	**0.229**	0.185 U	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	0.188 U	**0.559**	0.195 U	0.212 U	0.189 U	0.192 U	0.203 U	**1.21**	0.185 U	NA	NA	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	0.188 U	0.175 U	0.195 U	0.212 U	0.189 U	0.192 U	0.203 U	0.195 U	0.185 U	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	0.188 U	0.175 U	0.195 U	0.212 U	0.189 U	0.192 U	0.203 U	**0.218**	0.185 U	NA	NA	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	0.188 U	**3.01**	0.195 U	0.212 U	0.189 U	0.192 U	0.203 U	**2.45**	**0.300**	NA	NA	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	0.188 U	**1.91**	0.195 U	0.212 U	0.189 U	**0.211**	0.203 U	**2.80**	**0.379**	NA	NA	NA	NA
PCBs																				
(mg/kg)	Aroclor 1254	**2**	2	3	3	**2**	1	0.0566 U	0.0506 U	**0.0664 J**	0.0592 U	0.0575 U	0.0550 U	**0.103 J**	**18.5 J**	NA	0.0612 U	**0.520 J**	**0.153 J**	0.0583 U
	Aroclor 1260	**2**	2	3	3	2	1	0.0566 U	0.0506 U	0.0546 U	0.0592 U	0.0575 U	0.0550 U	0.0587 U	0.579 U	NA	0.0612 U	0.0555 U	0.0569 U	0.0583 U
	Total PCBs	2	2	3	3	2	1	0.0566 U	0.0506 U	**0.0664 J**	0.0592 U	0.0575 U	0.0550 U	**0.103 J**	**18.5 J**	NA	0.0612 U	**0.520 J**	**0.153 J**	0.0583 U
PCB Homologs																				
(mg/kg)	Tetrachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Heptachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																				
(mg/kg)	Mercury	20	20	30	30	20	N/A	**0.047**	**0.018**	**0.057**	**0.233**	NA	NA	**0.064**	**0.743**	NA	NA	NA	NA	NA
	Arsenic	20	20	20	20	20	N/A	2.82 U	2.62 U	**2.99**	**9.18**	**5.55**	**6.09**	**3.66**	**6.46**	2.77 U	NA	NA	NA	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	**18.2**	**14.9**	**18.6**	**197**	**148**	**124**	**26.9**	**178**	**39.4**	NA	NA	NA	NA
	Beryllium	100	100	200	200	100	N/A	0.29 U	0.27 U	0.30 U	0.32 U	NA	NA	0.31 U	0.30 U	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	0.29 U	0.27 U	0.30 U	**0.82**	0.29 U	**0.30**	0.31 U	**2.32**	**0.44**	NA	NA	NA	NA
	Chromium	30	30	200	200	30	N/A	**6.54**	**2.76**	**5.66**	**10.5**	**7.17**	**7.04**	**12.5**	**23.0**	**3.97**	NA	NA	NA	NA
	Lead	300	300	300	300	300	N/A	**22.7**	**52.4**	**31.7**	**302**	**137**	**219**	**28.2**	**805**	**96.6**	NA	NA	NA	NA
	Nickel	20	20	700	700	20	N/A	**4.67**	**3.09**	**6.18**	**12.7**	NA	NA	**7.00**	**16.3**	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	**2.01**	**1.26**	**1.89**	**3.47**	NA	NA	**2.48**	**3.79**	NA	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	**12.3**	**5.34**	**11.9**	**25.9**	NA	NA	**18.1**	**17.9**	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	**21.0**	**28.6**	**26.9**	**93.6**	NA	NA	**27.3**	**271**	NA	NA	NA	NA	NA
GRO																				
(mg/kg)	Gasoline Range Organics	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
All units in mg/kg unless otherwise specified.
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
NS - No standard available for this compound.
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Values in Bold indicate the compound was detected.
Values shown in Bold and shaded type exceed one or more of the listed Method 1 standards.
Values shown in bold and outlined exceed TSCA but are less than the listed Method 1 standards..
VOCs - Volatile Organic Compounds.
PAHs - Polynuclear Aromatic Hydrocarbons.
PCBs - Polychlorinated Biphenyls.
GRO - Gasoline Range Organics.
RC - Reportable Concentration.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.

TABLE 4-2
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Fenced Playing Field (EP2)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	SS-32C		SS-32D			SS-33		SS-34		SS-35		
							Sample Depth (ft.):	0-1	1-3	0-1	0-1	1-3	0.5	2	0.5	2	0.5	1.5	1-3
							Sample Date:	2/27/2009	2/27/2009	2/27/2009	2/27/2009	2/27/2009	8/7/2008	8/7/2008	8/7/2008	8/7/2008	8/7/2008	8/7/2008	3/31/2009
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA				Field Dup								
VOCs																			
(mg/kg)	Acetone	50	400	50	400	6.0	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloromethane	NS	NS	NS	NS	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trichlorobenzene	70	500	70	900	2	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,3-Trichlorobenzene	400*	20*	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs																			
(mg/kg)	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	NA	NA	NA	NA	0.203 U	0.184 U	0.195 U	0.177 U	0.197 U	0.184 U	**0.184**
	Acenaphthylene	600	10	600	10	1	N/A	NA	NA	NA	NA	NA	0.203 U	0.184 U	0.195 U	0.177 U	0.197 U	0.184 U	0.177 U
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	0.203 U	**0.350**	0.195 U	0.177 U	0.197 U	**0.420**	**0.510**
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	0.203 U	**0.704**	0.195 U	0.177 U	0.197 U	**0.764**	**1.15**
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	NA	NA	NA	NA	0.203 U	**0.662**	0.195 U	0.177 U	0.197 U	**0.647**	**1.11**
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	0.203 U	**0.711**	0.195 U	0.177 U	0.197 U	**0.653**	**1.17**
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	0.203 U	**0.436**	0.195 U	0.177 U	0.197 U	**0.328**	**0.737**
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	NA	NA	NA	NA	0.203 U	**0.281**	0.195 U	0.177 U	0.197 U	**0.276**	**0.407**
	Chrysene	70	70	400	400	70	N/A	NA	NA	NA	NA	NA	0.203 U	**0.686**	0.195 U	0.177 U	0.197 U	**0.723**	**1.25**
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	NA	NA	NA	NA	0.203 U	0.184 U	0.195 U	0.177 U	0.197 U	0.184 U	0.177 U
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	0.203 U	**1.53**	0.195 U	0.177 U	0.197 U	**1.68**	**2.39**
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	0.203 U	0.184 U	0.195 U	0.177 U	0.197 U	0.184 U	**0.208**
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	0.203 U	**0.473**	0.195 U	0.177 U	0.197 U	**0.405**	**0.793**
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	NA	NA	NA	NA	0.203 U	0.184 U	0.195 U	0.177 U	0.197 U	0.184 U	0.177 U
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	0.203 U	0.184 U	0.195 U	0.177 U	0.197 U	0.184 U	0.177 U
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	NA	NA	NA	NA	0.203 U	**1.27**	0.195 U	0.177 U	0.197 U	**1.74**	**3.21**
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	0.203 U	**1.33**	0.195 U	0.177 U	0.197 U	**1.46**	**3.37**
PCBs																			
(mg/kg)	Aroclor 1254	2	2	3	3	2	1	**0.0931 J**	**0.175 J**	**0.229 J**	**0.288 J**	**0.814 J**	**0.103 J**	**0.408 J**	**0.160 J**	0.0525 U	**0.161 J**	**0.472 J**	0.0529 U
	Aroclor 1260	2	2	3	3	2	1	0.0645 U	0.0548 U	0.0600 U	0.0637 U	0.0554 U	0.0576 U	**0.130 J**	0.0593 U	0.0525 U	0.0568 U	**0.213 J**	0.0529 U
	Total PCBs	2	2	3	3	2	1	**0.0931 J**	**0.175 J**	**0.229 J**	**0.288 J**	**0.814 J**	**0.103 J**	**0.538 J**	**0.160 J**	0.0525 U	**0.161 J**	**0.685 J**	0.0529 U
PCB Homologs																			
(mg/kg)	Tetrachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Heptachlorobiphenyl	NS	NS	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																			
(mg/kg)	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	**0.084**	**0.315**	**0.084**	0.022 U	**0.063**	**0.162**	NA
	Arsenic	20	20	20	20	20	N/A	NA	NA	NA	NA	NA	3.04 U	2.75 U	**3.09**	2.66 U	2.96 U	**5.15**	2.66 U
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	**22.2**	**63.4**	**26.2**	**15.9**	**20.3**	**37.8**	**24.4**
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	0.31 U	0.28 U	0.30 U	0.27 U	0.30 U	0.28 U	NA
	Cadmium	2	2	30	30	2	N/A	NA	NA	NA	NA	NA	0.31 U	0.28 U	0.30 U	0.27 U	0.30 U	0.28 U	0.27 U
	Chromium	30	30	200	200	30	N/A	NA	NA	NA	NA	NA	**6.02**	**6.69**	**6.53**	**2.32**	**5.02**	**7.74**	**4.10**
	Lead	300	300	300	300	300	N/A	NA	NA	NA	NA	NA	**37.0**	**130**	**90.4**	**4.28**	**37.1**	**109**	**45.0**
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	**4.71**	**5.77**	**5.39**	**2.67**	**3.76**	**5.45**	NA
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	**1.86**	**1.70**	**2.44**	**1.15**	**1.70**	**2.12**	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	**11.8**	**8.77**	**13.0**	5.31 U	**10.9**	**10.1**	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	**33.9**	**70.3**	**39.9**	**10.6**	**26.8**	**57.0**	NA
GRO																			
(mg/kg)	Gasoline Range Organics	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
All units in mg/kg unless otherwise specified.
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
NS - No standard available for this compound.
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 Method 1 standards.
Values shown in bold and outlined exceed TSCA but are less than the listed Method 1 standards..
VOCs - Volatile Organic Compounds.
PAHs - Polynuclear Aromatic Hydrocarbons.
PCBs - Polychlorinated Biphenyls.
GRO - Gasoline Range Organics.
RC - Reportable Concentration.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data. New Bedford High School" dated June 9, 2006, BETA Group, Inc.

TABLE 4-3
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Unfenced Playing Field (Exposure Point Area HS-3)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	HRG17		HRG21	HRI-17		HRI-19	HRI21	HRJ.75-17	HRK-19	HRK-21			HRK23
							Sample Depth (ft.):	2.5-3	1-3	2.5-3	2-3	1-3	1.5-2.5	0.5-2.5	1-2.5	1-3	1-3	1-3	1-3	0.5-3
							Sample Date:	2/21/2006	4/7/2009	2/21/2006	2/21/2006	4/7/2009	2/21/2006	2/21/2006	2/21/2006	2/21/2006	2/21/2006	2/21/2006 Field Dup	4/7/2009	2/21/2006
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA													
VOCs (mg/kg)	Benzene	30.0	30	200.0	200	2.0	N/A	NA	NA	NA	NA	NA	NA	NA	**0.036**	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	**11**	NA	NA	NA	NA	NA
	Toluene	500	500	1,000	1,000	30	N/A	NA	NA	NA	NA	NA	NA	NA	**0.041**	NA	NA	NA	NA	NA
	1,2,4-Trimethylbenzene	100(1)	100(1)	500(1)	500(1)	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	**0.046**	NA	NA	NA	NA	NA
PAHs (mg/kg)	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	0.182 U	NA	NA	0.196 U	NA	NA	NA	NA	NA	NA	**0.332**	NA
	Acenaphthylene	600	10	600	10	1	N/A	NA	0.182 U	NA	NA	0.196 U	NA	NA	NA	NA	NA	NA	0.255 U	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	0.182 U	NA	NA	**0.613**	NA	NA	NA	NA	NA	NA	**0.972**	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	0.182 U	NA	NA	**1.97**	NA	NA	NA	NA	NA	NA	**1.72**	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	0.182 U	NA	NA	**1.89**	NA	NA	NA	NA	NA	NA	**1.51**	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	0.182 U	NA	NA	**2.13**	NA	NA	NA	NA	NA	NA	**1.76**	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	0.182 U	NA	NA	**0.865**	NA	NA	NA	NA	NA	NA	**0.902**	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	0.182 U	NA	NA	**0.851**	NA	NA	NA	NA	NA	NA	**0.657**	NA
	Chrysene	70	70	400	400	70	N/A	NA	0.182 U	NA	NA	**2.01**	NA	NA	NA	NA	NA	NA	**1.84**	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	0.182 U	NA	NA	**0.266**	NA	NA	NA	NA	NA	NA	**0.273**	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	0.182 U	NA	NA	**3.12**	NA	NA	NA	NA	NA	NA	**3.47**	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	0.182 U	NA	NA	0.196 U	NA	NA	NA	NA	NA	NA	**0.453**	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	0.182 U	NA	NA	**1.16**	NA	NA	NA	NA	NA	NA	**1.17**	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	0.182 U	NA	NA	0.196 U	NA	NA	NA	NA	NA	NA	0.255 U	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	0.182 U	NA	NA	0.196 U	NA	NA	NA	NA	NA	NA	**0.367**	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	0.182 U	NA	NA	**2.60**	NA	NA	NA	NA	NA	NA	4.69	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	0.182 U	NA	NA	**3.64**	NA	NA	NA	NA	NA	NA	**3.59**	NA
PCBs (mg/kg)	Aroclor 1254	2	2	3	3	2	1	0.11 U	**0.162 J**	**0.15**	**0.34**	**0.0940 J**	**0.23**	0.12 U	**0.76**	0.04 U	0.041 U	0.037 U	0.0655 U	0.13 U
	Aroclor 1260	2	2	3	3	2	1	0.11 U	0.0524 U	0.13 U	0.03 U	0.0587 U	0.03 U	0.12 U	0.029 U	0.04 U	0.041 U	0.037 U	0.0655 U	0.13 U
	Total PCBs	2	2	3	3	2	1	0.22 U	**0.162 J**	**0.15**	**0.34**	**0.0940 J**	**0.23**	0.24 U	**0.76**	0.04 U	0.041 U	0.037 U	0.0655 U	0.25 U
Metals (mg/kg)	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Arsenic	20	20	20	20	20	N/A	NA	2.72 U	NA	NA	**3.74**	NA	NA	NA	NA	NA	NA	**8.02**	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	**9.14**	NA	NA	**106**	NA	NA	NA	NA	NA	NA	**223**	NA
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	NA	0.28 U	NA	NA	**0.46**	NA	NA	NA	NA	NA	NA	**1.45**	NA
	Chromium	30	30	200	200	30	N/A	NA	**2.20**	NA	NA	**6.57**	NA	NA	NA	NA	NA	NA	**8.23**	NA
	Lead	300	300	300	300	300	N/A	NA	**11.6**	NA	NA	**218**	NA	NA	NA	NA	NA	NA	**96.6**	NA
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
All units in mg/kg unless otherwise specified.
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
U - Compound was not detected at specified quantitation limit.
J - Estimated value; below quantitation limit.
B - Detected in associated laboratory method blank.
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 outlined exceed TSCA but are less than the listed MassDEP Method 1 standards.
VOCs - Volatile Organic Compounds.
PAHs - Polynuclear Aromatic Hydrocarbons.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - MassDEP Method 1 standards and RC for C9-C10 aromatics used.
(2) - MassDEP RC for Dichloropropane used.
(3) - MassDEP RC for Dichloropropene used.
(4) - MassDEP RC for 1,3-Dichloropropene used.
* - TRC developed standards.

TABLE 4-3
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Unfenced Playing Field (Exposure Point Area HS-3)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	NBHS-SS-5	NBHS-SS-6	SB-360					SB-360A	SB-360B	SB-360C		SB-360D	SB-360E	SB-360F
							Sample Depth (ft.):	0-0.5	0-0.5	0-1	1-3	1-3	5	8	1-3	1-3	1-3	1-3	1-3	1-3	1-3
							Sample Date:	8/6/2008	8/6/2008	3/4/2009	3/4/2009	3/4/2009	3/4/2009	3/4/2009	3/24/2009	3/24/2009	3/24/2009	3/24/2009	3/4/2009	3/24/2009	3/24/2009
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA					Field Dup						Field Dup			
VOCs																					
(mg/kg)	Benzene	30.0	30	200.0	200	2.0	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	500	500	1,000	1,000	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trimethylbenzene	100(1)	100(1)	500(1)	500(1)	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs																					
(mg/kg)	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	NA	0.206 U	0.229 U	0.236 U	0.301 U	0.230 U	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	NA	NA	0.206 U	0.229 U	0.236 U	0.301 U	0.230 U	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	0.206 U	0.229 U	0.236 U	0.301 U	0.230 U	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	NA	**0.270**	0.229 U	0.236 U	0.301 U	0.230 U	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	NA	**0.281**	0.229 U	0.236 U	0.301 U	0.230 U	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	NA	**0.376**	0.229 U	0.236 U	0.301 U	0.230 U	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	0.206 U	0.229 U	0.236 U	0.301 U	0.230 U	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	NA	0.206 U	0.229 U	0.236 U	0.301 U	0.230 U	NA	NA	NA	NA	NA	NA	NA
	Chrysene	70	70	400	400	70	N/A	NA	NA	**0.331**	0.229 U	0.236 U	0.301 U	0.230 U	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	NA	0.206 U	0.229 U	0.236 U	0.301 U	0.230 U	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	**0.611**	0.229 U	**0.367**	0.301 U	0.230 U	NA	NA	NA	NA	NA	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	0.206 U	0.229 U	0.236 U	0.301 U	0.230 U	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	NA	0.206 U	0.229 U	0.236 U	0.301 U	0.230 U	NA	NA	NA	NA	NA	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	NA	0.206 U	0.229 U	0.236 U	0.301 U	0.230 U	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	0.206 U	0.229 U	0.236 U	0.301 U	0.230 U	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	NA	**0.441**	**0.234**	**0.256**	0.301 U	0.230 U	NA	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	**0.502**	0.229 U	**0.334**	0.301 U	0.230 U	NA	NA	NA	NA	NA	NA	NA
PCBs																					
(mg/kg)	Aroclor 1254	2	2	3	3	2	1	**0.0956 J**	0.0524 U	**0.634 J**	0.0706 U	0.0632 U	0.0822 U	0.0578 U	NA	NA	NA	NA	NA	NA	NA
	Aroclor 1260	2	2	3	3	2	1	0.0538 U	0.0524 U	**0.163 J**	0.0706 U	0.0632 U	0.0822 U	0.0578 U	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	**0.0956 J**	0.0524 U	**0.797 J**	0.0706 U	0.0632 U	0.0822 U	0.0578 U	NA	NA	NA	NA	NA	NA	NA
Metals																					
(mg/kg)	Mercury	20	20	30	30	20	N/A	NA	NA	**0.261**	**0.074**	**0.044**	**0.275**	**0.016**	NA	NA	NA	NA	NA	NA	NA
	Arsenic	20	20	20	20	20	N/A	NA	NA	3.09 U	**12.4**	**11.3**	**14.5**	3.45 U	NA	NA	NA	NA	NA	NA	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	6.17 U	**867**	**2,750**	**760**	**10.0**	**4,060**	**2,170**	**403**	**488**	**376**	**1,050**	**1,250**
	Beryllium	100	100	200	200	100	N/A	NA	NA	0.31 U	**1.45**	**1.12**	**0.97**	0.35 U	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	NA	NA	0.31 U	**0.59**	**0.48**	**1.21**	0.35 U	NA	NA	NA	NA	NA	NA	NA
	Chromium	30	30	200	200	30	N/A	NA	NA	0.62 U	**15.9**	**39.2**	**16.6**	**4.30**	**54.0**	**17.2**	**12.8**	**13.2**	**10.7**	**21.0**	**74.7**
	Lead	300	300	300	300	300	N/A	NA	NA	0.93 U	**8,110**	**39,600**	**6,870**	**5.53**	**20,200**	**26,700**	**350**	**422**	**148**	**8,550**	**1,070**
	Nickel	20	20	700	700	20	N/A	NA	NA	0.62 U	**18.8**	**14.6**	**21.5**	**4.54**	NA	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	NA	0.62 U	0.69 U	0.71 U	0.91 U	0.69 U	NA	NA	NA	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	6.17 U	**37.1**	**24.7**	**49.4**	6.89 U	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	**1.59**	**712**	**577**	**423**	**30.7**	NA	NA	NA	NA	NA	NA	NA

Notes:
All units in mg/kg unless otherwise specified.
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
U - Compound was not detected at specified quantitation limit.
J - Estimated value; below quantitation limit.
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Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - MassDEP Method 1 standards and RC for C9-C10 aromatics used.
(2) - MassDEP RC for Dichloropropane used.
(3) - MassDEP RC for Dichloropropene used.
(4) - MassDEP RC for 1,3-Dichloropropene used.
* - TRC developed standards.

TABLE 4-3
Summary of Detected Aualytical Results for Soil Samples
New Bedford High School - Unfenced Playing Field (Exposure Point Area HS-3)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	SB-360G	SB-360I	SB-360J	SB-360K	SB-360L	SB-360M	SB-360O	SB-360Q	SB-360R	SB-360S	SB-360U	SB-360V	SB-360W
							Sample Depth (ft.):	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3
							Sample Date:	3/24/2009	5/21/2009	5/21/2009	5/21/2009	5/21/2009	7/6/2009	7/6/2009	7/6/2009	7/6/2009	7/6/2009	7/6/2009	7/6/2009	7/6/2009
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA													
VOCs																				
(mg/kg)	Benzene	30.0	30	200.0	200	2.0	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	500	500	1,000	1,000	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trimethylbenzene	100(1)	100(1)	500(1)	500(1)	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs																				
(mg/kg)	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	70	70	400	400	70	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs																				
(mg/kg)	Aroclor 1254	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aroclor 1260	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																				
(mg/kg)	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Arsenic	20	20	20	20	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	30	30	200	200	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	300	300	300	300	300	N/A	590	4,600	530	890	470	860	500	1,200	650	380	9,800	320	**210**
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
All units in mg/kg unless otherwise specified.
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
U - Compound was not detected at specified quantitation limit.
J - Estimated value; below quantitation limit.
B - Detected in associated laboratory method blank.
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 outlined exceed TSCA but are less than the listed MassDEP Method 1 standards.
VOCs - Volatile Organic Compounds.
PAHs - Polynuclear Aromatic Hydrocarbons.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - MassDEP Method 1 standards and RC for C9-C10 aromatics used.
(2) - MassDEP RC for Dichloropropane used.
(3) - MassDEP RC for Dichloropropene used.
(4) - MassDEP RC for 1,3-Dichloropropene used.
* - TRC developed standards.

TABLE 4-3
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Unfenced Playing Field (Exposure Point Area HS-3)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	SB-360X		SS-36			SS-36A		SS-36B		SS-36C		SS-36D		
							Sample Depth (ft.):	1-3	1-3	0.5	2	1-3	0-1	1-3	0-1	1-3	0-1	1-3	0-1	1-3	1-3
							Sample Date:	8/19/2009	8/19/2009	8/7/2008	8/7/2008	3/31/2009	3/9/2009	3/9/2009	3/9/2009	3/9/2009	3/9/2009	3/9/2009	3/9/2009	3/9/2009	3/9/2009
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA		Field Dup												Field Dup
VOCs																					
(mg/kg)	Benzene	30.0	30	200.0	200	2.0	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	500	500	1,000	1,000	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trimethylbenzene	100(1)	100(1)	500(1)	500(1)	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs																					
(mg/kg)	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	NA	0.198 U	**0.643**	0.229 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	NA	NA	0.198 U	**0.189**	0.229 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	0.198 U	**1.35**	0.229 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	NA	0.198 U	**3.60**	**0.446**	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	NA	0.198 U	**3.07**	**0.383**	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	NA	0.198 U	**4.09**	**0.549**	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	0.198 U	**1.58**	**0.406**	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	NA	0.198 U	**1.02**	0.229 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	70	70	400	400	70	N/A	NA	NA	0.198 U	**3.81**	**0.825**	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	NA	0.198 U	**0.403**	0.229 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	0.198 U	**6.38**	**0.692**	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	0.198 U	**0.704**	0.229 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	NA	0.198 U	**1.73**	**0.255**	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	NA	0.198 U	**0.209**	**0.259**	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	0.198 U	**0.431**	0.229 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	NA	0.198 U	**5.81**	**1.12**	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	0.198 U	**5.42**	**0.792**	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs																					
(mg/kg)	Aroclor 1254	2	2	3	3	2	1	NA	NA	0.0583 U	0.0564 U	0.0733 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aroclor 1260	2	2	3	3	2	1	NA	NA	0.0583 U	0.0564 U	0.0733 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	0.0583 U	0.0564 U	0.0733 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																					
(mg/kg)	Mercury	20	20	30	30	20	N/A	NA	NA	**0.050**	**0.258**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Arsenic	20	20	20	20	20	N/A	NA	NA	**6.97**	**23.1**	**21.8**	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	**15.3**	**219**	**472**	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Beryllium	100	100	200	200	100	N/A	NA	NA	0.30 U	0.29 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	NA	NA	0.30 U	**0.58**	**0.98**	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	30	30	200	200	30	N/A	NA	NA	**5.76**	**14.2**	**11.8**	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	300	300	300	300	300	N/A	**630**	**750**	**17.3**	**1270**	NA	**22.7**	**480**	**23.1**	**938**	**16.8**	**1,550**	**20.4**	**2,070**	**286**
	Nickel	20	20	700	700	20	N/A	NA	NA	**3.71**	**43.9**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	NA	**1.74**	**2.30**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	**11.3**	**28.0**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	**23.2**	**196**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
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NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
U - Compound was not detected at specified quantitation limit.
J - Estimated value; below quantitation limit.
B - Detected in associated laboratory method blank.
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 outlined exceed TSCA but are less than the listed MassDEP Method 1 standards.
VOCs - Volatile Organic Compounds.
PAHs - Polynuclear Aromatic Hydrocarbons.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - MassDEP Method 1 standards and RC for C9-C10 aromatics used.
(2) - MassDEP RC for Dichloropropane used.
(3) - MassDEP RC for Dichloropropene used.
(4) - MassDEP RC for 1,3-Dichloropropene used.
* - TRC developed standards.

TABLE 4-3
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Unfenced Playing Field (Exposure Point Area HS-3)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	SS-36E	SS-36F		SS-36G		SS-36H		SS-36I	SS-36J	SS-36L	SS-36N		SS-36O	SS-36R
							Sample Depth (ft.):	1-3	0-1	1-3	0-1	1-3	0-1	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3
							Sample Date:	3/9/2009	3/9/2009	3/9/2009	3/9/2009	3/9/2009	3/9/2009	3/9/2009	5/21/2009	5/21/2009	5/21/2009	7/6/2009	7/6/2009 Field Dup	7/6/2009	7/6/2009
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA														
VOCs (mg/kg)	Benzene	30.0	30	200.0	200	2.0	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	500	500	1,000	1,000	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trimethylbenzene	100(1)	100(1)	500(1)	500(1)	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs (mg/kg)	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	70	70	400	400	70	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)	Aroclor 1254	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aroclor 1260	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (mg/kg)	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Arsenic	20	20	20	20	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	30	30	200	200	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	300	300	300	300	300	N/A	**310**	**37.5**	**507**	**34.4**	**1,110**	**856**	**20.8**	**110**	**2,700**	**870**	**480**	**920**	**680**	**1,000**
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
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NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
U - Compound was not detected at specified quantitation limit.
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RC - Reportable Concentration.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - MassDEP Method 1 standards and RC for C9-C10 aromatics used.
(2) - MassDEP RC for Dichloropropane used.
(3) - MassDEP RC for Dichloropropene used.
(4) - MassDEP RC for 1,3-Dichloropropene used.
* - TRC developed standards.

TABLE 4-3
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Unfenced Playing Field (Exposure Point Area HS-3)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	SS-36S	SS-36V	SS-36W	SS-37			SS-38			SS-39			SS-40	
							Sample Depth (ft.):	1-3	1-3	1-3	0.5	2	2	0.5	1.5	1-3	0.5	2	1-3	0.5	2
							Sample Date:	7/6/2009	7/6/2009	7/6/2009	8/8/2008	8/8/2008	8/8/2008	8/8/2008	8/8/2008	3/31/2009	8/8/2008	8/8/2008	3/31/2009	8/8/2008	8/8/2008
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA						Field Dup								
VOCs																					
(mg/kg)	Benzene	30.0	30	200.0	200	2.0	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	500	500	1,000	1,000	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trimethylbenzene	100(1)	100(1)	500(1)	500(1)	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs																					
(mg/kg)	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	NA	NA	0.192 U	**0.424**	0.188 U	0.198 U	0.197 U	0.214 U	0.187 U	0.175 U	0.183 U	0.195 U	0.210 U
	Acenaphthylene	600	10	600	10	1	N/A	NA	NA	NA	0.192 U	**0.870**	0.188 U	0.198 U	0.197 U	0.214 U	0.187 U	0.175 U	0.183 U	0.195 U	0.210 U
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	0.192 U	**4.23**	**0.228**	0.198 U	0.197 U	0.214 U	0.187 U	0.175 U	0.183 U	0.195 U	**0.362**
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	NA	NA	0.192 U	**6.12**	**0.493**	0.198 U	**0.258**	0.214 U	0.187 U	0.175 U	0.183 U	0.195 U	**1.15**
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	NA	NA	0.192 U	**6.76**	**0.421**	0.198 U	**0.317**	0.214 U	0.187 U	0.175 U	0.183 U	0.195 U	**1.11**
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	NA	NA	0.192 U	**7.26**	**0.481**	0.198 U	**0.382**	0.214 U	0.187 U	0.175 U	0.183 U	0.195 U	**1.25**
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	0.192 U	**3.92**	**0.317**	0.198 U	**0.303**	0.214 U	0.187 U	0.175 U	0.183 U	0.195 U	**0.851**
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	NA	NA	0.192 U	**2.33**	0.188 U	0.198 U	0.197 U	0.214 U	0.187 U	0.175 U	0.183 U	0.195 U	**0.494**
	Chrysene	70	70	400	400	70	N/A	NA	NA	NA	0.192 U	**5.45**	**0.493**	0.198 U	**0.323**	0.214 U	0.187 U	0.175 U	0.183 U	0.195 U	**1.17**
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	NA	NA	0.192 U	**1.01**	0.188 U	0.198 U	0.197 U	0.214 U	0.187 U	0.175 U	0.183 U	0.195 U	**0.217**
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	0.192 U	**17.1**	**0.965**	**0.275**	**0.349**	0.214 U	0.187 U	0.175 U	0.183 U	0.195 U	**2.40**
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	0.192 U	**1.49**	0.188 U	0.198 U	0.197 U	0.214 U	0.187 U	0.175 U	0.183 U	0.195 U	0.210 U
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	NA	NA	0.192 U	**5.32**	**0.321**	0.198 U	**0.305**	0.214 U	0.187 U	0.175 U	0.183 U	0.195 U	**0.929**
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	NA	NA	0.192 U	0.186 U	0.188 U	0.198 U	0.197 U	0.214 U	0.187 U	0.175 U	0.183 U	0.195 U	0.210 U
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	0.192 U	**0.258**	0.188 U	0.198 U	0.197 U	0.214 U	0.187 U	0.175 U	0.183 U	0.195 U	0.210 U
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	NA	NA	0.192 U	**18.2**	**0.884**	0.198 U	**0.254**	0.214 U	0.187 U	0.175 U	0.183 U	0.195 U	**1.71**
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	0.192 U	**13.8**	**0.856**	**0.281**	**0.346**	0.214 U	0.187 U	0.175 U	**0.193**	0.195 U	**2.49**
PCBs																					
(mg/kg)	Aroclor 1254	2	2	3	3	2	1	NA	NA	NA	0.0551 U	**0.144 J**	**0.160 J**	**0.611 J**	**0.580 J**	0.0640 U	0.0541 U	0.0562 U	0.0501 U	0.0589 U	**0.444 J**
	Aroclor 1260	2	2	3	3	2	1	NA	NA	NA	0.0551 U	0.0541 U	0.0546 U	0.0574 U	0.0568 U	0.0640 U	0.0541 U	0.0562 U	0.0501 U	0.0589 U	**0.174 J**
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	0.0551 U	**0.144 J**	**0.160 J**	**0.611 J**	**0.580 J**	0.0640 U	0.0541 U	0.0562 U	0.0501 U	0.0589 U	**0.618 J**
Metals																					
(mg/kg)	Mercury	20	20	30	30	20	N/A	NA	NA	NA	**0.039**	**0.171**	**0.270**	**0.175**	**0.280**	NA	**0.026**	0.013 U	NA	**0.032**	**0.654**
	Arsenic	20	20	20	20	20	N/A	NA	NA	NA	**4.09**	**5.48**	**4.10**	**4.10**	**16.0**	**14.6**	2.80 U	2.62 U	2.74 U	2.93 U	**7.24**
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	**13.0**	**105**	**83.7**	**58.6**	**311**	**801**	**9.21**	**5.94**	**45.2**	**13.4**	**410**
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	0.29 U	0.28 U	0.29 U	0.30 U	**0.79**	NA	0.28 U	0.27 U	NA	0.30 U	**0.43**
	Cadmium	2	2	30	30	2	N/A	NA	NA	NA	0.29 U	**0.35**	**0.37**	**0.47**	**1.05**	**0.86**	0.28 U	0.27 U	**0.52**	0.30 U	**1.53**
	Chromium	30	30	200	200	30	N/A	NA	NA	NA	**5.68**	**7.35**	**7.01**	**6.89**	**12.6**	**18.0**	**5.06**	**2.52**	**4.64**	**5.66**	**15.4**
	Lead	300	300	300	300	300	N/A	**690**	**530**	**22**	**14.7**	**302**	**270**	**167**	**605**	**865**	**8.45**	**2.93**	**103**	**13.9**	**819**
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	**4.00**	**7.03**	**6.43**	**3.95**	**11.2**	NA	**3.32**	**2.23**	NA	**3.01**	**10.7**
	Silver	100	100	200	200	100	N/A	NA	NA	NA	**1.69**	**2.21**	**2.55**	**0.81**	**1.00**	NA	**0.85**	0.53 U	NA	**0.82**	**1.05**
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	**10.1**	**14.2**	**10.2**	**10.9**	**18.6**	NA	**9.18**	5.24 U	NA	**9.43**	**20.9**
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	**17.7**	**112**	**113**	**101**	**269**	NA	**10.4**	**8.18**	NA	**16.4**	**506**

Notes:
All units in mg/kg unless otherwise specified.
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
U - Compound was not detected at specified quantitation limit.
J - Estimated value; below quantitation limit.
B - Detected in associated laboratory method blank.
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 outlined exceed TSCA but are less than the listed MassDEP Method 1 standards.
VOCs - Volatile Organic Compounds.
PAHs - Polynuclear Aromatic Hydrocarbons.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - MassDEP Method 1 standards and RC for C9-C10 aromatics used.
(2) - MassDEP RC for Dichloropropane used.
(3) - MassDEP RC for Dichloropropene used.
(4) - MassDEP RC for 1,3-Dichloropropene used.
* - TRC developed standards.

TABLE 4-3
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Unfenced Playing Field (Exposnre Point Area HS-3)
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	SS-41 0.5 8/8/2008	SS-41 2 8/8/2008
VOCs (mg/kg)	Benzene	30.0	30	200.0	200	2.0	N/A	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA
	Toluene	500	500	1,000	1,000	30	N/A	NA	NA
	1,2,4-Trimethylbenzene	100(1)	100(1)	500(1)	500(1)	1,000	N/A	NA	NA
PAHs (mg/kg)	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	0.188 U	0.175 U
	Acenaphthylene	600	10	600	10	1	N/A	0.188 U	0.175 U
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	0.188 U	0.175 U
	Benzo(a)anthracene	7	7	40	40	7	N/A	0.188 U	0.175 U
	Benzo(a)pyrene	2	2	4	4	2	N/A	0.188 U	0.175 U
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	0.188 U	0.175 U
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	0.188 U	0.175 U
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	0.188 U	0.175 U
	Chrysene	70	70	400	400	70	N/A	0.188 U	0.175 U
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	0.188 U	0.175 U
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	0.188 U	0.175 U
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	0.188 U	0.175 U
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	0.188 U	0.175 U
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	0.188 U	0.175 U
	Naphthalene	40	500	40	1,000	4	N/A	0.188 U	0.175 U
	Phenanthrene	500	500	1,000	1,000	10	N/A	0.188 U	0.175 U
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	0.188 U	0.175 U
PCBs (mg/kg)	Aroclor 1254	2	2	3	3	2	1	0.0539 U	0.0516 U
	Aroclor 1260	2	2	3	3	2	1	0.0539 U	0.0516 U
	Total PCBs	2	2	3	3	2	1	0.0539 U	0.0516 U
Metals (mg/kg)	Mercury	20	20	30	30	20	N/A	**0.037**	0.018 U
	Arsenic	20	20	20	20	20	N/A	**2.97**	2.62 U
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	**9.05**	**6.93**
	Beryllium	100	100	200	200	100	N/A	0.29 U	0.27 U
	Cadmium	2	2	30	30	2	N/A	0.29 U	0.27 U
	Chromium	30	30	200	200	30	N/A	**5.21**	**3.01**
	Lead	300	300	300	300	300	N/A	**9.69**	**12.1**
	Nickel	20	20	700	700	20	N/A	**2.93**	**2.45**
	Silver	100	100	200	200	100	N/A	**1.04**	**0.52**
	Vanadium	600	600	1,000	1,000	600	N/A	**7.92**	5.23 U
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	**11.3**	**11.9**

Notes:
All units in mg/kg unless otherwise specified.
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
U - Compound was not detected at specified quanlitation limit.
J - Estimated vulue; below quantitation limit.
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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 outlined exceed TSCA but are less than the listed MassDEP Method 1 standards.
VOCs - Volatile Organic Compounds.
PAHs - Polynuclear Aromatic Hydrocarbons.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentratiou.
TSCA - Toxic Substances Cootrol Act criteria.
Data are based ou the "Summary of Analytieal Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - MassDEP Method 1 standards and RC for C9-C10 aromatics used.
(2) - MassDEP RC for Dichloropropane used.
(3) - MassDEP RC for Dichloropropene used.
(4) - MassDEP RC for 1,3-Dichloropropene used.
* - TRC developed standards.

TABLE 4-4
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Gym Area (Exposure Point Area HS-4)
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	HE44	HE-44B		HE-44C		HE-44F	HF31-0.5-1+2.5-3	HF-31A		HF-31B		HF-31C			HF-31D	
	Sample Location:							HE44	HE-44B		HE-44C		HE-44F	HF31-0.5-1+2.5-3	HF-31A		HF-31B		HF-31C			HF-31D	
	Sample Depth (ft.):							1.5-3	0-1	1-3	0-1	1-3	0-1	0.5-3	0-1	1-3	0-1	1-3	0-1	1-3	1-3	0-1	1-3
	Sample Date:							12/30/2004	3/31/2009	3/31/2009	3/31/2009	3/31/2009	3/31/2009	12/30/2004	4/2/2009	4/2/2009	4/2/2009	4/2/2009	4/2/2009	4/2/2009	4/2/2009 Field Dup	4/2/2009	4/2/2009
SVOCs (mg/kg)	4-Bromophenyl phenyl ether	0.3*	0.3*	NS	NS	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	600	10	600	10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	70	70	400	400	70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)	Aroclor 1254	2	2	3	3	2	1	0.057 U	**0.349 J**	**1.63 J**	0.0571 U	**0.756 J**	NA	**2.26**	**1.35 J**	**2.49 J**	**0.310 J**	**2.66 J**	**2.88 J**	**5.32 J**	**7.31 J**	**0.597 J**	**71.6 J**
	Aroclor 1260	2	2	3	3	2	1	0.057 U	0.0515 U	0.106 U	0.0571 U	0.0556 U	NA	0.056 U	**0.291 J**	0.217 U	0.0554 U	0.219 U	0.571 U	0.376 U	0.550 U	0.0532 U	3.36 U
	Aroclor 1262	2	2	3	3	2	1	0.057 U	NA	NA	NA	NA	NA	**0.293**	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	0.113 U	**0.349 J**	**1.63 J**	0.0571 U	**0.756 J**	NA	**2.553**	**1.641 J**	**2.49 J**	**0.310 J**	**2.66 J**	**2.88 J**	**5.32 J**	**7.31 J**	**0.597 J**	**71.6 J**
PCB Homologs (mg/kg)	Trichlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Heptachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (mg/kg)	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Arsenic	20	20	20	20	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	NA	**0.80**	**0.99**	0.29 U	**0.42**	NA	NA	**0.51**	**0.47**	**0.41**	**0.49**	**0.29**	**0.34**	NA	**0.62**	**1.24**
	Chromium	30	30	200	200	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	300	300	300	300	300	N/A	NA	**990**	**292**	**169**	**354**	**310**	NA	**194**	**168**	**79.7**	**164**	**31.5**	**82.9**	NA	**192**	**441**
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP (ug/L)	Lead	NS	NS	NS	NS	NS	5,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
ug/L - micrograms per liter.
B - Detected in associated laboratory method blank.
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
NS - No standard available for this compound.
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 or TCLP crit
Values shown in bold and outlined exceed TSCA but are less than the listed MassDEP Method 1 standards.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TCLP - Toxicity Characteristic Leaching Procedure.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Characteristic*.
* - TRC developed standards.
** - for Reference purposes only.

TABLE 4-4
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Gym Area (Exposure Point Area HS-4)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	HF-31G	HF-31H	HF35	HF-35A		HF-35B		HF-35C			HF-35D		HF-38	HF35+HF40	HF40
							Sample Depth (ft.):	1-3	1-3	2.5-3.5	0-1	1-3	0-1	1-3	0-1	1-3	1-3	0-1	1-3	1-3	2.5-3.5	2.5-3
							Sample Date:	4/2/2009	4/2/2009	12/30/2004	4/1/2009	4/1/2009	4/1/2009	4/1/2009	4/1/2009	4/1/2009	4/1/2009	4/1/2009	4/1/2009	4/2/2009	12/30/2004	12/30/2004
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1**	TSCA										Field Dup					
SVOCs																						
(mg/kg)	4-Bromophenyl phenyl ether	0.3*	0.3*	NS	NS	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.065 U	0.065 U	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.56 B**	**0.56 B**	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.11 J**	**0.11 J**	NA
	Dibenzofuran	10*	10*	NS	NS	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.12**	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.176 U	**0.15**	NA
	Acenaphthylene	600	10	600	10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.176 U	**0.1**	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.176 U	**0.49**	NA
	Benzo(a)anthracene	7	7	40	40	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.176 U	**1.6**	NA
	Benzo(a)pyrene	2	2	4	4	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.176 U	**2.8**	NA
	Benzo(b)fluoranthene	7	7	40	40	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.176 U	**4.8**	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.176 U	0.065 U	NA
	Benzo(k)fluoranthene	70	70	400	400	70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.176 U	**1.6**	NA
	Chrysene	70	70	400	400	70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.176 U	**1.3**	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.176 U	0.065 U	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.176 U	0.065 U	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.176 U	**0.19**	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.176 U	0.065 U	NA
	2-Methylnaphthalene	80	300	80	500	0.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.176 U	**0.096**	NA
	Naphthalene	40	500	40	1,000	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.176 U	**0.16**	NA
	Phenanthrene	500	500	1,000	1,000	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.176 U	**2**	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.176 U	**5.8**	NA
PCBs																						
(mg/kg)	Aroclor 1254	2	2	3	3	2	1	**0.334 J**	**0.565 J**	**1.58**	0.0547 U	0.0585 U	**0.118 J**	**0.786 J**	**0.133 J**	**0.899 J**	**0.735 J**	0.0597 U	**0.228 J**	0.0524 U	NA	**24.9**
	Aroclor 1260	2	2	3	3	2	1	0.0535 U	**0.355 J**	0.057 U	0.0547 U	**0.819 J**	0.0543 U	0.0557 U	0.0540 U	**0.468 J**	**0.343 J**	0.0597 U	0.0558 U	0.0524 U	NA	0.068 U
	Aroclor 1262	2	2	3	3	2	1	NA	NA	**0.264**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.566**
	Total PCBs	2	2	3	3	2	1	**0.334 J**	**0.920 J**	**1.844**	0.0547 U	**0.819 J**	**0.118 J**	**0.786 J**	**0.133 J**	**1.367 J**	**1.078 J**	0.0597 U	**0.228 J**	0.0524 U	NA	**25.466**
PCB Homologs																						
(mg/kg)	Trichlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Heptachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																						
(mg/kg)	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.403**	NA
	Arsenic	20	20	20	20	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.64 U	**8.58**	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**14.7**	**242**	NA
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	NA	NA	NA	0.28 U	**0.71**	0.28 U	**0.44**	0.28 U	**1.48**	**2.21**	0.31 U	**0.71**	0.27 U	**3.67**	NA
	Chromium	30	30	200	200	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2.50**	**14**	NA
	Lead	300	300	300	300	300	N/A	NA	NA	NA	**42.7**	**154**	**16.9**	**151**	**26.2**	525	661	**24.2**	471	**3.58**	683	NA
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.42**	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP																						
(ug/L)	Lead	NS	NS	NS	NS	NS	5,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2,560**	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
ug/L - micrograms per liter.
B - Detected in associated laboratory method blank.
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
NS - No standard available for this compound.
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 or TCLP criteria.
Values shown in bold and outlined exceed TSCA but are less than the listed MassDEP Method 1 standards.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TCLP - Toxicity Characteristic Leaching Procedure.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Characteristic*.
* - TRC developed standards.
** - for Reference purposes only.

TABLE 4-4
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Gym Area (Exposure Point Area HS-4)
New Bedford, Massachusetts

Analysis	Analyte							HF-40A			HF-40B		HF-40C		HF-40D		HF-40E		HF-40F		HF-40G		HF-40H	
							Sample Location:																	
							Sample Depth (ft.):	0-1	1-3	1-3	0-1	1-3	0-1	1-3	0-1	1-3	0-1	1-3	0-1	1-3	0-1	1-3	0-1	1-3
							Sample Date:	3/10/2009	3/10/2009	3/10/2009	3/9/2009	3/9/2009	3/10/2009	3/10/2009	3/9/2009	3/9/2009	3/10/2009	3/10/2009	3/9/2009	3/9/2009	3/10/2009	3/10/2009	3/9/2009	3/9/2009
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1**	TSCA			Field Dup														
SVOCs (mg/kg)	4-Bromophenyl phenyl ether	0.3*	0.3*	NS	NS	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	600	10	600	10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	70	70	400	400	70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)	Aroclor 1254	2	2	3	3	2	1	0.0614 U	3.10 J	1.44 J	9.32 J	15.2 J	0.216 J	4.93 J	0.233 J	0.277 J	NA	NA	1.66 J	3.93 J	NA	NA	NA	NA
	Aroclor 1260	2	2	3	3	2	1	0.0614 U	0.192 U	0.0608 U	0.576 U	0.562 U	0.0572 U	0.221 U	0.0615 U	0.0531 U	NA	NA	1.13 U	1.22 U	NA	NA	NA	NA
	Aroclor 1262	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.13 U	1.22 U	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	0.0614 U	3.10 J	1.44 J	9.32 J	15.2 J	0.216 J	4.93 J	0.233 J	0.277 J	NA	NA	1.66 J	3.93 J	NA	NA	NA	NA
PCB Homologs (mg/kg)	Trichlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Heptachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (mg/kg)	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Arsenic	20	20	20	20	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	0.32 U	1.22	NA	0.42	1.57	0.29 U	0.28 U	0.31 U	0.28 U	0.29 U	3.14	0.28 U	0.57	0.28 U	0.30	0.32 U	0.28 U
	Chromium	30	30	200	200	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	300	300	300	300	300	N/A	23.2	449	NA	90.5	201	36.1	85.3	48.4	29.8	54.8	643	15.2	770	40.8	86.9	24.2	4.06
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP (ug/L)	Lead	NS	NS	NS	NS	NS	5,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

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

ug/L - micrograms per liter.

B - Detected in associated laboratory method blank.

J - Estimated value; below quantitation limit.

NA - Sample not analyzed for the listed analyte.

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New Bedford High School - Gym Area (Exposure Poiut Area HS-4)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	HF-40I	HF-40J	HF43	HF-43A		HF-43B		HF-43D		HF-43G		HF-43H	HF43+HE44	HF44	HF44+HG44	HG-31	HG44
							Sample Depth (ft.):	1-3	1-3	2.5-3	0-1	1-3	0-1	1-3	0-1	1-3	0-1	1-3	1-3	1.5-3	0.5-3	0.5-3	1-3	1-3
							Sample Date:	4/9/2009	4/9/2009	12/30/2004	4/1/2009	4/1/2009	3/31/2009	3/31/2009	4/1/2009	4/1/2009	4/1/2009	4/1/2009	4/1/2009	12/30/2004	12/30/2004	12/30/2004	4/2/2009	12/30/2004
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1**	TSCA																	
SVOCs																								
(mg/kg)	4-Bromophenyl phenyl ether	0.3*	0.3*	NS	NS	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.059 U	NA	0.057 U	NA	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.2 B**	NA	0.17 U	NA	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.072 J**	NA	0.17 U	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.059 U	NA	0.057 U	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.059 U	NA	**0.31**	0.179 U	NA
	Acenaphthylene	600	10	600	10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.059 U	NA	**0.12**	0.179 U	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.1	NA	**4**	0.179 U	NA
	Benzo(a)anthracene	7	7	40	40	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.25**	NA	**7.9**	0.179 U	NA
	Benzo(a)pyrene	2	2	4	4	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.24**	NA	**6.9**	0.179 U	NA
	Benzo(b)fluoranthene	7	7	40	40	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.3**	NA	**8.9**	0.179 U	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.15**	NA	**1.7**	0.179 U	NA
	Benzo(k)fluoranthene	70	70	400	400	70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.087**	NA	**3.3**	0.179 U	NA
	Chrysene	70	70	400	400	70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.21**	NA	**6.7**	0.179 U	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.059 U	NA	**0.71**	0.179 U	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.54**	NA	**15**	0.179 U	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.059 U	NA	**0.22**	0.179 U	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.16**	NA	**1.8**	0.179 U	NA
	2-Methylnaphthalene	80	300	80	500	0.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.059 U	NA	**0.079**	0.179 U	NA
	Naphthalene	40	500	40	1,000	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.059 U	NA	**0.092**	0.179 U	NA
	Phenanthrene	500	500	1,000	1,000	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.4**	NA	**1.2**	0.179 U	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.41**	NA	**15**	0.179 U	NA
PCBs																								
(mg/kg)	Aroclor 1254	2	2	3	3	2	1	NA	NA	**0.516**	0.0564 U	2.60 J	**0.0953 J**	**0.489 J**	0.0606 U	26.7 J	**0.142 J**	0.0516 U	7.13 J	NA	1.08 U	NA	**0.0615 J**	**0.565**
	Aroclor 1260	2	2	3	3	2	1	NA	NA	0.054 U	0.0564 U	0.177 U	0.0577 U	0.0557 U	0.0606 U	1.13 U	0.0550 U	0.0516 U	0.561 U	NA	1.08 U	NA	0.0526 U	0.058 U
	Aroclor 1262	2	2	3	3	2	1	NA	NA	**0.133**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.08 U	NA	NA	**0.279**
	Total PCBs	2	2	3	3	2	1	NA	NA	**0.649**	0.0564 U	2.60 J	**0.0953 J**	**0.489 J**	0.0606 U	26.7 J	**0.142 J**	0.0516 U	7.13 J	NA	2.17 U	NA	**0.0615 J**	**0.844**
PCB Homologs																								
(mg/kg)	Trichlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Heptachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																								
(mg/kg)	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.243**	NA	**0.147**	NA	NA
	Arsenic	20	20	20	20	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**6.02**	NA	**3.66**	2.68 U	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**355**	NA	**86**	**28.2**	NA
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	**0.33**	**1.15**	NA	0.29 U	**0.85**	0.31 U	**0.55**	0.31 U	**1.21**	**0.32**	**0.82**	NA	**8.59**	NA	**0.83**	0.27 U	NA
	Chromium	30	30	200	200	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**8.67**	NA	**7.31**	**3.64**	NA
	Lead	300	300	300	300	300	N/A	**43.3**	**218**	NA	**13.7**	**629**	**52.2**	**134**	**26.3**	**1,460**	**82.8**	**273**	**281**	**1,910**	NA	**149**	**45.8**	NA
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.4**	NA	0.34 U	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP																								
(ug/L)	Lead	NS	NS	NS	NS	NS	5,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**9,670**	NA	**450**	NA	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
ug/L - micrograms per liter.
B - Detected in associated laboratory method blank.
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
NS - No standard available for this compound.
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 or TCLP criteria.
Values shown in bold and outlined exceed TSCA but are less than the listed MassDEP Method 1 standards.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TCLP - Toxicity Characteristic Leaching Procedure.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Characteristic*.
* - TRC developed standards.
** - for Reference purposes only.

TABLE 4-4
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Gym Area (Exposure Point Area HS-4)
New Bedford, Massachusetts

Analysis	Analyte							Sample Location:	HH43	HH43+HI42	HH44	HH44+HI44	HI42	HI43	HI44	HJ42	HJ-42A		HJ-42B		HJ-42C		HJ-42D		HJ42+HF31
								Sample Depth (ft.):	1.5-3	1.5-3	2.5-3	1-3	2.5-3	1.5-3	1-3	2.5-3	0-1	1-3	0-1	1-3	0-1	1-3	0-1	1-3	0.5-3
								Sample Date:	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	4/2/2009	4/2/2009	4/2/2009	4/2/2009	4/2/2009	4/2/2009	4/1/2009	4/1/2009	12/30/2004
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1**	TSCA																		
SVOCs																									
(mg/kg)	4-Bromophenyl phenyl ether	0.3*	0.3*	NS	NS	100	NA		NA	**0.078**	NA	0.059 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.06 U
	Di-n-butylphthalate	NS	NS	NS	NS	50	NA		NA	**0.084 JB**	NA	0.18 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.17 JB**
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	NA		NA	0.19 U	NA	0.18 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.15 J**
	Dibenzofuran	10*	10*	NS	NS	100	NA		NA	0.064 U	NA	0.059 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.12**
	Acenaphthene	1,000	1,000	3,000	3,000	4	NA		NA	0.064 U	NA	0.059 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.27**
	Acenaphthylene	600	10	600	10	1	NA		NA	0.064 U	NA	**0.11**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.077**
	Anthracene	1,000	1,000	3,000	3,000	1,000	NA		NA	0.064 U	NA	**0.21**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.59**
	Benzo(a)anthracene	7	7	40	40	7	NA		NA	**0.15**	NA	**1.2**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1.8**
	Benzo(a)pyrene	2	2	4	4	2	NA		NA	0.064 U	NA	**1.3**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1.7**
	Benzo(b)fluoranthene	7	7	40	40	7	NA		NA	**0.2**	NA	**1.7**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2.4**
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	NA		NA	0.064 U	NA	**0.43**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.87**
	Benzo(k)fluoranthene	70	70	400	400	70	NA		NA	0.064 U	NA	**0.52**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.77**
	Chrysene	70	70	400	400	70	NA		NA	**0.16**	NA	**1.1**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1.4**
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	NA		NA	0.064 U	NA	0.059 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.06 U
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	NA		NA	**0.27**	NA	**2.1**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**3.4**
	Fluorene	1,000	1,000	3,000	3,000	1,000	NA		NA	0.064 U	NA	0.059 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.26**
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	NA		NA	0.064 U	NA	**0.47**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.87**
	2-Methylnaphthalene	80	300	80	500	0.7	NA		NA	0.064 U	NA	0.059 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.11**
	Naphthalene	40	500	40	1,000	4	NA		NA	0.064 U	NA	0.059 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.11**
	Phenanthrene	500	500	1,000	1,000	10	NA		NA	**0.22**	NA	**0.93**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2.8**
	Pyrene	1,000	1,000	3,000	3,000	1,000	NA		NA	**0.41**	NA	**2.7**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**7.1**
PCBs																									
(mg/kg)	Aroclor 1254	2	2	3	3	2	1		**0.899**	NA	**0.157**	NA	**0.538**	1.31 U	**1.5**	**0.94**	0.0561 U	0.0540 U	0.0536 U	**0.125 J**	0.0527 U	**0.676 J**	0.0532 U	**0.136 J**	NA
	Aroclor 1260	2	2	3	3	2	1		0.067 U	NA	0.053 U	NA	0.056 U	1.31 U	1.12 U	0.07 U	0.0561 U	0.0540 U	0.0536 U	**0.121 J**	0.0527 U	**0.190 J**	0.0532 U	0.0572 U	NA
	Aroclor 1262	2	2	3	3	2	1		**0.292**	NA	0.053 U	NA	**0.155**	1.31 U	1.12 U	**0.277**	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1		**1.191**	NA	**0.157**	NA	**0.693**	2.63 U	**1.5**	**1.217**	0.0561 U	0.0540 U	0.0536 U	**0.246 J**	0.0527 U	**0.866 J**	0.0532 U	**0.136 J**	NA
PCB Homologs																									
(mg/kg)	Trichlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Heptachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																									
(mg/kg)	Mercury	20	20	30	30	20	N/A		NA	**0.223**	NA	**0.15**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1.25**
	Arsenic	20	20	20	20	20	N/A		NA	**5.25**	NA	**4.87**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**17**
	Barium	1,000	1,000	3,000	3,000	1,000	N/A		NA	**344**	NA	**135**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**340**
	Beryllium	100	100	200	200	100	N/A		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A		NA	**1.78**	NA	**2.24**	NA	NA	NA	NA	0.28 U	0.27 U	0.30 U	0.28 U	0.27 U	2.66	0.27 U	0.28 U	**4.92**
	Chromium	30	30	200	200	30	N/A		NA	**36**	NA	**9.3**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**36**
	Lead	300	300	300	300	300	N/A		NA	**665**	NA	**351**	NA	NA	NA	NA	**7.41**	**4.06**	**8.36**	**26.4**	**6.83**	**247**	**12.3**	**16.8**	**993**
	Nickel	20	20	700	700	20	N/A		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A		NA	0.39 U	NA	0.32 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.48**
	Vanadium	600	600	1,000	1,000	600	N/A		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP																									
(ug/L)	Lead	NS	NS	NS	NS	NS	5,000(1)		NA	**420**	NA	**120**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,280**

Notes:
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J - Estimated value; below quantitation limit.
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PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
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TABLE 4-4
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Gym Area (Exposure Point Area HS-4)
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	HJ44	HJ44+HJ43	HS-7	HS-9	HS-10	SB-267			SB-365						NBHS-1	
	Sample Location:							HJ44	HJ44+HJ43	HS-7	HS-9	HS-10	SB-267			SB-365						NBHS-1	
	Sample Depth (ft.):							2.75-3	1.5-3	0-0.5	0-0.5	0-0.5	1	3.5	9	0-1	1-3	5-7	5-7	9	12	8	12
	Sample Date:							12/30/2004	12/30/2004	9/9/2004	9/9/2004	9/9/2004	7/14/2008	7/14/2008	7/14/2008	3/4/2009	3/4/2009	3/4/2009	3/4/2009 Field Dup	3/4/2009	3/4/2009	7/29/2008	7/29/2008
SVOCs (mg/kg)	4-Bromophenyl phenyl ether	0.3*	0.3*	NS	NS	100	NA	NA	0.06 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	NA	NA	**0.13 JB**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	NA	NA	**0.076 J**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	NA	NA	0.06 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	NA	NA	0.06 U	NA	NA	NA	0.169 U	0.207 U	0.199 U	0.188 U	0.178 U	0.415 U	**0.970**	0.897 U	NA	**0.321**	0.665 U
	Acenaphthylene	600	10	600	10	1	NA	NA	0.06 U	NA	NA	NA	0.169 U	0.207 U	0.199 U	0.188 U	0.178 U	0.415 U	0.534 U	0.897 U	NA	0.200 U	0.665 U
	Anthracene	1,000	1,000	3,000	3,000	1,000	NA	NA	**0.14**	NA	NA	NA	0.169 U	0.207 U	0.199 U	0.188 U	0.178 U	0.415 U	**2.11**	0.897 U	NA	**0.929**	0.665 U
	Benzo(a)anthracene	7	7	40	40	7	NA	NA	**0.51**	NA	NA	NA	**0.260**	0.207 U	0.199 U	0.188 U	0.178 U	**0.575**	**3.52**	0.897 U	NA	**3.21**	0.665 U
	Benzo(a)pyrene	2	2	4	4	2	NA	NA	**0.5**	NA	NA	NA	**0.271**	0.207 U	0.199 U	0.188 U	0.178 U	**0.503**	**2.91**	0.897 U	NA	**2.86**	0.665 U
	Benzo(b)fluoranthene	7	7	40	40	7	NA	NA	**0.71**	NA	NA	NA	**0.343**	**0.275**	0.199 U	0.188 U	0.178 U	**0.717**	**4.24**	0.897 U	NA	**3.42**	0.665 U
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	NA	NA	**0.27**	NA	NA	NA	0.338 U	0.413 U	0.397 U	0.188 U	0.178 U	0.415 U	**0.963**	0.897 U	NA	**2.30**	0.665 U
	Benzo(k)fluoranthene	70	70	400	400	70	NA	NA	**0.25**	NA	NA	NA	0.169 U	0.207 U	0.199 U	0.188 U	0.178 U	0.415 U	**1.61**	0.897 U	NA	**1.07**	0.665 U
	Chrysene	70	70	400	400	70	NA	NA	**0.44**	NA	NA	NA	**0.325**	**0.682**	0.199 U	0.188 U	0.178 U	**0.624**	**3.46**	0.897 U	NA	**3.08**	0.665 U
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	NA	NA	0.06 U	NA	NA	NA	0.338 U	0.413 U	0.397 U	0.188 U	0.178 U	0.415 U	0.534 U	0.897 U	NA	**0.643**	0.665 U
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	NA	NA	**0.92**	NA	NA	NA	**0.523**	0.207 U	0.199 U	0.188 U	0.178 U	**1.01**	**7.37**	0.897 U	NA	**3.87**	0.665 U
	Fluorene	1,000	1,000	3,000	3,000	1,000	NA	NA	0.06 U	NA	NA	NA	0.169 U	0.207 U	0.199 U	0.188 U	0.178 U	0.415 U	**1.19**	0.897 U	NA	**0.401**	0.665 U
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	NA	NA	0.06 U	NA	NA	NA	0.338 U	0.413 U	0.397 U	0.188 U	0.178 U	0.415 U	**1.21**	0.897 U	NA	**2.60**	0.665 U
	2-Methylnaphthalene	80	300	80	500	0.7	NA	NA	0.06 U	NA	NA	NA	0.169 U	0.207 U	0.199 U	0.188 U	0.178 U	0.415 U	0.534 U	0.897 U	NA	0.200 U	0.665 U
	Naphthalene	40	500	40	1,000	4	NA	NA	0.06 U	NA	NA	NA	0.169 U	0.207 U	0.199 U	0.188 U	0.178 U	0.415 U	0.534 U	0.897 U	NA	**0.290**	0.665 U
	Phenanthrene	500	500	1,000	1,000	10	NA	NA	**0.7**	NA	NA	NA	**0.230**	**0.846**	0.199 U	0.188 U	0.178 U	**1.69**	**9.22**	0.897 U	NA	**3.78**	0.665 U
	Pyrene	1,000	1,000	3,000	3,000	1,000	NA	NA	**1.5**	NA	NA	NA	**0.585**	**0.289**	0.199 U	0.188 U	0.178 U	**1.00**	**5.67**	0.897 U	NA	**5.35**	0.665 U
PCBs (mg/kg)	Aroclor 1254	2	2	3	3	2	1	**1.13**	NA	0.12 U	0.11 U	0.11 U	0.0500 U	0.0586 U	0.0584 U	0.0574 U	0.0518 U	**0.329 J**	**0.501 J**	0.266 UJ	0.0576 U	**0.479 J**	0.230 UJ
	Aroclor 1260	2	2	3	3	2	1	0.056 U	NA	0.12 U	0.11 U	0.11 U	0.0500 U	0.0586 U	0.0584 U	0.0574 U	0.0518 U	0.0612 U	**0.189 J**	0.266 UJ	0.0576 U	**1.33 J**	0.230 UJ
	Aroclor 1262	2	2	3	3	2	1	**0.193**	NA	0.12 U	0.11 U	0.11 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	**1.323**	NA	0.23 U	0.22 U	0.22 U	0.0500 U	0.0586 U	0.0584 U	0.0574 U	0.0518 U	**0.329 J**	**0.690 J**	0.266 UJ	0.0576 U	**1.809 J**	0.230 UJ
PCB Homologs (mg/kg)	Trichlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.025**	NA
	Pentachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.028 J**	NA
	Hexachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.039**	NA
	Heptachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.081**	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.17**	NA
Metals (mg/kg)	Mercury	20	20	30	30	20	N/A	NA	**0.103**	NA	NA	NA	**0.079**	**0.078**	0.012 U	**0.049**	0.014 U	**0.606**	**0.658**	**0.163**	NA	**0.423**	0.089 U
	Arsenic	20	20	20	20	20	N/A	NA	**3.85**	NA	NA	NA	**3.19**	**14.3**	**4.84**	2.82 U	2.67 U	**15.3**	**53.4**	13.5 U	NA	**34.0**	9.97 U
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	**176**	NA	NA	NA	**14.0**	**200**	**7.59**	**17.7**	**10.9**	**1,500**	**755**	**181**	NA	**370**	**39.5**
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	0.26 U	0.31 U	0.30 U	0.29 U	0.27 U	0.32 U	0.40 U	1.35 U	NA	0.30 U	1.00 U
	Cadmium	2	2	30	30	2	N/A	NA	**1.96**	NA	NA	NA	0.26 U	0.31 U	0.30 U	0.29 U	0.27 U	**3.54**	**5.59**	1.35 U	NA	**8.78**	1.00 U
	Chromium	30	30	200	200	30	N/A	NA	**11**	NA	NA	NA	**5.14**	**5.30**	**3.81**	**6.20**	**2.04**	**29.1**	**43.5**	**7.14**	NA	**154**	**13.7**
	Lead	300	300	300	300	300	N/A	NA	**447**	NA	NA	NA	**47.9**	**209**	**3.13**	**15.7**	**3.05**	**741**	**1,590**	**19.0**	NA	**2,780**	**12.1**
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	**3.98**	**11.7**	**4.02**	**3.16**	**2.89**	**47.9**	**44.7**	**4.26**	NA	**173**	**9.95**
	Silver	100	100	200	200	100	N/A	NA	0.34 U	NA	NA	NA	**2.22**	**3.94**	**1.17**	0.57 U	0.54 U	0.63 U	**5.20**	2.69 U	NA	**29.0**	2.00 U
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	**10.6**	**18.3**	5.95 U	**9.87**	5.34 U	**219**	**60.1**	26.9 U	NA	**18.2**	20.0 U
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	**33.8**	**25.3**	**14.1**	**28.6**	**16.3**	**1,050**	**935**	**96.3**	NA	**1670**	**28.7**
Metals, TCLP (ug/L)	Lead	NS	NS	NS	NS	NS	5,000(1)	NA	**360**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
ug/L - micrograms per liter.
B - Detected in associated laboratory method blank.
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
NS - No standard available for this compound.
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 or TCLP crit
Values shown in bold and outlined exceed TSCA but are less than the listed MassDEP Method 1 standards.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TCLP - Toxicity Characteristic Leaching Procedure.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Characteristic*.
* - TRC developed standards.
** - for Reference purposes only.

TABLE 4-4
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Gym Area (Exposure Point Area HS-4)
New Bedford, Massachusetts

Analysis	Analyte							NBHS-SS-8		NBHS-SS-9	SS-42	SS-43	SS-44	SS-45	SS-46
							Sample Location:	NBHS-SS-8		NBHS-SS-9	SS-42	SS-43	SS-44	SS-45	SS-46
							Sample Depth (ft.):	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5
							Sample Date:	8/6/2008	8/6/2008	8/6/2008	12/2/2008	12/2/2008	12/2/2008	12/2/2008	12/2/2008
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1**	TSCA		Field Dup						
SVOCs															
(mg/kg)	4-Bromophenyl phenyl ether	0.3*	0.3*	NS	NS	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	NA	NA	NA	NA	NA	NA	NA	NA	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	NA	NA	NA	NA	0.199 U	0.199 U	0.201 U	0.207 U	0.206 U
	Acenaphthylene	600	10	600	10	1	NA	NA	NA	NA	0.199 U	0.199 U	0.201 U	0.207 U	0.206 U
	Anthracene	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	NA	0.199 U	0.199 U	0.201 U	0.207 U	0.206 U
	Benzo(a)anthracene	7	7	40	40	7	NA	NA	NA	NA	0.199 U	0.199 U	0.201 U	0.207 U	0.206 U
	Benzo(a)pyrene	2	2	4	4	2	NA	NA	NA	NA	0.199 U	0.199 U	0.201 U	0.207 U	0.206 U
	Benzo(b)fluoranthene	7	7	40	40	7	NA	NA	NA	NA	0.199 U	**0.257**	0.201 U	0.207 U	0.206 U
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	NA	0.199 U	0.199 U	0.201 U	0.207 U	0.206 U
	Benzo(k)fluoranthene	70	70	400	400	70	NA	NA	NA	NA	0.199 U	0.199 U	0.201 U	0.207 U	0.206 U
	Chrysene	70	70	400	400	70	NA	NA	NA	NA	0.199 U	0.199 U	0.201 U	0.207 U	0.206 U
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	NA	NA	NA	NA	0.199 U	0.199 U	0.201 U	0.207 U	0.206 U
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	NA	0.199 U	**0.437**	0.201 U	0.207 U	0.206 U
	Fluorene	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	NA	0.199 U	0.199 U	0.201 U	0.207 U	0.206 U
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	NA	NA	NA	NA	0.199 U	0.199 U	0.201 U	0.207 U	0.206 U
	2-Methylnaphthalene	80	300	80	500	0.7	NA	NA	NA	NA	0.199 U	0.199 U	0.201 U	0.207 U	0.206 U
	Naphthalene	40	500	40	1,000	4	NA	NA	NA	NA	0.199 U	0.199 U	0.201 U	0.207 U	0.206 U
	Phenanthrene	500	500	1,000	1,000	10	NA	NA	NA	NA	0.199 U	**0.344**	0.201 U	0.207 U	0.206 U
	Pyrene	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	NA	0.199 U	**0.258**	0.201 U	0.207 U	0.206 U
PCBs															
(mg/kg)	Aroclor 1254	2	2	3	3	2	1	0.0523 U	0.0530 U	0.0508 U	0.0549 U	0.0581 U	0.0598 U	0.0580 U	0.0617 U
	Aroclor 1260	2	2	3	3	2	1	0.0523 U	0.0530 U	0.0508 U	0.0549 U	0.0581 U	0.0598 U	0.0580 U	0.0617 U
	Aroclor 1262	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	0.0523 U	0.0530 U	0.0508 U	0.0549 U	0.0581 U	0.0598 U	0.0580 U	0.0617 U
PCB Homologs															
(mg/kg)	Trichlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA
	Heptachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA
Metals															
(mg/kg)	Mercury	20	20	30	30	20	N/A	NA	NA	NA	**0.044**	**0.046**	**0.041**	**0.049**	**0.040**
	Arsenic	20	20	20	20	20	N/A	NA	NA	NA	**3.00**	2.98 U	3.01 U	**3.29**	3.33
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	**17.5**	**29.1**	**17.7**	**24.9**	**21.3**
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	0.30 U	0.30 U	0.31 U	0.32 U	0.31 U
	Cadmium	2	2	30	30	2	N/A	NA	NA	NA	0.30 U	0.30 U	0.31 U	0.32 U	0.31 U
	Chromium	30	30	200	200	30	N/A	NA	NA	NA	**5.29**	**7.92**	**4.87**	**7.13**	**7.08**
	Lead	300	300	300	300	300	N/A	NA	NA	NA	**17.5**	**55.2**	**22.2**	**23.4**	**21.1**
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	**2.64**	**4.20**	**2.28**	**3.39**	**3.17**
	Silver	100	100	200	200	100	N/A	NA	NA	NA	0.60 U	0.60 U	0.61 U	0.63 U	0.62 U
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	**11.7**	**12.7**	**10.6**	**13.5**	**14.5**
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	**27.7**	**54.9**	**36.9**	**30.4**	**31.5**
Metals, TCLP															
(ug/L)	Lead	NS	NS	NS	NS	NS	5,000(1)	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
ug/L - micrograms per liter.
B - Detected in associated laboratory method blank.
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
NS - No standard available for this compound.
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 or TCLP criteria.
Values shown in bold and outlined exceed TSCA but are less than the listed MassDEP Method 1 standards.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TCLP - Toxicity Characteristic Leaching Procedure.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Chnracteristic*.
* - TRC developed standards.
** - for Reference purposes only.

TABLE 4-5
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Flag Pole Area (Exposure Point Area HS-5)
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	HA29	HA29+HB29	HB23+HB27 MSB	HB25	HB25+HB26	HB26	HB27	HB28	HB28+HB27	HB29	HB29	HS-5
	Sample Depth (ft.):							1-2.5	1-3	0.75-3	1-3	0.5-3	0.5-3	1-3	1.5-3	1-3	1-3	1-3	0-0.5
	Sample Date:							12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/28/2004 Field Dup	9/9/2004
SVOCs (mg/kg)	4-Methylphenol	200*	5*	NS	NS	500	N/A	NA	**0.074**	NA	NA	0.062 U	NA	NA	NA	0.064 U	NA	NA	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	**0.41 B**	NA	NA	**0.19 B**	NA	NA	NA	**1 B**	NA	NA	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	N/A	NA	**0.43**	NA	NA	**0.19**	NA	NA	NA	**0.1 J**	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	**0.98**	NA	NA	**0.25**	NA	NA	NA	**0.35**	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	**1.6**	NA	NA	**0.42**	NA	NA	NA	**0.49**	NA	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	NA	**0.27**	NA	NA	**0.17**	NA	NA	NA	**0.12**	NA	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	**4**	NA	NA	**1.4**	NA	NA	NA	**2.3**	NA	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	**5**	NA	NA	**4.8**	NA	NA	NA	**5.5**	NA	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	**6.4**	NA	NA	**3.7**	NA	NA	NA	**4.7**	NA	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	**5.1**	NA	NA	**6.1**	NA	NA	NA	**7.5**	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	**2.1**	NA	NA	**1.4**	NA	NA	NA	**1.2**	NA	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	**3.3**	NA	NA	**1.9**	NA	NA	NA	**2.8**	NA	NA	NA
	Chrysene	70	70	400	400	70	N/A	NA	**7.2**	NA	NA	**3.7**	NA	NA	NA	**4.1**	NA	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	0.06 U	NA	NA	0.062 U	NA	NA	NA	**0.5**	NA	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	**9.5**	NA	NA	**7.8**	NA	NA	NA	**11**	NA	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	**1.6**	NA	NA	**0.52**	NA	NA	NA	**0.69**	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	**2.4**	NA	NA	**1.5**	NA	NA	NA	**1.4**	NA	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	**0.38**	NA	NA	**0.11**	NA	NA	NA	**0.096**	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	**0.64**	NA	NA	**0.14**	NA	NA	NA	**0.13**	NA	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	**7.7**	NA	NA	**5.8**	NA	NA	NA	**7.4**	NA	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	**9.4**	NA	NA	**7.8**	NA	NA	NA	**19**	NA	NA	NA
PCBs (mg/kg)	Aroclor 1254	2	2	3	3	2	1	**2.37**	NA	NA	1.24 U	NA	**4.73**	**2.88**	**2.43**	NA	**6.11**	**1.53**	**0.629**
	Aroclor 1260	2	2	3	3	2	1	0.059 U	NA	NA	1.24 U	NA	0.062 U	0.062 U	0.061 U	NA	0.062 U	0.061 U	0.11 U
	Aroclor 1262	2	2	3	3	2	1	**0.26**	NA	NA	1.24 U	NA	**0.438**	**0.489**	**0.366**	NA	**0.366**	**0.194**	0.11 U
	Total PCBs	2	2	3	3	2	1	**2.63**	NA	NA	2.49 U	NA	**5.168**	**3.369**	**2.796**	NA	**6.476**	**1.724**	**0.629**
Metals, total (mg/kg)	Arsenic	20	20	20	20	20	N/A	NA	**9.58**	**91**	NA	**14**	NA	NA	NA	**9.19**	NA	NA	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	**742**	**875**	NA	**1,010**	NA	NA	NA	**789**	NA	NA	NA
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	NA	**5.94**	**82**	NA	**7.14**	NA	NA	NA	**5.82**	NA	NA	NA
	Chromium	30	30	200	200	30	N/A	NA	**61**	**143**	NA	**91**	NA	NA	NA	**66**	NA	NA	NA
	Lead	300	300	300	300	300	N/A	NA	**847**	**985**	NA	**1,790**	NA	NA	NA	**1,310**	NA	NA	NA
	Mercury	20	20	30	30	20	N/A	NA	**1.37**	**2.33**	NA	**0.715**	NA	NA	NA	**1.44**	NA	NA	NA
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Selenium	400	400	800	800	400	N/A	NA	0.7 U	**75**	NA	0.82 U	NA	NA	NA	0.84 U	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	**0.7**	**75**	NA	**1.64**	NA	NA	NA	**0.76**	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP (ug/L)	Lead, TCLP	NS	NS	NS	NS	NS	5,000(1)	NA	**550**	NA	NA	**2,270**	NA	NA	NA	**1,500**	NA	NA	NA
	Mercury, TCLP	NS	NS	NS	NS	NS	200(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

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

ug/L - micrograms per liter.

B - Detected in associated laboratory method blank.

J - Estimated value; below quantitation limit.

NA - Sample not analyzed for the listed analyte.

N/A - Not applicable/available.

NS - No standard available for this compound.

U - Compound was not detected at specified quantitation limit.

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 Method 1 standards or TCLP standard, as applicable.

Values shown in bold and outlined exceed TSCA standard.

SVOCs - Semivolatile Organic Compounds.

PCBs - Polychlorinated Biphenyls.

RC - Reportable Concentration.

TSCA - Toxic Substances Control Act criteria.

2004 data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.

(1) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contominants for Toxicity Characteristic*.

* - TRC developed standards.

TABLE 4-5
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Flag Pole Area (Exposure Point Area HS-5)
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	HS-6	COMP SS-13-A,F,S,T	COMP SS-13-AC,AD,AE,AF	COMP SS-13 - AG, AK, AO,	COMP SS-13-AI, BA,BB,BC,BD	COMP SS-13-AQ,	COMP SS-13-AS,AT,AU,AV		COMP SS-13-AW,AX,AY,AZ	COMP SS-13-E,L,K,B	COMP SS-13-G,H,I,J	COMP SS-13-M,N,O,P
	Sample Depth (ft.):							0-0.5	0.5-4	0.5-4	0.5-4	1-4	1-4	0.5-4	0.5-4	0.5-4	0.5-4	0.5-4	1-4
	Sample Date:							9/9/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004 Field Dup	9/2/2004	9/2/2004	9/2/2004	9/2/2004
SVOCs (mg/kg)	4-Methylphenol	200*	5*	NS	NS	500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	2.1 U	0.4 U	0.38 U	0.41 U	2.1 U	0.42 U	0.42 U	0.43 U	0.4 U	0.39 U	0.45 U
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	N/A	NA	4.2 U	0.8 U	0.76 U	0.82 U	4.2 U	0.83 U	0.83 U	0.85 U	0.8 U	0.78 U	0.9 U
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	2.9	0.62	0.38 U	0.41 U	2.1 U	0.42 U	0.5	0.43 U	0.4 U	0.39 U	0.45 U
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	2.6	0.4 U	0.38 U	0.61	2.1 U	0.42 U	0.85	0.55	0.4 U	0.39 U	0.56
	Acenaphthylene	600	10	600	10	1	N/A	NA	2.1 U	0.64	0.38 U	0.42	2.1 U	0.42	0.52	0.43 U	0.4 U	0.39 U	0.45 U
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	10	1.1	0.63	1.7	4.6	0.85	2.8	1.4	0.85	1	1.3
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	17	1.7	1.4	3.6	6.9	2	5.1	3.9	2	2.2	2.8
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	7.7	0.93	0.95	3.3	5.8	1.9	4.4	3.4	1.8	2	2.4
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	13	1	1.2	3.6	5.6	2.1	4.9	3.3	1.9	2	2.4
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	6.2	1	1.1	2.1	3.8	1.4	2.8	2.2	1.3	1.5	1.6
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	13	1.6	1.4	2.4	5	1.9	3.1	3.2	1.5	1.8	2.2
	Chrysene	70	70	400	400	70	N/A	NA	16	1.6	1.5	3.5	6.2	2.1	5.1	3.6	2	2.2	2.8
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	2.7	0.45	0.44	1.1	2.1 U	0.62	1.4	1.2	0.64	0.76	0.72
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	47	4.4	3.3	9.5	19	4.7	14	9.4	4.3	5.1	6.5
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	3.9	0.58	0.38 U	0.7	3	0.42 U	0.93	0.53	0.4 U	0.39 U	0.52
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	6	0.95	0.94	2	3.4	1.2	2.7	2	1.2	1.4	1.4
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	2.1 U	0.4 U	0.38 U	0.41 U	2.1 U	0.42 U	0.42 U	0.43 U	0.4 U	0.39 U	0.45 U
	Naphthalene	40	500	40	1,000	4	N/A	NA	2.1 U	0.4 U	0.38 U	0.41 U	2.1 U	0.42 U	0.42 U	0.43 U	0.4 U	0.39 U	0.45 U
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	42	4.4	2.4	6.6	19	3.2	11	5.8	2.3	3.6	5.2
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	38	4.0	3.1	8.4	16	4.5	13	8.2	4.4	5	5.9
PCBs (mg/kg)	Aroclor 1254	2	2	3	3	2	1	3.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aroclor 1260	2	2	3	3	2	1	1.13 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aroclor 1262	2	2	3	3	2	1	1.13 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	3.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, total (mg/kg)	Arsenic	20	20	20	20	20	N/A	NA	31	10	6.8	20	10	17	17	19	48	19	16
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	130	140	230	430	310	400	230	250	22	500	380
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	NA	2.4	2.1	1.2	2.2	2	2.6	2.5	1.7	2.6	2.4	2.7
	Chromium	30	30	200	200	30	N/A	NA	17	22	22	31	27	44	42	32	53	73	36
	Lead	300	300	300	300	300	N/A	NA	590	530	450	1,200	750	860	1,600	640	720	1,100	1,300
	Mercury	20	20	30	30	20	N/A	NA	0.54	0.46	0.42	1.2	0.95	0.95	1.1	0.76	76	0.73	0.79
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Selenium	400	400	800	800	400	N/A	NA	2.5 U	2.4 U	2.2 U	4.9	2.4 U	2.4 U	3.1	2.6 U	2.4 U	12 U	2.7 U
	Silver	100	100	200	200	100	N/A	NA	0.59	0.48 U	0.56	1.2	1.1	1.1	1	0.59	0.77	1	0.89
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP (ug/L)	Lead, TCLP	NS	NS	NS	NS	NS	5,000(1)	NA	770	NA	NA	NA	NA	NA	NA	NA	600	7,100	2,400
	Mercury, TCLP	NS	NS	NS	NS	NS	200(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	2	NA	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
ug/L - micrograms per liter.
B - Detected in associated laboratory method blank.
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable/available.
NS - No standard available for this compound.
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Values in Bold indicate the compound was detected.
Values shown in Bold and shaded type exceed one or more of the listed Method 1 standards or TCLP standard, as applicable.
Values shown in bold and outlined exceed TSCA standard.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TSCA - Toxic Substances Control Act criteria.
2004 data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Characteristic*.
* - TRC developed standards.

TABLE 4-5
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Flag Pole Area (Exposure Point Area HS-5)
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	COMP SS-13-Q,R,C,D	COMP SS-13-U,Z,AA,AB	COMP SS-13-V, W, X, Y	COMP SS-13-V,W, X, Y	SS-13-A	SS-13-AA	SS-13-AB	SS-13-AC	SS-13-AD	SS-13-AE	SS-13-AF	SS-13-AG	SS-13-AI	SS-13-AJ
	Sample ID:							COMP SS-13-Q,R,C,D	COMP SS-13-U,Z,AA,AB	COMP SS-13-V, W, X, Y	COMP SS-13-V,W, X, Y	SS-13-A	SS-13-AA	SS-13-AB	SS-13-AC	SS-13-AD	SS-13-AE	SS-13-AF	SS-13-AG	SS-13-AI	SS-13-AJ
	Sample Depth (ft.):							1-4	1-4	0.5-4	0.5-4	0.5-4	1-4	2.5-4	2-4	1-4	1-4	0.5-4	1-4	1-4	1-4
	Sample Date:							9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004
SVOCs																					
(mg/kg)	4-Methylphenol	200*	5*	NS	NS	500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	0.37 U	2.1 U	NA	0.4 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	N/A	0.74 U	4.3 U	NA	0.8 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	**0.56**	2.1 U	NA	0.4 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	0.37 U	2.1 U	NA	**0.55**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	**4**	2.1 U	NA	**1.5**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	**2.2**	2.1 U	NA	**2.0**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	**10**	2.1 U	NA	**3.6**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	**11**	2.1 U	NA	**2.1**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	**8.4**	2.1 U	NA	**2.8**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	**6.3**	2.1 U	NA	**2.6**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	**14**	2.1 U	NA	**3.5**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	70	70	400	400	70	N/A	**11**	2.1 U	NA	**4.3**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	**2.5**	2.1 U	NA	**1.2**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	**33**	**4**	NA	**8**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	**1.1**	2.1 U	NA	**1.1**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	**5.6**	2.1 U	NA	**2.3**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	0.37 U	2.1 U	NA	**8.6**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	0.37 U	2.1 U	NA	**40**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	**14**	**2.9**	NA	**7.5**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	**25**	**3.7**	NA	**8.8**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs																					
(mg/kg)	Aroclor 1254	2	2	3	3	2	1	NA	NA	NA	NA	0.0379 U	0.045 U	**0.0988**	**0.352**	0.0476 U	0.0444 U	**12.6**	**0.0584**	**1.44**	**0.719**
	Aroclor 1260	2	2	3	3	2	1	NA	NA	NA	NA	0.0379 U	0.045 U	0.0412 U	**0.187**	0.0476 U	**0.172**	0.855 U	0.0351 U	**0.796**	**0.341**
	Aroclor 1262	2	2	3	3	2	1	NA	NA	NA	NA	0.0379 U	0.045 U	0.0412 U	0.0366 U	0.0476 U	0.0444 U	0.855 U	0.0351 U	0.211 U	0.0412 U
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	0.0379 U	0.045 U	**0.0988**	**0.539**	0.0476 U	**0.172**	**12.6**	**0.0584**	**2.236**	**1.06**
Metals, total																					
(mg/kg)	Arsenic	20	20	20	20	20	N/A	**6**	**27**	NA	**10**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	**120**	**390**	NA	**380**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	**1**	**3.3**	NA	**4**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	30	30	200	200	30	N/A	**8.9**	**38**	NA	**39**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	300	300	300	300	300	N/A	**560**	**1,500**	NA	**1,000**	**2,200**	**1,800**	**2,200**	**320**	**160**	**370**	**1,100**	**4.6**	**2,100**	**960**
	Mercury	20	20	30	30	20	N/A	**0.32**	**0.5**	NA	**1.5**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Selenium	400	400	800	800	400	N/A	2.2 U	2.6 U	NA	2.4 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	0.44 U	**1.3**	NA	**0.54**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP																					
(ug/L)	Lead, TCLP	NS	NS	NS	NS	NS	5,000(1)	**2,000**	**1,500**	**5,200**	NA	**22,000**	**1,500**	**2,900**	**2,000**	NA	NA	NA	NA	NA	NA
	Mercury, TCLP	NS	NS	NS	NS	NS	200(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

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ug/L - micrograms per liter.

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New Bedford High School - Flag Pole Area (Exposure Point Area HS-5)
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	SS-13-AK	SS-13-AL	SS-13-AM	SS-13-AN	SS-13-AO	SS-13-AQ	SS-13-AR	SS-13-AS	SS-13-AT	SS-13-AU	SS-13-AV
	Sample Depth (ft.):							0.5-1.5	1-4	1-4	1-4	1-4	1-4	0.5-1.5	0.5-4	1-4	1-4	1-4
	Sample Date:							9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004
SVOCs (mg/kg)	4-Methylphenol	200*	5*	NS	NS	500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	70	70	400	400	70	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)	Aroclor 1254	2	2	3	3	2	1	**0.298**	**0.47**	**4.56**	**1.57**	**4.87**	**5.48**	**0.425**	**0.439**	**1.56**	**0.139**	**0.234**
	Aroclor 1260	2	2	3	3	2	1	**0.135**	**0.461**	0.427 U	0.208 U	0.383 U	0.417 U	**0.242**	**0.23**	0.0417 U	**0.0804**	**0.139**
	Aroclor 1262	2	2	3	3	2	1	0.0351 U	0.0402 U	0.427 U	0.208 U	0.383 U	0.417 U	0.0379 U	0.0463 U	0.0417 U	0.0417 U	0.0374 U
	Total PCBs	2	2	3	3	2	1	**0.433**	**0.931**	**4.56**	**1.57**	**4.87**	**5.48**	**0.667**	**0.669**	**1.56**	**0.2194**	**0.373**
Metals, total (mg/kg)	Arsenic	20	20	20	20	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	30	30	200	200	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	300	300	300	300	300	N/A	250	1,400	970	1,800	1,200	720	560	440	4,200	840	540
	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Selenium	400	400	800	800	400	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP (ug/L)	Lead, TCLP	NS	NS	NS	NS	NS	5,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Mercury, TCLP	NS	NS	NS	NS	NS	200(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
ug/L - micrograms per liter.
B - Detected in associated laboratory method blank.
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable/available.
NS - No standard available for this compound.
U - Compound was not detected at specified quantitation limit.
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 Method 1 standards or TCLP standard, as applicable.
Values shown in bold and outlined exceed TSCA standard.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TSCA - Toxic Substances Control Act criteria.
2004 data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Characteristic*.
* - TRC developed standards.

TABLE 4-5
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Flag Pole Area (Exposure Point Area HS-5)
New Bedford, Massachusetts

Analysis	Analyte						Sample ID:	SS-13-AW		SS-13-AX	SS-13-AY	SS-13-AZ	SS-13-B	SS-13-BA	SS-13-BB	SS-13-BC	SS-13-BD	SS-13-C
							Sample Depth (ft.):	1-4	1-4	0.5-4	0.5-4	0.5-4	0.5-4	1-4	1-4	1-4	1-4	1-4
							Sample Date:	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA		Field Dup									
SVOCs																		
(mg/kg)	4-Methylphenol	200*	5*	NS	NS	500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	70	70	400	400	70	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs																		
(mg/kg)	Aroclor 1254	2	2	3	3	2	1	1.66	**0.597**	**2.21**	**0.13**	0.0444 U	**0.298**	**0.427**	**0.124**	**0.219**	**0.221**	**0.0541**
	Aroclor 1260	2	2	3	3	2	1	0.219 U	**0.358**	0.228 U	**0.0523**	0.0444 U	**0.346**	**0.21**	**0.0575**	**0.342**	0.0427 U	**0.212**
	Aroclor 1262	2	2	3	3	2	1	0.219 U	0.0433 U	0.228 U	0.045 U	0.0444 U	0.0358 U	0.0402 U	0.0412 U	0.0417 U	0.0427 U	0.0402 U
	Total PCBs	2	2	3	3	2	1	1.66	**0.955**	**2.21**	**0.1823**	0.0444 U	**0.644**	**0.637**	**0.1815**	**0.561**	**0.221**	**0.2661**
Metals, total																		
(mg/kg)	Arsenic	20	20	20	20	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	30	30	200	200	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	300	300	300	300	300	N/A	**990**	**1,000**	**1,000**	**380**	**130**	**930**	**1,300**	**1,600**	**530**	**620**	**930**
	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Selenium	400	400	800	800	400	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP																		
(ug/L)	Lead, TCLP	NS	NS	NS	NS	NS	5,000(1)	NA	NA	NA	NA	NA	**1,000**	NA	NA	NA	NA	**2,000**
	Mercury, TCLP	NS	NS	NS	NS	NS	200(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
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ug/L - micrograms per liter.
B - Detected in associated laboratory method blank.
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable/available.
NS - No standard available for this compound.
U - Compound was not detected at specified quantitation limit.
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Values shown in bold and outlined exceed TSCA standard.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
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2004 data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminonts for Toxicity Characteristic* .
* - TRC developed standards.

TABLE 4-5
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Flag Pole Area (Exposure Point Area HS-5)
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	SS-13-D	SS-13-E	SS-13-F	SS-13-G	SS-13-H	SS-13-I	SS-13-J	SS-13-K	SS-13-L	SS-13-M	SS-13-N
	Sample Depth (ft.):							1-4	1-4	0.5-4	0.5-4	1-4	1-4	2-4	0.5-4	0.5-4	1-4	1-4
	Sample Date:							9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004
SVOCs (mg/kg)	4-Methylphenol	200*	5*	NS	NS	500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	70	70	400	400	70	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)	Aroclor 1254	2	2	3	3	2	1	0.0406 U	0.045 U	**0.0731**	0.0351 U	**0.358**	**1.25**	**1.53**	**0.133**	**0.572**	**0.0467**	0.0427 U
	Aroclor 1260	2	2	3	3	2	1	0.0406 U	0.045 U	0.0444 U	0.0351 U	**0.0956**	**0.592**	**1.22**	0.0397 U	**0.143**	**0.0459**	0.0427 U
	Aroclor 1262	2	2	3	3	2	1	0.0406 U	0.045 U	0.0444 U	0.0351 U	0.0412 U	0.228 U	0.196 U	0.0397 U	0.0433 U	0.0433 U	0.0427 U
	Total PCBs	2	2	3	3	2	1	0.0406 U	0.045 U	**0.0731**	0.0351 U	**0.4536**	**1.842**	**2.75**	**0.133**	**0.715**	**0.0926**	0.0427 U
Metals, total (mg/kg)	Arsenic	20	20	20	20	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	30	30	200	200	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	300	300	300	300	300	N/A	**380**	**490**	**660**	**38**	**9,700**	**2,300**	**1,600**	**72**	**480**	**950**	**1,300**
	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Selenium	400	400	800	800	400	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP (ug/L)	Lead, TCLP	NS	NS	NS	NS	NS	5,000(1)	500 U	**530**	**2,100**	NA	**3,300**	**2,300**	**1,900**	NA	**900**	**3,900**	**610**
	Mercury, TCLP	NS	NS	NS	NS	NS	200(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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* - TRC developed standards.

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New Bedford High School - Flag Pole Area (Exposure Point Area HS-5)
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	SS-13-O	SS-13-P	SS-13-Q	SS-13-R	SS-13-S	SS-13-T	SS-13-U	SS-13-V	SS-13-W	SS-13-X
	Sample Depth (ft.):							1-4	1-4	1-4	1-4	1-4	0.5-4	1-4	0.5-1.5	1-4	0.5-4
	Sample Date:							9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004
SVOCs (mg/kg)	4-Methylphenol	200*	5*	NS	NS	500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	70	70	400	400	70	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)	Aroclor 1254	2	2	3	3	2	1	**0.0436**	0.0463 U	0.0344 U	0.0347 U	**1.34**	**0.184**	0.0463 U	**0.134**	**0.0494**	0.0438 U
	Aroclor 1260	2	2	3	3	2	1	0.0427 U	0.0463 U	0.0344 U	0.0347 U	**0.519**	**0.048**	0.0463 U	**0.0391**	**0.0899**	**0.0779**
	Aroclor 1262	2	2	3	3	2	1	0.0427 U	0.0463 U	0.0344 U	0.0347 U	0.225 U	0.0417 U	0.0463 U	0.0351 U	0.0422 U	0.0438 U
	Total PCBs	2	2	3	3	2	1	**0.0436**	0.0463 U	0.0344 U	0.0347 U	**1.859**	**0.232**	0.0463 U	**0.1731**	**0.1393**	**0.0779**
Metals, total (mg/kg)	Arsenic	20	20	20	20	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	30	30	200	200	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	300	300	300	300	300	N/A	**420**	**380**	**4.4**	**3.2**	**1,100**	**350**	**140**	**48**	**11,000**	**3,900**
	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Selenium	400	400	800	800	400	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP (ug/L)	Lead, TCLP	NS	NS	NS	NS	NS	5,000(1)	**950**	500 U	NA	NA	**2,900**	**1,300**	500 U	NA	**32,000**	**30,000**
	Mercury, TCLP	NS	NS	NS	NS	NS	200(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
ug/L - micrograms per liter.
B - Detected in associated laboratory method blank.
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable/available.
NS - No standard available for this compound.
U - Compound was not detected at specified quantitation limit.
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 Method 1 standards or TCLP standard, as applicable.
Values shown in bold and outlined exceed TSCA standard.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TSCA - Toxic Substances Control Act criteria.
2004 data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Characteristic*.
* - TRC developed standards.

TABLE 4-5
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Flag Pole Area (Exposure Point Area HS-5)
New Bedford, Massachusetts

Analysis	Analyte						Sample ID:	SS-13-Y		SS-13-Z	SB-349					SS-47	SS-48	SS-49
							Sample Depth (ft.):	0.5-4	0.5-4	1-4	1	8	8	11	14	0-0.5	0-0.5	0-0.5
							Sample Date:	9/2/2004	9/2/2004	9/2/2004	8/21/2008	8/21/2008	8/21/2008	8/21/2008	8/21/2008	12/2/2008	12/2/2008	12/2/2008
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA		Field Dup				Field Dup					
SVOCs																		
(mg/kg)	4-Methylphenol	200*	5*	NS	NS	500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	NA	NA	NA	0.240 U	0.206 U	0.627 U	NA	0.210 U	0.208 U	0.211 U
	Acenaphthylene	600	10	600	10	1	N/A	NA	NA	NA	NA	0.240 U	0.206 U	0.627 U	NA	0.210 U	0.208 U	0.211 U
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	**0.251**	**0.466**	0.627 U	NA	0.210 U	0.208 U	0.211 U
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	NA	NA	NA	**0.771**	**1.24**	0.627 U	NA	0.210 U	0.208 U	0.211 U
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	NA	NA	NA	**0.715**	**1.12**	0.627 U	NA	0.210 U	0.208 U	0.211 U
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	NA	NA	NA	**0.762**	**1.13**	0.627 U	NA	0.210 U	0.208 U	0.211 U
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	**0.649**	**0.864**	0.627 U	NA	0.210 U	0.208 U	0.211 U
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	NA	NA	NA	**0.296**	**0.442**	0.627 U	NA	0.210 U	0.208 U	0.211 U
	Chrysene	70	70	400	400	70	N/A	NA	NA	NA	NA	**0.851**	**1.26**	0.627 U	NA	0.210 U	0.208 U	0.211 U
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	NA	NA	NA	0.240 U	0.206 U	0.627 U	NA	0.210 U	0.208 U	0.211 U
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	**1.53**	**2.56**	0.627 U	NA	**0.345**	0.208 U	0.211 U
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	0.240 U	0.206 U	0.627 U	NA	0.210 U	0.208 U	0.211 U
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	NA	NA	NA	**0.679**	**0.960**	0.627 U	NA	0.210 U	0.208 U	0.211 U
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	NA	NA	NA	0.240 U	0.206 U	0.627 U	NA	0.210 U	0.208 U	0.211 U
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	0.240 U	0.206 U	0.627 U	NA	0.210 U	0.208 U	0.211 U
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	NA	NA	NA	**1.19**	**2.00**	0.627 U	NA	0.210 U	0.208 U	0.211 U
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	**1.69**	**2.61**	0.627 U	NA	**0.246**	0.208 U	0.211 U
PCBs																		
(mg/kg)	Aroclor 1254	2	2	3	3	2	1	**0.671**	**0.367**	0.045 U	**2.50 J**	**0.174 J**	**0.323 J**	0.186 UJ	NA	**1.64 ***	0.0581 U	**0.108 ***
	Aroclor 1260	2	2	3	3	2	1	**0.296**	**0.226**	0.045 U	**1.72 J**	0.0704 UJ	**0.181 J**	0.186 UJ	NA	0.0583 U	0.0581 U	**0.077 ***
	Aroclor 1262	2	2	3	3	2	1	0.0417 U	0.0438 U	0.045 U	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	**0.967**	**0.593**	0.045 U	**4.22 J**	**0.174 J**	**0.504 J**	0.186 UJ	NA	**1.64**	0.0581 U	**0.185**
Metals, total																		
(mg/kg)	Arsenic	20	20	20	20	20	N/A	NA	NA	NA	NA	**10.9**	**10.8**	**14.5**	2.97 U	**3.48**	**3.50**	**3.98**
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	**212**	**147**	**152**	5.94 U	**52.9**	**33.5**	**86.0**
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	**0.46**	**0.33**	0.94 U	0.30 U	0.32 U	0.32 U	0.32 U
	Cadmium	2	2	30	30	2	N/A	NA	NA	NA	NA	**1.74**	**0.63**	0.94 U	0.30 U	**0.60**	**0.34**	**0.72**
	Chromium	30	30	200	200	30	N/A	NA	NA	NA	NA	**22.7**	**23.3**	**27.0**	**2.90**	**9.34**	**7.73**	**13.0**
	Lead	300	300	300	300	300	N/A	**610**	**730**	**280**	NA	**571**	**374**	**207**	**2.75**	**105**	**47.4**	**253**
	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	**0.098**	**0.140**	**0.304**	0.016 U	**0.107**	**0.096**	**0.094**
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	**48.1**	**23.1**	**39.3**	**1.96**	**4.98**	**3.69**	**6.74**
	Selenium	400	400	800	800	400	N/A	NA	NA	NA	NA	7.19 U	6.16 U	18.8 U	5.94 U	6.28 U	6.24 U	6.33 U
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	**6.99**	**11.0**	**8.92**	0.60 U	0.63 U	0.63 U	0.64 U
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	**24.3**	**19.6**	**27.7**	5.94 U	**14.8**	**14.8**	**17.6**
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	**2,670**	**385**	**665**	**7.34**	**78.3**	**47.9**	**151**
Metals, TCLP																		
(ug/L)	Lead, TCLP	NS	NS	NS	NS	NS	5,000(1)	**640**	**2,500**	**880**	NA	NA	NA	NA	NA	NA	NA	NA
	Mercury, TCLP	NS	NS	NS	NS	NS	200(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
ug/L - micrograms per liter.
B - Detected in associated laboratory method blank.
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable/available.
NS - No standard available for this compound.
U - Compound was not detected at specified quantitation limit.
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Values in Bold indicate the compound was detected.
Values shown in Bold and shaded type exceed one or more of the listed Method 1 standards or TCLP standard, as applicable.
Values shown in bold and outlined exceed TSCA standard.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TSCA - Toxic Substances Control Act criteria.
2004 data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006. BETA Group, Inc.
(1) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Characteristic*.
* - TRC developed standards.

TABLE 4-6
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - House Area (Exposure Point Area HS-6)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	HB23+HD23	HD19	HD-19A			HD-19B		HD-19C		HD-19D		HD19+HD20	HD20				HD-20A	
							Sample Depth (ft.):	0.75-3	2-3	0-1	1-3	1-3	0-1	1-3	0-1	1-3	0-1	1-3	1-3	1.5-3	0-1	1-3	1-3	0-1	1-3
							Sample Date:	12/29/2004	12/29/2004	3/9/2009	3/9/2009	3/9/2009 Field Dup	3/9/2009	3/9/2009	3/9/2009	3/9/2009	3/9/2009	3/9/2009	12/29/2004	12/29/2004	4/2/2009	4/2/2009	4/2/2009 Field Dup	5/19/2009	5/19/2009
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1^	TSCA																		
SVOCs																									
(mg/kg)	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	0.81 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.93 U	NA	NA	NA	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	0.27 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.87	NA	0.390 U	4.06 U	4.09 U	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	0.27 U	NA	0.196 U	0.198 U	NA	0.187 U	0.189 U	0.191 U	0.387 U	0.204 U	0.188 U	1.1	NA	0.192 U	2.03 U	3.25	0.20 U	0.47
	Acenaphthylene	600	10	600	10	1	N/A	0.27 U	NA	0.196 U	0.198 U	NA	0.187 U	0.189 U	0.191 U	0.387 U	0.204 U	0.188 U	1.8	NA	0.192 U	2.03 U	2.05 U	0.20 U	0.40 U
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	0.27 U	NA	0.196 U	0.198 U	NA	0.187 U	0.189 U	0.191 U	0.387 U	0.204 U	0.467	6.7	NA	0.192 U	2.03 U	8.58	0.31	1.1
	Benzo(a)anthracene	7	7	40	40	7	N/A	0.41	NA	0.407	0.198 U	NA	0.187 U	0.189 U	0.191 U	0.387 U	0.204 U	1.07	33	NA	0.192 U	2.03 U	14.6	0.98	1.6
	Benzo(a)pyrene	2	2	4	4	2	N/A	0.27 U	NA	0.414	0.198 U	NA	0.187 U	0.189 U	0.191 U	0.387 U	0.204 U	0.942	33	NA	0.192 U	2.03 U	12.0	0.76	1.3
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	0.27 U	NA	0.510	0.198 U	NA	0.187 U	0.189 U	0.191 U	0.387 U	0.204 U	1.31	25	NA	0.192 U	2.41	17.3	1.0	1.6
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	0.27 U	NA	0.196 U	0.198 U	NA	0.187 U	0.189 U	0.191 U	0.387 U	0.204 U	0.439	33	NA	0.192 U	2.03 U	5.04	0.38	0.74
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	0.27 U	NA	0.218	0.198 U	NA	0.187 U	0.189 U	0.191 U	0.387 U	0.204 U	0.557	15	NA	0.192 U	2.03 U	6.34	0.40	0.67
	Chrysene	70	70	400	400	70	N/A	0.35	NA	0.408	0.198 U	NA	0.187 U	0.189 U	0.191 U	0.387 U	0.204 U	1.07	25	NA	0.192 U	2.03 U	14.7	0.98	1.6
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	0.27 U	NA	0.196 U	0.198 U	NA	0.187 U	0.189 U	0.191 U	0.387 U	0.204 U	0.188 U	0.31 U	NA	0.192 U	2.03 U	2.05 U	0.20 U	0.40 U
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	0.95	NA	1.17	0.389	NA	0.196	0.189 U	0.223	0.565	0.204 U	3.31	36	NA	0.192 U	3.40	31.0	1.8	3.1
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	0.27 U	NA	0.196 U	0.198 U	NA	0.187 U	0.189 U	0.191 U	0.387 U	0.204 U	0.188 U	1.8	NA	0.192 U	2.03 U	4.24	0.20 U	0.56
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	0.27 U	NA	0.196 U	0.198 U	NA	0.187 U	0.189 U	0.191 U	0.387 U	0.204 U	0.577	22	NA	0.192 U	2.03 U	5.96	0.46	0.59
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	0.27 U	NA	0.196 U	0.198 U	NA	0.187 U	0.189 U	0.191 U	0.387 U	0.204 U	0.188 U	0.31	NA	0.192 U	2.03 U	2.05 U	0.20 U	0.40 U
	Naphthalene	40	500	40	1,000	4	N/A	0.27 U	NA	0.196 U	0.198 U	NA	0.187 U	0.189 U	0.191 U	0.387 U	0.204 U	0.188 U	0.42	NA	0.192 U	2.03 U	2.05 U	0.20 U	0.43
	Phenanthrene	500	500	1,000	1,000	10	N/A	0.3	NA	0.543	0.245	NA	0.187 U	0.189 U	0.204	0.447	0.204 U	2.03	25	NA	0.192 U	2.94	38.0	1.2	4.1
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	0.74	NA	0.820	0.322	NA	0.187 U	0.189 U	0.191 U	0.603	0.204 U	2.02	35	NA	0.192 U	3.43	22.0	1.6	2.3
PCBs																									
(mg/kg)	Aroclor 1248	2	2	3	3	2	1	NA	0.053 U	0.0574 U	0.0569 U	0.0567 U	0.0556 U	0.0536 U	0.0577 U	0.0553 U	0.0591 U	0.0546 U	NA	0.066 U	NA	NA	NA	0.0556 U	0.376 U
	Aroclor 1254	2	2	3	3	2	1	NA	14.7	0.242 J	0.252 J	0.115 J	0.226 J	0.0536 U	0.0577 U	0.668 J	0.0591 U	0.250 J	NA	0.698	NA	NA	NA	0.105 J	6.11 J
	Aroclor 1260	2	2	3	3	2	1	NA	0.053 U	0.0574 U	0.132 J	0.0818 J	0.0556 U	0.0536 U	0.0577 U	0.0553 U	0.0591 U	0.0826 J	NA	0.066 U	NA	NA	NA	0.0556 U	4.69 J
	Aroclor 1262	2	2	3	3	2	1	NA	3.96	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.31	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	18.66	0.242 J	0.384 J	0.1968 J	0.226 J	0.0536 U	0.0577 U	0.668 J	0.0591 U	0.3326 J	NA	1.008	NA	NA	NA	0.105 J	10.80 J
PCB Homologs																									
(mg/kg)	Pentachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																									
(mg/kg)	Arsenic	20	20	20	20	20	N/A	2.59	NA	3.68	5.76	NA	2.80 U	2.83 U	2.87 U	14.4	3.06 U	4.11	8.19	NA	2.87 U	34.6	33.6	2.9 U	12
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	209	NA	174	316	NA	89.8	15.3	17.4	321	23.4	146	776	NA	18.7	378	519	26	490
	Cadmium	2	2	30	30	2	N/A	1.95	NA	0.65	1.21	NA	0.55	0.29 U	0.29 U	1.55	0.31 U	0.42	6.51	NA	0.29 U	2.36	1.71	0.29 U	5.3
	Chromium	30	30	200	200	30	N/A	21	NA	20.7	246	NA	11.1	1.90	4.78	24.1	5.77	17.6	77	NA	5.81	37.9	53.9	6.4	57
	Lead	300	300	300	300	300	N/A	183	NA	205	432	NA	156	5.32	20.3	525	20.8	195	1,220	NA	13.2	2,760	4,000	29	820
	Mercury	20	20	30	30	20	N/A	0.166	NA	0.277	0.316	NA	0.319	0.019 U	0.029	0.168	0.047	0.170	0.62	NA	NA	NA	NA	NA	NA
	Nickel	20	20	700	700	20	N/A	NA	NA	7.03	18.5	NA	4.32	1.52	2.48	14.9	2.73	7.82	NA	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	0.29 U	NA	0.59 U	0.60 U	NA	0.56 U	0.57 U	0.58 U	0.58 U	0.62 U	0.57 U	0.95	NA	NA	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	17.2	68.8	NA	10.5	5.65 U	7.68	18.6	11.4	13.7	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	230	165	NA	84.1	16.4	20.8	262	20.8	91.4	NA	NA	NA	NA	NA	NA	NA
	Chromium (VI)	30	30	200	200	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP																									
(ug/L)	Barium	NS	NS	NS	NS	NS	100,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NS	NS	NS	NS	NS	5,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	NS	NS	NS	NS	NS	5,000(1)	440	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,390	NA	NA	NA	NA	NA	NA
Oxidation/Reduction Potential																									
(mV)	Oxidation/Reduction Potential	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
pH																									
(s.u.)	pH	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
ug/L - micrograms per liter.
mV - milliVolt.
s.u. - Standard unit.
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
NS - No MassDEP standards exist for this compound.
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 Method 1 standards or TCLP standard, as applicable.
Values shown in bold and outlined exceed TSCA but are less than the listed MassDEP Method 1 standards.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TCLP - Toxicity Characteristic Leaching Procedure.
TSCA - Toxic Substances Control Act criteria.
2004 and 2005 Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Characteristic*.
(a) - The sample was re-collected on 3/31/2009 and analyzed for dibenzofuran.
* - The sample exhibits altered PCB pattern; best possible Aroclor match reported.
** - TRC developed standards.
^ - For reference purposes only.

TABLE 4-6
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - House Area (Exposure Point Area HS-6)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	HD-20B			HD-20C		HD-20D		HD-20E	HD-20F	HD-20G	HD-20H	HD21			HD-21A		HD-21B	
							Sample Depth (ft.):	0-1	1-3	1-3	0-1	1-3	0-1	1-3	1-3	1-3	1-3	1-3	1-3	0-1	1-3	0-1	1-3	0-1	1-3
							Sample Date:	5/19/2009	5/19/2009	5/19/2009	5/19/2009	5/19/2009	5/19/2009	5/19/2009	5/19/2009	5/19/2009	5/19/2009	5/19/2009	12/29/2004	4/2/2009	4/2/2009	5/20/2009	5/20/2009	5/20/2009	5/20/2009
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1^	TSCA			Field Dup															
SVOCs (mg/kg)	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.440 U	2.11 U	NA	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	0.20 U	0.41 U	0.21 U	0.20 U	0.20 U	0.19 U	0.42 U	NA	NA	NA	NA	NA	0.220 U	1.06 U	0.19 U	2.1 U	0.38 U	5.1 U
	Acenaphthylene	600	10	600	10	1	N/A	0.20 U	0.41 U	0.21 U	0.20 U	0.20 U	0.19 U	0.42 U	NA	NA	NA	NA	NA	0.220 U	1.06 U	0.19 U	2.1 U	0.38 U	12
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	0.20 U	0.41 U	0.21 U	0.20 U	0.34	0.19 U	0.78	NA	NA	NA	NA	NA	0.220 U	1.56	0.19 U	2.1 U	0.38 U	35
	Benzo(a)anthracene	7	7	40	40	7	N/A	0.20 U	0.41 U	0.21 U	0.20 U	1.1	0.19 U	1.8	NA	NA	NA	NA	NA	0.341	5.64	0.19 U	2.1 U	1.2	150
	Benzo(a)pyrene	2	2	4	4	2	N/A	0.20 U	0.41 U	0.21 U	0.20 U	1.0	0.19 U	1.6	NA	NA	NA	NA	NA	0.220 U	4.94	0.19 U	2.1 U	1.1	130
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	0.20 U	0.41 U	0.21 U	0.20 U	1.5	0.19 U	1.9	NA	NA	NA	NA	NA	0.403	6.90	0.19 U	2.1 U	1.3	160
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	0.20 U	0.41 U	0.21 U	0.20 U	0.46	0.19 U	0.82	NA	NA	NA	NA	NA	0.220 U	2.09	0.19 U	2.1 U	0.48	43
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	0.20 U	0.41 U	0.21 U	0.20 U	0.57	0.19 U	0.75	NA	NA	NA	NA	NA	0.220 U	2.70	0.19 U	2.1 U	0.54	57
	Chrysene	70	70	400	400	70	N/A	0.20 U	0.41 U	0.21 U	0.20 U	1.2	0.19 U	1.9	NA	NA	NA	NA	NA	0.344	5.70	0.19 U	2.1 U	1.3	150
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	0.20 U	0.41 U	0.21 U	0.20 U	0.20 U	0.19 U	0.42 U	NA	NA	NA	NA	NA	0.220 U	1.06 U	0.19 U	2.1 U	0.38 U	14
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	0.20 U	0.41 U	0.21 U	0.20 U	2.0	0.19 U	3.4	NA	NA	NA	NA	NA	0.447	8.84	0.19 U	2.1 U	1.5	240
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	0.20 U	0.41 U	0.21 U	0.20 U	0.20 U	0.19 U	0.42 U	NA	NA	NA	NA	NA	0.220 U	1.06 U	0.19 U	2.1 U	0.38 U	10
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	0.20 U	0.41 U	0.21 U	0.20 U	0.56	0.19 U	1.0	NA	NA	NA	NA	NA	0.220 U	2.73	0.19 U	2.1 U	0.61	59
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	0.20 U	0.41 U	0.21 U	0.20 U	0.20 U	0.19 U	0.42 U	NA	NA	NA	NA	NA	0.220 U	1.06 U	0.19 U	2.1 U	0.38 U	5.1 U
	Naphthalene	40	500	40	1,000	4	N/A	0.20 U	0.41 U	0.21 U	0.20 U	0.20 U	0.19 U	0.42 U	NA	NA	NA	NA	NA	0.220 U	1.06 U	0.19 U	2.1 U	0.38 U	5.1 U
	Phenanthrene	500	500	1,000	1,000	10	N/A	0.20 U	0.41 U	0.21 U	0.20 U	1.6	0.19 U	3.4	NA	NA	NA	NA	NA	0.495	6.94	0.19 U	2.1 U	0.84	150
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	0.20 U	0.41 U	0.21 U	0.20 U	1.4	0.19 U	3.1	NA	NA	NA	NA	NA	0.579	7.33	0.19 U	2.1 U	1.8	280
PCBs (mg/kg)	Aroclor 1248	2	2	3	3	2	1	0.0595 U	0.0639 U	0.0629 U	0.0585 U	0.616 U	0.0567 U	0.0608 U	0.541 UJ	NA	NA	NA	0.057 U	NA	NA	0.0592 U	0.0578 U	0.116 U	0.122 U
	Aroclor 1254	2	2	3	3	2	1	0.0595 U	1.67 J	0.408 J	0.924 J	0.616 U	0.069 J	1.66 J	10.2 J	NA	NA	NA	1.525	NA	NA	0.561 J	1.20 J	1.87 J	0.649 J
	Aroclor 1260	2	2	3	3	2	1	0.0595 U	0.395 J	0.334 J	0.0585 U	0.616 U	0.0567 U	0.0608 U	0.541 UJ	NA	NA	NA	0.057 U	NA	NA	0.0592 U	0.0578 U	0.893 J	0.418 J
	Aroclor 1262	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.057 U	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	0.0595 U	2.065 J	0.742 J	0.924 J	0.616 U	0.069 J	1.66 J	10.2 J	NA	NA	NA	1.525	NA	NA	0.561 J	1.20 J	2.763 J	1.07 J
PCB Homologs (mg/kg)	Pentachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (mg/kg)	Arsenic	20	20	20	20	20	N/A	3.1	22	86	3.6	12	2.9 U	14	2.8 U	2.8 U	10	8.5	NA	3.29 U	24.2	2.8 U	25	3.0	34
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	23	570	720	37	2,100	38	510	170	86	370	1,300	NA	160	3,520	33	6,000	130	1,600
	Cadmium	2	2	30	30	2	N/A	0.30 U	3.5	2.8	0.33	2.7	0.29	2.9	1.2	0.29	3.4	4.1	NA	0.38	5.67	0.28 U	5.6	0.50	2.8
	Chromium	30	30	200	200	30	N/A	6.7	66	42	8.4	99	6.9	58	NA	NA	NA	NA	NA	10.4	595	4.8	1,300	15	3,800
	Lead	300	300	300	300	300	N/A	20	670	610	25	1,000	41	1,200	220	74	2,400	1,100	NA	88.5	1,740	36	2,200	200	2,500
	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium (VI)	30	30	200	200	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP (ug/L)	Barium	NS	NS	NS	NS	NS	100,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NS	NS	NS	NS	NS	5,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	NS	NS	NS	NS	NS	5,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oxidation/Reduction Potential (mV)	Oxidation/Reduction Potential	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
pH (s.u.)	pH	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
ug/L - micrograms per liter.
mV - milliVolt.
s.u. - Standard unit.
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(a) - The sample was re-collected on 3/31/2009 and analyzed for dibenzofuran.
* - The sample exhibits altered PCB pattern; best possible Aroclor match reported.
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New Bedford High School - House Area (Exposure Point Area HS-6)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	HD-21C			HD-21D		HD-21E	HD-21F	HD-21G	HD-21H	HD-21K		HD-21O	HD-21S	HD22			HD22+HC22
							Sample Depth (ft.):	0-1	1-3	1-3	0-1	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	0-1	1-3	1-3
							Sample Date:	5/20/2009	5/20/2009	5/20/2009	5/20/2009	5/20/2009	5/20/2009	5/20/2009	5/20/2009	5/20/2009	7/6/2009	7/6/2009	7/6/2009	7/6/2009	12/29/2004	4/9/2009	4/9/2009	12/29/2004
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1^	TSCA			Field Dup								Field Dup						
SVOCs (mg/kg)	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.87 U
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.29 U
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	0.39 U	0.40 U	2.1 U	0.19 U	2.2	NA	0.18 U	0.39 U	0.38 U	0.19 U	0.30	NA	NA	NA	0.199 U	0.191 U	0.42
	Acenaphthylene	600	10	600	10	1	N/A	0.39 U	0.40 U	2.1 U	0.19 U	2.0 U	NA	0.18 U	0.39 U	0.38 U	0.19 U	0.20 U	NA	NA	NA	0.199 U	0.191 U	0.29 U
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	0.86	0.40 U	4.0	0.19 U	8.5	NA	0.18 U	1.4	1.1	0.19 U	0.74	NA	NA	NA	0.241	0.423	1.4
	Benzo(a)anthracene	7	7	40	40	7	N/A	4.3	0.69	16	0.19 U	12	NA	0.18 U	7.4	5.5	0.60	2.1	NA	NA	NA	0.566	1.35	4.5
	Benzo(a)pyrene	2	2	4	4	2	N/A	4.1	0.83	16	0.19 U	8.9	NA	0.18 U	7.5	5.6	0.60	1.9	NA	NA	NA	0.493	1.22	4.5
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	5.3	0.89	21	0.19 U	11	NA	0.18 U	9.1	7.7	0.76	2.7	NA	NA	NA	0.658	1.66	6.1
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	1.5	0.60	5.5	0.19 U	3.2	NA	0.18 U	3.5	2.4	0.30	0.82	NA	NA	NA	0.218	0.577	4.2
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	1.9	0.40 U	8.4	0.19 U	4.4	NA	0.18 U	3.5	3.1	0.31	0.96	NA	NA	NA	0.239	0.622	2.1
	Chrysene	70	70	400	400	70	N/A	4.9	0.75	16	0.19 U	12	NA	0.18 U	7.8	5.8	0.64	2.1	NA	NA	NA	0.551	1.35	3.8
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	0.40	0.40 U	2.1 U	0.19 U	2.0 U	NA	0.18 U	1.0	0.71	0.19 U	0.26	NA	NA	NA	0.199 U	0.191 U	0.29 U
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	6.0	1.0	25	0.22	19	NA	0.18 U	12	8.3	1.0	3.6	NA	NA	NA	0.992	2.32	9.4
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	0.39 U	0.40 U	2.1 U	0.19 U	3.6	NA	0.18 U	0.40	0.38 U	0.19 U	0.36	NA	NA	NA	0.199 U	0.191 U	0.42
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	1.7	0.69	7.8	0.19 U	3.9	NA	0.18 U	4.5	3.1	0.37	1.1	NA	NA	NA	0.293	0.694	2.7
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	0.39 U	0.40 U	2.1 U	0.19 U	3.1	NA	0.18 U	0.39 U	0.38 U	0.19 U	0.20 U	NA	NA	NA	0.199 U	0.191 U	0.29 U
	Naphthalene	40	500	40	1,000	4	N/A	0.39 U	0.40 U	2.1 U	0.19 U	4.7	NA	0.18 U	0.39 U	0.38 U	0.19 U	0.32	NA	NA	NA	0.199 U	0.191 U	0.29 U
	Phenanthrene	500	500	1,000	1,000	10	N/A	3.3	0.84	16	0.19 U	32	NA	0.18 U	5.3	4.2	0.69	3.2	NA	NA	NA	0.980	1.80	5.3
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	6.8	1.1	20	0.24	23	NA	0.18 U	11	6.8	0.90	2.7	NA	NA	NA	0.849	1.71	8
PCBs (mg/kg)	Aroclor 1248	2	2	3	3	2	1	0.0588 U	0.0583 U	0.181 U	0.117 U	0.229 U	NA	NA	NA	NA	NA	NA	NA	NA	0.061 U	0.0546 U	0.168 U	NA
	Aroclor 1254	2	2	3	3	2	1	0.699 J	0.494 J	0.181 UJ	2.44 J	0.229 U	NA	NA	NA	NA	NA	NA	NA	NA	4.79	0.132 J	2.42 J	NA
	Aroclor 1260	2	2	3	3	2	1	0.0588 U	0.498 J	2.77 J	0.117 U	0.229 U	NA	NA	NA	NA	NA	NA	NA	NA	0.061 U	0.0546 U	0.168 U	NA
	Aroclor 1262	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.654	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	0.699 J	0.992 J	2.77 J	2.44 J	0.229 U	NA	NA	NA	NA	NA	NA	NA	NA	5.444	0.132 J	2.42 J	NA
PCB Homologs (mg/kg)	Pentachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (mg/kg)	Arsenic	20	20	20	20	20	N/A	4.5	5.7	24	3.1	11	10	2.7 U	25	22	NA	NA	NA	NA	NA	3.49	5.30	33
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	470	590	2,100	140	7,700	2,400	13	630	1,000	NA	NA	NA	NA	NA	58.8	218	899
	Cadmium	2	2	30	30	2	N/A	0.72	1.3	4.4	0.66	2.3	2.9	0.27 U	2.0	2.1	NA	NA	NA	NA	NA	0.38	1.26	4.71
	Chromium	30	30	200	200	30	N/A	34	46	640	20	260	310	2.1	51	54	NA	NA	NA	NA	NA	10.9	22.9	52
	Lead	300	300	300	300	300	N/A	540	540	1,800	110	470	1,600	4.6	680	1300	400	970	1,400	5,100	NA	74.6	234	1,020
	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.401
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.43
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium (VI)	30	30	200	200	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP (ug/L)	Barium	NS	NS	NS	NS	NS	100,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NS	NS	NS	NS	NS	5,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	NS	NS	NS	NS	NS	5,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2,920
Oxidation/Reduction Potential (mV)	Oxidation/Reduction Potential	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
pH (s.u.)	pH	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
ug/L - micrograms per liter.
mV - milliVolt.
s.u. - Standard unit.
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
NS - No MassDEP standards exist for this compound.
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 Method 1 standards or TCLP standard, as applicable.
Values shown in bold and outlined exceed TSCA but are less than the listed MassDEP Method 1 standards.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TCLP - Toxicity Characteristic Leaching Procedure.
TSCA - Toxic Substances Control Act criteria.
2004 and 2005 Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Characteristic*.
(a) - The sample was re-collected on 3/31/2009 and analyzed for dibenzofuran.
* - The sample exhibits altered PCB pattern; best possible Aroclor match reported.
** - TRC developed standards.
^ - For reference purposes only.

TABLE 4-6
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - House Area (Exposure Point Area HS-6)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	HD23			HF14	HF-14A	HF-14B	HF-14D	HF-14E			HF-14G		HF-14H		HF-14I	HH13		
							Sample Depth (ft.):	2-3	0-1	1-3	2-3	1-3	1-3	1-3	0-1	1-3	1-3	0-1	1-3	0-1	1-3	1-3	1.5-3	0-1	1-3
							Sample Date:	12/29/2004	3/31/2009	3/31/2009	12/29/2004	3/11/2009	3/11/2009	3/11/2009	3/11/2009	3/11/2009	3/11/2009 Field Dup	3/11/2009	3/11/2009	3/11/2009 (a)	3/11/2009 (a)	4/8/2009	12/29/2004	4/3/2009	4/3/2009
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1^	TSCA																		
SVOCs																									
(mg/kg)	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	NA	NA	**0.74 JB**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38 U	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	NA	NA	**1.5**	NA	NA	NA	NA	NA	NA	NA	NA	0.380 U	0.370 U	NA	**28**	0.400 U	**6.60**
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	0.190 U	**0.217**	**1.6**	NA	0.176 U	NA	0.184 U	0.381 U	0.186 U	0.203 U	0.981 U	0.198 U	0.182 U	NA	**46**	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	NA	0.190 U	0.206 U	**0.75**	NA	0.176 U	NA	0.184 U	0.381 U	0.186 U	0.203 U	0.981 U	0.198 U	0.182 U	NA	13 U	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	0.190 U	**0.626**	**7.8**	NA	0.176 U	NA	0.184 U	**0.754**	**0.671**	0.203 U	0.981 U	0.198 U	0.182 U	NA	**150**	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	0.190 U	**1.24**	**25**	NA	**0.339**	NA	0.184 U	**6.81**	**1.07**	0.203 U	**1.13**	0.198 U	0.182 U	NA	**400**	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	0.190 U	**1.01**	**25**	NA	**0.366**	NA	**0.187**	**5.85**	**0.912**	0.203 U	0.981 U	0.198 U	0.182 U	NA	**360**	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	0.190 U	**1.03**	**34**	NA	**0.377**	NA	**0.209**	**7.54**	**1.02**	0.203 U	**1.21**	0.198 U	0.182 U	NA	**460**	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	0.190 U	**0.362**	**21**	NA	**0.290**	NA	0.184 U	**2.43**	**0.415**	0.203 U	0.981 U	0.198 U	0.182 U	NA	**140**	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	0.190 U	**0.352**	**11**	NA	0.176 U	NA	0.184 U	**2.76**	**0.397**	0.203 U	0.981 U	0.198 U	0.182 U	NA	**200**	NA	NA
	Chrysene	70	70	400	400	70	N/A	NA	0.190 U	**1.30**	**21**	NA	**0.367**	NA	**0.188**	**6.11**	**1.03**	0.203 U	**1.17**	0.198 U	0.182 U	NA	**280**	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	0.190 U	0.206 U	0.3 U	NA	0.176 U	NA	0.184 U	**0.833**	0.186 U	0.203 U	0.981 U	0.198 U	0.182 U	NA	13 U	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	**0.193**	**1.45**	**41**	NA	**0.533**	NA	**0.242**	**8.44**	**1.75**	0.203 U	**1.87**	0.198 U	0.182 U	NA	**790**	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	0.190 U	**0.291**	**2.9**	NA	0.176 U	NA	0.184 U	0.381 U	**0.276**	0.203 U	0.981 U	0.198 U	0.182 U	NA	**46**	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	0.190 U	**0.430**	**14**	NA	**0.307**	NA	0.184 U	**3.79**	**0.545**	0.203 U	0.981 U	0.198 U	0.182 U	NA	**140**	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	0.190 U	0.206 U	**0.47**	NA	0.176 U	NA	0.184 U	0.381 U	0.186 U	0.203 U	0.981 U	0.198 U	0.182 U	NA	**17**	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	0.190 U	0.206 U	**0.72**	NA	0.176 U	NA	0.184 U	0.381 U	**0.295**	0.203 U	0.981 U	0.198 U	0.182 U	NA	**53**	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	**0.204**	**3.28**	**27**	NA	**0.368**	NA	0.184 U	**1.43**	**2.24**	0.203 U	**2.10**	0.198 U	0.182 U	NA	**1,000**	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	**0.264**	**2.22**	**34**	NA	**0.670**	NA	**0.308**	**9.19**	**1.94**	0.203 U	**1.67**	0.198 U	0.182 U	NA	**780**	NA	NA
PCBs																									
(mg/kg)	Aroclor 1248	2	2	3	3	2	1	0.054 U	NA	NA	1.14 U	NA	0.0526 U	NA	0.0580 U	0.172 U	0.215 U	0.0563 U	0.138 U	0.0555 U	0.0540 U	NA	0.065 U	NA	NA
	Aroclor 1254	2	2	3	3	2	1	**3.74**	NA	NA	**0.72**	NA	**1.41 J**	NA	0.0580 U	**3.00 J**	**3.31 J**	**0.322 J**	**0.949 J**	**0.129 J**	**0.439 J**	NA	**1.21**	NA	NA
	Aroclor 1260	2	2	3	3	2	1	0.054 U	NA	NA	1.14 U	NA	**0.613 J**	NA	0.0580 U	**1.59 J**	**2.10 J**	**0.121 J**	**0.565 J**	0.0555 U	**0.262 J**	NA	0.065 U	NA	NA
	Aroclor 1262	2	2	3	3	2	1	**0.418**	NA	NA	1.14 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.065 U	NA	NA
	Total PCBs	2	2	3	3	2	1	**4.158**	NA	NA	**0.720**	NA	**2.023 J**	NA	0.0580 U	**4.59 J**	**5.41 J**	**0.443 J**	**1.514 J**	**0.129 J**	**0.701 J**	NA	**1.21**	NA	NA
PCB Homologs																									
(mg/kg)	Pentachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																									
(mg/kg)	Arsenic	20	20	20	20	20	N/A	NA	**3.08**	**17.4**	**23**	NA	NA	NA	2.76 U	**6.37**	**2.85**	**4.82**	**10.1**	2.97 U	2.73 U	NA	**25**	NA	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	**36.5**	**385**	**6,700**	**2,540**	**24.3**	**8,480**	**38.0**	**1,300**	**203**	**71.1**	**3,330**	**22.6**	**22.5**	**6,550**	**2,910**	NA	NA
	Cadmium	2	2	30	30	2	N/A	NA	0.29 U	**1.35**	**12**	**3.49**	0.27 U	**4.26**	0.28 U	**1.31**	**0.45**	**0.40**	**2.42**	0.30 U	0.28 U	**2.39**	**4.81**	NA	NA
	Chromium	30	30	200	200	30	N/A	NA	**7.09**	**28.8**	**1,290**	**930**	**4.27**	**857**	**6.08**	**160**	**31.4**	**11.6**	**1,180**	**5.55**	**5.94**	**1,250**	**1,100**	NA	NA
	Lead	300	300	300	300	300	N/A	NA	**31.7**	**928**	**650**	**459**	**88.6**	**1,200**	**62.1**	**1,020**	**552**	**54.7**	**579**	**18.1**	**17.7**	**8,860**	**333**	NA	NA
	Mercury	20	20	30	30	20	N/A	NA	NA	NA	**1.35**	NA	NA	NA	**0.071**	**0.279**	**0.230**	**0.079**	**0.222**	**0.045**	**0.022**	NA	**0.38**	NA	NA
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	NA	NA	0.38 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.38 U	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium (VI)	30	30	200	200	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP																									
(ug/L)	Barium	NS	NS	NS	NS	NS	100,000(1)	NA	NA	NA	**4,260**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2,660**	NA	NA
	Chromium	NS	NS	NS	NS	NS	5,000(1)	NA	NA	NA	20 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**30**	NA	NA
	Lead	NS	NS	NS	NS	NS	5,000(1)	NA	NA	NA	**220**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**160**	NA	NA
Oxidation/Reduction Potential																									
(mV)	Oxidation/Reduction Potential	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
pH																									
(s.u.)	pH	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
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ug/L - micrograms per liter.
mV - milliVolt.
s.u. - Standard unit.
J - Estimated value; below quantitation limit.
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(1) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Characteristic*.
(a) - The sample was re-collected on 3/31/2009 and analyzed for dibenzofuran.
* - The sample exhibits altered PCB pattern; best possible Aroclor match reported.
** - TRC developed standards.
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New Bedford High School - House Area (Exposure Point Area HS-6)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	HH-13A		HH-13AA			HH-13B		HH-13BB		HH-13C		HH-13CC		HH-13D			HH-13DD	
							Sample Depth (ft.):	0-1	1-3	1-3	1-3	3.5-4	0-1	1-3	1-3	3-4	0-1	1-3	1-3	3-4	0-1	1-3	1-3	1-3	3.5-4
							Sample Date:	3/11/2009	3/11/2009	5/20/2009	5/20/2009	5/20/2009	3/11/2009	3/11/2009	5/20/2009	5/20/2009	3/11/2009	3/11/2009	5/20/2009	5/20/2009	3/11/2009	3/11/2009	3/11/2009	5/20/2009	5/20/2009
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1^	TSCA				Field Dup												Field Dup		
SVOCs																									
(mg/kg)	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	0.196 U	0.385 U	NA	NA	NA	0.222 U	**0.443**	NA	NA	0.193 U	**1.85**	NA	NA	0.192 U	**0.421**	**0.448**	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	0.196 U	0.385 U	NA	NA	NA	0.222 U	0.198 U	NA	NA	0.193 U	0.538 U	NA	NA	0.192 U	0.409 U	0.429 U	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	0.196 U	0.385 U	NA	NA	NA	**0.294**	**0.754**	NA	NA	0.193 U	**4.31**	NA	NA	0.192 U	**1.03**	**1.20**	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	0.196 U	0.385 U	NA	NA	NA	**0.621**	**1.37**	NA	NA	0.193 U	8.08	NA	NA	0.192 U	**2.43**	**3.00**	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	0.196 U	0.385 U	NA	NA	NA	**0.528**	**1.17**	NA	NA	0.193 U	6.85	NA	NA	0.192 U	2.14	2.69	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	0.196 U	0.385 U	NA	NA	NA	**0.672**	**1.42**	NA	NA	0.193 U	9.60	NA	NA	0.192 U	**2.74**	**3.61**	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	0.196 U	0.385 U	NA	NA	NA	**0.281**	**0.564**	NA	NA	0.193 U	**2.61**	NA	NA	0.192 U	**0.973**	**1.13**	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	0.196 U	0.385 U	NA	NA	NA	**0.250**	**0.513**	NA	NA	0.193 U	**3.67**	NA	NA	0.192 U	**1.09**	**1.34**	NA	NA
	Chrysene	70	70	400	400	70	N/A	0.196 U	0.385 U	NA	NA	NA	**0.621**	**1.34**	NA	NA	0.193 U	**8.23**	NA	NA	0.192 U	**2.40**	**3.01**	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	0.196 U	0.385 U	NA	NA	NA	0.222 U	0.198 U	NA	NA	0.193 U	0.822	NA	NA	0.192 U	0.409 U	0.429 U	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	0.196 U	0.385 U	NA	NA	NA	**1.09**	**2.53**	NA	NA	0.193 U	**17.6**	NA	NA	0.192 U	**4.41**	**5.32**	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	0.196 U	0.385 U	NA	NA	NA	0.222 U	**0.366**	NA	NA	0.193 U	**2.21**	NA	NA	0.192 U	**0.456**	**0.484**	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	0.196 U	0.385 U	NA	NA	NA	**0.341**	**0.714**	NA	NA	0.193 U	**3.49**	NA	NA	0.192 U	**1.28**	**1.43**	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	0.196 U	0.385 U	NA	NA	NA	0.222 U	0.198 U	NA	NA	0.193 U	**0.675**	NA	NA	0.192 U	0.409 U	0.429 U	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	0.196 U	0.385 U	NA	NA	NA	0.222 U	0.198 U	NA	NA	0.193 U	**0.982**	NA	NA	0.192 U	0.409 U	0.429 U	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	0.196 U	0.385 U	NA	NA	NA	**1.23**	**3.10**	NA	NA	0.193 U	**21.0**	NA	NA	0.192 U	**4.04**	**4.94**	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	0.196 U	0.385 U	NA	NA	NA	**1.08**	**2.62**	NA	NA	0.193 U	**11.8**	NA	NA	0.192 U	**3.88**	**4.52**	NA	NA
PCBs																									
(mg/kg)	Aroclor 1248	2	2	3	3	2	1	0.0585 U	0.0538 U	NA	NA	NA	0.0636 U	0.0547 U	NA	NA	0.0556 U	0.0575 U	NA	NA	0.0546 U	18.1 J	4.67 J	NA	NA
	Aroclor 1254	2	2	3	3	2	1	**0.104 J**	**1.02 J**	NA	NA	NA	**0.833 J**	**0.210 J**	NA	NA	**0.142 J**	**0.113 J**	NA	NA	**0.67 J**	27.9 J	20.7 J	NA	NA
	Aroclor 1260	2	2	3	3	2	1	0.0585 U	0.0538 U	NA	NA	NA	0.0636 U	0.0547 U	NA	NA	0.0556 U	0.0575 U	NA	NA	0.0546 U	1.31 U	3.08 J	NA	NA
	Aroclor 1262	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	**0.104 J**	**1.02 J**	NA	NA	NA	**0.833 J**	**0.210 J**	NA	NA	**0.142 J**	**0.113 J**	NA	NA	**0.67 J**	46.0 J	28.45 J	NA	NA
PCB Homologs																									
(mg/kg)	Pentachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																									
(mg/kg)	Arsenic	20	20	20	20	20	N/A	2.94 U	**10.9**	NA	NA	NA	40.0	2.97 U	NA	NA	2.90 U	31.9	NA	NA	2.88 U	**16.7**	**14.5**	NA	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	**20.0**	1,280	NA	NA	NA	7,920	**142**	NA	NA	41.9	6,780	NA	NA	**27.7**	3,850	3,330	NA	NA
	Cadmium	2	2	30	30	2	N/A	0.30 U	**0.63**	NA	NA	NA	2.01	**0.37**	NA	NA	0.29 U	40.6	NA	NA	**0.48**	7.47	8.09	NA	NA
	Chromium	30	30	200	200	30	N/A	**4.57**	492	350	390	200	1,960	**17.2**	220	87	**6.74**	384	750	3,800	**5.52**	594	496	230	310
	Lead	300	300	300	300	300	N/A	**10.0**	**216**	NA	NA	NA	543	**72.3**	NA	NA	**21.9**	3,250	NA	NA	**18.4**	987	982	NA	NA
	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium (VI)	30	30	200	200	30	N/A	NA	NA	1.3	4.4	1.0 U	NA	NA	0.45 U	1.0 U	NA	NA	**0.48**	0.39 U	NA	NA	NA	1.1 U	**2.7**
Metals, TCLP																									
(ug/L)	Barium	NS	NS	NS	NS	NS	100,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NS	NS	NS	NS	NS	5,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	NS	NS	NS	NS	NS	5,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oxidation/Reduction Potential																									
(mV)	Oxidation/Reduction Potential	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	**170**	**250**	**250**	NA	NA	**200**	**200**	NA	NA	**240**	**120**	NA	NA	NA	**170**	**160**
pH																									
(s.u.)	pH	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	**7.0**	**7.1**	**7.4**	NA	NA	**6.7**	**7.3**	NA	NA	**6.0**	**6.7**	NA	NA	NA	**7.6**	**7.2**

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
ug/L - micrograms per liter.
mV - milliVolt.
s.u. - Standard unit.
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
NS - No MassDEP standards exist for this compound.
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 Method 1 standards or TCLP standard, as applicable.
Values shown in bold and outlined exceed TSCA but are less than the listed MassDEP Method 1 standards.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TCLP - Toxicity Characteristic Leaching Procedure.
TSCA - Toxic Substances Control Act criteria.
2004 and 2005 Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Characteristic* .
(n) - The sample was re-collected on 3/31/2009 and analyzed for dibenzofuran.
* - The sample exhibits altered PCB pattern; best possible Aroclor match reported.
** - TRC developed standards.
^ - For reference purposes only.

TABLE 4-6
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - House Area (Exposure Point Area HS-6)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	HH-13E		HH-13F		HH-13G		HH-13H		HH-13I	HH-13J	HH-30A	HJ-25A	HRE-10	HRG-12A	HRG-14A	HS-11	HS-12	NBHS-SS-1
							Sample Depth (ft.):	0-1	1-3	0-1	1-3	0-1	1-3	0-1	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	0-0.5	0-0.5	0-0.5
							Sample Date:	3/11/2009	3/11/2009	3/11/2009	3/11/2009	3/11/2009	3/11/2009	3/11/2009	3/11/2009	4/8/2009	4/8/2009	4/2/2009	4/1/2009	3/31/2009	4/1/2009	4/1/2009	9/9/2004	9/9/2004	8/6/2008
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1^	TSCA																		
SVOCs																									
(mg/kg)	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.177 U	0.175 U	0.177 U	NA	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.177 U	0.175 U	0.177 U	NA	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.177 U	0.175 U	0.177 U	NA	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.177 U	0.175 U	0.177 U	NA	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.177 U	0.175 U	0.177 U	NA	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.177 U	0.175 U	0.177 U	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.177 U	0.175 U	0.177 U	NA	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.177 U	0.175 U	0.177 U	NA	NA	NA
	Chrysene	70	70	400	400	70	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.177 U	0.175 U	0.177 U	NA	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.177 U	0.175 U	0.177 U	NA	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.177 U	0.175 U	0.177 U	NA	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.177 U	0.175 U	0.177 U	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.177 U	0.175 U	0.177 U	NA	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.177 U	0.175 U	0.177 U	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.177 U	0.175 U	0.177 U	NA	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.177 U	0.175 U	0.177 U	NA	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.177 U	0.175 U	0.177 U	NA	NA	NA
PCBs																									
(mg/kg)	Aroclor 1248	2	2	3	3	2	1	NA	0.636 U	NA	NA	NA	NA	NA	NA	NA	0.591 U	0.0524 U	0.0510 U	0.0500 U	0.0520 U	0.0520 U	0.1 U	0.11 U	0.0567 U
	Aroclor 1254	2	2	3	3	2	1	NA	15.7 J	NA	NA	NA	NA	NA	NA	NA	12.4 J	**0.0702 J**	0.0510 U	0.0500 U	0.0520 U	0.0520 U	**0.131**	**0.438**	0.0567 U
	Aroclor 1260	2	2	3	3	2	1	NA	7.37 J	NA	NA	NA	NA	NA	NA	NA	0.591 U	0.0524 U	0.0510 U	**0.521 J**	0.0520 U	0.0520 U	0.1 U	0.11 U	0.0567 U
	Aroclor 1262	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.1 U	0.11 U	NA
	Total PCBs	2	2	3	3	2	1	NA	23.07 J	NA	NA	NA	NA	NA	NA	NA	12.4 J	**0.0702 J**	0.0510 U	**0.521 J**	0.0520 U	0.0520 U	**0.131**	**0.438**	0.0567 U
PCB Homologs																									
(mg/kg)	Pentachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																									
(mg/kg)	Arsenic	20	20	20	20	20	N/A	2.93 U	29.9	2.86 U	**3.74**	**3.62**	**14.0**	**3.10**	2.65 U	NA	31.5	2.62 U	2.69 U	2.65 U	2.62 U	2.66 U	NA	NA	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	**232**	2,460	**110**	443	**226**	3,390	**48.3**	**26**	**639**	12,800	**15.4**	**6.73**	**19.3**	**28.1**	**6.91**	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	0.30 U	4.95	0.29 U	**0.52**	**0.49**	2.15	**0.49**	0.27 U	3.20	13.3	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	NA	NA	NA
	Chromium	30	30	200	200	30	N/A	**10.6**	7,800	**12.0**	35.5	**15.1**	182	42.4	**2.90**	84.9	640	**2.39**	**2.02**	**4.28**	**3.04**	**2.31**	NA	NA	NA
	Lead	300	300	300	300	300	N/A	**36.2**	501	**32.6**	**119**	**146**	**136**	**79.4**	**7.45**	NA	2,070	**8.29**	**3.19**	**11.3**	**4.12**	**1.75**	NA	NA	NA
	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium (VI)	30	30	200	200	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP																									
(ug/L)	Barium	NS	NS	NS	NS	NS	100,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NS	NS	NS	NS	NS	5,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	NS	NS	NS	NS	NS	5,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oxidation/Reduction Potential																									
(mV)	Oxidation/Reduction Potential	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
pH																									
(s.u.)	pH	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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ug/L - micrograms per liter.
mV - milliVolt.
s.u. - Standard unit.
J - Estimated value; below quantitation limit.
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(a) - The sample was re-collected on 3/31/2009 and analyzed for dibenzofuran.
* - The sample exhibits altered PCB pattern; best possible Aroclor match reported.
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New Bedford High School - House Area (Exposure Point Area HS-6)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	NBHS-SS-2	NBHS-SS-3	NBHS-SS-4	NBHS-SS-10	SB-361			SS-50	SS-51	SS-52		SSHH-13B1		SSHH-13B2	SSHH-13B3	SSHH-13B4
							Sample Depth (ft.):	0-0.5	0-0.5	0-0.5	0-0.5	0-1	1-3	6.5	0-0.5	0-0.5	0-0.5	1-3	0-1	0-1	0-1	0-1	0-1
							Sample Date:	8/6/2008	8/6/2008	8/6/2008	8/6/2008	3/4/2009	3/4/2009	3/4/2009	12/2/2008	12/2/2008	12/2/2008	3/31/2009	4/10/2009	4/10/2009 Field Dup	4/10/2009	4/10/2009	4/10/2009
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1^	TSCA																
SVOCs (mg/kg)	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	NA	NA	NA	0.174 U	0.176 U	0.178 U	**0.257**	0.210 U	0.208 U	**0.542**	NA	NA	NA	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	NA	NA	NA	NA	0.174 U	0.176 U	0.178 U	0.210 U	0.210 U	0.208 U	0.187 U	NA	NA	NA	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	0.174 U	0.176 U	0.178 U	**0.900**	0.210 U	0.208 U	**1.62**	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	NA	NA	NA	0.174 U	0.176 U	0.178 U	**2.03**	0.210 U	0.208 U	**1.42**	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	NA	NA	NA	0.174 U	0.176 U	0.178 U	**1.65**	0.210 U	0.208 U	**1.17**	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	NA	NA	NA	0.174 U	0.176 U	0.178 U	**2.05**	0.210 U	0.208 U	**1.37**	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	0.174 U	0.176 U	0.178 U	**0.905**	0.210 U	0.208 U	**0.448**	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	NA	NA	NA	0.174 U	0.176 U	0.178 U	**0.872**	0.210 U	0.208 U	**0.539**	NA	NA	NA	NA	NA
	Chrysene	70	70	400	400	70	N/A	NA	NA	NA	NA	0.174 U	0.176 U	0.178 U	**1.80**	0.210 U	0.208 U	**1.38**	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	NA	NA	NA	0.174 U	0.176 U	0.178 U	**0.221**	0.210 U	0.208 U	0.187 U	NA	NA	NA	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	0.174 U	0.176 U	0.178 U	**4.32**	0.210 U	0.208 U	**2.70**	NA	NA	NA	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	0.174 U	0.176 U	0.178 U	**0.380**	0.210 U	0.208 U	**0.944**	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	NA	NA	NA	0.174 U	0.176 U	0.178 U	**0.973**	0.210 U	0.208 U	**0.588**	NA	NA	NA	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	NA	NA	NA	0.174 U	0.176 U	0.178 U	0.210 U	0.210 U	0.208 U	**0.274**	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	0.174 U	0.176 U	0.178 U	0.210 U	0.210 U	0.208 U	**0.505**	NA	NA	NA	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	NA	NA	NA	0.174 U	0.176 U	0.178 U	**3.06**	0.210 U	0.208 U	**4.30**	NA	NA	NA	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	0.174 U	0.176 U	0.178 U	**4.79**	0.210 U	0.208 U	**2.95**	NA	NA	NA	NA	NA
PCBs (mg/kg)	Aroclor 1248	2	2	3	3	2	1	0.0533 U	0.0529 U	0.0554 U	0.0544 U	0.0526 U	0.0531 U	0.0532 U	0.0587 U	0.0576 U	0.0612 U	0.164 U	NA	NA	NA	NA	NA
	Aroclor 1254	2	2	3	3	2	1	**0.260 J**	**0.316 J**	0.0554 U	**0.192 J**	0.0526 U	0.0531 U	0.0532 U	**0.939 ***	**0.0717 ***	**0.179 J**	**3.18 J**	NA	NA	NA	NA	NA
	Aroclor 1260	2	2	3	3	2	1	0.0533 U	0.0529 U	0.0554 U	0.0544 U	0.0526 U	0.0531 U	0.0532 U	0.0587 U	0.0576 U	0.0612 U	0.164 U	NA	NA	NA	NA	NA
	Aroclor 1262	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	**0.260 J**	**0.316 J**	0.0554 U	**0.192 J**	0.0526 U	0.0531 U	0.0532 U	**0.939**	**0.0717**	**0.179 J**	**3.18 J**	NA	NA	NA	NA	NA
PCB Homologs (mg/kg)	Pentachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	**0.081**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	**0.081**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (mg/kg)	Arsenic	20	20	20	20	20	N/A	NA	NA	NA	NA	2.61 U	2.64 U	2.67 U	**4.96**	3.15 U	3.11 U	2.81 U	NA	NA	NA	NA	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	**12.1**	**6.42**	**8.99**	**69.9**	**23.7**	**21.0**	**43.0**	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	NA	NA	NA	NA	0.27 U	0.27 U	0.27 U	**0.42**	0.32 U	0.32 U	0.29 U	NA	NA	NA	NA	NA
	Chromium	30	30	200	200	30	N/A	NA	NA	NA	NA	**2.70**	**1.68**	**3.02**	**11.7**	**5.57**	**5.24**	**10.1**	**6.58**	**6.05**	**5.12**	**4.93**	**5.81**
	Lead	300	300	300	300	300	N/A	NA	NA	NA	NA	**11.7**	**2.12**	**3.67**	**73.0**	**21.6**	**19.4**	**36.5**	NA	NA	NA	NA	NA
	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	**0.016**	0.012 U	0.016 U	**0.102**	**0.045**	**0.046**	NA	NA	NA	NA	NA	NA
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	**2.19**	**1.90**	**2.79**	**5.09**	**2.37**	**2.24**	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	0.53 U	0.53 U	0.54 U	0.63 U	0.63 U	0.63 U	NA	NA	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	5.22 U	5.27 U	5.34 U	**18.3**	**10.5**	**9.82**	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	**12.6**	**6.73**	**12.0**	**60.2**	**24.8**	**23.1**	NA	NA	NA	NA	NA	NA
	Chromium (VI)	30	30	200	200	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.37 U	0.39 U	0.38 U	0.38 U	0.38 U
Metals, TCLP (ug/L)	Barium	NS	NS	NS	NS	NS	100,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NS	NS	NS	NS	NS	5,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	NS	NS	NS	NS	NS	5,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oxidation/Reduction Potential (mV)	Oxidation/Reduction Potential	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**169**	**229**	**242**	**189**	**227**
pH (s.u.)	pH	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**5.81**	**5.87**	**5.97**	**5.93**	**5.93**

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
ug/L - micrograms per liter.
mV - milliVolt.
s.u. - Standard unit.
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
NS - No MassDEP standards exist for this compound.
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 Method 1 standards or TCLP standard, as applicable.
Values shown in bold and outlined exceed TSCA but are less than the listed MassDEP Method 1 standards.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TCLP - Toxicity Characteristic Leaching Procedure.
TSCA - Toxic Substances Control Act criteria.
2004 and 2005 Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Characteristic*.
(a) - The sample was re-collected on 3/31/2009 and analyzed for dibenzofuran.
* - The sample exhibits altered PCB pattern; best possible Aroclor match reported.
** - TRC developed standards.
^ - For reference purposes only.

TABLE 4-7
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Hang-Out Area (Exposure Point Area HS-7)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	SS-4	SS-53	SS-54	SS-55	SS-56	SS-57	SB-362				SB-363		
							Sample Depth (ft.):	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-1	1-3	5	6.5	0-1	1-3	5
							Sample Date:	7/23/2001	12/2/2008	12/2/2008	12/2/2008	12/2/2008	12/2/2008	3/4/2009	3/4/2009	3/4/2009	3/4/2009	3/4/2009	3/4/2009	3/4/2009
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA													
PAHs																				
(mg/kg)	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	**0.228**	0.211 U	0.208 U	0.213 U	0.214 U	**0.395**	0.221 U	**0.246**	0.507 U	0.459 U	0.195 U	0.184 U
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	**0.216**	0.211 U	0.208 U	0.213 U	0.214 U	**0.348**	0.221 U	**0.215**	0.507 U	0.459 U	0.195 U	0.184 U
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	**0.269**	0.211 U	0.208 U	0.213 U	0.214 U	**0.410**	0.221 U	**0.244**	0.507 U	0.459 U	0.195 U	0.184 U
	Chrysene	70	70	400	400	70	N/A	NA	**0.207**	0.211 U	0.208 U	0.213 U	0.214 U	**0.417**	0.221 U	**0.272**	0.507 U	0.459 U	0.195 U	0.184 U
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	**0.732**	0.211 U	0.208 U	0.213 U	0.214 U	**0.696**	**0.343**	**0.431**	0.507 U	**0.640**	0.195 U	0.184 U
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	0.207 U	0.211 U	0.208 U	0.213 U	0.214 U	**0.192**	0.221 U	0.214 U	0.507 U	0.459 U	0.195 U	0.184 U
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	**0.252**	0.211 U	0.208 U	0.213 U	0.214 U	**0.621**	**0.264**	**0.501**	0.507 U	**0.607**	0.195 U	0.184 U
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	**0.567**	0.211 U	0.208 U	0.213 U	0.214 U	**0.793**	**0.270**	**0.530**	0.507 U	**0.573**	0.195 U	0.184 U
PCBs																				
(mg/kg)	Aroclor 1254	2	2	3	3	2	1	0.100 U	**0.293 J**	**0.0959 J**	**0.148 J**	0.0648 U	0.0597 U	**0.509 J**	**0.0904 J**	**0.154 J**	0.155 U	**0.283 J**	0.0582 U	0.0528 U
	Aroclor 1260	2	2	3	3	2	1	0.100 U	**0.136 J**	**0.123 J**	0.0606 U	0.0648 U	0.0597 U	0.0568 U	0.0615 U	0.0599 U	0.155 U	0.0642 U	0.0582 U	0.0528 U
	Total PCBs	2	2	3	3	2	1	0.100 U	**0.429 J**	**0.2189 J**	**0.148 J**	0.0648 U	0.0597 U	**0.509 J**	**0.0904 J**	**0.154 J**	0.155 U	**0.283 J**	0.0582 U	0.0528 U
Metals																				
(mg/kg)	Mercury	20	20	30	30	20	N/A	0.07 U	**0.070**	**0.063**	**0.088**	**0.149**	**0.052**	**0.213**	**0.088**	**0.120**	**0.183**	**0.211**	**0.048**	0.016 U
	Antimony	20	20	30	30	20	N/A	NA	4.97 U	5.06 U	4.99 U	5.11 U	5.14 U	4.60 U	5.30 U	5.13 U	12.2 U	5.51 U	4.66 U	4.40 U
	Arsenic	20	20	20	20	20	N/A	**1.52**	3.11 U	**3.55**	**3.92**	**4.50**	**3.32**	**5.37**	**9.86**	**6.59**	**12.6**	**5.18**	**4.48**	2.75 U
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	**11**	**60.4**	**40.2**	**28.1**	**40.8**	**23.6**	**173**	**271**	**269**	**135**	**187**	**16.9**	**8.77**
	Beryllium	100	100	200	200	100	N/A	NA	0.32 U	0.32 U	0.32 U	0.32 U	0.33 U	0.29 U	**1.11**	**0.70**	**1.56**	0.35 U	0.30 U	0.28 U
	Cadmium	2	2	30	30	2	N/A	0.32 U	**0.34**	**0.33**	0.32 U	0.32 U	0.33 U	**0.84**	**0.59**	**1.35**	**5.77**	**2.78**	0.30 U	0.28 U
	Chromium	30	30	200	200	30	N/A	**3.74**	**10.6**	**9.16**	**8.59**	**14.2**	**10.9**	**15.0**	**21.5**	**18.8**	**47.7**	**34.1**	**10.8**	**3.63**
	Lead	300	300	300	300	300	N/A	**8.89**	**67.2**	**54.4**	**89.4**	**67.2**	**30.7**	**277**	**487**	**448**	**319**	**292**	**5.35**	**1.00**
	Nickel	20	20	700	700	20	N/A	NA	**4.99**	**4.42**	**4.52**	**8.62**	**5.21**	**9.37**	**18.0**	**10.5**	**40.3**	**8.03**	**5.02**	**2.36**
	Vanadium	600	600	1,000	1,000	600	N/A	NA	**15.5**	**17.2**	**17.3**	**21.4**	**18.6**	**18.3**	**25.1**	**19.4**	**17.8**	**24.4**	**14.3**	**5.62**
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	**47.5**	**47.4**	**34.2**	**39.4**	**29.9**	**191**	**99.6**	**264**	**703**	**181**	**20.7**	**7.66**

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
J - Estimated value.
N/A - Not applicable.
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 Method 1 standards.
PAHs - Polynuclear Aromatic Hydrocarbons.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TSCA - Toxic Substances Control Act criteria.

TABLE 4-8
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Junior High Gym Class Area (Exposure Point Area HS-8)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	HG2	HG2.5	HG2.5+HH2.5	HG3		HG4		HG4+HG3	HG3+HG4	HG5	HG6	HG6+HG5	HG7	HG7+HH7	HG8
							Sample Depth (ft.):	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	0.5-3	0.5-3	0.5-3	0.75-3	0.75-3	1.5-3
							Sample Date:	12/29/2004	2/22/2005	2/22/2005	12/29/2004	2/22/2005	12/29/2004	2/22/2005	12/29/2004	2/22/2005	12/28/2004	12/28/2004	12/28/2004	12/28/2004	12/28/2004	12/28/2004
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1**	TSCA															
SVOCs (mg/kg)	Benzoic Acid	1,000*	1,000*	NS	NS	NS	N/A	4.8 U	NA	NA	NA	NA	NA	NA	20 U	NA	NA	NA	NA	NA	NA	NA
	Dimethyl phthalate	50	600	50	600	30	N/A	0.32 U	NA	0.63 U	NA	NA	NA	NA	1.3 U	0.65 U	NA	NA	NA	NA	NA	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	**0.41 JB**	NA	1.9 U	NA	NA	NA	NA	4 U	1.9 U	NA	NA	NA	NA	NA	NA
	Butyl benzyl phthalate	NS	NS	NS	NS	100	N/A	0.32 U	NA	0.63 U	NA	NA	NA	NA	1.3 U	0.65 U	NA	NA	NA	NA	NA	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	N/A	0.96 U	NA	**23**	NA	NA	NA	NA	4 U	1.9 U	NA	NA	NA	NA	NA	NA
	Carbazole	NS	NS	NS	NS	NS	N/A	NA	NA	**1.1**	NA	NA	NA	NA	NA	**0.74**	NA	NA	NA	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	0.32 U	NA	0.63 U	NA	NA	NA	NA	1.3 U	0.65 U	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	0.32 U	NA	**0.91**	NA	NA	NA	NA	1.3 U	0.65 U	NA	NA	NA	NA	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	0.32 U	NA	0.63 U	NA	NA	NA	NA	**10**	0.65 U	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	**0.69**	NA	**2.2**	NA	NA	NA	NA	1.3 U	**1.1**	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	**2.4**	NA	**10**	NA	NA	NA	NA	**2.7**	**2.6**	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	**2.2**	NA	**8.9**	NA	NA	NA	NA	1.3 U	**2.0**	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	**2.2**	NA	**13**	NA	NA	NA	NA	1.3 U	**3.2**	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	0.32 U	NA	**2**	NA	NA	NA	NA	1.3 U	0.65 U	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	**1.5**	NA	**4.5**	NA	NA	NA	NA	1.3 U	**0.81**	NA	NA	NA	NA	NA	NA
	Chrysene	70	70	400	400	70	N/A	**1.9**	NA	**7.8**	NA	NA	NA	NA	**2.1**	**1.8**	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	0.32 U	NA	0.63 U	NA	NA	NA	NA	1.3 U	0.65 U	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	**5.6**	NA	**23**	NA	NA	NA	NA	**5.1**	**6**	NA	NA	NA	NA	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	0.32 U	NA	**0.83**	NA	NA	NA	NA	1.3 U	**0.77**	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	0.32 U	NA	**2.7**	NA	NA	NA	NA	1.3 U	0.65 U	NA	NA	NA	NA	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	0.32 U	NA	0.63 U	NA	NA	NA	NA	1.3 U	0.65 U	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	0.32 U	NA	0.63 U	NA	NA	NA	NA	1.3 U	**1.3**	NA	NA	NA	NA	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	**3.4**	NA	**11**	NA	NA	NA	NA	1.3 U	**5.4**	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	**4.5**	NA	**12**	NA	NA	NA	NA	**5.5**	**3.6**	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)	Aroclor 1254	2	2	3	3	2	1	4.19	19.8	NA	1.2	12.13	**0.143**	3.7	NA	NA	1.23 U	**0.601**	NA	1.9	NA	3.06
	Aroclor 1260	2	2	3	3	2	1	1.27 U	0.121 U	NA	0.067 U	0.123 U	0.057 U	0.121 U	NA	NA	1.23 U	0.061 U	NA	0.06 U	NA	0.063 U
	Aroclor 1262	2	2	3	3	2	1	**0.644**	0.121 U	NA	**0.519**	0.123 U	0.057 U	0.121 U	NA	NA	1.23 U	**0.145**	NA	**0.21**	NA	**0.47**
	Aroclor 1268	2	2	3	3	2	1	1.27 U	0.121 U	NA	0.067 U	0.123 U	0.057 U	0.121 U	NA	NA	1.23 U	0.061 U	NA	0.06 U	NA	0.063 U
	Total PCBs	2	2	3	3	2	1	4.834	19.8	NA	1.719	12.13	**0.143**	3.7	NA	NA	2.45 U	**0.746**	NA	2.11	NA	3.53
Metals (mg/kg)	Arsenic	20	20	20	20	20	N/A	**5.21**	NA	**8.56**	NA	NA	NA	NA	**5.98**	**3.36**	NA	NA	**3.17**	NA	**10**	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	**975**	NA	**873**	NA	NA	NA	NA	**734**	**316**	NA	NA	**179**	NA	1,710	NA
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	4.61	NA	7.94	NA	NA	NA	NA	10	2.09	NA	NA	4.26	NA	6.34	NA
	Chromium	30	30	200	200	30	N/A	320	NA	59	NA	NA	NA	NA	94	**22**	NA	NA	**13**	NA	150	NA
	Lead	300	300	300	300	300	N/A	413	NA	765	NA	NA	NA	NA	1,140	354	NA	NA	419	NA	1,070	NA
	Mercury	20	20	30	30	20	N/A	**0.749**	NA	**0.405**	NA	NA	NA	NA	**0.92**	**0.344**	NA	NA	**0.386**	NA	**17**	NA
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Selenium	400	400	800	800	400	N/A	0.74 U	NA	0.12 U	NA	NA	NA	NA	0.81 U	0.12 U	NA	NA	0.77 U	NA	**2.22**	NA
	Silver	100	100	200	200	100	N/A	0.37 U	NA	**0.4**	NA	NA	NA	NA	**0.65**	**0.16**	NA	NA	0.39 U	NA	**1.35**	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP (ug/L)	Barium	NS	NS	NS	NS	NS	100,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NS	NS	NS	NS	NS	5,000(1)	**140**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20 U	NA
	Lead	NS	NS	NS	NS	NS	5,000(1)	**490**	NA	**1,100**	NA	NA	NA	NA	**3,830**	**200**	NA	NA	**250**	NA	**250**	NA
	Mercury	NS	NS	NS	NS	NS	200(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2**	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
ug/L - micrograms per liter.
B - Detected in associated laboratory method blank.
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
NS - No standard available for this compound.
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 Method 1 standards or TCLP standard, as applicable.
Values shown in bold and outlined exceed TSCA but are less than the listed Method 1 standards.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TCLP - Toxicity Characteristic Leaching Procedure.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Characteristic*.
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TABLE 4-8
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Junior High Gym Class Area (Exposure Point Area HS-8)
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	HG9	HG9	HG10	HG10+HG9	HH2.5	HH3	HH3	HH4	HH4+HI4	HH5	HH5+HI5	HH7	HH8	HH8+HG8	HH9	HH9+HI9
	Sample Location:							HG9	HG9	HG10	HG10+HG9	HH2.5	HH3	HH3	HH4	HH4+HI4	HH5	HH5+HI5	HH7	HH8	HH8+HG8	HH9	HH9+HI9
	Sample Depth (ft.):							1.5-3	1.5-3	2-3	1.5-3	1.5-3	0-1.5	1.5-3	1-3	1-3	0.75-3	0.75-3	1.25-3	0.5-3	0.5-3	1-3	0.75-3
	Sample Date:							12/28/2004	12/28/2004	12/28/2004	12/28/2004	2/22/2005	2/22/2005	2/22/2005	2/22/2005	2/22/2005	12/28/2004	12/28/2004	12/28/2004	12/28/2004	12/28/2004	12/28/2004	12/28/2004
									Field Dup														
SVOCs (mg/kg)	Benzoic Acid	1,000*	1,000*	NS	NS	NS	N/A	NA	NA	NA	**2.4**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dimethyl phthalate	50	600	50	600	30	N/A	NA	NA	NA	**0.35**	NA	0.07 U	NA	NA	0.63 U	NA	NA	NA	NA	NA	NA	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	NA	NA	**1 B**	NA	**0.21 B**	NA	NA	1.9 U	NA	NA	NA	NA	NA	NA	NA
	Butyl benzyl phthalate	NS	NS	NS	NS	100	N/A	NA	NA	NA	0.062 U	NA	0.07 U	NA	NA	0.63 U	NA	NA	NA	NA	NA	NA	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	N/A	NA	NA	NA	**1**	NA	**0.1 J**	NA	NA	1.9 U	NA	NA	NA	NA	NA	NA	NA
	Carbazole	NS	NS	NS	NS	NS	N/A	NA	NA	NA	**NA**	NA	**0.11**	NA	NA	**1.5**	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	NA	NA	**0.079**	NA	0.07 U	NA	NA	0.63 U	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	NA	NA	**0.12**	NA	0.07 U	NA	NA	**0.88**	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	NA	NA	NA	**0.064**	NA	0.07 U	NA	NA	0.63 U	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	**0.31**	NA	0.14 U	NA	NA	**2**	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	NA	NA	**1.1**	NA	**0.62**	NA	NA	**6.5**	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	NA	NA	**1.1**	NA	**0.55**	NA	NA	**6**	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	NA	NA	**1.7**	NA	**0.73**	NA	NA	**9**	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	**0.57**	NA	**0.15**	NA	NA	**1.9**	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	NA	NA	**0.39**	NA	**0.31**	NA	NA	**3.4**	NA	NA	NA	NA	NA	NA	NA
	Chrysene	70	70	400	400	70	N/A	NA	NA	NA	**0.93**	NA	**0.55**	NA	NA	**4.8**	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	NA	NA	0.062 U	NA	0.07 U	NA	NA	0.63 U	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	**1.9**	NA	**1.3**	NA	NA	**15**	NA	NA	NA	NA	NA	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	0.062 U	NA	0.07 U	NA	NA	**0.74**	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	NA	NA	0.062 U	NA	**0.19**	NA	NA	**1.9**	NA	NA	NA	NA	NA	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	NA	NA	0.062 U	NA	0.07 U	NA	NA	0.63 U	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	**0.069**	NA	0.07 U	NA	NA	0.63 U	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	NA	NA	**1.4**	NA	**0.66**	NA	NA	**10**	NA	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	**4.3**	NA	**0.74**	NA	NA	**9.9**	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)	Aroclor 1254	2	2	3	3	2	1	2.35	2.92	1.65	NA	14.3	**0.653**	5.37	4.95	NA	2.39	NA	3.4	3.654	NA	2.37	NA
	Aroclor 1260	2	2	3	3	2	1	0.06 U	0.076 U	0.061 U	NA	0.136 U	0.12 U	0.138 U	0.113 U	NA	0.06 U	NA	0.06 U	1.19 U	NA	0.059 U	NA
	Aroclor 1262	2	2	3	3	2	1	**0.23**	**0.3**	**0.234**	NA	0.136 U	0.12 U	0.138 U	0.113 U	NA	**0.298**	NA	**0.284**	1.19 U	NA	**0.334**	NA
	Aroclor 1268	2	2	3	3	2	1	0.06 U	0.076 U	0.061 U	NA	0.136 U	0.12 U	0.138 U	0.113 U	NA	0.06 U	NA	0.06 U	1.19 U	NA	0.059 U	NA
	Total PCBs	2	2	3	3	2	1	2.58	3.22	1.884	NA	14.3	0.653	5.37	4.95	NA	2.688	NA	3.684	3.654	NA	2.704	NA
Metals (mg/kg)	Arsenic	20	20	20	20	20	N/A	NA	NA	NA	**9.02**	NA	**1.44**	NA	NA	**9.07**	NA	**3.01**	NA	NA	22	NA	**5.65**
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	**752**	NA	**523**	NA	NA	**1,210**	NA	**358**	NA	NA	5,110	NA	1,370
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	NA	NA	NA	7.46	NA	**1.14**	NA	NA	11	NA	3.51	NA	NA	12	NA	5.65
	Chromium	30	30	200	200	30	N/A	NA	NA	NA	80	NA	**8.01**	NA	NA	177	NA	**27**	NA	NA	356	NA	137
	Lead	300	300	300	300	300	N/A	NA	NA	NA	1,430	NA	693	NA	NA	2,280	NA	568	NA	NA	2,200	NA	829
	Mercury	20	20	30	30	20	N/A	NA	NA	NA	**1.57**	NA	**0.073**	NA	NA	**1.02**	NA	**0.691**	NA	NA	**0.708**	NA	**0.953**
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Selenium	400	400	800	800	400	N/A	NA	NA	NA	0.82 U	NA	0.1 U	NA	NA	0.11 U	NA	0.72 U	NA	NA	0.94 U	NA	0.8 U
	Silver	100	100	200	200	100	N/A	NA	NA	NA	**6.4**	NA	0.05 U	NA	NA	**1.02**	NA	0.36 U	NA	NA	**2.17**	NA	**0.4**
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP (ug/L)	Barium	NS	NS	NS	NS	NS	100,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2,530**	NA	NA
	Chromium	NS	NS	NS	NS	NS	5,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	20 U	NA	NA	NA	NA	20 U	NA	20 U
	Lead	NS	NS	NS	NS	NS	5,000(1)	NA	NA	NA	**1,540**	NA	**100**	NA	NA	**3,100**	NA	**340**	NA	NA	**510**	NA	**310**
	Mercury	NS	NS	NS	NS	NS	200(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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New Bedford High School - Junior High Gym Class Area (Exposure Point Area HS-8)
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	HH10	HH10+HI10	HI2.5	HI2.5+HJ2.5	HI3	HI3+HH3	HI4	HI5	HI6	HI6+HH6	HI7+HJ7	HI7	HI8	HI9	HI10
	Sample Depth (ft.):							1.5-3	1-3	1-2	0-2	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-2	0.75-3	0.75-3	1-3
	Sample Date:							12/29/2004	12/29/2004	2/22/2005	2/22/2005	2/22/2005	2/22/2005	2/22/2005	12/28/2004	12/28/2004	12/28/2004	12/28/2004	12/28/2004	12/28/2004	12/28/2004	12/29/2004
SVOCs (mg/kg)	Benzoic Acid	1,000*	1,000*	NS	NS	NS	N/A	NA	4.2 U	NA	NA	NA	NA	NA	NA	NA	0.9 U	NA	NA	NA	NA	NA
	Dimethyl phthalate	50	600	50	600	30	N/A	NA	0.28 U	NA	0.67 U	NA	0.72 U	NA	NA	NA	0.06 U	NA	NA	NA	NA	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	**0.3 JB**	NA	**0.73 JB**	NA	2.2 U	NA	NA	NA	**0.19 B**	NA	NA	NA	NA	NA
	Butyl benzyl phthalate	NS	NS	NS	NS	100	N/A	NA	0.28 U	NA	0.67 U	NA	0.72 U	NA	NA	NA	0.06 U	NA	NA	NA	NA	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	N/A	NA	**9.8**	NA	**2.6**	NA	**0.92 J**	NA	NA	NA	0.18 U	NA	NA	NA	NA	NA
	Carbazole	NS	NS	NS	NS	NS	N/A	NA	NA	NA	**13**	NA	**4**	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	0.28 U	NA	**7.2**	NA	**2.1**	NA	NA	NA	**0.56**	NA	NA	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	0.28 U	NA	**14**	NA	**2.1**	NA	NA	NA	**1.1**	NA	NA	NA	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	NA	0.28 U	NA	0.67 U	NA	**2.5**	NA	NA	NA	**0.074**	NA	NA	NA	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	0.28 U	NA	**22**	NA	**10**	NA	NA	NA	**1.9**	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	**0.94**	NA	**40**	NA	**26**	NA	NA	NA	**3.6**	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	**0.93**	NA	**33**	NA	**21**	NA	NA	NA	**2.8**	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	**0.82**	NA	**45**	NA	**32**	NA	NA	NA	**4.2**	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	0.28 U	NA	**7.7**	NA	**4.7**	NA	NA	NA	**1.2**	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	**0.51**	NA	**13**	NA	**6.8**	NA	NA	NA	**1.4**	NA	NA	NA	NA	NA
	Chrysene	70	70	400	400	70	N/A	NA	**0.66**	NA	**33**	NA	**20**	NA	NA	NA	**2.7**	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	0.28 U	NA	**3.3**	NA	0.72 U	NA	NA	NA	0.06 U	NA	NA	NA	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	**2.1**	NA	**73**	NA	**69**	NA	NA	NA	**6.8**	NA	NA	NA	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	0.28 U	NA	**11**	NA	**2.2**	NA	NA	NA	**0.8**	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	0.28 U	NA	**9.8**	NA	**6.1**	NA	NA	NA	**1.4**	NA	NA	NA	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	0.28 U	NA	**4.5**	NA	0.72 U	NA	NA	NA	**0.25**	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	0.28 U	NA	**12**	NA	**1**	NA	NA	NA	**0.76**	NA	NA	NA	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	0.76 U	NA	**84**	NA	**45**	NA	NA	NA	**6.1**	NA	NA	NA	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	**1.6**	NA	**58**	NA	**45**	NA	NA	NA	**6.5**	NA	NA	NA	NA	NA
PCBs (mg/kg)	Aroclor 1254	2	2	3	3	2	1	**0.638**	NA	**0.94**	NA	**5.35**	NA	**4.44**	**3.88**	**3.29**	NA	NA	**2.06**	**2.09**	**4.15**	**10.4**
	Aroclor 1260	2	2	3	3	2	1	0.058 U	NA	0.137 U	NA	0.154 U	NA	0.122 U	0.06 U	0.059 U	NA	NA	0.073 U	0.055 U	0.058 U	1.12 U
	Aroclor 1262	2	2	3	3	2	1	**0.132**	NA	0.137 U	NA	0.154 U	NA	0.122 U	**3.58**	**1.07**	NA	NA	**0.43**	**0.372**	**0.565**	1.12 U
	Aroclor 1268	2	2	3	3	2	1	0.058 U	NA	0.137 U	NA	0.154 U	NA	0.122 U	0.06 U	0.059 U	NA	NA	0.073 U	0.055 U	0.058 U	1.12 U
	Total PCBs	2	2	3	3	2	1	**0.770**	NA	**0.94**	NA	**5.35**	NA	**4.44**	**7.46**	**4.36**	NA	NA	**2.49**	**2.462**	**4.715**	**10.4**
Metals (mg/kg)	Arsenic	20	20	20	20	20	N/A	NA	**3.87**	NA	**4.3**	NA	**7.93**	NA	NA	NA	**4.74**	**8.3**	NA	NA	NA	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	**567**	NA	**572**	NA	**595**	NA	NA	NA	**833**	**903**	NA	NA	NA	NA
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	NA	**2.79**	NA	**4.53**	NA	**7.17**	NA	NA	NA	**2.98**	**4.31**	NA	NA	NA	NA
	Chromium	30	30	200	200	30	N/A	NA	**65**	NA	**62**	NA	**81**	NA	NA	NA	**66**	**84**	NA	NA	NA	NA
	Lead	300	300	300	300	300	N/A	NA	**278**	NA	**866**	NA	**4,380**	NA	NA	NA	**398**	**796**	NA	NA	NA	NA
	Mercury	20	20	30	30	20	N/A	NA	**0.453**	NA	**0.845**	NA	**0.608**	NA	NA	NA	**0.324**	**1.3**	NA	NA	NA	NA
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Selenium	400	400	800	800	400	N/A	NA	0.72 U	NA	0.13 U	NA	0.14 U	NA	NA	NA	0.68 U	**3.42**	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	0.36 U	NA	**0.71**	NA	**0.53**	NA	NA	NA	**0.41**	**0.57**	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP (ug/L)	Barium	NS	NS	NS	NS	NS	100,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NS	NS	NS	NS	NS	5,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	NS	NS	NS	NS	NS	5,000(1)	NA	**160**	NA	**1,600**	NA	**1,100**	NA	NA	NA	**450**	**970**	NA	NA	NA	NA
	Mercury	NS	NS	NS	NS	NS	200(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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New Bedford High School - Junior High Gym Class Area (Exposure Point Area HS-8)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	HI-10A		HI-10B		HI-10C		HI-10E	HJ2.5		HJ3	HJ4	HJ4+HK4	HJ5	HJ5+HK5	HJ6	HJ7
							Sample Depth (ft.):	0-1	1-3	0-1	1-3	0-1	1-2	1-3	0-2	2-3	2.5-3	1.5-3	0.5-3	2-3	1-3	1-2.5	1-3
							Sample Date:	3/11/2009	3/11/2009	3/11/2009	3/11/2009	3/11/2009	3/11/2009	3/11/2009	2/22/2005	2/22/2005	2/22/2005	2/22/2005	2/22/2005	12/28/2004	12/28/2004	12/28/2004	12/28/2004
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1**	TSCA																
SVOCs (mg/kg)	Benzoic Acid	1,000*	1,000*	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 U	NA	NA
	Dimethyl phthalate	50	600	50	600	30	N/A	NA	NA	NA	NA	NA	NA	NA	0.056 U	NA	NA	NA	0.59 U	NA	**0.97**	NA	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	NA	NA	NA	NA	NA	NA	**0.095 JB**	NA	NA	NA	1.8 U	NA	**0.41 JB**	NA	NA
	Butyl benzyl phthalate	NS	NS	NS	NS	100	N/A	NA	NA	NA	NA	NA	NA	NA	0.056 U	NA	NA	NA	0.59 U	NA	0.31 U	NA	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	N/A	NA	NA	NA	NA	NA	NA	NA	**0.078 J**	NA	NA	NA	1.8 U	NA	0.92 U	NA	NA
	Carbazole	NS	NS	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	0.056 U	NA	NA	NA	0.59 U	NA	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	NA	NA	NA	NA	NA	NA	0.056 U	NA	NA	NA	0.59 U	NA	0.31 U	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	0.056 U	NA	NA	NA	0.59 U	NA	**3.9**	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	NA	NA	NA	NA	NA	NA	NA	0.056 U	NA	NA	NA	0.59 U	NA	**2.2**	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	0.056 U	NA	NA	NA	0.59 U	NA	**8.1**	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	**0.23**	NA	NA	NA	**1.5**	NA	**16**	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	NA	NA	NA	NA	NA	NA	**0.22**	NA	NA	NA	**1.3**	NA	**9.7**	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	**0.31**	NA	NA	NA	0.59 U	NA	**9.8**	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	**0.092**	NA	NA	NA	0.59 U	NA	**2.8**	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	NA	NA	NA	NA	NA	NA	**0.08**	NA	NA	NA	0.59 U	NA	**6.5**	NA	NA
	Chrysene	70	70	400	400	70	N/A	NA	NA	NA	NA	NA	NA	NA	**0.2**	NA	NA	NA	**1.3**	NA	**14**	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	NA	NA	NA	NA	NA	NA	0.056 U	NA	NA	NA	0.59 U	NA	0.31 U	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	**0.39**	NA	NA	NA	**2.9**	NA	**30**	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	0.056 U	NA	NA	NA	0.59 U	NA	**2.9**	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	**0.11**	NA	NA	NA	0.59 U	NA	**3.1**	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	NA	NA	NA	NA	NA	NA	0.056 U	NA	NA	NA	0.59 U	NA	**3.9**	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	0.056 U	NA	NA	NA	0.59 U	NA	**1.8**	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	NA	NA	NA	NA	NA	NA	**0.23**	NA	NA	NA	**1.7**	NA	**33**	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	**0.39**	NA	NA	NA	**2.9**	NA	**37**	NA	NA
PCBs (mg/kg)	Aroclor 1254	2	2	3	3	2	1	**2.95 J**	**1.80 J**	**6.02 J**	**0.743 J**	**1.14 J**	**0.756 J**	**0.800 J**	**0.73**	**2.74**	**0.209**	**0.77**	NA	**0.612**	NA	**0.682**	**2.04**
	Aroclor 1260	2	2	3	3	2	1	0.190 U	0.126 U	0.366 U	**0.297 J**	**0.328 J**	0.0560 U	**0.161 J**	0.13 U	0.13 U	0.117 U	0.123 U	NA	0.066 U	NA	0.056 U	0.067 U
	Aroclor 1262	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	0.13 U	0.13 U	0.117 U	0.123 U	NA	**0.257**	NA	0.056 U	**0.428**
	Aroclor 1268	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	0.13 U	0.13 U	0.117 U	0.123 U	NA	0.066 U	NA	**1.12**	0.067 U
	Total PCBs	2	2	3	3	2	1	**2.95 J**	**1.80 J**	**6.02 J**	**1.04 J**	**1.468 J**	**0.756 J**	**0.961 J**	**0.73**	**2.74**	**0.209**	**0.77**	NA	**0.869**	NA	**1.802**	**2.468**
Metals (mg/kg)	Arsenic	20	20	20	20	20	N/A	NA	NA	NA	NA	NA	NA	NA	**0.56**	NA	NA	NA	**4.62**	NA	**4**	NA	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	**27**	NA	NA	NA	**593**	NA	**788**	NA	NA
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	NA	NA	NA	NA	NA	NA	NA	**0.8**	NA	NA	NA	3.14	NA	3.56	NA	NA
	Chromium	30	30	200	200	30	N/A	NA	NA	NA	NA	NA	NA	NA	**10**	NA	NA	NA	66	NA	58	NA	NA
	Lead	300	300	300	300	300	N/A	NA	NA	NA	NA	NA	NA	NA	35	NA	NA	NA	359	NA	400	NA	NA
	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA	NA	**0.044**	NA	NA	NA	**0.32**	NA	**0.422**	NA	NA
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Selenium	400	400	800	800	400	N/A	NA	NA	NA	NA	NA	NA	NA	0.11 U	NA	NA	NA	0.11 U	NA	0.63 U	NA	NA
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	0.06 U	NA	NA	NA	**0.22**	NA	0.31 U	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP (ug/L)	Barium	NS	NS	NS	NS	NS	100,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NS	NS	NS	NS	NS	5,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	NS	NS	NS	NS	NS	5,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**500**	NA	**240**	NA	NA
	Mercury	NS	NS	NS	NS	NS	200(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
ug/L - micrograms per liter.
B - Detected in associated laboratory method blank.
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
NS - No standard available for this compound.
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 Method 1 standards or TCLP standard, as applicable.
Values shown in bold and outlined exceed TSCA but are less than the listed Method 1 standards.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TCLP - Toxicity Characteristic Leaching Procedure.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
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** - For reference purposes only.

TABLE 4-8
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Junior High Gym Class Area (Exposure Point Area HS-8)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	HJ8	HJ8+HI8		HJ9	HJ9+HK8	HJ10	HJ-10A	HJ-10B	HJ-10C		HJ-10D		HJ-10F		HK2.5	HK2.5+HM2.5
							Sample Depth (ft.):	0.5-2.5	0.5-3	0.5-3	1-3	0.5-2.5	1-3	1-3	1-3	0-1	1-3	0-1	1-3	0-1	1-3	0.5-3	0.5-3
							Sample Date:	12/28/2004	12/28/2004	12/28/2004	12/28/2004	12/28/2004	12/29/2004	3/11/2009	3/11/2009	3/11/2009	3/11/2009	3/11/2009	3/11/2009	3/11/2009	3/11/2009	2/22/2005	2/22/2005
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1**	TSCA			Field Dup													
SVOCs																							
(mg/kg)	Benzoic Acid	1,000*	1,000*	NS	NS	NS	N/A	NA	0.89 U	0.89 U	NA	NA	4.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dimethyl phthalate	50	600	50	600	30	N/A	NA	0.059 U	0.059 U	NA	NA	0.28 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.59 U
	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	**0.21** B	**0.52** B	NA	NA	**5.6** B	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1.8** U
	Butyl benzyl phthalate	NS	NS	NS	NS	100	N/A	NA	**0.29**	**0.33**	NA	NA	0.28 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.59 U
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	N/A	NA	**7.0**	**5.6**	NA	NA	**5.3**	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 U
	Carbazole	NS	NS	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.59 U
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	**0.27**	**0.14**	NA	NA	0.28 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.59 U
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	**0.42**	**0.26**	NA	NA	0.28 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.59 U
	Acenaphthylene	600	10	600	10	1	N/A	NA	**0.097**	**0.087**	NA	NA	0.28 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.59 U
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	**0.86**	**0.77**	NA	NA	**3**	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.59 U
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	**2.8**	**2.6**	NA	NA	**1.6**	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.96**
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	**2.3**	**4.7**	NA	NA	**1.5**	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.59 U
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	**3.3**	**6.5**	NA	NA	**1.5**	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1.3**
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	**1.2**	**2.5**	NA	NA	0.28 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.59 U
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	**0.85**	**2.3**	NA	NA	**1.1**	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.59 U
	Chrysene	70	70	400	400	70	N/A	NA	**2.2**	**1.9**	NA	NA	**1.3**	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.76**
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	0.059 U	0.059 U	NA	NA	0.28 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.59 U
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	**5.2**	**4.7**	NA	NA	**3.8**	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1.7**
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	**0.4**	**0.24**	NA	NA	0.28 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.59 U
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	**1.3**	**2.6**	NA	NA	0.28 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.59 U
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	**0.13**	0.059 U	NA	NA	0.28 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.59 U
	Naphthalene	40	500	40	1,000	4	N/A	NA	**0.26**	**0.092**	NA	NA	0.28 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.59 U
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	**4.2**	**3**	NA	NA	**2.5**	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1.2**
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	**5.2**	**4.3**	NA	NA	**3.1**	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1.2**
PCBs																							
(mg/kg)	Aroclor 1254	2	2	3	3	2	1	**0.52**	NA	NA	**2.62**	NA	**0.444**	**0.364** J	**0.963** J	**1.89** J	**10.2** J	**0.103** J	**0.696** J	**1.93** J	0.0658 U	**9.32**	NA
	Aroclor 1260	2	2	3	3	2	1	0.058 U	NA	NA	0.067 U	NA	0.059 U	**0.193** J	**0.254** J	0.176 U	0.684 U	**0.0787** J	**0.313** J	**0.857** J	0.0658 U	0.144 U	NA
	Aroclor 1262	2	2	3	3	2	1	**0.22**	NA	NA	**0.603**	NA	**0.285**	NA	NA	NA	NA	NA	NA	NA	NA	0.144 U	NA
	Aroclor 1268	2	2	3	3	2	1	0.058 U	NA	NA	0.067 U	NA	0.059 U	NA	NA	NA	NA	NA	NA	NA	NA	0.144 U	NA
	Total PCBs	2	2	3	3	2	1	**0.74**	NA	NA	**3.223**	NA	**0.729**	**0.557** J	**1.217** J	**1.89** J	**10.2** J	**0.1817** J	**1.009** J	**2.787** J	0.0658 U	**9.32**	NA
Metals																							
(mg/kg)	Arsenic	20	20	20	20	20	N/A	NA	**11**	**5.01**	NA	**5.94**	**2.53**	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.97**
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	**3,640**	**787**	NA	**1,510**	**169**	NA	NA	NA	NA	NA	NA	NA	NA	NA	**167**
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	NA	**18**	**5.29**	NA	**3.73**	**4.65**	NA	NA	**0.52**	**14.9**	**0.55**	**19.2**	**3.06**	0.34 U	NA	**4.22**
	Chromium	30	30	200	200	30	N/A	NA	**741**	**116**	NA	**206**	**192**	NA	NA	**17.6**	**332**	**19.3**	**368**	**133**	**11.8**	NA	**36**
	Lead	300	300	300	300	300	N/A	NA	**1,780**	**1,250**	NA	**526**	**436**	NA	NA	**98.5**	**2,690**	**106**	**3,120**	**922**	**8.69**	NA	**379**
	Mercury	20	20	30	30	20	N/A	NA	**1.36**	**0.755**	NA	**0.532**	**1.02**	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.501**
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Selenium	400	400	800	800	400	N/A	NA	0.78 U	0.72 U	NA	0.76 U	0.68 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.1 U
	Silver	100	100	200	200	100	N/A	NA	**2.33**	**1**	NA	**0.38**	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.25**
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP																							
(ug/L)	Barium	NS	NS	NS	NS	NS	100,000(1)	NA	**3,540**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NS	NS	NS	NS	NS	5,000(1)	NA	20 U	20 U	NA	20 U	**40**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	NS	NS	NS	NS	NS	5,000(1)	NA	**560**	**720**	NA	**180**	**650**	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,200**
	Mercury	NS	NS	NS	NS	NS	200(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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ug/L - micrograms per liter.
B - Detected in associated laboratory method blank.
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
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New Bedford, Massachusetts

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							Sample Depth (ft.):	0.5-3	1-3	0.25-3	0.25-3	0.25-3	2-3	1-3	1-2	0.25-3	0.25-3	2-3	2-3	1-1.5	1-2	0.75-1.5	0.75-1.5
							Sample Date:	2/22/2005	12/28/2004	12/28/2004	12/28/2004	12/28/2004	12/28/2004	12/28/2004	12/28/2004	2/22/2005	2/22/2005	2/22/2005	2/22/2005	12/28/2004	2/22/2005	2/22/2005	2/22/2005
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1**	TSCA				Field Dup								Field Dup				Field Dup
SVOCs																							
(mg/kg)	Benzoic Acid	1,000*	1,000*	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dimethyl phthalate	50	600	50	600	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.57 U	0.68 U	NA	NA	NA	NA	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.92 JB**	2 U	NA	NA	NA	NA	NA
	Butyl benzyl phthalate	NS	NS	NS	NS	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.57 U	0.68 U	NA	NA	NA	NA	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 U	2 U	NA	NA	NA	NA	NA
	Carbazole	NS	NS	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.57 U	0.68 U	NA	NA	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.57 U	0.68 U	NA	NA	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.57 U	0.68 U	NA	NA	NA	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.57 U	0.68 U	NA	NA	NA	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.57 U	**0.68**	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1.8**	**3.4**	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1.3**	**2.5**	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2**	**4.4**	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.57 U	0.68 U	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.57 U	**1.2**	NA	NA	NA	NA	NA
	Chrysene	70	70	400	400	70	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1.6**	**2.5**	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.57 U	0.68 U	NA	NA	NA	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2.9**	**6.3**	NA	NA	NA	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.57 U	0.68 U	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.57 U	0.68 U	NA	NA	NA	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.57 U	0.68 U	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.57 U	0.68 U	NA	NA	NA	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2.6**	**3.5**	NA	NA	NA	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2.8**	**4.4**	NA	NA	NA	NA	NA
PCBs																							
(mg/kg)	Aroclor 1254	2	2	3	3	2	1	**0.926**	**0.242**	1.26 U	1.62	NA	**0.296**	NA	**0.367**	1.62	NA	5.63	NA	1.15 U	**0.28**	**0.634**	**0.78**
	Aroclor 1260	2	2	3	3	2	1	0.109 U	0.053 U	1.26 U	1.27 U	NA	0.07 U	NA	0.064 U	0.116 U	NA	0.149 U	NA	1.15 U	0.128 U	0.141 U	0.153 U
	Aroclor 1262	2	2	3	3	2	1	0.109 U	0.053 U	1.26 U	1.27 U	NA	0.07 U	NA	**0.185**	0.116 U	NA	0.149 U	NA	1.15 U	0.128 U	0.141 U	0.153 U
	Aroclor 1268	2	2	3	3	2	1	0.109 U	0.053 U	1.26 U	1.27 U	NA	0.07 U	NA	0.064 U	0.116 U	NA	0.149 U	NA	1.15 U	0.128 U	0.141 U	0.153 U
	Total PCBs	2	2	3	3	2	1	**0.926**	**0.242**	2.5 U	1.62	NA	**0.296**	NA	**0.552**	1.62	NA	5.63	NA	2.3 U	**0.28**	**0.634**	**0.78**
Metals																							
(mg/kg)	Arsenic	20	20	20	20	20	N/A	NA	NA	NA	NA	35	NA	**1.77**	NA	NA	**1.22**	**5.81**	**5.93**	NA	NA	NA	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	**638**	NA	**106**	NA	NA	**43**	1,870	1,980	NA	NA	NA	NA
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	NA	NA	NA	NA	12	NA	**1.68**	NA	NA	**0.92**	7.85	6.03	NA	NA	NA	NA
	Chromium	30	30	200	200	30	N/A	NA	NA	NA	NA	476	NA	**19**	NA	NA	**14**	200	146	NA	NA	NA	NA
	Lead	300	300	300	300	300	N/A	NA	NA	NA	NA	3,900	NA	**230**	NA	NA	**75**	1,640	1,020	NA	NA	NA	NA
	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	**4.29**	NA	**0.226**	NA	NA	**0.078**	**0.96**	**0.343**	NA	NA	NA	NA
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Selenium	400	400	800	800	400	N/A	NA	NA	NA	NA	0.91 U	NA	0.8 U	NA	NA	0.1 U	0.12 U	0.11 U	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	**2.82**	NA	**0.4**	NA	NA	0.05 U	**0.74**	**0.38**	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP																							
(ug/L)	Barium	NS	NS	NS	NS	NS	100,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2,500**	NA	NA	NA	NA
	Chromium	NS	NS	NS	NS	NS	5,000(1)	NA	NA	NA	NA	20 U	NA	NA	NA	NA	NA	NA	20 U	NA	NA	NA	NA
	Lead	NS	NS	NS	NS	NS	5,000(1)	NA	NA	NA	NA	**1,940**	NA	**2,770**	NA	NA	NA	NA	**500**	NA	NA	NA	NA
	Mercury	NS	NS	NS	NS	NS	200(1)	NA	NA	NA	NA	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
ug/L - micrograms per liter.
B - Detected in associated laboratory method blank.
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
NS - No standard available for this compound.
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 Method 1 standards or TCLP standard, as applicable.
Values shown in bold and outlined exceed TSCA but are less than the listed Method 1 standards.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TCLP - Toxicity Characteristic Leaching Procedure.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Characteristic* .
* - TRC developed standards.
** - For reference purposes only.

TABLE 4-8
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Junior High Gym Class Area (Exposure Point Area HS-8)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	HN3	HN3+HM3	HO2.5	HO2.5+HO3	HO3	HS-2	SB-350			SS-58	SS-59		SS-60	SS-61	SS-62
							Sample Depth (ft.):	1-2	0.75-2	0.5-1.5	0.5-1.5	0.5-1.25	0-0.5	0.5	5	8	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5
							Sample Date:	2/22/2005	2/22/2005	2/22/2005	2/22/2005	2/22/2005	9/9/2004	8/21/2008	8/21/2008	8/21/2008	12/2/2008	12/2/2008	12/2/2008 Field Dup	12/2/2008	12/2/2008	12/2/2008
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1**	TSCA															
SVOCs (mg/kg)	Benzoic Acid	1,000*	1,000*	NS	NS	NS	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dimethyl phthalate	50	600	50	600	30	N/A	NA	0.62 U	NA	0.58 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	1.8 U	NA	1.7 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Butyl benzyl phthalate	NS	NS	NS	NS	100	N/A	NA	0.62 U	NA	0.58 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	N/A	NA	1.8 U	NA	1.7 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Carbazole	NS	NS	NS	NS	NS	N/A	NA	0.62 U	NA	0.58 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	0.62 U	NA	0.58 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	0.62 U	NA	0.58 U	NA	NA	NA	0.238 U	0.182 U	0.213 U	0.211 U	0.211 U	0.221 U	0.199 U	0.206 U
	Acenaphthylene	600	10	600	10	1	N/A	NA	0.62 U	NA	0.58 U	NA	NA	NA	0.238 U	0.182 U	0.213 U	0.211 U	0.211 U	0.221 U	0.199 U	0.206 U
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	0.62 U	NA	0.58 U	NA	NA	NA	0.238 U	0.182 U	0.213 U	0.211 U	0.211 U	0.221 U	0.199 U	0.206 U
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	0.62 U	NA	0.58 U	NA	NA	NA	0.238 U	0.182 U	0.213 U	0.211 U	0.211 U	**0.268**	**0.798**	0.206 U
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	0.62 U	NA	0.58 U	NA	NA	NA	0.238 U	0.182 U	0.213 U	0.211 U	0.211 U	**0.252**	**0.651**	0.206 U
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	**0.76**	NA	0.58 U	NA	NA	NA	0.238 U	0.182 U	0.213 U	0.211 U	0.211 U	**0.300**	**0.704**	0.206 U
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	0.62 U	NA	0.58 U	NA	NA	NA	0.238 U	0.182 U	0.213 U	0.211 U	0.211 U	**0.240**	**0.403**	0.206 U
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	0.62 U	NA	0.58 U	NA	NA	NA	0.238 U	0.182 U	0.213 U	0.211 U	0.211 U	0.221 U	**0.294**	0.206 U
	Chrysene	70	70	400	400	70	N/A	NA	0.62 U	NA	0.58 U	NA	NA	NA	0.238 U	0.182 U	0.213 U	0.211 U	0.211 U	**0.277**	**0.936**	0.206 U
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	0.62 U	NA	0.58 U	NA	NA	NA	0.238 U	0.182 U	0.213 U	0.211 U	0.211 U	0.221 U	0.199 U	0.206 U
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	0.62 U	NA	0.58 U	NA	NA	NA	0.238 U	0.182 U	0.213 U	**0.232**	**0.251**	**0.453**	**1.03**	**0.298**
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	0.62 U	NA	0.58 U	NA	NA	NA	0.238 U	0.182 U	0.213 U	0.211 U	0.211 U	0.221 U	0.199 U	0.206 U
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	0.62 U	NA	0.58 U	NA	NA	NA	0.238 U	0.182 U	0.213 U	0.211 U	0.211 U	**0.244**	**0.465**	0.206 U
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	0.62 U	NA	0.58 U	NA	NA	NA	0.238 U	0.182 U	0.213 U	0.211 U	0.211 U	0.221 U	0.199 U	0.206 U
	Naphthalene	40	500	40	1,000	4	N/A	NA	0.62 U	NA	0.58 U	NA	NA	NA	0.238 U	0.182 U	0.213 U	0.211 U	0.211 U	0.221 U	0.199 U	0.206 U
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	0.62 U	NA	0.58 U	NA	NA	NA	0.238 U	0.182 U	0.213 U	0.211 U	**0.305**	**0.299**	**0.962**	0.206 U
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	0.62 U	NA	0.58 U	NA	NA	NA	0.238 U	0.182 U	0.213 U	**0.286**	**0.307**	**0.537**	**1.42**	**0.344**
PCBs (mg/kg)	Aroclor 1254	2	2	3	3	2	1	**0.48**	NA	**0.22**	NA	0.113 U	6.51	0.0545 U	**0.604 J**	0.0531 U	0.0578 U	**0.372 J**	**0.365 J**	**0.397 J**	0.0543 U	**0.676 J**
	Aroclor 1260	2	2	3	3	2	1	0.111 U	NA	0.111 U	NA	0.113 U	1.09 U	0.0545 U	**0.258 J**	0.0531 U	0.0578 U	**0.139 J**	**0.133 J**	**0.304 J**	**0.199 J**	**0.181 J**
	Aroclor 1262	2	2	3	3	2	1	0.111 U	NA	0.111 U	NA	0.113 U	1.09 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aroclor 1268	2	2	3	3	2	1	0.111 U	NA	0.111 U	NA	0.113 U	1.09 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	**0.48**	NA	**0.22**	NA	0.227 U	6.51	0.0545 U	**0.862 J**	0.0531 U	0.0578 U	**0.511 J**	**0.498 J**	**0.701 J**	**0.199 J**	**0.857 J**
Metals (mg/kg)	Arsenic	20	20	20	20	20	N/A	NA	**0.88**	NA	**0.87**	NA	NA	NA	59.8	2.73 U	3.19 U	3.17 U	3.16 U	3.31 U	**3.34**	3.09 U
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	**29**	NA	**52**	NA	NA	NA	7,430	**19.3**	**21.4**	**127**	**92.2**	**159**	**50.8**	**153**
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	**0.61**	0.28 U	0.32 U	0.32 U	0.32 U	0.34 U	0.30 U	0.31 U
	Cadmium	2	2	30	30	2	N/A	NA	**0.98**	NA	**1.26**	NA	NA	NA	4.74	0.28 U	0.32 U	**0.49**	**0.46**	**1.55**	0.30 U	**0.44**
	Chromium	30	30	200	200	30	N/A	NA	**13**	NA	**16**	NA	NA	NA	1,370	**8.20**	**9.21**	**13.7**	**11.5**	**25.4**	**17.9**	**17.6**
	Lead	300	300	300	300	300	N/A	NA	**53**	NA	**40**	NA	NA	NA	638	**3.83**	**7.87**	**144**	**113**	**186**	**68.0**	**95.3**
	Mercury	20	20	30	30	20	N/A	NA	**0.059**	NA	**0.099**	NA	NA	NA	0.356	0.011 U	**0.027**	**0.510**	**0.511**	**0.259**	**0.088**	**0.128**
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	167	**4.73**	**6.01**	**5.03**	**4.25**	**7.74**	**8.81**	**6.05**
	Selenium	400	400	800	800	400	N/A	NA	0.12 U	NA	0.11 U	NA	NA	NA	7.12 U	5.46 U	6.38 U	6.33 U	6.31 U	6.61 U	5.96 U	6.18 U
	Silver	100	100	200	200	100	N/A	NA	0.06 U	NA	**0.22**	NA	NA	NA	**31.5**	**1.50**	0.64 U	0.64 U	0.64 U	0.67 U	0.60 U	0.62 U
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	602	**9.23**	**15.0**	**17.3**	**16.5**	**25.5**	**21.5**	**19.0**
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	**1,300**	**19.6**	**20.5**	**82.6**	**65.2**	**143**	**60.1**	**72.1**
Metals, TCLP (ug/L)	Barium	NS	NS	NS	NS	NS	100,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NS	NS	NS	NS	NS	5,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	NS	NS	NS	NS	NS	5,000(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Mercury	NS	NS	NS	NS	NS	200(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
ug/L - micrograms per liter.
B - Detected in associated laboratory method blank.
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
NS - No standard available for this compound.
U - Compound was not detected at specified quantitation limit.
Values in **Bold** indicate the compound was detected.
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Values shown in bold and outlined exceed TSCA but are less than the listed Method 1 standards.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TCLP - Toxicity Characteristic Leaching Procedure.
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Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Characteristic*.
* - TRC developed standards.
** - For reference purposes only.

TABLE 4-9
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Beneath Pavement/Building Areas (Exposure Point Area HS-9)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	SB-273		SB-274			SB-275		SB-276		SB-277		SB-278	
							Sample Depth (ft.):	5.5	8	4	4	8	4	9.5	4	9.5	4	9	4	6
							Sample Date:	7/16/2008	7/16/2008	7/16/2008	7/16/2008	7/16/2008	7/16/2008	7/16/2008	7/16/2008	7/16/2008	7/16/2008	7/16/2008	7/17/2008	7/17/2008
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1*	TSCA				Field Dup									
PAHs																				
(mg/kg)	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	0.261 U	0.182 U	2.08 U	2.15 U	0.207 U	0.213 U	0.193 U	NA	NA	0.202 U	0.191 U	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	0.261 U	0.182 U	2.08 U	2.15 U	0.207 U	0.213 U	0.193 U	NA	NA	0.202 U	0.191 U	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	0.261 U	0.182 U	**4.21**	**7.85**	0.207 U	**0.293**	0.193 U	NA	NA	0.202 U	0.191 U	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	0.261 U	0.182 U	**26.6**	**35.9**	0.207 U	**1.45**	0.193 U	NA	NA	0.202 U	0.191 U	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	0.261 U	0.182 U	**22.2**	**29.5**	0.207 U	**1.13**	0.193 U	NA	NA	0.202 U	0.191 U	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	0.261 U	0.182 U	**26.0**	**31.3**	0.207 U	**1.12**	0.193 U	NA	NA	0.202 U	0.191 U	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	0.261 U	0.182 U	**15.2**	**21.3**	0.207 U	**0.809**	0.193 U	NA	NA	0.202 U	0.191 U	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	0.261 U	0.182 U	**9.49**	**15.1**	0.207 U	**0.334**	0.193 U	NA	NA	0.202 U	0.191 U	NA	NA
	Chrysene	70	70	400	400	70	N/A	0.261 U	0.182 U	**16.3**	**32.3**	0.207 U	**1.75**	0.193 U	NA	NA	0.202 U	0.191 U	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	0.261 U	0.182 U	**4.49**	**6.41**	0.207 U	0.213 U	0.193 U	NA	NA	0.202 U	0.191 U	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	**0.372**	0.182 U	**99.7**	**71.3**	0.207 U	**2.00**	0.193 U	NA	NA	**0.235**	0.191 U	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	0.261 U	0.182 U	2.08 U	**3.43**	0.207 U	0.213 U	0.193 U	NA	NA	0.202 U	0.191 U	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	0.261 U	0.182 U	**17.3**	**24.3**	0.207 U	**0.753**	0.193 U	NA	NA	0.202 U	0.191 U	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	0.261 U	0.182 U	2.08 U	2.15 U	0.207 U	0.213 U	0.193 U	NA	NA	0.202 U	0.191 U	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	0.261 U	0.182 U	2.08 U	2.15 U	0.207 U	0.213 U	0.193 U	NA	NA	0.202 U	0.191 U	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	0.261 U	0.182 U	**8.89**	**17.9**	0.207 U	**1.48**	0.193 U	NA	NA	0.202 U	0.191 U	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	**0.340**	0.182 U	**41.5**	**63.0**	0.207 U	**2.41**	0.193 U	NA	NA	**0.316**	0.191 U	NA	NA
PCBs																				
(mg/kg)	Aroclor 1254	2	2	3	3	2	1	**0.248 J**	0.0536 U	**0.741 J**	**0.692 J**	0.0544 U	**0.125 J**	0.0580 U	**0.0999 J**	0.0587 U	**15.2 J**	0.0576 U	**1.37 J**	0.189 UJ
	Aroclor 1260	2	2	3	3	2	1	0.0690 U	0.0536 U	**0.358 J**	**0.200 J**	0.0544 U	0.0608 U	0.0580 U	0.0737 U	0.0587 U	0.357 U	0.0576 U	0.0642 U	0.189 UJ
	Total PCBs	2	2	3	3	2	1	**0.248 J**	0.0536 U	**1.099 J**	**0.892 J**	0.0544 U	**0.125 J**	0.0580 U	**0.0999 J**	0.0587 U	**15.2 J**	0.0576 U	**1.37 J**	0.189 UJ
PCB Homologs																				
(mg/kg)	Pentachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																				
(mg/kg)	Antimony	20	20	30	30	20	N/A	R	R	R	R	R	R	R	NA	NA	4.84 U	4.58 U	NA	NA
	Arsenic	20	20	20	20	20	N/A	**10.6**	3.14	**38.9**	**41.6**	3.10 U	**16.1**	2.90 U	NA	NA	**16.7**	2.87 U	NA	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	**251**	**16.8**	**1,240**	**464**	**13.7**	**422**	**7.90**	NA	NA	**265**	**11.4**	NA	NA
	Beryllium	100	100	200	200	100	N/A	0.40 U	0.28 U	0.32 U	0.33 U	0.31 U	**0.38**	0.29 U	NA	NA	0.31 U	0.29 U	NA	NA
	Cadmium	2	2	30	30	2	N/A	**6.12**	0.28 U	**3.40**	**3.97**	0.31 U	**0.59**	0.29 U	NA	NA	**2.08**	0.29 U	NA	NA
	Chromium	30	30	200	200	30	N/A	**11.3**	**7.29**	**44.3**	**48.1**	**4.94**	**11.0**	**3.44**	NA	NA	**16.9**	**4.30**	NA	NA
	Lead	300	300	300	300	300	N/A	**456**	**2.92**	**1,750**	**1,450**	**4.97**	**330**	**3.48**	NA	NA	**977**	**3.99**	NA	NA
	Mercury	20	20	30	30	20	N/A	**0.243**	0.021 U	**1.27**	**3.26**	0.015 U	**0.256**	0.014 U	NA	NA	**0.207**	0.017 U	NA	NA
	Nickel	20	20	700	700	20	N/A	**15.8**	**5.14**	**113**	**43.6**	**2.22**	**14.9**	**2.25**	NA	NA	**15.0**	**4.44**	NA	NA
	Silver	100	100	200	200	100	N/A	**6.62**	**1.90**	**45.5**	**38.6**	**0.66**	**3.31**	**0.95**	NA	NA	**6.65**	**1.04**	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	**22.9**	**8.06**	**20.6**	**23.5**	6.20 U	**31.2**	5.79 U	NA	NA	**29.6**	**6.79**	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	**397**	**23.4**	**835**	**815**	**9.54**	**200**	**7.88**	NA	NA	**250**	**9.97**	NA	NA

Notes:

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

J - Estimated value; below quantitation limit.

NA - Sample not analyzed for the listed analyte.

N/A - Not available.

R - Rejected data point during validation.

U - Compound was not detected at specified quantitation limit.

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 Method 1 standards.

Values shown in bold and outlined 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.

* - For reference purposes only.

TABLE 4-9
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Beneath Pavement/Building Areas (Exposure Point Area HS-9)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	SB-279		SB-280		SB-281			SB-282		SB-283			SB-284	
							Sample Depth (ft.):	4	11	4	9.5	4	4	8	3.5	8	3.5	3.5	6	3	5
							Sample Date:	7/23/2008	7/23/2008	7/23/2008	7/23/2008	7/21/2008	7/21/2008	7/21/2008	7/21/2008	7/21/2008	7/17/2008	7/17/2008	7/17/2008	7/17/2008	7/17/2008
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1*	TSCA						Field Dup					Field Dup			
PAHs																					
(mg/kg)	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	0.207 U	0.195 U	NA	NA	0.193 U	0.486 U	0.725 U	NA	NA	**1.43**	2.08 U	0.567 U	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	**0.615**	0.195 U	NA	NA	0.193 U	0.486 U	0.725 U	NA	NA	1.03 U	2.08 U	0.567 U	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	**0.592**	0.195 U	NA	NA	0.193 U	0.486 U	0.725 U	NA	NA	**3.28**	**4.77**	0.567 U	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	**3.04**	0.195 U	NA	NA	**0.376**	**0.613**	0.725 U	NA	NA	**7.90**	**10.4**	0.567 U	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	**2.70**	0.195 U	NA	NA	**0.374**	**0.593**	0.725 U	NA	NA	**7.20**	**9.50**	0.567 U	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	**4.64**	0.195 U	NA	NA	0.193 U	**1.02**	0.725 U	NA	NA	**7.36**	**9.39**	0.567 U	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	**2.39**	0.195 U	NA	NA	**0.392**	0.486 U	0.725 U	NA	NA	**5.07**	**8.99**	0.567 U	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	**1.70**	0.195 U	NA	NA	0.193 U	0.486 U	0.725 U	NA	NA	**2.93**	**4.22**	0.567 U	NA	NA
	Chrysene	70	70	400	400	70	N/A	**4.41**	0.195 U	NA	NA	**0.535**	**0.785**	0.725 U	NA	NA	**8.08**	**10.4**	0.567 U	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	**0.770**	0.195 U	NA	NA	0.193 U	0.486 U	0.725 U	NA	NA	**1.39**	**2.27**	0.567 U	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	**5.99**	0.195 U	NA	NA	**0.807**	**1.40**	0.725 U	NA	NA	**14.3**	**20.5**	0.567 U	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	0.207 U	0.195 U	NA	NA	0.193 U	0.486 U	0.725 U	NA	NA	**1.79**	**2.42**	0.567 U	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	**2.89**	0.195 U	NA	NA	**0.301**	0.486 U	0.725 U	NA	NA	**5.81**	**9.27**	0.567 U	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	**0.743**	0.195 U	NA	NA	**0.249**	**0.614**	0.725 U	NA	NA	1.03 U	2.08 U	0.567 U	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	**0.523**	0.195 U	NA	NA	**0.402**	**2.15**	0.725 U	NA	NA	1.03 U	2.08 U	0.567 U	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	**1.72**	0.195 U	NA	NA	**0.513**	**1.34**	0.725 U	NA	NA	**14.0**	**20.0**	0.567 U	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	**5.08**	0.195 U	NA	NA	**0.675**	**1.04**	0.725 U	NA	NA	**14.6**	**20.1**	0.567 U	NA	NA
PCBs																					
(mg/kg)	Aroclor 1254	2	2	3	3	2	1	**0.375 J**	0.0564 U	**0.378 J**	0.126 U	0.0543 U	0.0572 U	0.234 UJ	**0.0725 J**	0.229 UJ	**0.566 J**	**0.670 J**	0.147 U	**0.499 J**	0.207 UJ
	Aroclor 1260	2	2	3	3	2	1	**0.0951 J**	0.0564 U	0.0595 U	0.126 U	**1.30 J**	**0.474 J**	0.234 UJ	0.0644 U	0.229 UJ	**0.247 J**	**0.421 J**	0.147 U	**0.269 J**	0.207 UJ
	Total PCBs	2	2	3	3	2	1	**0.4701 J**	0.0564 U	**0.378 J**	0.126 U	**1.30 J**	**0.474 J**	0.234 UJ	**0.0725 J**	0.229 UJ	**0.813 J**	**1.091 J**	0.147 U	**0.768 J**	0.207 UJ
PCB Homologs																					
(mg/kg)	Pentachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	0.029 U	NA	NA	NA	NA	NA	NA	**0.045**	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	0.074 U	NA	NA	NA	NA	NA	NA	**0.045**	NA	NA	NA	NA
Metals																					
(mg/kg)	Antimony	20	20	30	30	20	N/A	4.96 U	4.68 U	4.84 U	8.74 U	R	R	R	NA	NA	R	R	R	NA	NA
	Arsenic	20	20	20	20	20	N/A	**41.5**	2.93 U	**21.3**	**9.02**	**44.5**	**27.1**	10.9 U	NA	NA	**19.8**	**18.8**	**13.5**	NA	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	**644**	**8.05**	**470**	**24.8**	**671**	**675**	**147**	NA	NA	**558**	**544**	**198**	NA	NA
	Beryllium	100	100	200	200	100	N/A	**0.71**	0.30 U	**1.03**	**0.73**	**0.70**	**0.52**	1.09 U	NA	NA	0.31 U	0.32 U	0.86 U	NA	NA
	Cadmium	2	2	30	30	2	N/A	**4.39**	0.30 U	**9.10**	0.55 U	**4.25**	**2.90**	1.09 U	NA	NA	**3.93**	**4.65**	0.86 U	NA	NA
	Chromium	30	30	200	200	30	N/A	**75.6**	**3.77**	**23.2**	**15.2**	**149**	**124**	**7.78**	NA	NA	**30.4**	**26.6**	**9.55**	NA	NA
	Lead	300	300	300	300	300	N/A	**2,060**	**36.2**	**1,980**	**5.61**	**4,940**	**4,970**	**8.87**	NA	NA	**1,450**	**1,680**	**13.5**	NA	NA
	Mercury	20	20	30	30	20	N/A	**0.917**	0.013 U	**0.527**	0.045 U	**0.352**	**0.449**	0.095 U	NA	NA	**1.17**	**1.30**	**0.191**	NA	NA
	Nickel	20	20	700	700	20	N/A	**35.9**	**2.27**	**15.0**	**19.6**	**25.6**	**28.2**	2.18 U	NA	NA	**21.5**	**20.2**	**4.75**	NA	NA
	Silver	100	100	200	200	100	N/A	**12.3**	0.59 U	**8.25**	1.10 U	**9.83**	**25.2**	2.18 U	NA	NA	**17.7**	**14.4**	**2.14**	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	**25.5**	5.85 U	**20.0**	**21.2**	**19.4**	**18.7**	21.8 U	NA	NA	**22.9**	**23.3**	17.1 U	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	**1,340**	**10.6**	**1,770**	**40.1**	**1,660**	**1,520**	**58.6**	NA	NA	**1,450**	**1,370**	**32.7**	NA	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not available.
R - Rejected data point during validation.
U - Compound was not detected at specified quantitation limit.
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 Method 1 standards.
Values shown in bold and outlined 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.
* - For reference purposes only.

TABLE 4-9
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Beneath Pavement/Building Areas (Exposure Point Area HS-9)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	SB-285		SB-286		SB-287		SB-288		SB-289		SB-290		SB-291	
							Sample Depth (ft.):	3.5	7.5	4	9	4	9	4	9	3.5	6	2.5	6	2	6
							Sample Date:	7/17/2008	7/17/2008	7/17/2008	7/17/2008	7/17/2008	7/17/2008	7/17/2008	7/17/2008	7/17/2008	7/17/2008	7/21/2008	7/21/2008	7/21/2008	7/21/2008
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1*	TSCA														
PAHs																					
(mg/kg)	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	1.02 U	0.178 U	NA	NA	**2.64**	0.212 U	NA	NA	1.96 U	0.507 U	NA	NA	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	1.02 U	0.178 U	NA	NA	0.981 U	0.212 U	NA	NA	1.96 U	0.507 U	NA	NA	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	1.02 U	0.178 U	NA	NA	**5.78**	0.212 U	NA	NA	1.96 U	0.507 U	NA	NA	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	**1.31**	0.178 U	NA	NA	**10.2**	0.212 U	NA	NA	1.96 U	0.507 U	NA	NA	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	**1.07**	0.178 U	NA	NA	**8.80**	0.212 U	NA	NA	1.96 U	0.507 U	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	1.02 U	0.178 U	NA	NA	**9.21**	0.212 U	NA	NA	1.96 U	0.507 U	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	1.02 U	0.178 U	NA	NA	**5.58**	0.212 U	NA	NA	1.96 U	0.507 U	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	1.02 U	0.178 U	NA	NA	**3.54**	0.212 U	NA	NA	1.96 U	0.507 U	NA	NA	NA	NA
	Chrysene	70	70	400	400	70	N/A	**1.27**	0.178 U	NA	NA	**9.65**	0.212 U	NA	NA	1.96 U	0.507 U	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	1.02 U	0.178 U	NA	NA	0.981 U	0.212 U	NA	NA	1.96 U	0.507 U	NA	NA	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	**2.06**	0.178 U	NA	NA	**18.8**	0.212 U	NA	NA	1.96 U	0.507 U	NA	NA	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	1.02 U	0.178 U	NA	NA	**3.16**	0.212 U	NA	NA	1.96 U	0.507 U	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	1.02 U	0.178 U	NA	NA	**6.63**	0.212 U	NA	NA	1.96 U	0.507 U	NA	NA	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	1.02 U	0.178 U	NA	NA	0.981 U	0.212 U	NA	NA	1.96 U	0.507 U	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	1.02 U	0.178 U	NA	NA	**1.57**	0.212 U	NA	NA	1.96 U	0.507 U	NA	NA	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	**3.60**	0.178 U	NA	NA	**21.2**	0.212 U	NA	NA	1.96 U	0.507 U	NA	NA	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	**3.82**	0.178 U	NA	NA	**18.0**	0.212 U	NA	NA	1.96 U	0.507 U	NA	NA	NA	NA
PCBs																					
(mg/kg)	Aroclor 1254	2	2	3	3	2	1	**5.74 J**	0.0553 U	**6.17 J**	**0.232 J**	**1.27 J**	0.0611 U	**0.294 J**	0.0575 U	**1.69 J**	**0.184 J**	**0.127 J**	0.0532 U	**0.127 J**	0.0533 U
	Aroclor 1260	2	2	3	3	2	1	**1.76 J**	0.0553 U	**1.02 J**	0.0550 U	**0.509 J**	0.0611 U	**0.161 J**	0.0575 U	**1.24 J**	0.163 U	0.0526 U	0.0532 U	0.0552 U	0.0533 U
	Total PCBs	2	2	3	3	2	1	**7.50 J**	0.0553 U	**7.19 J**	**0.232 J**	**1.779 J**	0.0611 U	**0.455 J**	0.0575 U	**2.93 J**	**0.184 J**	**0.127 J**	0.0532 U	**0.127 J**	0.0533 U
PCB Homologs																					
(mg/kg)	Pentachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																					
(mg/kg)	Antimony	20	20	30	30	20	N/A	**226**	4.26 U	NA	NA	4.71 U	5.08 U	NA	NA	4.69 U	12.2 U	NA	NA	NA	NA
	Arsenic	20	20	20	20	20	N/A	**26.6**	2.66 U	NA	NA	**31.9**	3.18 U	NA	NA	**14.6**	**39.8**	NA	NA	NA	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	**986**	**20.2**	NA	NA	**1,810**	**7.35**	NA	NA	**717**	**326**	NA	NA	NA	NA
	Beryllium	100	100	200	200	100	N/A	0.31 U	0.27 U	NA	NA	0.30 U	0.32 U	NA	NA	0.30 U	0.76 U	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	**14.8**	0.27 U	NA	NA	**84.3**	0.32 U	NA	NA	**2.91**	**1.59**	NA	NA	NA	NA
	Chromium	30	30	200	200	30	N/A	**280**	**3.44**	NA	NA	**302**	**3.30**	NA	NA	**44.4**	**42.6**	NA	NA	NA	NA
	Lead	300	300	300	300	300	N/A	**1,140**	**3.20**	NA	NA	**3,110**	**3.07**	NA	NA	**1,730**	**60.6**	NA	NA	NA	NA
	Mercury	20	20	30	30	20	N/A	**2.26**	0.017 U	NA	NA	**0.773**	0.016 U	NA	NA	**0.818**	**0.247**	NA	NA	NA	NA
	Nickel	20	20	700	700	20	N/A	**55.7**	**2.43**	NA	NA	**83.2**	**4.14**	NA	NA	**18.5**	**48.0**	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	**23.3**	**0.85**	NA	NA	**28.4**	**1.16**	NA	NA	**6.44**	**18.0**	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	**311**	5.32 U	NA	NA	**45.0**	6.35 U	NA	NA	**66.8**	15.2 U	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	**2,210**	**14.7**	NA	NA	**3,540**	**12.3**	NA	NA	**671**	**372**	NA	NA	NA	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not available.
R - Rejected data point during validation.
U - Compound was not detected at specified quantitation limit.
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 Method 1 standards.
Values shown in bold and outlined 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.
* - For reference purposes only.

TABLE 4-9
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Beneath Pavement/Building Areas (Exposure Point Area HS-9)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	SB-292		SB-293			SB-294			SB-295		SB-296		
							Sample Depth (ft.):	2	5	6.5	9	12	4	8.5	12	5.5	9	5	5	10
							Sample Date:	7/21/2008	7/21/2008	7/21/2008	7/21/2008	7/21/2008	7/21/2008	7/21/2008	7/21/2008	7/22/2008	7/22/2008	7/22/2008	7/22/2008 Field Dup	7/22/2008
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1*	TSCA													
PAHs																				
(mg/kg)	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	NA	0.222 U	0.719 U	NA	NA	NA	NA	NA	NA	0.233 U	0.226 U	0.198 U
	Acenaphthylene	600	10	600	10	1	N/A	NA	NA	0.222 U	0.719 U	NA	NA	NA	NA	NA	NA	0.233 U	0.226 U	0.198 U
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	0.222 U	0.719 U	NA	NA	NA	NA	NA	NA	0.233 U	0.226 U	0.198 U
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	NA	0.222 U	0.719 U	NA	NA	NA	NA	NA	NA	0.233 U	0.226 U	0.198 U
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	NA	0.222 U	0.719 U	NA	NA	NA	NA	NA	NA	0.233 U	0.226 U	0.198 U
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	NA	0.222 U	0.719 U	NA	NA	NA	NA	NA	NA	0.233 U	0.226 U	0.198 U
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	0.222 U	0.719 U	NA	NA	NA	NA	NA	NA	0.233 U	0.226 U	0.198 U
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	NA	0.222 U	0.719 U	NA	NA	NA	NA	NA	NA	0.233 U	0.226 U	0.198 U
	Chrysene	70	70	400	400	70	N/A	NA	NA	0.222 U	0.719 U	NA	NA	NA	NA	NA	NA	0.233 U	0.226 U	0.198 U
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	NA	0.222 U	0.719 U	NA	NA	NA	NA	NA	NA	0.233 U	0.226 U	0.198 U
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	0.222 U	0.719 U	NA	NA	NA	NA	NA	NA	0.233 U	0.226 U	0.198 U
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	0.222 U	0.719 U	NA	NA	NA	NA	NA	NA	0.233 U	0.226 U	0.198 U
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	NA	0.222 U	0.719 U	NA	NA	NA	NA	NA	NA	0.233 U	0.226 U	0.198 U
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	NA	0.222 U	0.719 U	NA	NA	NA	NA	NA	NA	0.233 U	0.226 U	0.198 U
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	0.222 U	0.719 U	NA	NA	NA	NA	NA	NA	0.233 U	0.226 U	0.198 U
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	NA	0.222 U	0.719 U	NA	NA	NA	NA	NA	NA	0.233 U	0.226 U	0.198 U
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	0.222 U	0.719 U	NA	NA	NA	NA	NA	NA	0.233 U	0.226 U	0.198 U
PCBs																				
(mg/kg)	Aroclor 1254	2	2	3	3	2	1	0.0519 U	0.0527 U	0.0684 U	0.202 UJ	NA	0.0649 U	0.162 UJ	NA	0.0798 U	0.0531 U	0.0676 U	0.0711 U	0.0597 U
	Aroclor 1260	2	2	3	3	2	1	0.0519 U	0.0527 U	0.0684 U	0.202 UJ	NA	0.0649 U	0.162 UJ	NA	0.0798 U	0.0531 U	0.0676 U	0.0711 U	0.0597 U
	Total PCBs	2	2	3	3	2	1	0.0519 U	0.0527 U	0.0684 U	0.202 UJ	NA	0.0649 U	0.162 UJ	NA	0.0798 U	0.0531 U	0.0676 U	0.0711 U	0.0597 U
PCB Homologs																				
(mg/kg)	Pentachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	**0.057**	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	**0.057**	NA	NA	NA	NA
Metals																				
(mg/kg)	Antimony	20	20	30	30	20	N/A	NA	NA	R	R	4.62 U	R	R	4.73 U	NA	NA	R	R	R
	Arsenic	20	20	20	20	20	N/A	NA	NA	**16.1**	**31.6**	2.89 U	**40.6**	**14.0**	**4.27**	NA	NA	**10.3**	**10.5**	2.96 U
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	**438**	**266**	**15.8**	**1,920**	**170**	**63.9**	NA	NA	**314**	**242**	5.92 U
	Beryllium	100	100	200	200	100	N/A	NA	NA	**0.86**	**1.42**	0.29 U	**0.70**	0.93 U	0.30 U	NA	NA	**0.66**	**0.64**	0.30 U
	Cadmium	2	2	30	30	2	N/A	NA	NA	**0.61**	**16.2**	0.29 U	**2.10**	**3.14**	**2.75**	NA	NA	**5.55**	**2.29**	0.30 U
	Chromium	30	30	200	200	30	N/A	NA	NA	**14.3**	**23.8**	**4.74**	**36.5**	**14.5**	**9.77**	NA	NA	**16.2**	**22.4**	**2.80**
	Lead	300	300	300	300	300	N/A	NA	NA	**396**	**848**	**3.20**	**3,260**	**790**	**257**	NA	NA	**353**	**436**	**2.01**
	Mercury	20	20	30	30	20	N/A	NA	NA	**0.212**	**0.389**	0.022 U	**1.34**	**0.118**	**0.041**	NA	NA	**0.143**	**0.372**	0.020 U
	Nickel	20	20	700	700	20	N/A	NA	NA	**14.0**	**25.9**	**2.76**	**31.8**	**13.7**	**8.03**	NA	NA	**14.1**	**11.7**	**2.46**
	Silver	100	100	200	200	100	N/A	NA	NA	**2.97**	**21.5**	0.58 U	**16.0**	**6.15**	0.60 U	NA	NA	**4.28**	**7.99**	0.60 U
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	**33.8**	**25.5**	**7.68**	**33.5**	18.5 U	**8.72**	NA	NA	**24.9**	**23.2**	5.92 U
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	**185**	**4,500**	**11.1**	**894**	**2,050**	**1,000**	NA	NA	**288**	**169**	**13.4**

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
J - Estimated value: below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not available.
R - Rejected data point during validation.
U - Compound was not detected at specified quantitation limit.
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Values in Bold indicate the compound was detected.
Values shown in Bold and shaded type exceed one or more of the listed Method 1 standards.
Values shown in bold and outlined 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.
* - For reference purposes only.

TABLE 4-9
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Beneath Pavement/Building Areas (Exposure Point Area HS-9)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	SB-297			SB-298		SB-299		SB-300		SB-301		SB-302	
							Sample Depth (ft.):	6	8	11	4	8	4	8	4	8	7	10.5	2.5	8
							Sample Date:	7/22/2008	7/22/2008	7/22/2008	8/4/2008	8/4/2008	8/4/2008	8/4/2008	7/22/2008	7/22/2008	7/22/2008	7/22/2008	7/22/2008	7/22/2008
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1*	TSCA													
PAHs																				
(mg/kg)	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	0.228 U	0.600 U	NA	NA	NA	NA	NA	0.216 U	0.755 U	NA	NA	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	0.228 U	0.600 U	NA	NA	NA	NA	NA	0.216 U	0.755 U	NA	NA	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	0.228 U	0.600 U	NA	NA	NA	NA	NA	0.216 U	0.755 U	NA	NA	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	**0.266**	0.600 U	NA	NA	NA	NA	NA	0.216 U	0.755 U	NA	NA	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	**0.228**	0.600 U	NA	NA	NA	NA	NA	0.216 U	0.755 U	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	**0.260**	0.600 U	NA	NA	NA	NA	NA	0.216 U	0.755 U	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	0.228 U	0.600 U	NA	NA	NA	NA	NA	0.216 U	0.755 U	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	0.228 U	0.600 U	NA	NA	NA	NA	NA	0.216 U	0.755 U	NA	NA	NA	NA
	Chrysene	70	70	400	400	70	N/A	**0.299**	0.600 U	NA	NA	NA	NA	NA	0.216 U	0.755 U	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	0.228 U	0.600 U	NA	NA	NA	NA	NA	0.216 U	0.755 U	NA	NA	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	**0.674**	0.600 U	NA	NA	NA	NA	NA	0.216 U	0.755 U	NA	NA	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	0.228 U	0.600 U	NA	NA	NA	NA	NA	0.216 U	0.755 U	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	0.228 U	0.600 U	NA	NA	NA	NA	NA	0.216 U	0.755 U	NA	NA	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	0.228 U	0.600 U	NA	NA	NA	NA	NA	0.216 U	0.755 U	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	0.228 U	0.600 U	NA	NA	NA	NA	NA	0.216 U	0.755 U	NA	NA	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	**0.608**	0.600 U	NA	NA	NA	NA	NA	0.216 U	0.755 U	NA	NA	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	**0.414**	0.600 U	NA	NA	NA	NA	NA	0.216 U	0.755 U	NA	NA	NA	NA
PCBs																				
(mg/kg)	Aroclor 1254	2	2	3	3	2	1	0.0732 U	0.187 UJ	NA	0.0630 U	0.255 UJ	0.0666 U	0.206 UJ	0.0636 U	0.235 UJ	0.0648 U	0.0795 U	0.0640 U	0.205 UJ
	Aroclor 1260	2	2	3	3	2	1	0.0732 U	0.187 UJ	NA	0.0630 U	0.255 UJ	0.0666 U	0.206 UJ	0.0636 U	0.235 UJ	0.0648 U	0.0795 U	0.0640 U	0.205 UJ
	Total PCBs	2	2	3	3	2	1	0.0732 U	0.187 UJ	NA	0.0630 U	0.255 UJ	0.0666 U	0.206 UJ	0.0636 U	0.235 UJ	0.0648 U	0.0795 U	0.0640 U	0.205 UJ
PCB Homologs																				
(mg/kg)	Pentachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	0.032 U	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	0.081 U	NA	NA	NA	NA	NA
Metals																				
(mg/kg)	Antimony	20	20	30	30	20	N/A	R	R	4.71 U	5.51 U	19.1 U	NA	NA	R	R	NA	NA	R	R
	Arsenic	20	20	20	20	20	N/A	**14.9**	9.00 U	2.94 U	**17.1**	12.0 U	NA	NA	**9.93**	11.4 U	NA	NA	**8.84**	10.7 U
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	**432**	**94.9**	**8.16**	**407**	**61.7**	NA	NA	**275**	**63.2**	NA	NA	**280**	**31.1**
	Beryllium	100	100	200	200	100	N/A	**1.01**	0.90 U	0.30 U	**0.83**	1.20 U	NA	NA	**0.75**	1.14 U	NA	NA	**0.84**	1.07 U
	Cadmium	2	2	30	30	2	N/A	**1.53**	**8.36**	0.30 U	**0.58**	1.20 U	NA	NA	**0.50**	1.14 U	NA	NA	**0.51**	1.07 U
	Chromium	30	30	200	200	30	N/A	**16.2**	**3.36**	**3.70**	**15.4**	**4.90**	NA	NA	**12.1**	**3.31**	NA	NA	**9.81**	**2.17**
	Lead	300	300	300	300	300	N/A	**1,500**	**50.6**	**2.76**	**869**	**12.2**	NA	NA	**142**	**9.62**	NA	NA	**2,440**	**4.73**
	Mercury	20	20	30	30	20	N/A	**0.214**	**0.128**	0.018 U	**0.222**	**0.174**	NA	NA	**0.507**	**0.215**	NA	NA	**0.094**	0.084 U
	Nickel	20	20	700	700	20	N/A	**17.3**	**11.9**	**3.07**	**14.8**	**3.03**	NA	NA	**13.3**	2.27 U	NA	NA	**11.6**	2.13 U
	Silver	100	100	200	200	100	N/A	**1.89**	1.80 U	0.59 U	**6.58**	2.39 U	NA	NA	**1.14**	2.27 U	NA	NA	**1.37**	2.13 U
	Vanadium	600	600	1,000	1,000	600	N/A	**22.6**	18.0 U	5.88 U	**41.4**	23.9 U	NA	NA	**28.5**	22.7 U	NA	NA	**35.9**	21.3 U
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	**267**	**1,310**	**10.7**	**213**	**40.2**	NA	NA	**237**	**93.9**	NA	NA	**181**	**27.8**

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not available.
R - Rejected data point during validation.
U - Compound was not detected at specified quantitation limit.
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 Method 1 standards.
Values shown in bold and outlined 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.
* - For reference purposes only.

TABLE 4-9
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Beneath Pavement/Building Areas (Exposure Point Area HS-9)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	SB-303		SB-304		SB-305		SB-307			SB-308		SB-308A	SB-308B	
							Sample Depth (ft.):	5	10	5	8	4	9	3	6	9	3.5	6	3-4	3	4
							Sample Date:	7/22/2008	7/22/2008	7/22/2008	7/22/2008	7/22/2008	7/22/2008	7/23/2008	7/23/2008	7/23/2008	7/23/2008	7/23/2008	5/21/2009	5/21/2009	5/21/2009
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1*	TSCA														
PAHs																					
(mg/kg)	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	0.279 U	0.932 U	NA	NA	NA	NA	NA	NA	NA	**240**	0.698 U	**2.3**	0.20 U	0.20 U
	Acenaphthylene	600	10	600	10	1	N/A	0.279 U	0.932 U	NA	NA	NA	NA	NA	NA	NA	9.32 U	0.698 U	0.19 U	0.20 U	0.20 U
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	0.279 U	0.932 U	NA	NA	NA	NA	NA	NA	NA	**443**	0.698 U	**3.9**	0.20 U	**0.50**
	Benzo(a)anthracene	7	7	40	40	7	N/A	0.279 U	0.932 U	NA	NA	NA	NA	NA	NA	NA	**644**	0.698 U	**5.1**	**0.38**	**1.9**
	Benzo(a)pyrene	2	2	4	4	2	N/A	0.279 U	0.932 U	NA	NA	NA	NA	NA	NA	NA	**564**	0.698 U	**4.2**	**0.34**	**1.5**
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	0.279 U	0.932 U	NA	NA	NA	NA	NA	NA	NA	**635**	0.698 U	**4.5**	**0.40**	**1.2**
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	0.279 U	0.932 U	NA	NA	NA	NA	NA	NA	NA	**337**	0.698 U	**2.6**	**0.22**	**0.78**
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	0.279 U	0.932 U	NA	NA	NA	NA	NA	NA	NA	**257**	0.698 U	**2.0**	0.20 U	**0.49**
	Chrysene	70	70	400	400	70	N/A	0.279 U	0.932 U	NA	NA	NA	NA	NA	NA	NA	**587**	0.698 U	**5.1**	**0.37**	**2.2**
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	0.279 U	0.932 U	NA	NA	NA	NA	NA	NA	NA	**143**	0.698 U	**0.61**	0.20 U	0.20 U
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	0.279 U	0.932 U	NA	NA	NA	NA	NA	NA	NA	**1,300**	**1.05**	**11**	**0.64**	**2.2**
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	0.279 U	0.932 U	NA	NA	NA	NA	NA	NA	NA	**311**	0.698 U	**2.9**	0.20 U	0.20 U
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	0.279 U	0.932 U	NA	NA	NA	NA	NA	NA	NA	**400**	0.698 U	**3.2**	**0.22**	**0.81**
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	0.279 U	0.932 U	NA	NA	NA	NA	NA	NA	NA	**146**	0.698 U	**1.0**	0.20 U	0.20 U
	Naphthalene	40	500	40	1,000	4	N/A	0.279 U	0.932 U	NA	NA	NA	NA	NA	NA	NA	**354**	0.698 U	**1.4**	0.20 U	0.20 U
	Phenanthrene	500	500	1,000	1,000	10	N/A	0.279 U	0.932 U	NA	NA	NA	NA	NA	NA	NA	**1,310**	**0.785**	**17**	**0.76**	**2.2**
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	0.279 U	0.932 U	NA	NA	NA	NA	NA	NA	NA	**1,050**	**0.799**	**11**	**0.62**	**4.2**
PCBs																					
(mg/kg)	Aroclor 1254	2	2	3	3	2	1	0.0689 U	0.273 UJ	0.0670 U	0.211 UJ	0.0611 U	0.0593 U	0.0649 U	0.245 UJ	NA	0.105 U	0.192 UJ	NA	NA	NA
	Aroclor 1260	2	2	3	3	2	1	0.0689 U	0.273 UJ	0.0670 U	0.211 UJ	0.0611 U	0.0593 U	0.0649 U	0.245 UJ	NA	0.105 U	0.192 UJ	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	0.0689 U	0.273 UJ	0.0670 U	0.211 UJ	0.0611 U	0.0593 U	0.0649 U	0.245 UJ	NA	0.105 U	0.192 UJ	NA	NA	NA
PCB Homologs																					
(mg/kg)	Pentachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																					
(mg/kg)	Antimony	20	20	30	30	20	N/A	R	22.4 U	NA	NA	5.12 U	4.85 U	5.05 U	20.9 U	4.73 U	**7.03**	16.8 U	NA	NA	NA
	Arsenic	20	20	20	20	20	N/A	**31.9**	14.0 U	NA	NA	**8.68**	3.04 U	**5.99**	13.1 U	2.96 U	**15.0**	10.5 U	NA	NA	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	**1,960**	**44.4**	NA	NA	**702**	**6.83**	**373**	**85.1**	5.92 U	**261**	**50.5**	NA	NA	NA
	Beryllium	100	100	200	200	100	N/A	**1.45**	1.40 U	NA	NA	**1.23**	0.31 U	**0.85**	1.31 U	0.30 U	**2.94**	1.05 U	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	**1.34**	1.40 U	NA	NA	**1.55**	0.31 U	**0.76**	**4.43**	0.30 U	**0.49**	1.05 U	NA	NA	NA
	Chromium	30	30	200	200	30	N/A	**24.4**	**8.56**	NA	NA	**18.3**	**2.88**	**11.6**	**7.18**	**1.61**	**5.15**	2.10 U	NA	NA	NA
	Lead	300	300	300	300	300	N/A	**1,820**	4.19 U	NA	NA	**3,970**	**7.80**	**589**	**281**	**2.36**	**503**	**5.22**	NA	NA	NA
	Mercury	20	20	30	30	20	N/A	**0.488**	0.140 U	NA	NA	0.028 U	0.014 U	**0.074**	0.115 U	0.016 U	**0.086**	**0.104**	NA	NA	NA
	Nickel	20	20	700	700	20	N/A	**27.3**	**5.69**	NA	NA	**14.7**	**2.40**	**35.2**	**5.74**	**1.20**	**3.75**	2.10 U	NA	NA	NA
	Silver	100	100	200	200	100	N/A	**2.82**	2.80 U	NA	NA	0.64 U	0.61 U	0.64 U	**4.67**	0.60 U	0.56 U	2.10 U	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	**50.6**	28.0 U	NA	NA	**32.8**	6.07 U	**160**	26.1 U	5.92 U	**19.4**	21.0 U	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	**564**	**13.4**	NA	NA	**435**	**8.99**	**343**	**1,300**	**8.26**	**80.7**	**17.3**	NA	NA	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not available.
R - Rejected data point during validation.
U - Compound was not detected at specified quantitation limit.
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 Method 1 standards.
Values shown in bold and outlined 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.
* - For reference purposes only.

TABLE 4-9
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Beneath Pavement/Building Areas (Exposure Point Area HS-9)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	SB-308C		SB-308D		SB-308F	SB-308H	SB-308I	SB-309		SB-310		SB-311		
							Sample Depth (ft.):	3	5	3	5	3-4	3-4	3-4	4	8	3	7	6	6	9
							Sample Date:	5/21/2009	5/21/2009	5/21/2009	5/21/2009	5/20/2009	5/20/2009	5/21/2009	7/23/2008	7/23/2008	7/23/2008	7/23/2008	7/23/2008	7/23/2008 Field Dup	7/23/2008
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1*	TSCA														
PAHs																					
(mg/kg)	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	0.18 U	0.65 U	0.37 U	0.67 U	0.19 U	0.37 U	0.19 U	NA	NA	NA	NA	1.16 U	0.232 U	0.652 U
	Acenaphthylene	600	10	600	10	1	N/A	0.18 U	0.65 U	0.37 U	0.67 U	**0.64**	0.37 U	0.19 U	NA	NA	NA	NA	1.16 U	0.232 U	0.652 U
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	**0.24**	0.65 U	**0.48**	0.67 U	**0.84**	0.37 U	**0.34**	NA	NA	NA	NA	1.16 U	0.232 U	0.652 U
	Benzo(a)anthracene	7	7	40	40	7	N/A	**0.36**	**0.86**	**1.7**	0.67 U	**3.9**	0.37 U	**0.63**	NA	NA	NA	NA	1.16 U	0.232 U	0.652 U
	Benzo(a)pyrene	2	2	4	4	2	N/A	**0.32**	**0.82**	**1.6**	0.67 U	**4.5**	0.37 U	**0.49**	NA	NA	NA	NA	1.16 U	0.232 U	0.652 U
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	**0.43**	**1.2**	**1.9**	0.67 U	**4.8**	0.37 U	**0.62**	NA	NA	NA	NA	1.16 U	0.232 U	0.652 U
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	0.18 U	0.65 U	**0.77**	0.67 U	**1.7**	0.37 U	**0.53**	NA	NA	NA	NA	1.16 U	0.232 U	0.652 U
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	0.18 U	0.65 U	**0.79**	0.67 U	**1.9**	0.37 U	**0.26**	NA	NA	NA	NA	1.16 U	0.232 U	0.652 U
	Chrysene	70	70	400	400	70	N/A	**0.34**	**0.81**	**1.6**	0.67 U	**4.1**	0.37 U	**0.66**	NA	NA	NA	NA	1.16 U	0.232 U	0.652 U
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	0.18 U	0.65 U	0.37 U	0.67 U	**0.46**	0.37 U	**0.21**	NA	NA	NA	NA	1.16 U	0.232 U	0.652 U
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	**0.57**	**1.4**	**2.8**	0.67 U	**7.5**	0.37 U	**1.6**	NA	NA	NA	NA	1.16 U	0.232 U	0.652 U
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	0.18 U	0.65 U	0.37 U	0.67 U	**0.20**	0.37 U	0.19 U	NA	NA	NA	NA	1.16 U	0.232 U	0.652 U
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	0.18 U	0.65 U	**0.98**	0.67 U	**2.0**	**0.50**	**0.59**	NA	NA	NA	NA	1.16 U	0.232 U	0.652 U
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	0.18 U	0.65 U	0.37 U	0.67 U	0.19 U	0.37 U	0.19 U	NA	NA	NA	NA	1.16 U	0.232 U	0.652 U
	Naphthalene	40	500	40	1,000	4	N/A	**0.20**	0.65 U	0.37 U	0.67 U	**0.29**	0.37 U	**0.32**	NA	NA	NA	NA	1.16 U	0.232 U	0.652 U
	Phenanthrene	500	500	1,000	1,000	10	N/A	**0.79**	**1.7**	**1.8**	0.67 U	**4.2**	0.37 U	**1.3**	NA	NA	NA	NA	1.16 U	0.232 U	0.652 U
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	**0.51**	**0.91**	**2.6**	0.67 U	**8.6**	0.37 U	**1.4**	NA	NA	NA	NA	1.16 U	0.232 U	0.652 U
PCBs																					
(mg/kg)	Aroclor 1254	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	0.0822 U	**0.698 J**	0.0632 U	0.253 UJ	0.0667 U	0.0706 U	0.183 UJ
	Aroclor 1260	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	0.0822 U	0.143 U	**0.175 J**	0.253 UJ	0.0667 U	0.0706 U	0.183 UJ
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	0.0822 U	**0.698 J**	**0.175 J**	0.253 UJ	0.0667 U	0.0706 U	0.183 UJ
PCB Homologs																					
(mg/kg)	Pentachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																					
(mg/kg)	Antimony	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.11 U	19.3 U	5.54 U	5.56 U	15.7 U
	Arsenic	20	20	20	20	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	**9.39**	12.1 U	**14.9**	**18.0**	9.77 U
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	**287**	24.1 U	**384**	**356**	**23.7**
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.86**	1.21 U	**0.55**	**0.59**	0.98 U
	Cadmium	2	2	30	30	2	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.46**	1.21 U	**1.71**	**1.71**	0.98 U
	Chromium	30	30	200	200	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	**11.0**	**10.8**	**24.6**	**40.8**	**11.5**
	Lead	300	300	300	300	300	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	**443**	**3.91**	**1,970**	**912**	**4.51**
	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2.08**	0.105 U	**0.218**	**0.215**	0.078 U
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	**13.0**	**8.83**	**17.2**	**31.3**	**9.47**
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1.18**	2.41 U	**10.7**	**12.5**	1.96 U
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	**20.7**	24.1 U	**22.1**	**23.5**	19.6 U
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	**76.4**	**14.3**	**851**	**592**	**21.3**

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not available.
R - Rejected data point during validation.
U - Compound was not detected at specified quantitation limit.
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 Method 1 standards.
Values shown in bold and outlined 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.
* - For reference purposes only.

TABLE 4-9
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Beneath Pavement/Building Areas (Exposure Point Area HS-9)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	SB-312		SB-313		NBHS-2			NBHS-3		NBHS-4			
							Sample Depth (ft.):	5	9	5	8	1.5	3.5	5	4	6	2	6	6	8
							Sample Date:	8/5/2008	8/5/2008	8/4/2008	8/4/2008	8/4/2008	8/4/2008	8/4/2008	7/30/2008	7/30/2008	7/31/2008	7/31/2008	7/31/2008 Field Dup	7/31/2008
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1*	TSCA													
PAHs																				
(mg/kg)	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	0.187 U	0.174 U	NA	NA	NA	NA	NA	NA	NA	NA	0.181 U	**0.349**	0.174 U
	Acenaphthylene	600	10	600	10	1	N/A	0.187 U	0.174 U	NA	NA	NA	NA	NA	NA	NA	NA	0.181 U	0.186 U	0.174 U
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	0.187 U	0.174 U	NA	NA	NA	NA	NA	NA	NA	NA	0.181 U	**0.797**	0.174 U
	Benzo(a)anthracene	7	7	40	40	7	N/A	0.187 U	0.174 U	NA	NA	NA	NA	NA	NA	NA	NA	0.181 U	**1.87**	0.174 U
	Benzo(a)pyrene	2	2	4	4	2	N/A	0.187 U	0.174 U	NA	NA	NA	NA	NA	NA	NA	NA	0.181 U	**1.64**	0.174 U
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	0.187 U	0.174 U	NA	NA	NA	NA	NA	NA	NA	NA	0.181 U	**1.90**	0.174 U
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	0.187 U	0.174 U	NA	NA	NA	NA	NA	NA	NA	NA	0.181 U	**1.08**	0.174 U
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	0.187 U	0.174 U	NA	NA	NA	NA	NA	NA	NA	NA	0.181 U	**0.634**	0.174 U
	Chrysene	70	70	400	400	70	N/A	0.187 U	0.174 U	NA	NA	NA	NA	NA	NA	NA	NA	0.181 U	**1.76**	0.174 U
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	0.187 U	0.174 U	NA	NA	NA	NA	NA	NA	NA	NA	0.181 U	**0.324**	0.174 U
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	0.187 U	0.174 U	NA	NA	NA	NA	NA	NA	NA	NA	0.181 U	**3.55**	0.174 U
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	0.187 U	0.174 U	NA	NA	NA	NA	NA	NA	NA	NA	0.181 U	**0.438**	0.174 U
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	0.187 U	0.174 U	NA	NA	NA	NA	NA	NA	NA	NA	0.181 U	**1.29**	0.174 U
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	0.187 U	0.174 U	NA	NA	NA	NA	NA	NA	NA	NA	0.181 U	0.186 U	0.174 U
	Naphthalene	40	500	40	1,000	4	N/A	0.187 U	0.174 U	NA	NA	NA	NA	NA	NA	NA	NA	0.181 U	0.186 U	0.174 U
	Phenanthrene	500	500	1,000	1,000	10	N/A	0.187 U	0.174 U	NA	NA	NA	NA	NA	NA	NA	NA	0.181 U	**3.80**	0.174 U
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	0.187 U	0.174 U	NA	NA	NA	NA	NA	NA	NA	NA	0.181 U	**3.48**	0.174 U
PCBs																				
(mg/kg)	Aroclor 1254	2	2	3	3	2	1	**19.7 J**	0.0500 U	**6.32 J**	0.0529 U	0.0500 U	0.0501 U	0.0535 U	**0.147 J**	0.0520 U	0.0559 U	0.0513 U	0.0508 U	0.0518 U
	Aroclor 1260	2	2	3	3	2	1	0.527 U	0.0500 U	0.206 U	0.0529 U	0.0500 U	0.0501 U	0.0535 U	0.0502 U	0.0520 U	0.0559 U	0.0513 U	0.0508 U	0.0518 U
	Total PCBs	2	2	3	3	2	1	**19.7 J**	0.0500 U	**6.32 J**	0.0529 U	0.0500 U	0.0501 U	0.0535 U	**0.147 J**	0.0520 U	0.0559 U	0.0513 U	0.0508 U	0.0518 U
PCB Homologs																				
(mg/kg)	Pentachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																				
(mg/kg)	Antimony	20	20	30	30	20	N/A	4.47 U	4.16 U	NA	NA	NA	NA	NA	NA	NA	NA	4.33 U	4.46 U	4.18 U
	Arsenic	20	20	20	20	20	N/A	2.80 U	2.60 U	NA	NA	NA	NA	NA	NA	NA	NA	2.71 U	**2.86**	**3.31**
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	**5.90**	**8.82**	NA	NA	NA	NA	NA	NA	NA	NA	**15.0**	**19.7**	**13.4**
	Beryllium	100	100	200	200	100	N/A	0.28 U	0.26 U	NA	NA	NA	NA	NA	NA	NA	NA	0.28 U	0.28 U	0.27 U
	Cadmium	2	2	30	30	2	N/A	0.28 U	0.26 U	NA	NA	NA	NA	NA	NA	NA	NA	0.28 U	0.28 U	0.27 U
	Chromium	30	30	200	200	30	N/A	**2.06**	**4.05**	NA	NA	NA	NA	NA	NA	NA	NA	**5.33**	**8.46**	**5.29**
	Lead	300	300	300	300	300	N/A	**2.97**	**4.88**	NA	NA	NA	NA	NA	NA	NA	NA	**9.74**	**15.7**	**2.86**
	Mercury	20	20	30	30	20	N/A	0.020 U	0.017 U	NA	NA	NA	NA	NA	NA	NA	NA	**0.022**	**0.027**	**0.645**
	Nickel	20	20	700	700	20	N/A	**2.37**	**3.40**	NA	NA	NA	NA	NA	NA	NA	NA	**3.75**	**5.91**	**3.02**
	Silver	100	100	200	200	100	N/A	**0.57**	**0.71**	NA	NA	NA	NA	NA	NA	NA	NA	0.55 U	**0.62**	**0.65**
	Vanadium	600	600	1,000	1,000	600	N/A	5.59 U	**5.53**	NA	NA	NA	NA	NA	NA	NA	NA	**7.46**	**10.5**	**9.32**
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	**9.50**	**10.2**	NA	NA	NA	NA	NA	NA	NA	NA	**19.0**	**25.3**	**16.3**

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not available.
R - Rejected data point during validation.
U - Compound was not detected at specified quantitation limit.
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 Method 1 standards.
Values shown in bold and outlined 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.
* - For reference purposes only.

TABLE 4-9
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Beneath Pavement/Building Areas (Exposure Point Area HS-9)
New Bedford, Massachusetts

Analysis	Analyte							NBHS-5		NBHS-6		NBHS-7		NBHS-8	
							Sample Location:	NBHS-5		NBHS-6		NBHS-7		NBHS-8	
							Sample Depth (ft.):	4	8	3	6	3	7	2.5	6
							Sample Date:	7/30/2008	7/30/2008	7/28/2008	7/28/2008	7/29/2008	7/29/2008	7/28/2008	7/28/2008
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1*	TSCA								
PAHs															
(mg/kg)	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	NA	NA	NA	0.177 U	0.188 U	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	NA	NA	NA	NA	0.177 U	0.188 U	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	0.177 U	0.188 U	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	NA	NA	NA	0.177 U	0.188 U	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	NA	NA	NA	0.177 U	0.188 U	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	NA	NA	NA	0.177 U	0.188 U	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	0.177 U	0.188 U	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	NA	NA	NA	0.177 U	0.188 U	NA	NA
	Chrysene	70	70	400	400	70	N/A	NA	NA	NA	NA	0.177 U	0.188 U	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	NA	NA	NA	0.177 U	0.188 U	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	0.177 U	0.188 U	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	0.177 U	0.188 U	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	NA	NA	NA	0.177 U	0.188 U	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	NA	NA	NA	0.177 U	0.188 U	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	0.177 U	0.188 U	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	NA	NA	NA	0.177 U	0.188 U	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	0.177 U	0.188 U	NA	NA
PCBs															
(mg/kg)	Aroclor 1254	2	2	3	3	2	1	**0.192 J**	0.0599 U	**1.13 J**	0.0553 U	**0.183 J**	0.0532 U	0.0510 U	**0.0687 J**
	Aroclor 1260	2	2	3	3	2	1	0.0500 U	0.0599 U	0.0537 U	0.0553 U	0.0504 U	0.0532 U	0.0510 U	0.0568 U
	Total PCBs	2	2	3	3	2	1	**0.192 J**	0.0599 U	**1.13 J**	0.0553 U	**0.183 J**	0.0532 U	0.0510 U	**0.0687 J**
PCB Homologs															
(mg/kg)	Pentachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA
Metals															
(mg/kg)	Antimony	20	20	30	30	20	N/A	4.22 U	4.80 U	4.28 U	4.55 U	4.24 U	4.50 U	NA	NA
	Arsenic	20	20	20	20	20	N/A	2.64 U	3.00 U	**4.17**	2.85 U	2.65 U	2.82 U	NA	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	**27.9**	**14.2**	**308**	**9.10**	**31.7**	5.63 U	NA	NA
	Beryllium	100	100	200	200	100	N/A	0.27 U	0.30 U	0.27 U	0.29 U	0.27 U	0.29 U	NA	NA
	Cadmium	2	2	30	30	2	N/A	0.27 U	0.30 U	**0.90**	0.29 U	0.27 U	0.29 U	NA	NA
	Chromium	30	30	200	200	30	N/A	**6.40**	**5.38**	**31.0**	**4.53**	**7.39**	**2.26**	NA	NA
	Lead	300	300	300	300	300	N/A	**4.05**	**3.46**	**322**	**2.99**	**13.7**	**2.03**	NA	NA
	Mercury	20	20	30	30	20	N/A	0.015 U	0.016 U	**0.183**	0.022 U	**0.018**	0.017 U	NA	NA
	Nickel	20	20	700	700	20	N/A	**5.45**	**3.85**	**9.14**	**2.33**	**5.35**	**1.49**	NA	NA
	Silver	100	100	200	200	100	N/A	**1.05**	0.60 U	**1.59**	0.57 U	**0.70**	0.57 U	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	**8.08**	**8.25**	**17.6**	5.69 U	**9.48**	5.63 U	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	**13.0**	**11.4**	**315**	**11.2**	**24.0**	**10.4**	NA	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not available.
R - Rejected data point during validation.
U - Compound was not detected at specified quantitation limit.
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 Method 1 standards.
Values shown in bold and outlined 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.
* - For reference purposes only.

TABLE 4-10
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Tree Belts (EP10)
New Bedford, Massachusetts

Analysis	Analyte							HA3	HA4	HA4+HA3	HA5	HA8	HA8+HA5	HA9	HA-9		HA10	HA-10		HA10+HA9	HA-19	HA-19A		HA-19B		HA-19C			HA-19D	
							Sample Location:																							
							Sample Depth (ft.):	0.5-1	1-2	0.5-2	2.5-2.7	2.5-3	2.5-3	2.5-3	0-1	1-3	2.5-3	0-1	1-3	2.5-3	1-3	0-1	1-3	0-1	1-3	0-1	1-3	1-3	0-1	1-3
							Sample Date:	12/29/2004	12/29/2004	12/29/2004	12/29/2004	12/29/2004	12/29/2004	12/29/2004	5/19/2009	5/19/2009	12/29/2004	5/19/2009	5/19/2009	12/29/2004	4/7/2009	5/19/2009	5/19/2009	5/19/2009	5/19/2009	5/19/2009	5/19/2009	5/19/2009 Field Dup	5/19/2009	5/19/2009
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA																							
VOCs (mg/kg)	Acetone	50	400	50	400	6.0	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EPH (mg/kg)	Dibenzo(a,h)anthracene	0.7	0.7	4	4	0.7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(ghi)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	C19 - C36 Aliphatics	3,000	3,000	5,000	5,000	3,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SVOCs (mg/kg)	Dimethyl phthalate	50	600	50	600	30	N/A	NA	NA	0.29 U	NA	NA	0.27 U	NA	NA	NA	NA	NA	NA	0.55 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	NA	0.87 U	NA	NA	0.82 U	NA	NA	NA	NA	NA	NA	1.6 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	N/A	NA	NA	0.87 U	NA	NA	0.82 U	NA	NA	NA	NA	NA	NA	1.6 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	NA	0.29 U	NA	NA	0.27 U	NA	NA	NA	NA	NA	NA	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	NA	0.29 U	NA	NA	0.27 U	NA	0.19 U	0.18 U	NA	0.19 U	0.20 U	4.2	0.204 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	NA	NA	0.29 U	NA	NA	0.27 U	NA	0.19 U	0.18 U	NA	0.19 U	0.20 U	1.5	0.204 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	0.29 U	NA	NA	0.69	NA	0.19 U	0.18 U	NA	0.19 U	0.20 U	12	0.204 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	NA	0.35	NA	NA	3.3	NA	0.19 U	0.18 U	NA	0.19 U	0.20 U	28	0.450	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	NA	0.29 U	NA	NA	2.5	NA	0.19 U	0.18 U	NA	0.19 U	0.20 U	18	0.439	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	NA	0.29 U	NA	NA	2.4	NA	0.19 U	0.18 U	NA	0.19 U	0.20 U	19	0.560	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	0.29 U	NA	NA	0.27 U	NA	0.19 U	0.18 U	NA	0.19 U	0.20 U	11	0.289	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	NA	0.29 U	NA	NA	1.2	NA	0.19 U	0.18 U	NA	0.19 U	0.20 U	7.1	0.218	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	70	70	400	400	70	N/A	NA	NA	0.31	NA	NA	2.7	NA	0.19 U	0.18 U	NA	0.19 U	0.20 U	23	0.528	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	NA	0.29 U	NA	NA	0.27 U	NA	0.19 U	0.18 U	NA	0.19 U	0.20 U	0.55 U	0.204 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	0.91	NA	NA	6.6	NA	0.19 U	0.18 U	NA	0.19 U	0.20 U	61	0.736	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	0.29 U	NA	NA	0.27 U	NA	0.19 U	0.18 U	NA	0.19 U	0.20 U	15	0.204 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	NA	0.29 U	NA	NA	0.27 U	NA	0.19 U	0.18 U	NA	0.19 U	0.20 U	7.4	0.345	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	NA	0.29 U	NA	NA	0.27 U	NA	0.19 U	0.18 U	NA	0.19 U	0.20 U	6	0.204 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	0.29 U	NA	NA	0.27 U	NA	0.19 U	0.18 U	NA	0.19 U	0.20 U	0.92	0.204 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	NA	0.32	NA	NA	4.8	NA	0.19 U	0.18 U	NA	0.19 U	0.20 U	61	0.694	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	0.69	NA	NA	8.1	NA	0.19 U	0.18 U	NA	0.19 U	0.20 U	60	0.800	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)	Aroclor 1248	2	2	3	3	2	1	0.064 U	1.26 U	NA	0.058 U	0.055 U	NA	0.054 U	0.567 U	0.472 U	0.055 U	0.165 U	0.174 U	NA	0.0566 U	0.0589 U	0.246 U	0.0571 U	0.0526 U	0.0547 U	0.117 U	0.0571 U	0.0568 U	0.0555 U
	Aroclor 1254	2	2	3	3	2	1	0.637	11.3	NA	1.08	1.06	NA	1.92	18.8 J	10.2 J	0.62	3.21 J	2.70 J	NA	0.483 J	0.0589 U	5.30 J	0.130 J	0.248 J	0.113 J	0.916 J	0.518 J	0.0799 J	1.32 J
	Aroclor 1260	2	2	3	3	2	1	0.064 U	1.26 U	NA	0.058 U	0.055 U	NA	0.054 U	0.567 U	0.472 U	0.055 U	0.165 U	0.174 U	NA	0.179 J	0.0589 U	0.246 U	0.0571 U	0.0526 U	0.0547 U	0.117 U	0.163 J	0.0568 U	0.0555 U
	Aroclor 1262	2	2	3	3	2	1	0.064 U	1.26 U	NA	0.058 U	0.055 U	NA	0.054 U	NA	NA	0.055 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	0.637	11.3	NA	1.08	1.06	NA	1.92	18.8 J	10.2 J	0.62	3.21 J	2.70 J	NA	0.662 J	0.0589 U	5.30 J	0.130 J	0.248 J	0.113 J	0.916 J	0.681 J	0.0799	1.32 J
Metals (mg/kg)	Mercury	20	20	30	30	20	N/A	NA	NA	0.113	NA	NA	0.075 U	NA	NA	NA	NA	NA	NA	0.075 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Arsenic	20	20	20	20	20	N/A	NA	NA	3.03	NA	NA	2.22	NA	2.9	2.7 U	NA	2.8 U	2.9 U	1.25	17.4	2.9 U	10	2.8 U	12	2.9 U	21	22	7.9	2.7 U
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	93	NA	NA	50	NA	14	8.9	NA	14	13	30	7,290	77	250	30	1,400	32	3,900	9,300	360	35
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	NA	NA	1.45	NA	NA	0.69	NA	0.28 U	0.27 U	NA	0.28 U	0.29 U	0.9	9.07	0.29 U	2.5	0.28 U	3.3	0.29 U	5.4	2.5	2.4	0.28
	Chromium	30	30	200	200	30	N/A	NA	NA	10	NA	NA	8.54	NA	5.8	2.3	NA	6.2	5.9	8.44	358	9.1	48	5.1	47	6.9	84	4,800	16	4.3
	Lead	300	300	300	300	300	N/A	NA	NA	170	NA	NA	45	NA	10	3.3	NA	6.4	7.0	17	1,770	39	820	27	1,200	26	740	4,300	150	25
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Selenium	400	400	800	800	400	N/A	NA	NA	0.69 U	NA	NA	0.69 U	NA	NA	NA	NA	NA	NA	0.69 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	NA	0.34 U	NA	NA	0.35 U	NA	NA	NA	NA	NA	NA	0.35 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
GRO (mg/kg)	Gasoline Range Organics	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP (ug/L)	Barium	NS	NS	NS	NS	NS	100,000(3)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	NS	NS	NS	NS	NS	1,000(3)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NS	NS	NS	NS	NS	5,000(3)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	NS	NS	NS	NS	NS	5,000(3)	NA	NA	260	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
ug/L - micrograms per liter.
B - Detected in associated laboratory method blank.
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
U - Compound was not detected at specified quantitation limit.
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 Method 1 standards or TCLP standards, as applicable.
Values shown in bold and outlined exceed TSCA but are less than the listed Method 1 standards.
VOCs - Volatile Organic Compounds.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TCLP - Toxicity Characteristic Leaching Procedure.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - MassDEP Method 1 standards and RC for C9-C10 aromatics used.
(2) - MassDEP RC for Dichloropropane used.
(3) - MassDEP RC for Dichloropropene used.
(4) - MassDEP RC for 1,3-Dichloropropene used
(5) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Characteristic*.
* - TRC developed standards.

TABLE 4-10
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Tree Belts (EP10)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	HA-19E	HA-19F	HA-19G	HA-19I		HA-19K	HA-19M	HA-19O	HA-19Q	HA-19S	HA33	HA33+HA35	HA35	HA-36	HB-7		HB-9	
							Sample Depth (ft.):	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-1.5	1-3	0-1	1-3	0-1	1-3
							Sample Date:	5/19/2009	5/19/2009	5/19/2009	7/7/2009	7/7/2009 Field Dup	7/7/2009	7/7/2009	7/7/2009	7/7/2009	7/7/2009	1/11/2005	1/11/2005	1/11/2005	4/7/2009	5/19/2009	5/19/2009	5/19/2009	5/19/2009
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA																		
VOCs (mg/kg)	Acetone	50	400	50	400	6.0	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EPH (mg/kg)	Dibenzo(a,h)anthracene	0.7	0.7	4	4	0.7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(ghi)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	C19 - C36 Aliphatics	3,000	3,000	5,000	5,000	3,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SVOCs (mg/kg)	Dimethyl phthalate	50	600	50	600	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.28 U	NA	NA	NA	NA	NA	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.83 U	NA	NA	NA	NA	NA	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.83 U	NA	NA	NA	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.28 U	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.28 U	NA	0.178 U	0.20 U	0.18 U	0.20 U	0.52
	Acenaphthylene	600	10	600	10	1	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.36	NA	0.178 U	0.20 U	0.18 U	0.20 U	0.18 U
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1	NA	0.178 U	0.20 U	0.18 U	0.20 U	1.4
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3	NA	0.178 U	0.20 U	0.18 U	0.20 U	1.9
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5	NA	0.178 U	0.20 U	0.18 U	0.20 U	1.5
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4	NA	0.178 U	0.20 U	0.18 U	0.20 U	1.7
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2	NA	0.178 U	0.20 U	0.18 U	0.20 U	0.63
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.97	NA	0.178 U	0.20 U	0.18 U	0.20 U	0.68
	Chrysene	70	70	400	400	70	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9	NA	0.178 U	0.20 U	0.18 U	0.20 U	1.7
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.28 U	NA	0.178 U	0.20 U	0.18 U	0.20 U	0.18 U
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4	NA	0.178 U	0.20 U	0.18 U	0.20 U	3.4
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.28 U	NA	0.178 U	0.20 U	0.18 U	0.20 U	0.71
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3	NA	0.178 U	0.20 U	0.18 U	0.20 U	0.80
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.28 U	NA	0.178 U	0.20 U	0.18 U	0.20 U	0.18 U
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.28 U	NA	0.178 U	0.20 U	0.18 U	0.20 U	0.29
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5	NA	0.178 U	0.20 U	0.18 U	0.20 U	5.0
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7	NA	0.178 U	0.20 U	0.18 U	0.20 U	3.2
PCBs (mg/kg)	Aroclor 1248	2	2	3	3	2	1	0.175 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.055 U	NA	0.058 U	0.0516 U	0.111 U	0.0504 U	0.403 U	0.225 U
	Aroclor 1254	2	2	3	3	2	1	2.69 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.142	NA	2.24	0.181 J	1.91 J	0.0504 U	9.00 J	3.93 J
	Aroclor 1260	2	2	3	3	2	1	0.175 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.055 U	NA	0.058 U	0.0516 U	0.111 U	0.0504 U	0.403 U	0.225 U
	Aroclor 1262	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.055 U	NA	0.361	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	2.69 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.142	NA	2.601	0.181 J	1.91 J	0.0504 U	9.00 J	3.93 J
Metals (mg/kg)	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.106	NA	NA	NA	NA	NA	NA
	Arsenic	20	20	20	20	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6	NA	2.67 U	2.9 U	3.2	3.0 U	4.4
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	660	15,000	1,100	NA	NA	NA	NA	NA	NA	NA	NA	107	NA	12.4	16	12	15	200
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	2.6	6.6	9.7	4.1	4.5	2.9	NA	NA	NA	NA	NA	0.95	NA	0.27 U	0.29 U	0.26 U	0.30 U	0.79
	Chromium	30	30	200	200	30	N/A	30	1,900	100	NA	NA	NA	NA	NA	NA	NA	NA	7.55	NA	2.79	6.3	5.3	5.4	19
	Lead	300	300	300	300	300	N/A	1,600	3,600	1,000	1,400	1,700	1,200	1,700	420	620	870	NA	209	NA	6.49	16	7.1	8.4	280
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Selenium	400	400	800	800	400	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.11 U	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.77	NA	NA	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
GRO (mg/kg)	Gasoline Range Organics	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP (ug/L)	Barium	NS	NS	NS	NS	NS	100,000(3)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	NS	NS	NS	NS	NS	1,000(3)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NS	NS	NS	NS	NS	5,000(3)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	NS	NS	NS	NS	NS	5,000(3)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	300	NA	NA	NA	NA	NA	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
ug/L - micrograms per liter.
B - Detected in associated laboratory method blank.
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
U - Compound was not detected at specified quantitation limit.
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 Method 1 standards or TCLP standard, as applicable.
Values shown in bold and outlined exceed TSCA but are less than the listed Method 1 standards.
VOCs - Volatile Organic Compounds.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TCLP - Toxicity Characteristic Leaching Procedure.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - MassDEP Method 1 standards and RC for C9-C10 aromatics used.
(2) - MassDEP RC for Dichloropropane used.
(3) - MassDEP RC for Dichloropropene used.
(4) - MassDEP RC for 1,3-Dichloropropene used.
(5) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Characteristic*.
* - TRC developed standards.

TABLE 4-10
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Tree Belts (EP10)
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	HB-10		HB-22			HA38	HA38+HA40	HA40		HA41+HA42	HA42	HA43	HA43+HA44	HA44	HB3	HB7	HB7+HB9	HB9	HB10	HB10+HD10	HB12	HB12+HB16	HB16
	Sample Location:							HB-10		HB-22			HA38	HA38+HA40	HA40		HA41+HA42	HA42	HA43	HA43+HA44	HA44	HB3	HB7	HB7+HB9	HB9	HB10	HB10+HD10	HB12	HB12+HB16	HB16
	Sample Depth (ft.):							0-1	1-3	0-1	1-3	1-3	1-3	0.5-3	0.5-3	0.5-3	0.75-3	0.5-3	0.75-3	0.75-3	0.75-3	2-3	2.75-3	2.5-3	2.5-3	2.5-3	1-3	2.5-3	2.5-3	2.5-3
	Sample Date:							5/19/2009	5/19/2009	4/9/2009	4/9/2009	4/9/2009	1/11/2005	1/11/2005	1/11/2005	1/11/2005	1/11/2005	1/11/2005	1/11/2005	1/11/2005	1/11/2005	12/29/2004	12/28/2004	12/28/2004	12/28/2004	12/28/2004	12/28/2004	12/29/2004	12/29/2004	12/29/2004
												Field Dup				Field Dup														
VOCs (mg/kg)	Acetone	50	400	50	400	6.0	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EPH (mg/kg)	Dibenzo(a,h)anthracene	0.7	0.7	4	4	0.7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(ghi)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	C19 - C36 Aliphatics	3,000	3,000	5,000	5,000	3,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SVOCs (mg/kg)	Dimethyl phthalate	50	600	50	600	30	N/A	NA	NA	NA	NA	NA	NA	0.27 U	NA	NA	0.29 U	NA	NA	0.28 U	NA	NA	NA	0.063 U	NA	NA	NA	NA	0.32 U	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	NA	NA	NA	NA	NA	0.3 JB	NA	NA	0.87 U	NA	NA	0.84 U	NA	NA	NA	0.27 B	NA	NA	NA	NA	0.97 U	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	N/A	NA	NA	NA	NA	NA	NA	0.82 U	NA	NA	0.87 U	NA	NA	0.84 U	NA	NA	NA	0.33	NA	NA	NA	NA	0.97 U	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	NA	NA	NA	NA	NA	0.7	NA	NA	0.29 U	NA	NA	0.28 U	NA	NA	NA	0.2	NA	NA	NA	NA	0.32 U	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	0.20 U	0.40 U	0.193 U	0.966 U	NA	NA	1.5	NA	NA	0.29 U	NA	NA	0.4	NA	NA	NA	0.28	NA	NA	NA	NA	0.32 U	NA
	Acenaphthylene	600	10	600	10	1	N/A	0.20 U	0.40 U	0.193 U	0.966 U	NA	NA	0.3	NA	NA	0.29 U	NA	NA	0.63	NA	NA	NA	0.063 U	NA	NA	NA	NA	2.9	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	0.20 U	0.40 U	0.193 U	0.966 U	NA	NA	3.7	NA	NA	0.56	NA	NA	1.8	NA	NA	NA	0.93	NA	NA	NA	NA	0.56	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	0.20 U	1.3	0.285	1.00	NA	NA	8.2	NA	NA	1.4	NA	NA	3.9	NA	NA	NA	2.5	NA	NA	NA	NA	4.2	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	0.20 U	1.3	0.265	0.966 U	NA	NA	5.3	NA	NA	1	NA	NA	2.5	NA	NA	NA	2.2	NA	NA	NA	NA	5.4	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	0.20 U	1.4	0.366	1.36	NA	NA	7.1	NA	NA	1.4	NA	NA	3.2	NA	NA	NA	3.4	NA	NA	NA	NA	5.4	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	0.20 U	0.69	0.193 U	0.966 U	NA	NA	2.1	NA	NA	0.43	NA	NA	0.97	NA	NA	NA	1.2	NA	NA	NA	NA	1.8	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	0.20 U	0.54	0.193 U	0.966 U	NA	NA	2.1	NA	NA	0.29	NA	NA	0.8	NA	NA	NA	1.1	NA	NA	NA	NA	2.4	NA
	Chrysene	70	70	400	400	70	N/A	0.20 U	1.3	0.327	1.06	NA	NA	6.5	NA	NA	1.3	NA	NA	3.4	NA	NA	NA	2.5	NA	NA	NA	NA	2.8	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	0.20 U	0.40 U	0.193 U	0.966 U	NA	NA	0.85	NA	NA	0.29 U	NA	NA	0.28 U	NA	NA	NA	0.063 U	NA	NA	NA	NA	0.32 U	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	0.20 U	1.9	0.442	1.83	NA	NA	23	NA	NA	3	NA	NA	8	NA	NA	NA	4.6	NA	NA	NA	NA	7	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	0.20 U	0.40 U	0.193 U	0.966 U	NA	NA	1.1	NA	NA	0.29 U	NA	NA	0.88	NA	NA	NA	0.32	NA	NA	NA	NA	0.32 U	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	0.20 U	0.85	0.193 U	0.966 U	NA	NA	2.4	NA	NA	0.44	NA	NA	1	NA	NA	NA	1.2	NA	NA	NA	NA	0.32 U	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	0.20 U	0.40 U	0.193 U	0.966 U	NA	NA	0.53	NA	NA	0.29 U	NA	NA	0.57	NA	NA	NA	0.083	NA	NA	NA	NA	0.32 U	NA
	Naphthalene	40	500	40	1,000	4	N/A	0.20 U	0.40 U	0.193 U	0.966 U	NA	NA	0.68	NA	NA	0.29 U	NA	NA	0.28 U	NA	NA	NA	0.16	NA	NA	NA	NA	0.43	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	0.20 U	1.1	0.498	1.58	NA	NA	19	NA	NA	2.2	NA	NA	12	NA	NA	NA	3.5	NA	NA	NA	NA	2.3	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	0.20 U	2.0	0.424	1.52	NA	NA	17	NA	NA	2.9	NA	NA	8.1	NA	NA	NA	4.2	NA	NA	NA	NA	6.8	NA
PCBs (mg/kg)	Aroclor 1248	2	2	3	3	2	1	0.226 U	0.125 U	0.0565 U	0.0597 U	0.123 U	0.058 U	NA	0.057 U	0.056 U	NA	0.057 U	0.055 U	NA	0.055 U	0.057 U	0.06 U	NA	0.058 U	0.061 U	NA	0.069 U	NA	0.065 U
	Aroclor 1254	2	2	3	3	2	1	5.14 J	1.49 J	1.18 J	1.01 J	1.92 J	1.34	NA	0.804	0.452	NA	1.88	0.167	NA	0.308	0.057 U	0.955	NA	1.273	0.549	NA	1.64	NA	3.92
	Aroclor 1260	2	2	3	3	2	1	0.226 U	0.125 U	0.0565 U	0.0597 U	0.123 U	0.058 U	NA	0.057 U	0.056 U	NA	0.057 U	0.055 U	NA	0.055 U	0.057 U	0.06 U	NA	0.058 U	0.061 U	NA	0.069 U	NA	0.065 U
	Aroclor 1262	2	2	3	3	2	1	NA	NA	NA	NA	NA	0.058 U	NA	0.057 U	0.127	NA	0.057 U	0.055 U	NA	0.138	0.057 U	0.241	NA	0.43	0.061 U	NA	0.069 U	NA	0.678
	Total PCBs	2	2	3	3	2	1	5.14 J	1.49 J	1.18 J	1.01 J	1.92 J	1.34	NA	0.804	0.579	NA	1.88	0.167	NA	0.446	0.115 U	1.196	NA	1.703	0.549	NA	1.64	NA	4.598
Metals (mg/kg)	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA	0.01 U	NA	NA	0.369	NA	NA	0.286	NA	NA	NA	0.398	NA	NA	0.814	NA	0.913	NA
	Arsenic	20	20	20	20	20	N/A	3.1	100	5.45	7.83	NA	NA	3.48	NA	NA	4.4	NA	NA	2.15	NA	NA	NA	9.71	NA	NA	4.32	NA	30	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	36	600	59	307	NA	NA	167	NA	NA	210	NA	NA	71	NA	NA	NA	1,590	NA	NA	337	NA	1,000	NA
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	0.30 U	4.9	0.56	1.84	NA	NA	1.08	NA	NA	2.21	NA	NA	1.19	NA	NA	NA	5.96	NA	NA	4.7	NA	9.68	NA
	Chromium	30	30	200	200	30	N/A	8.4	47	12.8	20.9	NA	NA	7.23	NA	NA	15	NA	NA	5.22	NA	NA	NA	345	NA	NA	53	NA	272	NA
	Lead	300	300	300	300	300	N/A	20	1,000	93.4	759	NA	NA	216	NA	NA	360	NA	NA	533	NA	NA	NA	1,120	NA	NA	421	NA	5,230	NA
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Selenium	400	400	800	800	400	N/A	NA	NA	NA	NA	NA	NA	0.11 U	NA	NA	0.11 U	NA	NA	0.11 U	NA	NA	NA	0.82 U	NA	NA	0.64 U	NA	0.84 U	NA
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	0.16	NA	NA	0.17	NA	NA	0.15	NA	NA	NA	0.65	NA	NA	0.32	NA	1.68	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
GRO (mg/kg)	Gasoline Range Organics	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP (ug/L)	Barium	NS	NS	NS	NS	NS	100,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2,760	NA
	Cadmium	NS	NS	NS	NS	NS	1,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NS	NS	NS	NS	NS	5,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20 U	NA	NA	NA	NA	20 U	NA
	Lead	NS	NS	NS	NS	NS	5,000(2)	NA	NA	NA	NA	NA	NA	300	NA	NA	800	NA	NA	400	NA	NA	NA	2,460	NA	NA	400	NA	13,200	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
ug/L - micrograms per liter.
B - Detected in associated laboratory method blank.
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
U - Compound was not detected at specified quantitation limit.
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 Method 1 standards or TCLP standard, as applicable.
Values shown in bold and outlined exceed TSCA but are less than the listed Method 1 standards.
VOCs - Volatile Organic Compounds.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TCLP - Toxicity Characteristic Leaching Procedure.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - MassDEP Method 1 standards and RC for C9-C10 aromatics used
(2) - MassDEP RC for Dichloropropane used.
(3) - MassDEP RC for Dichloropropene used.
(4) - MassDEP RC for 1,3-Dichloropropene used.
(5) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Characteristic*.
* - TRC developed standards.

TABLE 4-10
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Tree Belts (EP10)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	HB-23B		HB-23C		HB-23F	HB-23G		HB-23H		HB-23I		HB-23K	HB-23L	HB-23M	HB-23N		HB23+HB27 MSB	HB23+HB23	HB31+HB32	HB32	HB33	HB33+HB36	HB36
							Sample Depth (ft.):	0-1	1-3	0-1	1-3	1-3	0-1	1-3	0-1	1-3	0-1	1-3	1-3	1-3	1-3	1-3	1-3	0.75-3	0.75-3	0.5-3	0.5-3	0.2-3	0.2-3	0.5-3
							Sample Date:	3/10/2009	3/10/2009	3/10/2009	3/10/2009	3/10/2009	3/10/2009	3/10/2009	3/10/2009	3/10/2009	3/10/2009	3/10/2009	4/9/2009	4/9/2009	4/9/2009	4/9/2009	4/9/2009 Field Dup	12/30/2004	12/29/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA																							
VOCs (mg/kg)	Acetone	50	400	50	400	6.0	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EPH (mg/kg)	Dibenzo(a,h)anthracene	0.7	0.7	4	4	0.7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(ghi)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	C19 - C36 Aliphatics	3,000	3,000	5,000	5,000	3,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SVOCs (mg/kg)	Dimethyl phthalate	50	600	50	600	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.27 U	0.06 U	NA	NA	0.058 U	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.81 U	0.24 B	NA	NA	0.39 B	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.81 U	0.12 J	NA	NA	0.14 J	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.27 U	0.06 U	NA	NA	0.058 U	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.27 U	0.076	NA	NA	0.1	NA
	Acenaphthylene	600	10	600	10	1	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.27 U	0.06 U	NA	NA	0.058 U	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.27 U	0.26	NA	NA	0.32	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.41	0.95	NA	NA	0.95	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.27 U	0.9	NA	NA	0.93	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.27 U	1.7	NA	NA	1.5	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.27 U	0.06 U	NA	NA	0.058 U	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.27 U	0.47	NA	NA	0.42	NA
	Chrysene	70	70	400	400	70	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.35	0.77	NA	NA	0.81	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.27 U	0.06 U	NA	NA	0.058 U	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.95	1.8	NA	NA	1.9	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.27 U	0.06 U	NA	NA	0.11	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.27 U	0.06 U	NA	NA	0.3	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.27 U	0.06 U	NA	NA	0.058 U	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.27 U	0.06 U	NA	NA	0.058 U	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.3	1.2	NA	NA	1.3	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.74	2.3	NA	NA	2.1	NA
PCBs (mg/kg)	Aroclor 1248	2	2	3	3	2	1	0.0596 U	0.0585 U	0.0597 U	0.306 U	NA	0.0570 U	0.282 U	0.118 U	0.0631 U	0.230 U	0.0645 U	NA	NA	NA	NA	NA	NA	NA	NA	0.059 U	0.056 U	NA	0.058 U
	Aroclor 1254	2	2	3	3	2	1	0.786 J	0.915 J	1.41 J	4.74 J	NA	0.943 J	4.94 J	2.53 J	0.0843 J	4.70 J	0.517 J	NA	NA	NA	NA	NA	NA	NA	NA	0.532	1.23	NA	0.352
	Aroclor 1260	2	2	3	3	2	1	0.0596 U	0.0585 U	0.0597 U	0.306 U	NA	0.0570 UJ	0.282 UJ	0.118 U	0.0631 U	0.230 U	0.0645 U	NA	NA	NA	NA	NA	NA	NA	NA	0.059 U	0.056 U	NA	0.058 U
	Aroclor 1262	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.219	0.178	NA	0.058 U
	Total PCBs	2	2	3	3	2	1	0.786 J	0.915	1.41 J	4.74 J	NA	0.943 J	4.94 J	2.53 J	0.0843 J	4.70 J	0.517 J	NA	NA	NA	NA	NA	NA	NA	NA	0.751	1.408	NA	0.352
Metals (mg/kg)	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.33	0.166	0.228	NA	NA	0.205	NA
	Arsenic	20	20	20	20	20	N/A	3.11	7.30	3.10 U	18.1	NA	2.90 U	6.77	3.42	17.7	7.29	10.6	NA	NA	NA	NA	NA	91	2.59	6.99	NA	NA	3.35	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	58.1	236	53.2	1,020	612	55.1	297	343	269	311	1,210	NA	NA	NA	NA	NA	875	209	282	NA	NA	132	NA
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	0.37	1.14	0.31 U	3.86	2.20	0.29 U	1.28	0.61	3.31	1.03	4.06	NA	NA	NA	NA	NA	82	1.95	2.03	NA	NA	1.83	NA
	Chromium	30	30	200	200	30	N/A	8.95	14.7	8.13	60.2	47.0	15.4	29.7	26.9	36.8	36.7	35.2	NA	NA	NA	NA	NA	143	21	17	NA	NA	9.07	NA
	Lead	300	300	300	300	300	N/A	48.5	169	42.9	1,460	893	88.4	423	220	548	293	3,630	59.4	2,400	9.97	110	121	985	183	376	NA	NA	219	NA
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Selenium	400	400	800	800	400	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	75	0.57 U	0.75 U	NA	NA	0.76 U	NA
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	75	0.29 U	0.53	NA	NA	0.38 U	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
GRO (mg/kg)	Gasoline Range Organics	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP (ug/L)	Barium	NS	NS	NS	NS	NS	100,000(3)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	NS	NS	NS	NS	NS	1,000(3)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NS	NS	NS	NS	NS	5,000(3)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	NS	NS	NS	NS	NS	5,000(3)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	440	180	NA	NA	370	NA

Notes:
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ug/L - micrograms per liter.
B - Detected in associated laboratory method blank.
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NA - Sample not analyzed for the listed analyte.
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U - Compound was not detected at specified quantitation limit.
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Values in Bold indicate the compound was detected.
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VOCs - Volatile Organic Compounds.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TCLP - Toxicity Characteristic Leaching Procedure.
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Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006. BETA Group, Inc.
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* - TRC developed standards.

TABLE 4-10
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Tree Belts (EP10)
New Bedford, Massachusetts

Analysis	Analyte							HB37	HB37+HB38	HB38	HB39	HB-39		HB-39A		HB-39C		HB-39D		HB39+HB40	HB40	HB-40	
							Sample Location:	HB37	HB37+HB38	HB38	HB39	HB-39		HB-39A		HB-39C		HB-39D		HB39+HB40	HB40	HB-40	
							Sample Depth (ft.):	0.5-3	0.2-3	0.2-3	0.5-3	0-1	1-3	0-1	1-3	0-1	1-3	0-1	1-3	0.5-3	0.5-3	0-1	1-3
							Sample Date:	12/30/2004	12/30/2004	12/30/2004	12/30/2004	5/20/2009	5/20/2009	6/16/2009	6/16/2009	6/16/2009	6/16/2009	6/16/2009	6/16/2009	12/30/2004	12/30/2004	5/20/2009	5/20/2009
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA																
VOCs (mg/kg)	Acetone	50	400	50	400	6.0	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EPH (mg/kg)	Dibenzo(a,h)anthracene	0.7	0.7	4	4	0.7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(ghi)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	C19 - C36 Aliphatics	3,000	3,000	5,000	5,000	3,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SVOCs (mg/kg)	Dimethyl phthalate	50	600	50	600	30	N/A	NA	0.055 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.06 U	NA	NA	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	0.13 JB	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.13 JB	NA	NA	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	N/A	NA	0.16 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.18 U	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	0.055 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.1	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	0.14	NA	NA	0.39 U	0.42 U	NA	NA	NA	NA	NA	NA	0.17	NA	0.41 U	0.38 U
	Acenaphthylene	600	10	600	10	1	N/A	NA	0.074	NA	NA	0.39 U	0.42 U	NA	NA	NA	NA	NA	NA	0.86	NA	0.41 U	0.38 U
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	0.57	NA	NA	0.39 U	0.42 U	NA	NA	NA	NA	NA	NA	0.82	NA	0.41 U	0.70
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	1.5	NA	NA	0.60	0.69	NA	NA	NA	NA	NA	NA	3.5	NA	0.41 U	2.7
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	1.4	NA	NA	0.57	0.68	NA	NA	NA	NA	NA	NA	3.5	NA	0.41 U	2.8
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	2	NA	NA	0.68	0.83	NA	NA	NA	NA	NA	NA	5.3	NA	0.41 U	3.2
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	0.57	NA	NA	0.41	0.42 U	NA	NA	NA	NA	NA	NA	1.4	NA	0.41 U	1.9
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	0.64	NA	NA	0.39 U	0.42 U	NA	NA	NA	NA	NA	NA	1.4	NA	0.41 U	1.2
	Chrysene	70	70	400	400	70	N/A	NA	1.3	NA	NA	0.68	0.76	NA	NA	NA	NA	NA	NA	3.2	NA	0.41 U	3.1
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	0.055 U	NA	NA	0.39 U	0.42 U	NA	NA	NA	NA	NA	NA	0.06 U	NA	0.41 U	0.42
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	2.6	NA	NA	1.0	1.1	NA	NA	NA	NA	NA	NA	5.2	NA	0.50	3.9
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	0.16	NA	NA	0.39 U	0.42 U	NA	NA	NA	NA	NA	NA	0.12	NA	0.41 U	0.38 U
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	0.59	NA	NA	0.46	0.44	NA	NA	NA	NA	NA	NA	1.5	NA	0.41 U	2.2
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	0.055 U	NA	NA	0.39 U	0.42 U	NA	NA	NA	NA	NA	NA	0.14	NA	0.41 U	0.38 U
	Naphthalene	40	500	40	1,000	4	N/A	NA	0.055 U	NA	NA	0.39 U	0.42 U	NA	NA	NA	NA	NA	NA	0.13	NA	0.41 U	0.38 U
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	1.6	NA	NA	0.88	0.76	NA	NA	NA	NA	NA	NA	2.9	NA	0.41 U	3.8
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	6.3	NA	NA	1.3	1.5	NA	NA	NA	NA	NA	NA	4.8	NA	0.56	5.2
PCBs (mg/kg)	Aroclor 1248	2	2	3	3	2	1	1.11 U	NA	0.053 U	0.065 U	0.0577 U	0.120 U	NA	NA	NA	NA	NA	NA	NA	0.056 U	0.0583 U	0.0559 U
	Aroclor 1254	2	2	3	3	2	1	1.11 U	NA	0.152	0.365	0.119 J	2.89 J	NA	NA	NA	NA	NA	NA	NA	0.521	0.151 J	0.790 J
	Aroclor 1260	2	2	3	3	2	1	1.11 U	NA	0.053 U	0.065 U	0.0577 U	0.120 U	NA	NA	NA	NA	NA	NA	NA	0.056 U	0.0583 U	0.281 J
	Aroclor 1262	2	2	3	3	2	1	1.11 U	NA	0.053 U	0.08	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.172	NA	NA
	Total PCBs	2	2	3	3	2	1	2.22 U	NA	0.152	0.445	0.119 J	2.89 J	NA	NA	NA	NA	NA	NA	NA	0.693	0.151 J	1.071 J
Metals (mg/kg)	Mercury	20	20	30	30	20	N/A	NA	0.065 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.25	NA	NA	NA
	Arsenic	20	20	20	20	20	N/A	NA	3.8	NA	NA	3.0	7.4	4.1	10	9.6	13	7.3	19	5.32	NA	3.0 U	8.5
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	52	NA	NA	61	370	82	230	120	270	300	390	229	NA	31	280
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	NA	1.04	NA	NA	0.41	1.0	0.66	1.1	1.7	1.0	1.8	0.85	6.13	NA	0.35	1.9
	Chromium	30	30	200	200	30	N/A	NA	11	NA	NA	9.3	18	11	20	21	15	17	9.4	13	NA	7.9	29
	Lead	300	300	300	300	300	N/A	NA	68	NA	NA	150	520	200	350	380	300	540	260	1,430	NA	67	890
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Selenium	400	400	800	800	400	N/A	NA	0.69 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.67 U	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	0.35 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.34	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
GRO (mg/kg)	Gasoline Range Organics	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP (ug/L)	Barium	NS	NS	NS	NS	NS	100,000(4)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	NS	NS	NS	NS	NS	1,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NS	NS	NS	NS	NS	5,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	NS	NS	NS	NS	NS	5,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4,950	NA	NA	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
ug/L - micrograms per liter.
B - Detected in associated laboratory method blank.
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
U - Compound was not detected at specified quantitation limit.
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 Method 1 standards or TCLP standard, as applicable.
Values shown in bold and outlined exceed TSCA but are less than the listed Method 1 standards.
VOCs - Volatile Organic Compounds.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TCLP - Toxicity Characteristic Leaching Procedure.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - MassDEP Method 1 standards and RC for C9-C10 aromatics used.
(2) - MassDEP RC for Dichloropropane used.
(3) - MassDEP RC for Dichloropropene used.
(4) - MassDEP RC for 1,3-Dichloropropene used
(5) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Characteristic*.
* - TRC developed standards.

TABLE 4-10
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Tree Belts (EP10)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	HB-40A			HB-40C		HB-40D		HB-40E	HB-40G	HB-40H	HB-40I	HB-40K	HB-40M	HB-40O	HB-40Q	HB-40S	HB41+HB42	HB42	HB43	HB43+HB44	HB44	HC12	HC13
							Sample Depth (ft.):	0-1	1-3	1-3	0-1	1-3	0-1	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	0.2-3	0.2-3	1.5-3	0.5-3	0.5-3	2-3	1.5-3
							Sample Date:	6/16/2009	6/16/2009	6/16/2009	6/16/2009	6/16/2009	6/16/2009	6/16/2009	6/16/2009	6/16/2009	6/16/2009	7/7/2009	7/7/2009	7/7/2009	7/7/2009	7/7/2009	7/7/2009	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/29/2004	12/29/2004
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA			Field Dup																				
VOCs (mg/kg)	Acetone	50	400	50	400	6.0	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EPH (mg/kg)	Dibenzo(a,h)anthracene	0.7	0.7	4	4	0.7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(ghi)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	C19 - C36 Aliphatics	3,000	3,000	5,000	5,000	3,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SVOCs (mg/kg)	Dimethyl phthalate	50	600	50	600	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.058 U	NA	NA	0.057 U	NA	NA	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.32 B	NA	NA	0.17 U	NA	NA	NA
	bis(2-Ethythexyl)phthalate	200	200	700	700	200	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.1 J	NA	NA	0.14 J	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.058 U	NA	NA	0.057 U	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	0.20 U	0.20 U	0.20 U	0.20 U	0.21	0.20 U	0.24	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.058 U	NA	NA	0.065	NA	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	0.20 U	0.20 U	0.22	0.20 U	0.21 U	0.20 U	0.22 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.13	NA	NA	0.13	NA	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	0.20 U	0.20 U	0.45	0.20 U	0.44	0.27	0.65	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.18	NA	NA	0.27	NA	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	0.27	0.83	1.8	0.43	1.4	0.99	1.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.71	NA	NA	1.1	NA	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	0.29	0.84	1.8	0.47	1.3	0.99	1.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.81	NA	NA	1	NA	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	0.37	1.2	2.5	0.66	1.8	1.3	2.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2	NA	NA	1.6	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	0.20 U	0.46	0.95	0.24	0.60	0.43	0.71	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.27	NA	NA	0.45	NA	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	0.20 U	0.41	0.93	0.24	0.64	0.47	0.82	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.34	NA	NA	0.53	NA	NA	NA
	Chrysene	70	70	400	400	70	N/A	0.33	0.97	2.0	0.53	1.5	1.2	1.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.67	NA	NA	1	NA	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	0.20 U	0.20 U	0.25	0.20 U	0.21 U	0.20 U	0.22 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.058 U	NA	NA	0.057 U	NA	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	0.56	2.1	4.2	0.90	3.0	1.9	3.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4	NA	NA	0.057 U	NA	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	0.20 U	0.20 U	0.20 U	0.20 U	0.25	0.20 U	0.24	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.058 U	NA	NA	0.1	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	0.20 U	0.50	1.2	0.27	0.71	0.50	0.84	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.31	NA	NA	0.49	NA	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	0.20 U	0.20 U	0.20 U	0.20 U	0.21 U	0.20 U	0.22 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.058 U	NA	NA	0.057 U	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	0.20 U	0.20 U	0.20 U	0.20 U	0.37	0.20 U	0.22 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.058 U	NA	NA	0.057 U	NA	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	0.25	1.0	1.9	0.52	2.3	1.4	2.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.85	NA	NA	1.6	NA	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	0.48	1.1	2.5	0.64	2.2	1.4	2.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4	NA	NA	3.9	NA	NA	NA
PCBs (mg/kg)	Aroclor 1248	2	2	3	3	2	1	0.0596 U	0.0565 U	0.0581 U	0.0604 U	0.0558 U	0.0578 U	0.0619 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.054 U	0.055 U	NA	0.059 U	0.063 U	0.057 U
	Aroclor 1254	2	2	3	3	2	1	0.409 J	0.816 J	1.18 J	0.139 J	0.789 J	0.225 J	0.443 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.411	0.326	NA	0.443	4.0	0.538
	Aroclor 1260	2	2	3	3	2	1	0.0596 U	0.0565 U	0.0581 U	0.0604 U	0.0558 U	0.0578 U	0.0619 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.054 U	0.055 U	NA	0.059 U	0.063 U	0.057 U
	Aroclor 1262	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.065	0.055 U	NA	0.074	0.953	0.225
	Total PCBs	2	2	3	3	2	1	0.409 J	0.816 J	1.18 J	0.139 J	0.789 J	0.225 J	0.443 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.476	0.326	NA	0.517	4.953	0.763
Metals (mg/kg)	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.799	NA	NA	0.547	NA	NA	NA
	Arsenic	20	20	20	20	20	N/A	3.8	47	38	4.4	13	5.1	11	21	7.4	10	NA	NA	NA	NA	NA	NA	12	NA	NA	2.72	NA	NA	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	34	290	240	49	320	130	340	320	270	300	NA	NA	NA	NA	NA	NA	123	NA	NA	46	NA	NA	NA
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	0.30 U	8.8	3.3	0.51	4.4	0.74	1.8	91	1.6	1.1	0.93	NA	NA	NA	NA	NA	2.5	NA	NA	1.12	NA	NA	NA
	Chromium	30	30	200	200	30	N/A	9.5	64	55	11	31	14	29	41	15	43	NA	NA	NA	NA	NA	NA	8.51	NA	NA	6.57	NA	NA	NA
	Lead	300	300	300	300	300	N/A	57	780	430	240	4,980	370	820	880	530	380	470	1,700	680	1,200	1,000	1,800	304	NA	NA	176	NA	NA	NA
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Selenium	400	400	800	800	400	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.68 U	NA	NA	0.59 U	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.34 U	NA	NA	0.3 U	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
GRO (mg/kg)	Gasoline Range Organics	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP (ug/L)	Barium	NS	NS	NS	NS	NS	100,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	NS	NS	NS	NS	NS	1,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NS	NS	NS	NS	NS	5,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	NS	NS	NS	NS	NS	5,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	450	NA	NA	190	NA	NA	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
ug/L - micrograms per liter.
B - Detected in associated laboratory method blank.
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
U - Compound was not detected at specified quantitation limit.
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 Method 1 standards or TCLP standard, as applicable.
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VOCs - Volatile Organic Compounds.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TCLP - Toxicity Characteristic Leaching Procedure.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - MassDEP Method 1 standards and RC for C9-C10 aromatics used.
(2) - MassDEP RC for Dichloropropene used.
(3) - MassDEP RC for Dichloropropene used.
(4) - MassDEP RC for 1,3-Dichloropropene used.
(5) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Characteristic*.
* - TRC developed standards.

TABLE 4-10
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Tree Belts (EP10)
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	HC13+HC12+ HD12	HC14	HC15	HC16	HC16+HC15+ HC14	HC22	HC22	HC-22	HC-22	HC-22A	HC-22A	HC-22A	HC-22B	HC-22B	HC-22C	HC-22C	HC-22D	HC-22D	HC-22E	HC-22F	HC-22H	HC23	HD10
	Sample Location:							HC13+HC12+ HD12	HC14	HC15	HC16	HC16+HC15+ HC14	HC22	HC22	HC-22	HC-22	HC-22A	HC-22A	HC-22A	HC-22B	HC-22B	HC-22C	HC-22C	HC-22D	HC-22D	HC-22E	HC-22F	HC-22H	HC23	HD10
	Sample Depth (ft.):							1-3	2.5-3	2-3	1.5-3	1.5-3	1-3	1-3	0-1	1-3	0-1	1-3	1-3	0-1	1-3	0-1	1-3	0-1	1-3	1-3	1-3	1-3	1-3	1-3
	Sample Date:							12/29/2004	12/29/2004	12/29/2004	12/29/2004	12/29/2004	12/29/2004	12/29/2004	4/9/2009	4/9/2009	5/21/2009	5/21/2009	5/21/2009 Field Dup	5/21/2009	5/21/2009	5/21/2009	5/21/2009	5/21/2009	5/21/2009	5/21/2009	5/21/2009	5/21/2009	12/29/2004	12/28/2004
VOCs (mg/kg)	Acetone	50	400	50	400	6.0	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EPH (mg/kg)	Dibenzo(a,h)anthracene	0.7	0.7	4	4	0.7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(ghi)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	C19 - C36 Aliphatics	3,000	3,000	5,000	5,000	3,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SVOCs (mg/kg)	Dimethyl phthalate	50	600	50	600	30	N/A	0.33 U	NA	NA	NA	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	1 U	NA	NA	NA	1.9 B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	N/A	1 U	NA	NA	NA	3.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	0.33 U	NA	NA	NA	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	0.33 U	NA	NA	NA	1.8	NA	NA	0.204 U	0.272	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	2.6	NA	NA	NA	2.3	NA	NA	0.204 U	0.205 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	0.33 U	NA	NA	NA	6.8	NA	NA	0.204 U	0.615	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	2.7	NA	NA	NA	31	NA	NA	0.204 U	1.62	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	8.1	NA	NA	NA	30	NA	NA	0.204 U	1.53	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	7.8	NA	NA	NA	42	NA	NA	0.204 U	2.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	1.5	NA	NA	NA	13	NA	NA	0.204 U	0.730	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	3.3	NA	NA	NA	14	NA	NA	0.204 U	0.819	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	70	70	400	400	70	N/A	1.9	NA	NA	NA	26	NA	NA	0.204 U	1.74	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	0.33 U	NA	NA	NA	0.6 U	NA	NA	0.204 U	0.205 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	3	NA	NA	NA	56	NA	NA	0.306	2.68	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	0.33 U	NA	NA	NA	2.3	NA	NA	0.204 U	0.267	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	3.1	NA	NA	NA	14	NA	NA	0.204 U	0.876	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	0.33 U	NA	NA	NA	0.6 U	NA	NA	0.204 U	0.205 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	0.33 U	NA	NA	NA	1	NA	NA	0.204 U	0.218	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	0.69	NA	NA	NA	30	NA	NA	0.211	2.76	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	2.8	NA	NA	NA	64	NA	NA	0.328	2.34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)	Aroclor 1248	2	2	3	3	2	1	NA	0.056 U	0.075 U	0.06 U	NA	0.066 U	0.07 U	0.0582 U	0.0573 U	0.0573 U	0.0602 U	0.258 U	0.0553 U	0.0639 U	0.0540 U	0.0612 U	0.0539 U	0.0596 UJ	0.0540 U	NA	NA	0.055 U	1.11 U
	Aroclor 1254	2	2	3	3	2	1	NA	0.36	6.94	0.387	NA	0.44	0.07 U	0.145 J	0.166 J	0.128 J	0.876 J	4.40 J	0.081 J	0.154 J	0.991 J	1.09 J	0.854 J	0.0841 J	0.0540 U	NA	NA	6.14	1.11 U
	Aroclor 1260	2	2	3	3	2	1	NA	0.056 U	0.075 U	0.06 U	NA	0.066 U	0.07 U	0.0582 U	0.0573 U	0.0573 U	0.0602 U	0.258 U	0.0553 U	0.0639 U	0.0540 U	0.0612 U	0.0539 U	0.0596 UJ	0.0540 U	NA	NA	0.055 U	1.11 U
	Aroclor 1262	2	2	3	3	2	1	NA	0.056 U	4.1	0.06 U	NA	0.066 U	0.07 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.402	1.11 U
	Total PCBs	2	2	3	3	2	1	NA	0.36	11.04	0.387	NA	0.44	0.14 U	0.145 J	0.166 J	0.128 J	0.876 J	4.40 J	0.081 J	0.154 J	0.991 J	1.09 J	0.854 J	0.0841 J	0.0540 U	NA	NA	6.542	2.22 U
Metals (mg/kg)	Mercury	20	20	30	30	20	N/A	1.09	NA	NA	NA	1.51	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Arsenic	20	20	20	20	20	N/A	8.87	NA	NA	NA	46	NA	NA	3.26	26.1	2.9 U	7.5	7.5	2.9 U	8.5	2.8 U	16	3.1 U	28	NA	NA	NA	NA	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	854	NA	NA	NA	15,400	NA	NA	41.4	626	31	620	560	39	490	38	440	60	840	NA	NA	NA	NA	NA
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	6.27	NA	NA	NA	22	NA	NA	0.31 U	2.52	0.29 U	1.5	1.8	0.44	1.6	0.28 U	0.83	0.31 U	1.70	NA	NA	NA	NA	NA
	Chromium	30	30	200	200	30	N/A	231	NA	NA	NA	1,430	NA	NA	7.99	28.3	6.4	40	31	6.8	25	7.5	11	20	27	NA	NA	NA	NA	NA
	Lead	300	300	300	300	300	N/A	1,110	NA	NA	NA	2,650	NA	NA	38.9	1,090	29	520	640	36	1,900	44	210	65	580	41	2,100	460	NA	NA
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Selenium	400	400	800	800	400	N/A	0.9 U	NA	NA	NA	0.8 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	1.7	NA	NA	NA	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
GRO (mg/kg)	Gasoline Range Organics	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP (ug/L)	Barium	NS	NS	NS	NS	NS	100,000(5)	NA	NA	NA	NA	275,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	NS	NS	NS	NS	NS	1,000(5)	NA	NA	NA	NA	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NS	NS	NS	NS	NS	5,000(5)	20 U	NA	NA	NA	20 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	NS	NS	NS	NS	NS	5,000(5)	510	NA	NA	NA	550	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
ug/L - micrograms per liter.
B - Detected in associated laboratory method blank.
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
U - Compound was not detected at specified quantitation limit.
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 Method 1 standards or TCLP standard, as applicable.
Values shown in bold and outlined exceed TSCA but are less than the listed Method 1 standards.
VOCs - Volatile Organic Compounds.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TCLP - Toxicity Characteristic Leaching Procedure.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - MassDEP Method 1 standards and RC for C9-C10 aromatics used.
(2) - MassDEP RC for Dichloropropane used.
(3) - MassDEP RC for Dichloropropane used.
(4) - MassDEP RC for 1,3-Dichloropropene used.
(5) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Characteristic*.
* - TRC developed standards.

TABLE 4-10
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Tree Belts (EP10)
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	HD12 1-3 12/29/2004	HD12 1-3 12/29/2004 Field Dup	HD13 1-3 12/29/2004	HD13+HD14+HD15 1.5-3 12/29/2004	HD14 2-3 12/29/2004	HD-14A 0-1 3/10/2009	HD-14A 1-3 3/10/2009	HD-14B 0-1 3/10/2009	HD-14B 1-3 3/10/2009	HD-14B 1-3 3/10/2009 Field Dup	HD-14C 0-1 3/10/2009	HD-14C 1-3 3/10/2009	HD-14D 0-1 3/10/2009	HD-14D 1-3 3/10/2009	HD15 1.5-3 12/29/2004	HD22+HC22+HB22 1-3 12/29/2004	HE10 1.5-3 12/28/2004	HE-10B 0-1 4/3/2009	HE-10B 1-3 4/3/2009	HE-10B 1-3 4/3/2009 Field Dup	HE-10C 0-1 4/3/2009	HE-10C 1-3 4/3/2009
VOCs (mg/kg)	Acetone	50	400	50	400	6.0	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EPH (mg/kg)	Dibenzo(a,h)anthracene	0.7	0.7	4	4	0.7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(ghi)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	C19 - C36 Aliphatics	3,000	3,000	5,000	5,000	3,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SVOCs (mg/kg)	Dimethyl phthalate	50	600	50	600	30	N/A	NA	NA	NA	0.57	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.29 U	NA	NA	NA	NA	NA	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	NA	NA	0.74 JB	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.87 U	NA	NA	NA	NA	NA	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	N/A	NA	NA	NA	21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.87 U	NA	NA	NA	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	NA	NA	0.32 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.29 U	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	NA	NA	0.32 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.42	NA	0.197 U	0.389	0.464	0.197 U	0.206 U
	Acenaphthylene	600	10	600	10	1	N/A	NA	NA	NA	0.32 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.29 U	NA	0.197 U	0.213 U	0.240 U	0.197 U	0.206 U
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	0.69	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4	NA	0.197 U	0.732	1.01	0.197 U	0.255
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	NA	NA	2.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5	NA	0.197 U	2.51	3.49	0.197 U	0.786
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	NA	NA	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5	NA	0.197 U	2.35	3.19	0.197 U	0.741
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	NA	NA	3.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1	NA	0.197 U	3.54	5.01	0.197 U	0.953
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	0.32 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2	NA	0.197 U	0.964	1.33	0.197 U	0.344
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	NA	NA	0.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1	NA	0.197 U	1.24	1.83	0.197 U	0.382
	Chrysene	70	70	400	400	70	N/A	NA	NA	NA	2.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8	NA	0.197 U	2.56	3.49	0.197 U	0.798
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	NA	NA	0.32 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.29 U	NA	0.197 U	0.340	0.240 U	0.197 U	0.206 U
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	4.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4	NA	0.197 U	3.61	7.09	0.197 U	1.30
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	0.32 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.42	NA	0.197 U	0.387	0.520	0.197 U	0.206 U
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	NA	NA	0.32 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7	NA	0.197 U	1.35	1.80	0.197 U	0.410
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	NA	NA	0.32 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.29 U	NA	0.197 U	0.213 U	0.240 U	0.197 U	0.206 U
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	0.32 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.29 U	NA	0.197 U	0.213 U	0.240 U	0.197 U	0.206 U
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	NA	NA	2.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3	NA	0.197 U	3.01	4.07	0.197 U	1.09
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8	NA	0.197 U	3.04	4.97	0.197 U	1.29
PCBs (mg/kg)	Aroclor 1248	2	2	3	3	2	1	0.061 U	0.063 U	0.064 U	NA	0.062 U	0.0575 U	0.0642 U	0.0545 U	0.118 U	0.0645 U	0.0576 U	0.108 U	0.0540 U	0.593 U	0.056 U	NA	0.066 U	0.0576 U	0.134 U	NA	0.0561 U	0.193 U
	Aroclor 1254	2	2	3	3	2	1	7.31	0.853	1.16	NA	17.3	0.0791 J	0.985 J	0.0545 U	2.04 J	1.92 J	0.785 J	1.32 J	0.163 J	18.9 J	2.35	NA	0.427	0.222 J	1.45 J	NA	0.0991 J	2.41 J
	Aroclor 1260	2	2	3	3	2	1	0.061 U	0.063 U	0.064 U	NA	0.062 U	0.0575 U	0.0642 U	0.0545 U	0.118 U	0.0645 U	0.0576 U	0.108 U	0.0793 J	0.593 U	0.056 U	NA	0.066 U	0.0576 U	0.583 J	NA	0.0561 U	0.193 U
	Aroclor 1262	2	2	3	3	2	1	0.865	0.721	0.064 U	NA	0.523	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.739	NA	0.14	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	8.175	1.574	1.16	NA	17.523	0.0791 J	0.985 J	0.0545 U	2.04 J	1.92 J	0.785 J	1.32 J	0.2423 J	18.9 J	3.089	NA	0.567	0.222 J	2.033 J	NA	0.0991 J	2.41 J
Metals (mg/kg)	Mercury	20	20	30	30	20	N/A	NA	NA	NA	2.89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.401	NA	NA	NA	NA	NA	NA
	Arsenic	20	20	20	20	20	N/A	NA	NA	NA	94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	33	NA	2.95 U	9.96	12.0	2.96 U	9.34
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	5,850	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	899	NA	28.3	446	1,040	48.0	666
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	NA	NA	NA	21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.71	NA	0.30 U	3.07	4.56	0.30	2.30
	Chromium	30	30	200	200	30	N/A	NA	NA	NA	2,050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	52	NA	7.99	33.2	66.4	8.53	72.9
	Lead	300	300	300	300	300	N/A	NA	NA	NA	1,460	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,020	NA	29.3	549	2,500	37.3	853
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Selenium	400	400	800	800	400	N/A	NA	NA	NA	0.81 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.61 U	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	NA	NA	1.61	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.43	NA	NA	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
GRO (mg/kg)	Gasoline Range Organics	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP (ug/L)	Barium	NS	NS	NS	NS	NS	100,000(5)	NA	NA	NA	4,010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	N5	NS	NS	NS	NS	1,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NS	NS	NS	NS	NS	5,000(5)	NA	NA	NA	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	NS	NS	NS	NS	NS	5,000(5)	NA	NA	NA	420	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2,920	NA	NA	NA	NA	NA	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
ug/L - micrograms per liter.
B - Detected in associated laboratory method blank.
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
U - Compound was not detected at specified quantitation limit.
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 Method 1 standards or TCLP standards, as applicable.
Values shown in bold and outlined exceed TSCA but are less than the listed Method 1 standards.
VOCs - Volatile Organic Compounds.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TCLP - Toxicity Characteristic Leaching Procedure.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc
(1) - MassDEP Method 1 standards and RC for C9-C10 aromatics used.
(2) - MassDEP RC for Dichloropropene used.
(3) - MassDEP RC for Dichloropropene used.
(4) - MassDEP RC for 1,3-Dichloropropene used.
(5) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Characteristic*.
* - TRC developed standards.

TABLE 4-10
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Tree Belts (EP10)
New Bedford, Massachusetts

Analysis	Analyte							HE-10D			HE10 + HF10	HF10	HF-10B		HF-10C		HF-10D		HRA33		HRC-33	HRC-33A		HRC-33B		HRC-33C	
							Sample Location:																				
							Sample Depth (ft.):	0-1	1-3	1-3	1.5-3	2-3	0-1	1-3	0-1	1-3	0-1	1-3	1-3	1-3	0.67-2	0-1	1-3	0-1	1-3	0-1	1-3
							Sample Date:	4/3/2009	4/3/2009	4/3/2009	12/28/2004	12/28/2004	4/3/2009	4/3/2009	4/3/2009	4/3/2009	4/3/2009	4/3/2009	2/22/2006	2/22/2006	2/22/2006	2/27/2009	2/27/2009	2/27/2009	2/27/2009	2/27/2009	2/27/2009
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA			Field Dup										Field Dup								
VOCs (mg/kg)	Acetone	50	400	50	400	6.0	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.92 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.33	NA	NA	NA	NA	NA	NA	NA	NA	NA
EPH (mg/kg)	Dibenzo(a,h)anthracene	0.7	0.7	4	4	0.7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(ghi)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	C19 - C36 Aliphatics	3,000	3,000	5,000	5,000	3,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SVOCs (mg/kg)	Dimethyl phthalate	50	600	50	600	30	N/A	NA	NA	NA	0.32 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	NA	NA	0.57 JB	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	N/A	NA	NA	NA	0.96 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	NA	NA	0.32 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	0.194 U	0.407	NA	0.41	NA	0.199 U	113	0.198 U	0.953 U	0.191 U	0.187 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	0.194 U	0.223 U	NA	0.32 U	NA	0.199 U	1.68 U	0.198 U	0.953 U	0.191 U	0.187 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	0.194 U	1.08	NA	1.9	NA	0.199 U	190	0.198 U	1.83	0.191 U	0.228	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	0.194 U	2.48	NA	4.4	NA	0.199 U	167	0.198 U	3.78	0.393	0.746	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	0.194 U	2.33	NA	3.7	NA	0.199 U	133	0.198 U	3.21	0.367	0.732	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	0.194 U	3.17	NA	3.3	NA	0.199 U	183	0.198 U	3.68	0.486	0.967	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	0.194 U	0.929	NA	1.2	NA	0.199 U	58.3	0.198 U	2.39	0.190	0.359	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	0.194 U	1.14	NA	3.4	NA	0.199 U	75.7	0.198 U	1.42	0.191 U	0.340	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	70	70	400	400	70	N/A	0.194 U	2.53	NA	3.9	NA	0.199 U	171	0.198 U	3.94	0.390	0.800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	0.194 U	0.223 U	NA	0.32 U	NA	0.199 U	17.2	0.198 U	0.953 U	0.191 U	0.187 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	0.194 U	4.97	NA	11	NA	0.257	443	0.198 U	7.20	0.626	1.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	0.194 U	0.455	NA	0.32 U	NA	0.199 U	121	0.198 U	1.22	0.191 U	0.187 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	0.194 U	1.19	NA	1.3	NA	0.199 U	56.9	0.198 U	2.93	0.240	0.425	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	0.194 U	0.223 U	NA	0.32 U	NA	0.199 U	47.8	0.198 U	0.953 U	0.191 U	0.187 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	0.194 U	0.223 U	NA	0.32 U	NA	0.199 U	76.0	0.198 U	0.953 U	0.191 U	0.187 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	0.194 U	4.80	NA	4.7	NA	0.203	710	0.198 U	9.65	0.548	1.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	0.194 U	3.84	NA	7.3	NA	0.386	280	0.198 U	7.71	0.598	1.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)	Aroclor 1248	2	2	3	3	2	1	0.0577 U	0.0661 U	0.140 U	NA	0.062 U	0.0587 U	8.28 J	0.0579 U	0.167 U	0.0574 U	0.168 U	0.12 U	0.12 U	0.029 U	0.120 U	0.566 U	0.0616 U	0.0583 U	0.126 U	0.0607 U
	Aroclor 1254	2	2	3	3	2	1	0.136 J	0.473 J	1.42 J	NA	0.565	0.460 J	7.10 J	0.582 J	2.29 J	0.167 J	2.42 J	0.28	0.15	28	1.44 J	14.8 J	1.01 J	1.25 J	1.77 J	0.446 J
	Aroclor 1260	2	2	3	3	2	1	0.0577 U	0.285 J	0.470 J	NA	0.357	0.147 J	2.58 J	0.213 J	0.167 U	0.0574 U	1.44 J	0.12 U	0.12 U	12	0.495 J	4.54 J	0.468 J	0.0583 U	0.755 J	0.0607 U
	Aroclor 1262	2	2	3	3	2	1	NA	NA	NA	NA	0.062 U	NA	NA	NA	NA	NA	NA	0.12 U	0.12 U	0.029 U	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	0.136 J	0.758 J	1.89 J	NA	0.922	0.607 J	17.96 J	0.795 J	2.29 J	0.167 J	3.86 J	0.28	0.15	40	1.935 J	19.34 J	1.478 J	1.25 J	2.525 J	0.446 J
Metals (mg/kg)	Mercury	20	20	30	30	20	N/A	NA	NA	NA	0.757	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Arsenic	20	20	20	20	20	N/A	2.90 U	16.1	NA	21	NA	3.66	19.3	2.97 U	5.69	4.13	7.18	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	26.3	1,720	NA	8,190	NA	371	1,310	35.4	741	462	432	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	0.29	10.6	NA	12	NA	0.71	29.3	0.33	3.49	0.73	1.08	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	30	30	200	200	30	N/A	7.11	82.5	NA	827	NA	25.7	119	8.36	65.3	29.8	30.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	300	300	300	300	300	N/A	20.9	1,270	NA	8,300	NA	118	16,100	38.0	692	132	1,020	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Selenium	400	400	800	800	400	N/A	NA	NA	NA	0.79 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	NA	NA	33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
GRO (mg/kg)	Gasoline Range Organics	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	12.3	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP (ug/L)	Barium	NS	NS	NS	NS	NS	100,000(5)	NA	NA	NA	4,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	NS	NS	NS	NS	NS	1,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NS	NS	NS	NS	NS	5,000(5)	NA	NA	NA	20 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	NS	NS	NS	NS	NS	5,000(5)	NA	NA	NA	9,420	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
ug/L - micrograms per liter.
B - Detected in associated laboratory method blank.
J - Estimated value; below quantitation limit.
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Values shown in Bold and shaded type exceed one or more of the listed Method 1 standards or TCLP standard, as applicable.
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SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TCLP - Toxicity Characteristic Leaching Procedure.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - MassDEP Method 1 standards and RC for C9-C10 aromatics used.
(2) - MassDEP RC for Dichloropropane used.
(3) - MassDEP RC for Dichloropropane used.
(4) - MassDEP RC for 1,3-Dichloropropene used.
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* - TRC developed standards.

TABLE 4-10
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Tree Belts (EP10)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	HRC-33D			HRC-33E		HRC-33F		HRC-33I	HRC-33J	HRC-33L		HRC-33M		HRC-33N		HRE33	HRG-33	HRK-33A	HRM-23	HRM-23	HRM-25
							Sample Depth (ft.):	0-1	1-3	1-3	0-1	1-3	0-1	1-3	1-3	1-3	0-1	1-3	0-1	1-3	0-1	1-3	0.5-3	1-3	1-3	2-3	1-3	1.5-3
							Sample Date:	2/27/2009	2/27/2009	2/27/2009	2/27/2009	2/27/2009	2/27/2009	2/27/2009	3/24/2009	3/24/2009	4/3/2009	4/3/2009	4/3/2009	4/3/2009	4/3/2009	4/3/2009	2/22/2006	2/22/2006	4/3/2009	2/21/2006	4/7/2009	2/21/2006
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA			Field Dup																		
VOCs (mg/kg)	Acetone	50	400	50	400	6.0	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.36 U
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.45
EPH (mg/kg)	Dibenzo(a,h)anthracene	0.7	0.7	4	4	0.7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(ghi)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	C19 - C36 Aliphatics	3,000	3,000	5,000	5,000	3,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SVOCs (mg/kg)	Dimethyl phthalate	50	600	50	600	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.213 U	0.207 U	0.207 U	0.633	0.207 U	2.03 U	NA	NA	0.212 U	NA	0.219 U	NA
	Acenaphthylene	600	10	600	10	1	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.213 U	0.243	0.207 U	0.208 U	0.207 U	2.03 U	NA	NA	0.212 U	NA	0.219 U	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.213 U	0.828	0.366	0.939	0.207 U	2.03 U	NA	NA	0.257	NA	0.219 U	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.315	2.21	1.48	2.52	0.326	3.90	NA	NA	1.00	NA	0.771	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.323	2.04	1.48	2.39	0.346	3.25	NA	NA	1.21	NA	0.830	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.370	2.66	1.80	3.04	0.366	4.02	NA	NA	1.55	NA	0.887	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.213 U	0.797	0.735	1.11	0.286	2.03 U	NA	NA	0.634	NA	0.501	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.213 U	0.975	0.655	1.09	0.207 U	2.03 U	NA	NA	0.608	NA	0.363	NA
	Chrysene	70	70	400	400	70	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.338	2.24	1.66	2.90	0.355	4.22	NA	NA	1.20	NA	0.797	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.213 U	0.228	0.211	0.301	0.207 U	2.03 U	NA	NA	0.212 U	NA	0.219 U	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.463	3.83	2.03	6.21	0.522	6.33	NA	NA	2.57	NA	1.01	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.213 U	0.317	0.207 U	0.736	0.207 U	2.03 U	NA	NA	0.212 U	NA	0.219 U	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.225	1.05	0.877	1.43	0.290	2.13	NA	NA	0.739	NA	0.656	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.213 U	0.207 U	0.207 U	0.477	0.207 U	2.03 U	NA	NA	0.212 U	NA	0.219 U	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.213 U	0.207 U	0.207 U	0.932	0.207 U	2.03 U	NA	NA	0.212 U	NA	0.219 U	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.315	4.16	2.02	6.51	0.297	8.01	NA	NA	1.42	NA	0.687	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.619	4.10	2.63	3.97	0.715	7.44	NA	NA	1.87	NA	1.36	NA
PCBs (mg/kg)	Aroclor 1248	2	2	3	3	2	1	0.0641 U	0.184 U	0.0586 U	0.0642 U	0.562 U	0.0706 U	0.580 U	0.153 U	0.112 U	NA	NA	NA	NA	NA	NA	0.11 U	0.03 U	0.0607 U	0.035 U	0.0557 U	0.034 U
	Aroclor 1254	2	2	3	3	2	1	0.730 J	2.87 J	0.245 J	0.141 J	12.3 J	0.691 J	11.9 J	3.20 J	1.60 J	NA	NA	NA	NA	NA	NA	0.11 U	0.29	0.148 J	0.035 U	0.0557 U	0.062
	Aroclor 1260	2	2	3	3	2	1	0.265 J	0.928 J	0.0586 U	0.0872 J	2.92 J	0.344 J	2.49 J	0.913 J	0.208 J	NA	NA	NA	NA	NA	NA	0.11 U	0.24	0.0607 U	0.035 U	0.0557 U	0.057
	Aroclor 1262	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.11 U	0.03 U	NA	0.035 U	NA	0.034 U
	Total PCBs	2	2	3	3	2	1	0.995 J	3.798 J	0.245 J	0.2282 J	15.22 J	1.035 J	14.39 J	4.113 J	1.808 J	NA	NA	NA	NA	NA	NA	0.22 U	0.53	0.148 J	0.035 U	0.0557 U	0.119
Metals (mg/kg)	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Arsenic	20	20	20	20	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.74	11.0	5.19	5.40	4.24	10.1	NA	NA	65.2	NA	7.13	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	111	229	209	122	120	349	NA	NA	984	NA	255	NA
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.74	1.97	4.08	1.61	0.80	11.3	NA	NA	1.85	NA	0.46	NA
	Chromium	30	30	200	200	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.88	15.8	14.6	14.2	11.1	28.3	NA	NA	17.90	NA	8.80	NA
	Lead	300	300	300	300	300	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	322	979	834	780	517	10,000	NA	NA	1,150	NA	214	NA
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Selenium	400	400	800	800	400	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
GRO (mg/kg)	Gasoline Range Organics	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 U
Metals, TCLP (ug/L)	Barium	NS	NS	NS	NS	NS	100,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	NS	NS	NS	NS	NS	1,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NS	NS	NS	NS	NS	5,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	NS	NS	NS	NS	NS	5,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
ug/L - micrograms per liter.
B - Detected in associated laboratory method blank.
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
U - Compound was not detected at specified quantitation limit.
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 Method 1 standards or TCLP standard, as applicable.
Values shown in bold and outlined exceed TSCA but are less than the listed Method 1 standards.
VOCs - Volatile Organic Compounds.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TCLP - Toxicity Characteristic Leaching Procedure.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006. BETA Group, Inc.
(1) - MassDEP Method 1 standards and RC for C9-C10 aromatics used
(2) - MassDEP RC for Dichloropropane used.
(3) - MassDEP RC for Dichloropropene used.
(4) - MassDEP RC for 1,3-Dichloropropene used.
(5) - SW-846 Chapter 7, Table 7-1. *Maximum Concentration of Contaminants for Toxicity Characteristic*.
* - TRC developed standards.

TABLE 4-10
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Tree Belts (EP10)
New Bedford, Massachusetts

Analysis	Analyte																				
	Sample Location:							HRN26		HRN-26	HRN28	HRO-30		HRO-30	HRP.5-33	HRP31	HS-1	HS-3	HS-4	HS-8	SB-01	
	Sample Depth (ft.):							0.5-3	0.5-3	1-3	1.5-3	1.5-3	2-3	1-3	1.5-3	1.5-3	0-0.5	0-0.5	0-0.5	0-0.5	1	3
	Sample Date:							2/22/2006	2/22/2006	4/7/2009	2/22/2006	2/22/2006	2/22/2006	4/7/2009	2/22/2006	2/22/2006	9/9/2004	9/9/2004	9/9/2004	9/9/2004	3/31/2008	3/31/2008
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA		Field Dup													
VOCs (mg/kg)	Acetone	50	400	50	400	6.0	N/A	NA	NA	NA	NA	NA	NA	NA	0.37 U	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	0.075 U	NA	NA	NA	NA	NA	NA	NA
EPH (mg/kg)	Dibenzo(a,h)anthracene	0.7	0.7	4	4	0.7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(ghi)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	C19 - C36 Aliphatics	3,000	3,000	5,000	5,000	3,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SVOCs (mg/kg)	Dimethyl phthalate	50	600	50	600	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	NA	0.212 U	NA	NA	NA	1.27	NA	NA	NA	NA	NA	NA	0.18 U	0.18 U
	Acenaphthylene	600	10	600	10	1	N/A	NA	NA	0.212 U	NA	NA	NA	0.378 U	NA	NA	NA	NA	NA	NA	0.18 U	0.18 U
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	0.405	NA	NA	NA	4.12	NA	NA	NA	NA	NA	NA	0.18 U	0.18 U
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	NA	0.958	NA	NA	NA	10.3	NA	NA	NA	NA	NA	NA	0.18 U	0.18 U
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	NA	0.816	NA	NA	NA	8.37	NA	NA	NA	NA	NA	NA	0.18 U	0.18 U
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	NA	0.916	NA	NA	NA	8.97	NA	NA	NA	NA	NA	NA	0.20	0.18 U
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	0.623	NA	NA	NA	2.68	NA	NA	NA	NA	NA	NA	0.18 U	0.18 U
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	NA	0.345	NA	NA	NA	3.53	NA	NA	NA	NA	NA	NA	0.18 U	0.18 U
	Chrysene	70	70	400	400	70	N/A	NA	NA	1.09	NA	NA	NA	10.4	NA	NA	NA	NA	NA	NA	0.18 U	0.18 U
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	NA	0.212 U	NA	NA	NA	0.378 U	NA	NA	NA	NA	NA	NA	0.18 U	0.18 U
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	1.60	NA	NA	NA	17.0	NA	NA	NA	NA	NA	NA	0.23	0.18 U
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	0.212 U	NA	NA	NA	1.98	NA	NA	NA	NA	NA	NA	0.18 U	0.18 U
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	NA	0.755	NA	NA	NA	3.41	NA	NA	NA	NA	NA	NA	0.18 U	0.18 U
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	NA	0.212 U	NA	NA	NA	1.27	NA	NA	NA	NA	NA	NA	0.18 U	0.18 U
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	0.212 U	NA	NA	NA	0.621	NA	NA	NA	NA	NA	NA	0.18 U	0.18 U
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	NA	1.96	NA	NA	NA	22.2	NA	NA	NA	NA	NA	NA	0.18 U	0.18 U
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	2.11	NA	NA	NA	26.7	NA	NA	NA	NA	NA	NA	0.27	0.18 U
PCBs (mg/kg)	Aroclor 1248	2	2	3	3	2	1	0.12 U	0.13 U	0.0617 U	0.13 U	0.027 U	0.12 U	0.0605 U	0.12 U	0.13 U	0.111 U	0.11 U	0.11 U	0.12 U	0.0520 U	0.0523 U
	Aroclor 1254	2	2	3	3	2	1	0.12 U	0.13 U	0.0617 U	0.13 U	0.098	0.12 U	0.0605 U	0.12 U	0.13 U	0.141	0.11 U	0.162	0.12 U	0.0520 U	0.0523 U
	Aroclor 1260	2	2	3	3	2	1	0.23	0.22	0.128 J	0.13 U	0.11	0.12 U	0.0605 U	0.12 U	0.13 U	0.111 U	0.11 U	0.11 U	0.12 U	0.0520 U	0.0523 U
	Aroclor 1262	2	2	3	3	2	1	0.12 U	0.13 U	NA	0.13 U	0.027 U	0.12 U	NA	0.12 U	0.13 U	0.111 U	0.11 U	0.11 U	0.12 U	NA	NA
	Total PCBs	2	2	3	3	2	1	0.23	0.22	0.128 J	0.27 U	0.208	0.23 U	0.0605 U	0.24 U	0.26 U	0.141	0.22 U	0.162	0.24 U	0.0520 U	0.0523 U
Metals (mg/kg)	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.014	0.013 U
	Arsenic	20	20	20	20	20	N/A	NA	NA	10.8	NA	NA	NA	8.37	NA	NA	NA	NA	NA	NA	2.63 U	2.60 U
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	581	NA	NA	NA	122	NA	NA	NA	NA	NA	NA	11.0	9.31
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.27	0.26 U
	Cadmium	2	2	30	30	2	N/A	NA	NA	0.46	NA	NA	NA	0.89	NA	NA	NA	NA	NA	NA	0.27 U	0.26 U
	Chromium	30	30	200	200	30	N/A	NA	NA	15.1	NA	NA	NA	9.50	NA	NA	NA	NA	NA	NA	3.85	3.09
	Lead	300	300	300	300	300	N/A	NA	NA	587	NA	NA	NA	189	NA	NA	NA	NA	NA	NA	35.1	11.1
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.84	3.23
	Selenium	400	400	800	800	400	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.25 U	5.20 U
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U	0.52 U
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.32	5.20 U
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	23.1	15.2
GRO (mg/kg)	Gasoline Range Organics	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	3.7 U	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP (ug/L)	Barium	NS	NS	NS	NS	NS	100,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	NS	NS	NS	NS	NS	1,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NS	NS	NS	NS	NS	5,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	NS	NS	NS	NS	NS	5,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
ug/L - micrograms per liter.
B - Detected in associated laboratory method blank.
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
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VOCs - Volatile Organic Compounds.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TCLP - Toxicity Characteristic Leaching Procedure.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - MassDEP Method 1 standards and RC for C9-C10 aromatics used.
(2) - MassDEP RC for Dichloropropene used.
(3) - MassDEP RC for Dichloropropene used.
(4) - MassDEP RC for 1,3-Dichloropropene used.
(5) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Characteristic*.
* - TRC developed standards.

TABLE 4-10
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Tree Belts (EP10)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	SB-02		SB-03		SB-04			SB-05		SB-270			SB-270A		SB-270B		SB-270D		SB-270E		SB-270F	
							Sample Depth (ft.):	1	3	1	3	1	3.5	3.5	1	8	1	3	9.5	0-1	1-3	0-1	1-3	0-1	1-3	0-1	1-3	0-1	1-3
							Sample Date:	3/31/2008	3/31/2008	3/31/2008	3/31/2008	3/31/2008	3/31/2008	3/31/2008	3/31/2008	3/31/2008	7/16/2008	7/16/2008	7/16/2008	5/20/2009	5/20/2009	5/20/2009	5/20/2009	5/20/2009	5/20/2009	5/20/2009	5/20/2009	5/20/2009	5/20/2009
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA							Field Dup															
VOCs																													
(mg/kg)	Acetone	50	400	50	400	6.0	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EPH																													
(mg/kg)	Dibenzo(a,h)anthracene	0.7	0.7	4	4	0.7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(ghi)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	C19 - C36 Aliphatics	3,000	3,000	5,000	5,000	3,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SVOCs																													
(mg/kg)	Dimethyl phthalate	50	600	50	600	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	NA	0.209 U	0.213 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	NA	0.209 U	0.213 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	NA	0.209 U	0.213 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	NA	0.282	0.213 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	NA	0.320	0.213 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	NA	0.360	0.213 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	NA	0.433	0.425 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	NA	0.209 U	0.213 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	70	70	400	400	70	N/A	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	NA	0.362	0.213 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	NA	0.418 U	0.425 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	NA	0.474	0.213 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	NA	0.209 U	0.213 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	NA	0.418 U	0.425 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	NA	0.209 U	0.213 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	NA	0.209 U	0.213 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	NA	0.375	0.213 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	NA	0.619	0.213 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs																													
(mg/kg)	Aroclor 1248	2	2	3	3	2	1	0.0520 U	0.0500 U	0.0502 U	0.0500 U	0.0523 U	0.0512 U	0.0508 U	0.0534 U	0.0517 U	0.0500 U	0.0567 U	0.0596 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aroclor 1254	2	2	3	3	2	1	0.0520 U	0.0500 U	0.0502 U	0.0500 U	0.0523 U	0.0512 U	0.0508 U	0.0534 U	0.0517 U	0.396 J	0.0567 U	0.0596 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aroclor 1260	2	2	3	3	2	1	0.0520 U	0.0500 U	0.0502 U	0.0500 U	0.0523 U	0.0512 U	0.0508 U	0.0534 U	0.0517 U	0.102 J	0.0567 U	0.0596 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aroclor 1262	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	0.0520 U	0.0500 U	0.0502 U	0.0500 U	0.0523 U	0.0512 U	0.0508 U	0.0534 U	0.0517 U	0.498 J	0.0567 U	0.0596 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																													
(mg/kg)	Mercury	20	20	30	30	20	N/A	0.014	0.014 U	0.013 U	0.010 U	0.017	0.014 U	0.019 U	0.025	0.010 U	NA	0.236	0.012 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Arsenic	20	20	20	20	20	N/A	2.62 U	2.60 U	2.62 U	2.60 U	2.65 U	2.58 U	2.60 U	2.69 U	2.62 U	NA	12.7	4.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	7.41	5.50	8.49	6.24	14.6	7.58	7.14	12.2	5.24 U	NA	256	17.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Beryllium	100	100	200	200	100	N/A	0.27 U	0.26 U	0.27 U	0.26 U	0.27 U	0.26 U	0.26 U	0.27 U	0.27 U	NA	0.32 U	0.32 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	0.27 U	0.26 U	0.27 U	0.26 U	0.27 U	0.26 U	0.26 U	0.27 U	0.27 U	NA	0.48	0.32 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	30	30	200	200	30	N/A	4.11	3.55	3.38	2.96	6.30	2.93	3.42	7.70	2.75	NA	9.24	7.56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	300	300	300	300	300	N/A	42.8	4.76	18.1	6.42	12.1	14.9	14.8	27.9	3.45	NA	602	4.54	430	550	520	600	580	660	240	650	150	400
	Nickel	20	20	700	700	20	N/A	3.48	3.76	3.38	3.18	4.93	3.02	3.39	5.92	2.16	NA	11.3	6.83	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Selenium	400	400	800	800	400	N/A	5.24 U	5.20 U	5.23 U	5.20 U	5.30 U	5.16 U	5.20 U	5.38 U	5.24 U	NA	6.26 U	6.37 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	0.53 U	0.52 U	0.53 U	0.52 U	0.53 U	0.52 U	0.52 U	0.54 U	0.53 U	NA	2.39	1.64	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	5.24 U	5.20 U	5.23 U	5.20 U	8.81	5.16 U	5.20 U	8.65	5.24 U	NA	29.1	12.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	20.4	15.6	23.0	14.5	23.2	18.1	18.4	23.4	9.35	NA	154	22.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
GRO																													
(mg/kg)	Gasoline Range Organics	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP																													
(ug/L)	Barium	NS	NS	NS	NS	NS	100,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	NS	NS	NS	NS	NS	1,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NS	NS	NS	NS	NS	5,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	NS	NS	NS	NS	NS	5,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
ug/L - micrograms per liter.
B - Detected in associated laboratory method blank.
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
U - Compound was not detected at specified quantitation limit.
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 Method 1 standards or TCLP standards, as applicable.
Values shown in bold and outlined exceed TSCA but are less than the listed Method 1 standards.
VOCs - Volatile Organic Compounds.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TCLP - Toxicity Characteristic Leaching Procedure.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - MassDEP Method 1 standards and RC for C9-C10 aromatics used.
(2) - MassDEP RC for Dichloropropene used.
(3) - MassDEP RC for Dichloropropene used.
(4) - MassDEP RC for 1,3-Dichloropropene used.
(5) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Characteristic*.
* - TRC developed standards.

TABLE 4-10
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Tree Belts (EP10)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	SB-270H		SB-270I	SB-270J	SB-270K	SB-270M	SB-270Q	SB-270U	SB-271			SB-272			SB-306		
							Sample Depth (ft.):	0-1	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1	3.5	10	1	3	10	1	4	7
							Sample Date:	5/20/2009	5/20/2009	6/16/2009	6/16/2009	6/16/2009	7/6/2009	7/6/2009	7/6/2009	7/16/2008	7/16/2008	7/16/2008	7/16/2008	7/16/2008	7/16/2008	7/23/2008	7/23/2008	7/23/2008
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA																	
VOCs (mg/kg)	Acetone	50	400	50	400	6.0	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EPH (mg/kg)	Dibenzo(a,h)anthracene	0.7	0.7	4	4	0.7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(ghi)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	C19 - C36 Aliphatics	3,000	3,000	5,000	5,000	3,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SVOCs (mg/kg)	Dimethyl phthalate	50	600	50	600	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.221 U	0.220 U	NA	0.216 U	0.202 U	NA	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.221 U	0.220 U	NA	0.216 U	0.202 U	NA	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.221 U	0.220 U	NA	0.216 U	0.202 U	NA	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.221 U	0.220 U	NA	0.216 U	0.202 U	NA	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.221 U	0.220 U	NA	0.216 U	0.202 U	NA	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.221 U	0.220 U	NA	0.216 U	0.202 U	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.441 U	0.439 U	NA	0.216 U	0.202 U	NA	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.221 U	0.220 U	NA	0.216 U	0.202 U	NA	NA	NA
	Chrysene	70	70	400	400	70	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.221 U	0.220 U	NA	0.216 U	0.202 U	NA	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.441 U	0.439 U	NA	0.216 U	0.202 U	NA	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.221 U	0.220 U	NA	0.216 U	0.202 U	NA	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.221 U	0.220 U	NA	0.216 U	0.202 U	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.441 U	0.439 U	NA	0.216 U	0.202 U	NA	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.221 U	0.220 U	NA	0.216 U	0.202 U	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.221 U	0.220 U	NA	0.216 U	0.202 U	NA	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.221 U	0.220 U	NA	0.216 U	0.202 U	NA	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.221 U	0.220 U	NA	0.216 U	0.202 U	NA	NA	NA
PCBs (mg/kg)	Aroclor 1248	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	0.0500 U	0.0654 U	0.0670 U	0.0500 U	0.0685 U	0.0580 U	0.0500 U	0.0656 U	0.182 UJ
	Aroclor 1254	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	0.0500 U	0.0654 U	0.0670 U	0.264 J	0.0685 U	0.0580 U	0.107 J	0.0656 U	0.182 UJ
	Aroclor 1260	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	0.0500 U	0.0654 U	0.0670 U	0.314 J	0.0685 U	0.0580 U	0.0500 U	0.0656 U	0.182 UJ
	Aroclor 1262	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	0.0500 U	0.0654 U	0.0670 U	0.578 J	0.0685 U	0.0580 U	0.107 J	0.0656 U	0.182 UJ
Metals (mg/kg)	Mercury	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.101	0.018 U	NA	0.176	0.012 U	NA	NA	NA
	Arsenic	20	20	20	20	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.5	4.05	NA	19.0	3.47	NA	NA	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	194	9.16	NA	497	6.04 U	NA	NA	NA
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.34 U	0.33 U	NA	0.52	0.31 U	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.34 U	0.33 U	NA	0.39	0.31 U	NA	NA	NA
	Chromium	30	30	200	200	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.03	4.03	NA	14.6	3.27	NA	NA	NA
	Lead	300	300	300	300	300	N/A	57	710	860	240	750	610	930	330	NA	126	2.50	NA	247	2.37	NA	NA	NA
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	12.8	4.55	NA	22.0	4.25	NA	NA	NA
	Selenium	400	400	800	800	400	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.62 U	6.58 U	NA	6.47 U	6.04 U	NA	NA	NA
	Silver	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.44	1.20	NA	7.99	2.14	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	27.7	7.26	NA	44.2	6.04 U	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	54.2	16.6	NA	74.9	14.8	NA	NA	NA
GRO (mg/kg)	Gasoline Range Organics	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP (ug/L)	Barium	NS	NS	NS	NS	NS	100,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	NS	NS	NS	NS	NS	1,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NS	NS	NS	NS	NS	5,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	NS	NS	NS	NS	NS	5,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
ug/L - micrograms per liter.
B - Detected in associated laboratory method blank.
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
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VOCs - Volatile Organic Compounds.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TCLP - Toxicity Characteristic Leaching Procedure.
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Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - MassDEP Method 1 standards and RC for C9-C10 aromatics used.
(2) - MassDEP RC for Dichloropropane used.
(3) - MassDEP RC for Dichloropropane used.
(4) - MassDEP RC for 1,3-Dichloropropene used.
(5) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Characteristic*.
* - TRC developed standards.

TABLE 4-10
Summary of Detected Analytical Results for Soil Samples
New Bedford High School - Tree Belts (EP10)
New Bedford, Massachusetts

Analysis	Analyte						Sample Location:	SB-359					SB-364				SS-3		SS-14		SB-LSD-1			SB-LSD-2				SB-LSD-3		
							Sample Depth (ft.):	0-1	1-3	4	8	12	0-1	1-3	6	9.5	0-0.5	1-2	0-0.5	1-2	0-1	1-3	3-4	0-1	1-3	1-3	3-4	0-1	1-3	4-5
							Sample Date:	3/4/2009	3/4/2009	3/4/2009	3/4/2009	3/4/2009	3/4/2009	3/4/2009	3/4/2009	3/4/2009	7/23/2001	7/23/2001	7/23/2001	7/23/2001	5/12/2010	5/12/2010	5/12/2010	5/12/2010	5/12/2010	5/12/2010 Field Dup	5/12/2010	5/12/2010	5/12/2010	5/12/2010
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA																							
VOCs (mg/kg)	Acetone	50	400	50	400	6.0	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EPH (mg/kg)	Dibenzo(a,h)anthracene	0.7	0.7	4	4	0.7	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(ghi)perylene	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	C19 - C36 Aliphatics	3,000	3,000	5,000	5,000	3,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	76	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SVOCs (mg/kg)	Dimethyl phthalate	50	600	50	600	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.051 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butylphthalate	NS	NS	NS	NS	50	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	bis(2-Ethylhexyl)phthalate	200	200	700	700	200	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.11 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenzofuran	10*	10*	NS	NS	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.051 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	0.204 U	0.230 U	0.241 U	1.41 U	NA	0.202 U	0.174 U	4.16	0.497 U	NA	0.051 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	600	10	600	10	1	N/A	0.204 U	0.230 U	0.241 U	1.41 U	NA	0.202 U	0.174 U	0.785	0.497 U	NA	0.051 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	0.204 U	0.230 U	0.241 U	1.41 U	NA	0.202 U	0.174 U	16.8	0.497 U	NA	0.051 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	N/A	0.353	0.230 U	0.255	1.41 U	NA	0.202 U	0.174 U	27.1	0.746	NA	0.073	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	N/A	0.276	0.230 U	0.290	1.41 U	NA	0.202 U	0.174 U	21.3	0.532	NA	0.051 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	0.345	0.230 U	0.514	1.41 U	NA	0.202 U	0.174 U	23.1	0.866	NA	0.058	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	0.204 U	0.230 U	0.241 U	1.41 U	NA	0.202 U	0.174 U	8.46	0.497 U	NA	0.051 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	0.204 U	0.230 U	0.241 U	1.41 U	NA	0.202 U	0.174 U	10.0	0.497 U	NA	0.051 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	70	70	400	400	70	N/A	0.389	0.230 U	0.298	1.41 U	NA	0.202 U	0.174 U	24.4	0.790	NA	0.054	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	N/A	0.204 U	0.230 U	0.241 U	1.41 U	NA	0.202 U	0.174 U	1.61	0.497 U	NA	0.051 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	0.572	0.230 U	0.382	1.41 U	NA	0.202 U	0.174 U	46.9	1.57	NA	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	0.204 U	0.230 U	0.241 U	1.41 U	NA	0.202 U	0.174 U	5.09	0.497 U	NA	0.051 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	0.204 U	0.230 U	0.246	1.41 U	NA	0.202 U	0.174 U	11.1	0.497 U	NA	0.051 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	N/A	0.204 U	0.230 U	0.241 U	1.41 U	NA	0.202 U	0.174 U	2.32	0.497 U	NA	0.051 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	40	500	40	1,000	4	N/A	0.204 U	0.230 U	0.241 U	1.41 U	NA	0.202 U	0.174 U	3.37	0.497 U	NA	0.051 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	N/A	0.530	0.230 U	0.241 U	1.41 U	NA	0.202 U	0.174 U	59.6	1.18	NA	0.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	0.543	0.230 U	0.366	1.41 U	NA	0.202 U	0.174 U	57.3	1.25	NA	0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)	Aroclor 1248	2	2	3	3	2	1	0.0591 U	0.0558 U	0.0599 U	0.395 UJ	NA	0.0553 U	0.0516 U	0.0644 U	0.208 UJ	0.100 U	0.100 U	0.100 U	0.100 U	0.0544 U	0.0521 U	0.0567 U	0.0569 U	0.0570 U	0.0560 U	0.0567 U	0.0551 U	0.0555 U	0.0599 U
	Aroclor 1254	2	2	3	3	2	1	0.0591 U	0.0558 U	0.0599 U	0.395 UJ	NA	0.0553 U	0.0516 U	1.70 J	0.208 UJ	0.100 U	0.100 U	1.42	6.89	0.0685 *	0.0521 U	0.611 *	0.131 *	0.510 *	0.478 *	0.611 *	0.0615 *	0.0555 U	0.0599 U
	Aroclor 1260	2	2	3	3	2	1	0.0635 J	0.0558 U	0.0599 U	0.395 UJ	NA	0.0553 U	0.0516 U	0.0644 U	0.208 UJ	0.100 U	0.100 U	1.34	0.100 U	0.0544 U	0.0521 U	0.227 *	0.0569 U	0.221 *	0.210 *	0.227 *	0.0551 U	0.0607 *	0.0599 U
	Aroclor 1262	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	0.0635 J	0.0558 U	0.0599 U	0.395 UJ	NA	0.0553 U	0.0516 U	1.70 J	0.208 UJ	0.100 U	0.100 U	2.76	6.89	0.0685	0.0521 U	0.838	0.131	0.731	0.688	0.738	0.0615	0.0607	0.0599 U
Metals (mg/kg)	Mercury	20	20	30	30	20	N/A	0.039	0.056	0.959	0.150 U	0.012 U	0.040	0.017 U	0.322	0.144	0.07 U	0.07 U	0.13	0.65	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Arsenic	20	20	20	20	20	N/A	4.15	6.07	65.5	195	3.15 U	3.02 U	2.61 U	10.8	7.45 U	1.77	1.52	3.48	5.49	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	31.6	76.1	391	1,490	8.27	16.5	8.58	533	178	16	11	372	532	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Beryllium	100	100	200	200	100	N/A	0.31 U	0.35 U	0.86	5.13	0.32 U	0.31 U	0.27 U	0.32 U	0.75 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	0.31 U	0.35 U	2.33	8.81	0.32 U	0.31 U	0.27 U	2.32	2.03	0.35 U	0.32 U	0.78	0.63	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	30	30	200	200	30	N/A	8.34	13.7	15.2	92.5	4.21	5.14	2.34	35.4	9.17	5.11	3.74	32	109	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	300	300	300	300	300	N/A	129	49.6	802	2,710	2.18	12.9	4.61	2,350	85.8	17	8.89	223	371	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	20	20	700	700	20	N/A	4.25	7.89	18.4	94.1	3.14	3.04	2.24	19.1	7.67	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Selenium	400	400	800	800	400	N/A	6.10 U	6.89 U	28.1	99.4	6.29 U	6.04 U	5.22 U	6.22 U	14.9 U	0.71 U	0.64 U	0.68 U	1.38	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Silver	100	100	200	200	100	N/A	0.61 U	0.69 U	0.73 U	4.21 U	0.63 U	0.61 U	0.53 U	1.03	1.49 U	0.35 U	0.32 U	0.34 U	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	9.97	22.3	32.5	174	6.29 U	9.98	5.22 U	34.4	14.9 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	58.9	89.6	772	2,980	13.8	18.9	10.0	738	483	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
GRO (mg/kg)	Gasoline Range Organics	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP (ug/L)	Barium	NS	NS	NS	NS	NS	100,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	NS	NS	NS	NS	NS	1,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NS	NS	NS	NS	NS	5,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	NS	NS	NS	NS	NS	5,000(5)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
ug/L - micrograms per liter.
B - Detected in associated laboratory method blank.
J - Estimated value; below quantitation limit.
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
U - Compound was not detected at specified quantitation limit.
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 Method 1 standards or TCLP standards, as applicable.
Values shown in bold and outlined exceed TSCA but are less than the listed Method 1 standards.
VOCs - Volatile Organic Compounds.
SVOCs - Semivolatile Organic Compounds.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TCLP - Toxicity Characteristic Leaching Procedure.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - MassDEP Method 1 standards and RC for C9-C10 aromatics used.
(2) - MassDEP RC for Dichloropropene used.
(3) - MassDEP RC for Dichloropropene used.
(4) - MassDEP RC for 1,3-Dichloropropene used.
(5) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Characteristic*.
* - TRC developed standards.

TABLE 4-11
Summary of Detected Analytical Results for Soil Samples
New Bedford High School -Miscellaneous (Exposure Point Area HS-11)
New Bedford, Massaschusetts

Analysis	Analyte	S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1	TSCA	Comp-1	Comp 3	Comp 5	Comp 7	Comp 9	Comp 9	Comp 11	Comp 13	HS Comp 2	HS Comp 4	HS Comp 6	HS Comp 6	HS Comp 8	HS Comp 10	HS Comp 12	HS Comp 14	HS Comp 16
	Sample Location:							Comp-1	Comp 3	Comp 5	Comp 7	Comp 9	Comp 9	Comp 11	Comp 13	HS Comp 2	HS Comp 4	HS Comp 6	HS Comp 6	HS Comp 8	HS Comp 10	HS Comp 12	HS Comp 14	HS Comp 16
	Sample Depth (ft.):							Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
	Sample Date:							2/21/2006	2/21/2006	2/21/2006	2/21/2006	2/22/2006	2/22/2006	2/22/2006	2/22/2006	2/21/2006	2/21/2006	2/21/2006	2/21/2006	2/21/2006	2/21/2006	2/22/2006	2/22/2006	2/22/2006
													Field Dup						Field Dup					
SVOCs/PAHs																								
	Dibenzofuran	10*	10*	NS	NS	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.057 U	0.150	0.240	NA	NA
	Acenaphthene	1,000	1,000	3,000	3,000	4	NA	0.34 U	NA	0.34 U	NA	NA	NA	NA	0.39	NA	NA	NA	NA	0.057 U	0.440	0.750	NA	NA
	Acenaphthylene	600	10	600	10	1	NA	1.4	NA	0.34 U	NA	NA	NA	NA	2.6	NA	NA	NA	NA	0.210	0.560	0.550	NA	NA
	Anthracene	1,000	1,000	3,000	3,000	1,000	NA	2.0	NA	0.34 U	NA	NA	NA	NA	4.8	NA	NA	NA	NA	0.280	1.7	1.8	NA	NA
	Benzo(a)anthracene	7	7	40	40	7	NA	4.4	NA	0.34 U	NA	NA	NA	NA	9.0	NA	NA	NA	NA	0.850	2.9	5.0	NA	NA
	Benzo(a)pyrene	2	2	4	4	2	NA	3.8	NA	0.34 U	NA	NA	NA	NA	4.3	NA	NA	NA	NA	0.820	2.2	4.2	NA	NA
	Benzo(b)fluoranthene	7	7	40	40	7	NA	4.4	NA	0.34 U	NA	NA	NA	NA	5.1	NA	NA	NA	NA	0.610	1.5	2.8	NA	NA
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	NA	2.4	NA	0.34 U	NA	NA	NA	NA	2.0	NA	NA	NA	NA	0.430	1.1	1.8	NA	NA
	Benzo(k)fluoranthene	70	70	400	400	70	NA	1.9	NA	0.34 U	NA	NA	NA	NA	1.6	NA	NA	NA	NA	0.920	2.3	4.2	NA	NA
	Chrysene	70	70	400	400	70	NA	4.0	NA	0.34 U	NA	NA	NA	NA	9.9	NA	NA	NA	NA	0.780	2.9	4.3	NA	NA
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	NA	0.57	NA	0.34 U	NA	NA	NA	NA	0.83	NA	NA	NA	NA	0.190	0.530	0.880	NA	NA
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	NA	10	NA	0.38	NA	NA	NA	NA	13	NA	NA	NA	NA	1.7	5.2	9.0	NA	NA
	Fluorene	1,000	1,000	3,000	3,000	1,000	NA	0.98	NA	0.34 U	NA	NA	NA	NA	1.2	NA	NA	NA	NA	0.066	0.750	0.630	NA	NA
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	NA	2.3	NA	0.34 U	NA	NA	NA	NA	2.0	NA	NA	NA	NA	0.420	0.920	1.9	NA	NA
	2-Methylnaphthalene	80	300	80	500	0.7	NA	0.47	NA	0.34 U	NA	NA	NA	NA	0.29	NA	NA	NA	NA	0.057 U	0.170	0.130	NA	NA
	Naphthalene	40	500	40	1,000	4	NA	0.89	NA	0.34 U	NA	NA	NA	NA	0.27 U	NA	NA	NA	NA	0.057 U	0.091	0.200	NA	NA
	Phenanthrene	500	500	1,000	1,000	10	NA	8.6	NA	0.34 U	NA	NA	NA	NA	18	NA	NA	NA	NA	0.950	6.5	6.2	NA	NA
	Pyrene	1,000	1,000	3,000	3,000	1,000	NA	8.5	NA	0.38	NA	NA	NA	NA	20	NA	NA	NA	NA	1.6	5.6	9.1	NA	NA
Pesticides																								
	4,4'-DDD	4	4	30	30	4	NA	0.029	NA	0.0022 U	NA	NA	NA	NA	0.0017 U	NA	NA	NA	NA	0.010 U	0.113	0.0126	NA	NA
	4,4'-DDE	3	3	20	20	3	NA	0.18	NA	0.0022 U	NA	NA	NA	NA	0.18	NA	NA	NA	NA	0.010 U	0.010 U	0.0483	NA	NA
	4,4'-DDT	3	3	20	20	3	NA	0.16	NA	0.0022 U	NA	NA	NA	NA	0.046	NA	NA	NA	NA	0.010 U	0.123	0.157	NA	NA
	Endosulfan sulfate	200*	20*	NS	NS	0.5	NA	0.1	NA	0.0022 U	NA	NA	NA	NA	0.0017 U	NA	NA	NA	NA	0.010 U	0.010 U	0.010 U	NA	NA
Herbicides																								
	Dinoseb	30*	7*	NS	NS	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.025 U	NA	0.025 U	NA	0.025 U	0.043	0.025 U	0.025 U	NA
Metals																								
	Arsenic	20	20	20	20	20	N/A	24.4	17.4	24.7	24.9	11.0	14.6	17.9	10.0	8.79	7.03	9.56	8.07	7.23	18	8.71	4.13	10
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	465	305	484	433	209	259	256	57.7	307	283	312	314	156	214	166	90	327
	Cadmium	2	2	30	30	2	N/A	1.68	1.13	0.845 U	0.892 U	1.10	2.5	2.70	0.645 U	42	0.87	0.79	1.03	1.26	2.10	2.60	0.46	1.03
	Chromium	30	30	200	200	30	N/A	47.8	21.3	34.7	37.1	19.5	20	33.5	10.4	19	7.59	8.55	10	9.82	15	12	7.73	11
	Lead	300	300	300	300	300	N/A	1,190	518	896	506	328	839	1,480	174	827	633	427	510	354	579	2,670	107	537
	Mercury	20	20	30	30	20	N/A	0.271	0.165	0.823	0.0669 U	0.367	0.52	0.454	0.0754	0.368	0.480	0.237	0.195	0.421	0.409	0.455	0.206	0.249
	Selenium	400	400	800	800	400	N/A	20 U	22.3 U	20.2 U	21.4 U	18.2 U	18.9 U	19.1 U	15.5 U	2.61	0.95	0.86	2.20	0.66	1.50	0.84	0.77 U	0.73
	Silver	100	100	200	200	100	N/A	2.83	2.6 U	2.86	2.5 U	2.13 U	2.21 U	2.62	1.81 U	0.37 U	0.40 U	0.36 U	1.25	0.33 U	0.37 U	0.35 U	0.38 U	0.37 U
DRO (mg/kg)	Diesel Range Organics	1,000	1,000	3,000	3,000	1,000	NA	3,800	NA	65 U	NA	NA	NA	NA	750	NA	NA	NA	NA	102	28	553	NA	NA
Metals, TCLP																								
	Cadmium, TCLP	NS	NS	NS	NS	NS	1,000[5]	NA	NA	NA	NA	NA	NA	NA	NA	60	NA	NA	NA	NA	NA	NA	NA	NA
	Lead, TCLP	NS	NS	NS	NS	NS	5,000[5]	360	1,300	5,300	250 U	2,400	410	1,500	250 U	1,800	1,000	400	600	400	30,000	1,900	100	500
Ignitability (Deg. F)	Ignitability	NS	NS	NS	NS	NS	NA	0	NA	0	NA	NA	NA	NA	0	NA	NA	NA	NA	0	0	0	NA	NA

Notes:
All units in mg/kg unless otherwise specified.
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
NA - Sample not analyzed for the listed analyte.
U - Compound was not detected at specified quantitation limit.
J - Estimated value; below quantitation limit.
B - Detected in associated laboratory method blank.
Values in **Bold** indicate the compound was detected.
Values shown in Bold and shaded type exceed one or more of the listed Method 1 standards or TCLP standard, as applicable.
Values shown in bold and outlined exceed TSCA standard.
VOCs - Volatile Organic Compounds.
SVOCs - Semivolatile Organic Compounds.
PAHs - Polynuclear Aromatic Hydrocarbons.
PCBs - Polychlorinated Biphenyls.
RC - Reportable Concentration.
TSCA - Toxic Substances Control Act criteria.
Data are based on the "Summary of Analytical Data, New Bedford High School" dated June 9, 2006, BETA Group, Inc.
(1) - MassDEP Method 1 standards and RC for C9-C10 aromatics used.
(2) - MassDEP RC for Dichloropropane used.
(3) - MassDEP RC for Dichloropropene used.
(4) - MassDEP RC for 1,3-Dichloropropene used.
(5) - SW-846 Chapter 7, Table 7-1, *Maximum Concentration of Contaminants for Toxicity Characteristic*.
* - TRC developed standards.

TABLE 4-12
Summary of Analytical Results for Dioxin Investigation Soil Samples
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte						Area Code:	5				6			4			4			8		
							Sample ID:	HB-26				HF-14			HF-31D			HF-40			HG-2		
							Sample Depth (ft.):	0-1	1-3	1-3	3-5	0-1	1-3	3-4	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	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			Field Dup													
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	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	0.39 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	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	0.39 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	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	0.39 U	1.2	0.78	1.2 U	0.20 U	0.18 U	0.93	0.19 U	1.1	0.45 U	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	0.73	3.9	2.4	1.2 U	0.20 U	0.21	2.4	0.19 U	1.5	0.68	0.19 U	5.8	7.0	0.20 U	10	0.48
	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	0.20	12	13	0.20 U	9.0	0.42 U
	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	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	0.53	1.1	0.75	1.2 U	0.20 U	0.18 U	0.74	0.19 U	0.49	0.45 U	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	0.39 U	1.7	1.2	1.2 U	0.20 U	0.18 U	1.2	0.19 U	0.68	0.45 U	0.19 U	3.3	4.1	0.20 U	1.7 U	0.42 U
	Chrysene	70	70	400	400	70	N/A	0.75	4.2	2.6	1.2 U	0.20 U	0.23	2.7	0.19 U	1.6	0.66	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	0.39 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	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	1.2	6.5	4.3	1.2 U	0.20 U	0.33	5.6	0.19 U	3.0	0.90	0.24	28	30	0.20 U	21	0.86
	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	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	0.54	1.4	0.98	1.2 U	0.20 U	0.18 U	0.97	0.19 U	0.67	0.45 U	0.19 U	8.4	7.9	0.20 U	5.7	0.42 U
	Naphthalene	40	500	40	1,000	4	N/A	0.39 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	0.19 U	20	17	0.20 U	1.7 U	0.42 U
	Phenanthrene	500	500	1,000	1,000	10	N/A	0.99	4.6	3.3	1.2 U	0.20 U	0.33	4.4	0.19 U	4.0	1.0	0.21	30	37	0.20 U	17	0.76
	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	0.28	21	27	0.30	14	0.55
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	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	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	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	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	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	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	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	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	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	0.47	0.63	0.87	0.70	0.26	0.54	0.13 U	0.23	0.73	0.13 U	0.33	8.0	12	0.12 U	4.2	4.0
	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	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	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	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	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	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	0.47	0.63	0.87	0.70	0.26	0.54	1.0	0.23	0.73	0.13 U	0.33	8.0	12	0.12 U	4.2	4.0
PCB Congeners (pg/g)	*Total PCBs (a)*	2.00E+06	2.00E+06	3.00E+06	3.00E+06	2.00E+06	1.00E+06	*4.65E+05*	*1.82E+06*	*6.47E+06*	*1.66E+07*	*1.81E+05*	*7.44E+05*	*1.15E+06*	*1.93E+05*	*7.44E+05*	*8.19E+04*	*2.67E+05*	*6.61E+04*	*9.79E+04*	*2.55E+05*	*4.90E+06*	*3.73E+06*
	Total PCBs (b)	2.00E+06	2.00E+06	3.00E+06	3.00E+06	2.00E+06	1.00E+06	*4.65E+05*	*1.82E+06*	*6.47E+06*	*1.66E+07*	*1.81E+05*	*7.44E+05*	*1.15E+06*	*1.93E+05*	*7.35E+05*	*8.19E+04*	*2.66E+05*	*6.61E+04*	*9.80E+04*	*2.55E+05*	*4.90E+06*	*3.73E+06*
	Dioxin-like PCB TEQs (ND=0 EMPC=EMPC)	20	20	50	50	20	N/A	*6.69*	*38.93*	*123.48*	*31.52*	*5.13*	*7.49*	*1.76*	*3.07*	*13.36*	*1.96*	*6.54*	*0.83*	*1.64*	*4.76*	*108.90*	*72.60*
	Dioxin-like PCB TEQs (ND=DL/2; EMPC=EMPC)	20	20	50	50	20	N/A	*6.74*	*39.11*	*124.20*	*35.52*	*5.17*	*7.56*	*4.45*	*3.09*	*13.43*	*1.99*	*6.58*	*0.84*	*1.65*	*4.80*	*109.39*	*72.81*
Dioxins (pg/g)	*TEQs (ND=0; EMPC=EMPC)*	20	20	50	50	20	N/A	*42.84*	*181.29*	*145.49*	*143.04*	*10.45*	*15.78*	*147.57*	*13.64*	*26.64*	*20.09*	*11.83*	*50.57*	*179.81*	*19.05*	*191.22*	*148.38*
	TEQs (ND=DL/2; EMPC=EMPC)	20	20	50	50	20	N/A	*42.87*	*181.34*	*145.52*	*143.08*	*10.55*	*15.89*	*147.58*	*13.66*	*26.66*	*20.11*	*12.02*	*50.59*	*179.82*	*19.07*	*191.49*	*148.40*
TEQ Summation** (pg/g)	*TEQs (ND=0; EMPC=EMPC)*	20	20	50	50	20	N/A	*49.53*	*220.22*	*268.97*	*174.56*	*15.57*	*23.27*	*149.33*	*16.70*	*39.99*	*22.05*	*18.37*	*51.39*	*181.45*	*23.82*	*300.12*	*220.98*
	TEQs (ND=DL/2; EMPC=EMPC)	20	20	50	50	20	N/A	*49.61*	*220.45*	*269.72*	*178.60*	*15.72*	*23.45*	*152.02*	*16.75*	*40.09*	*22.09*	*18.59*	*51.43*	*181.47*	*23.87*	*300.88*	*221.21*
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	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	3.6	23	22	9.1	3.0 U	2.7 U	14	2.7 U	3.0	8.8	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	180	900	1,000	540	61	160	4,400	70	96	380	22	130	560	56	810	190
	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	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	0.77	3.5	3.7	11	0.31	0.35	1.5	0.35	0.82	0.69	0.29	1.1	3.7	1.1	2.7	2.7
	Chromium	30	30	200	200	30	N/A	16	75	69	46	79	16	480	24	9.8	20	4.9	10	33	11	97	47
	Lead	300	300	300	300	300	N/A	230	1,100	1,300	4,300	41	58	800	100	170	480	87	280	770	220	1,900	320
	Nickel	20	20	700	700	20	N/A	11	54	39	31	6.0	4.0	49	6.0	8.2	43	3.4	5.8	21	7.3	29	25
	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	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	0.58 U	0.90	0.64 U	75	0.60 U	0.53 U	0.67 U	0.55 U	0.54 U	1.2	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	3.5 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	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	21	36	41	28	37	14	210	13	8.5	32	8.0	6.4	19	12	60	28
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	210	980	1,200	410	44	32	360	76	130	220	41	150	580	77	580	340
	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	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).
pg/g - picograms per gram (dry weight).
EMPC - Estimate Maximum Possible Concentration.
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.
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.
TEQs - Toxic Equivalents of dioxins/furans; PCB Congeners TEQs calculated using 2005 WHO Toxicity Equivalency Factors (TEFs).
Dioxins TEQs calculated using 1991 MassDEP Derived Toxicity Equivalency Factors (TEFs).
(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.

TABLE 4-13
Summary of Analytical Results for Dioxin Investigation Soil Sample HB-2 (5-7)
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[a]	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-Trichlorobeazene	70	500	70	900	2	N/A	0.33 U
	1,2,4-Trimethylbenzene	100[a]	100[a]	500[a]	500[a]	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[a]	100[a]	500[a]	500[a]	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[a]	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[a]	9[a]	0.4[a]	70[a]	0.01[a]	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[a]	100[a]	500[a]	500[a]	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[a]	100[a]	500[a]	500[a]	100[a]	N/A	0.17 U
	n-Propylbenzene	100[a]	100[a]	500[a]	500[a]	100	N/A	0.084 U
	o-Xylene	300	500	300	1,000	300	N/A	0.084 U
	p-Isopropyltoluene (p-Cymene)	100[a]	100[a]	500[a]	500[a]	100[a]	N/A	1.2
	sec-Butylbenzene	100[a]	100[a]	500[a]	500[a]	100[a]	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[a]	100[a]	500[a]	500[a]	100[a]	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[a]	9[a]	0.4[a]	70[a]	0.01[a]	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

TABLE 4-13
Summary of Analytical Results for Dioxin Investigation Soil Sample HB-2 (5-7)
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	
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**
SVOCs/PAHs								
(mg/kg)	2-Methylnaphthalene	80	300	80	500	0.7	N/A	0.42 U
	Acenaphthene	1,000	1,000	3,000	3,000	4	N/A	0.42 U
	Acenaphthylene	600	10	600	10	1	N/A	0.42 U
	Anthracene	1,000	1,000	3,000	3,000	1,000	N/A	0.42 U
	Benzo(a)anthracene	7	7	40	40	7	N/A	**0.48**
	Benzo(a)pyrene	2	2	4	4	2	N/A	0.42 U
	Benzo(b)fluoranthene	7	7	40	40	7	N/A	**0.55**
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	N/A	0.42 U
	Benzo(k)fluoranthene	70	70	400	400	70	N/A	0.42 U
	Chrysene	70	70	400	400	70	N/A	**0.49**
	Dibenz(a,h)anthracene	0.7	0.7	4	4	0.7	N/A	0.42 U
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	N/A	**0.86**
	Fluorene	1,000	1,000	3,000	3,000	1,000	N/A	0.42 U
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	N/A	0.42 U
	Naphthalene	40	500	40	1,000	4	N/A	0.42 U
	Phenanthrene	500	500	1,000	1,000	10	N/A	**0.76**
	Pyrene	1,000	1,000	3,000	3,000	1,000	N/A	**0.55**
PCBs								
(mg/kg)	Aroclor-1016	2	2	3	3	2	1	0.49 U
	Aroclor-1221	2	2	3	3	2	1	0.49 U
	Aroclor-1232	2	2	3	3	2	1	0.49 U
	Aroclor-1242	2	2	3	3	2	1	0.49 U
	Aroclor-1248	2	2	3	3	2	1	0.49 U
	Aroclor-1254	2	2	3	3	2	1	4.0
	Aroclor-1260	2	2	3	3	2	1	0.49 U
	Aroclor-1262	2	2	3	3	2	1	0.49 U
	Aroclor-1268	2	2	3	3	2	1	0.49 U
	Total PCBs	2	2	3	3	2	1	4.0
Metals								
(mg/kg)	Antimony	20	20	30	30	20	N/A	4.9 U
	Arsenic	20	20	20	20	20	N/A	**3.3**
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	**190**
	Beryllium	100	100	200	200	100	N/A	0.31 U
	Cadmium	2	2	30	30	2	N/A	2.7
	Chromium	30	30	200	200	30	N/A	47
	Lead	300	300	300	300	300	N/A	320
	Nickel	20	20	700	700	20	N/A	25
	Selenium	400	400	800	800	400	N/A	6.2 U
	Silver	100	100	200	200	100	N/A	0.62 U
	Thallium	8	8	60	60	8	N/A	3.7 U
	Vanadium	600	600	1,000	1,000	600	N/A	**28**
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	**340**
	Mercury	20	20	30	30	20	N/A	**0.15**

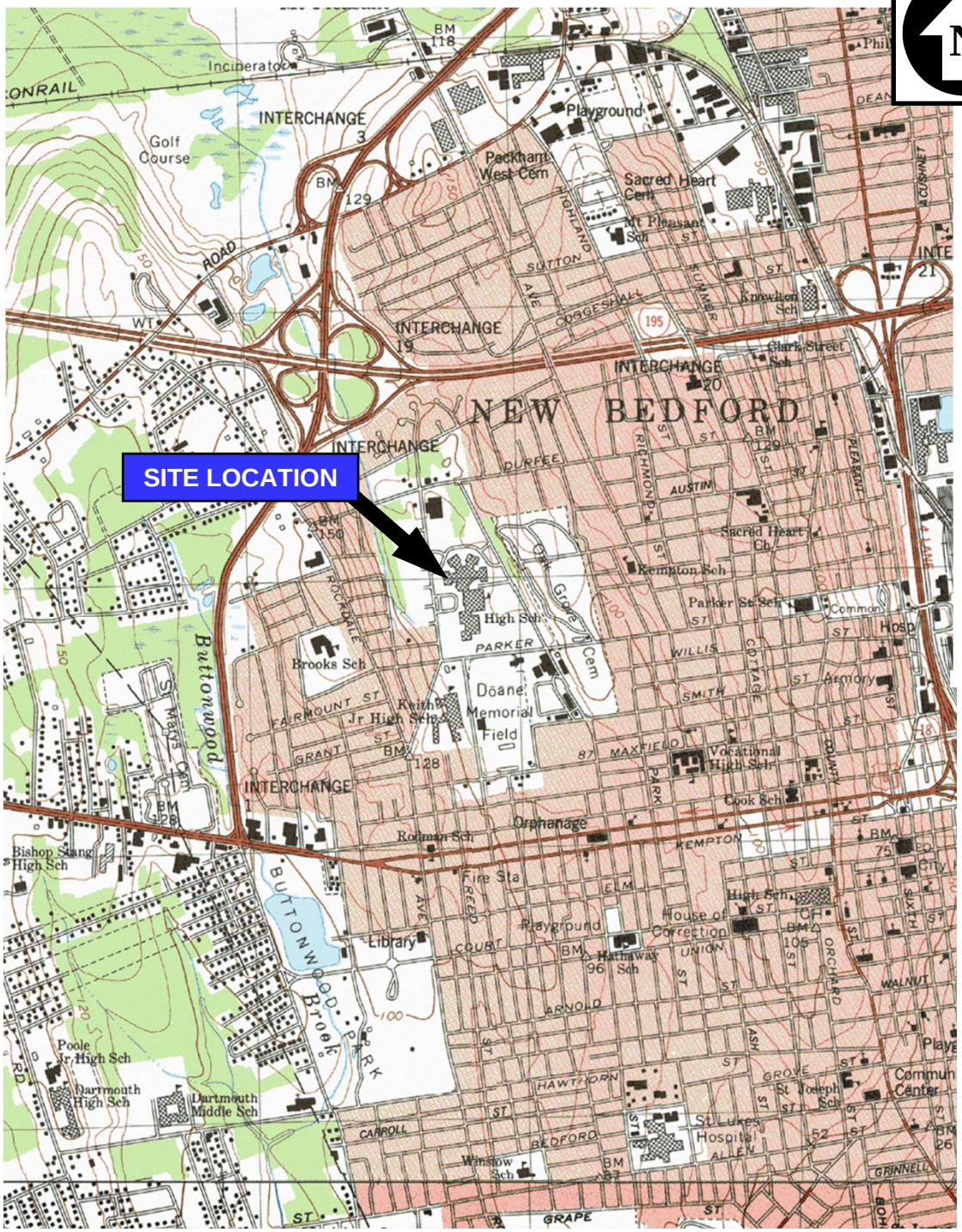
Notes:
mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).
NA - Sample not analyzed for the listed analyte.
N/A - Not applicable.
NS - No MassDEP standards exist for this analyte.
U - Compound was not detected at specified quantitation limit.
Values in Bold indicate the compound 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.

TABLE 4-14
Summary of Analytical Results for Groundwater Samples - 2008 and 2009
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte		Sample ID:	MW-4		MW-5	MW-6	MW-7	MW-8B	MW-HH-13		MW-HRC-33	
			Sample Date:	8/19/2008	8/19/2008	8/19/2008	8/19/2008	9/16/2008	9/16/2008	4/23/2009	4/23/2009	4/23/2009	4/23/2009
		GW-2	GW-3		Field Dup						Field Dup		Field Dup
PAHs													
(ug/L)	Acenaphthene	NS	6,000	0.30 U	0.30 U	0.30 U	0.30 U	5.0 U	5.0 U	0.30 U	0.30 U	0.30 U	NA
	Acenaphthylene	10,000	40	0.30 U	0.30 U	0.30 U	0.30 U	5.0 U	5.0 U	0.30 U	0.30 U	0.30 U	NA
	Anthracene	NS	30	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	NA
	Benzo(a)anthracene	NS	1,000	0.05 U	0.05 U	0.05 U	0.05 U	5.0 U	5.0 U	0.05 U	0.05 U	0.05 U	NA
	Benzo(a)pyrene	NS	500	0.10 U	0.10 U	0.10 U	0.10 U	5.0 U	5.0 U	0.10 U	0.10 U	0.10 U	NA
	Benzo(b)fluoranthene	NS	400	0.05 U	0.05 U	0.05 U	0.05 U	5.0 U	5.0 U	0.05 U	0.05 U	0.05 U	NA
	Benzo(g,h,i)perylene	NS	20	0.50 U	0.50 U	0.50 U	0.50 U	5.0 U	5.0 U	0.50 U	0.50 U	0.50 U	NA
	Benzo(k)fluoranthene	NS	100	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	NA
	Chrysene	NS	70	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	NA
	Dibenz(a,h)anthracene	NS	40	0.50 U	0.50 U	0.50 U	0.50 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	NA
	Fluoranthene	NS	200	0.50 U	0.50 U	0.50 U	0.50 U	5.0 U	5.0 U	0.50 U	0.50 U	0.50 U	NA
	Fluorene	NS	40	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	NA
	Indeno(1,2,3-cd)pyrene	NS	100	0.50 U	0.50 U	0.50 U	0.50 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	NA
	2-Methylnaphthalene	2,000	20,000	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	NA
	Naphthalene	1,000	20,000	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	NA
	Phenanthrene	NS	10,000	0.05 U	0.05 U	**0.18**	**0.09**	5.0 U	5.0 U	0.05 U	0.05 U	0.05 U	NA
	Pyrene	NS	20	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	NA
PCBs													
(ug/L)	Aroclor 1016	5	10	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.050 U	NA	0.050 U	0.050 U
	Aroclor 1221	5	10	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.050 U	NA	0.050 U	0.050 U
	Aroclor 1232	5	10	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.050 U	NA	0.050 U	0.050 U
	Aroclor 1242	5	10	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.050 U	NA	0.050 U	0.050 U
	Aroclor 1248	5	10	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.050 U	NA	0.050 U	0.050 U
	Aroclor 1254	5	10	0.0500 U	0.0500 U	**0.0731 J**	0.0500 U	0.0500 U	0.0500 U	0.050 U	NA	0.050 U	0.050 U
	Aroclor 1260	5	10	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.050 U	NA	0.050 U	0.050 U
	Aroclor 1262	5	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aroclor 1268	5	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	5	10	0.0500 U	0.0500 U	**0.0731 J**	0.0500 U	0.0500 U	0.0500 U	0.050 U	NA	0.050 U	0.050 U
Metals, total													
(ug/L)	Antimony	NS	8,000	3.0 U	3.0 U	3.0 U	3.0 U	5.0 U	5.0 U	40.0 U	40.0 U	40.0 U	NA
	Arsenic	NS	900	**7.0**	5.0 U	**15.0**	**13.0**	2.0 U	2.0 U	5.0 U	5.0 U	5.0 U	NA
	Barium	NS	50,000	50 U	50 U	**122**	50 U	**254**	250 U	**5,570**	**5,710**	**157**	NA
	Beryllium	NS	200	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	NA
	Cadmium	NS	4	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	NA
	Chromium	NS	300	5.0 U	5.0 U	**52.0**	5.0 U	50 U	50 U	5.0 U	5.0 U	5.0 U	NA
	Lead	NS	10	7.5 U	7.5 U	**19.2**	7.5 U	5.0 U	5.0 U	7.5 U	7.5 U	**10.5**	NA
	Mercury	NS	20	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	NA
	Nickel	NS	200	5.0 U	5.0 U	**20.0**	5.0 U	**29.4**	25 U	5.0 U	5.0 U	5.0 U	NA
	Selenium	NS	100	30 U	30 U	30 U	30 U	25 U	25 U	30.0 U	30.0 U	30.0 U	NA
	Silver	NS	7	3.0 U	3.0 U	**5.0**	**3.0**	2.5 U	2.5 U	3.0 U	3.0 U	3.0 U	NA
	Thallium	NS	3,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.29**	30.0 U	30.0 U	30.0 U	NA
	Vanadium	NS	4,000	25 U	25 U	25 U	25 U	25 U	25 U	25.0 U	25.0 U	25.0 U	NA
	Zinc	NS	900	**12.0**	**16.0**	**68.0**	**110**	**894**	100 U	**17.0**	**20.0**	**300**	NA
Metals, dissolved													
(ug/L)	Antimony	NS	8,000	3.0 U	3.0 U	3.0 U	3.0 U	5.0 U	5.0 U	40.0 U	40.0 U	40.0 U	NA
	Arsenic	NS	900	10 U	10 U	**10**	**10**	**2.41**	2.0 U	5.0 U	5.0 U	5.0 U	NA
	Barium	NS	50,000	50 U	50 U	**64.9**	50 U	250 U	250 U	**5,340**	**5,490**	**141**	NA
	Beryllium	NS	200	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	NA
	Cadmium	NS	4	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	NA
	Chromium	NS	300	5.0 U	5.0 U	5.0 U	5.0 U	50 U	50 U	5.0 U	5.0 U	5.0 U	NA
	Lead	NS	10	8.0 U	8.0 U	8.0 U	8.0 U	5.0 U	5.0 U	7.5 U	7.5 U	7.5 U	NA
	Mercury	NS	20	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	NA
	Nickel	NS	200	5.0 U	5.0 U	5.0 U	5.0 U	**27.7**	25 U	5.0 U	5.0 U	5.0 U	NA
	Selenium	NS	100	30 U	30 U	30 U	30 U	25 U	25 U	30.0 U	30.0 U	30.0 U	NA
	Silver	NS	7	2.5 U	2.5 U	2.5 U	**2.6**	2.5 U	2.5 U	3.0 U	3.0 U	3.0 U	NA
	Thallium	NS	3,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	30.0 U	30.0 U	30.0 U	NA
	Vanadium	NS	4,000	50 U	50 U	50 U	50 U	25 U	25 U	25.0 U	25.0 U	25.0 U	NA
	Zinc	NS	900	**11**	**119**	**10**	10 U	**870**	100 U	**14.0**	**15.0**	**270**	NA

Notes:
All units in ug/L unless otherwise specified.
ug/L - micrograms per liter.
J - Estimated value.
NA - Sample not analyzed for the listed analyte.
NS - No MassDEP GW-2 standards exist for this compound.
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 MCP Method 1 standards.
VOCs - Volatile Organic Compounds.
EPH - Extractable Petroleum Hydrocarbons.
PAHs - Polynuclear Aromatic Hydrocarbons.
PCBs - Polychlorinated Biphenyls.
(1) - MassDEP Method 1 standardsfor C9-C10 aromatic hydrocarbons used.
(2) - MassDEP Method 1 standards for 1,3-Dichloropropene used.

FIGURES



BASE MAP IS A PORTION OF THE FOLLOWING 7.5' X 15' USGS TOPOGRAPHIC QUADRANGLES: NEW BEDFORD NORTH, MA, 1979; NEW BEDFORD SOUTH, MA 1977

0 1000 2000 3000

scale in feet

QUADRANGLE LOCATION

T:\E_CAD\115058\TOPO NBHS.ppt

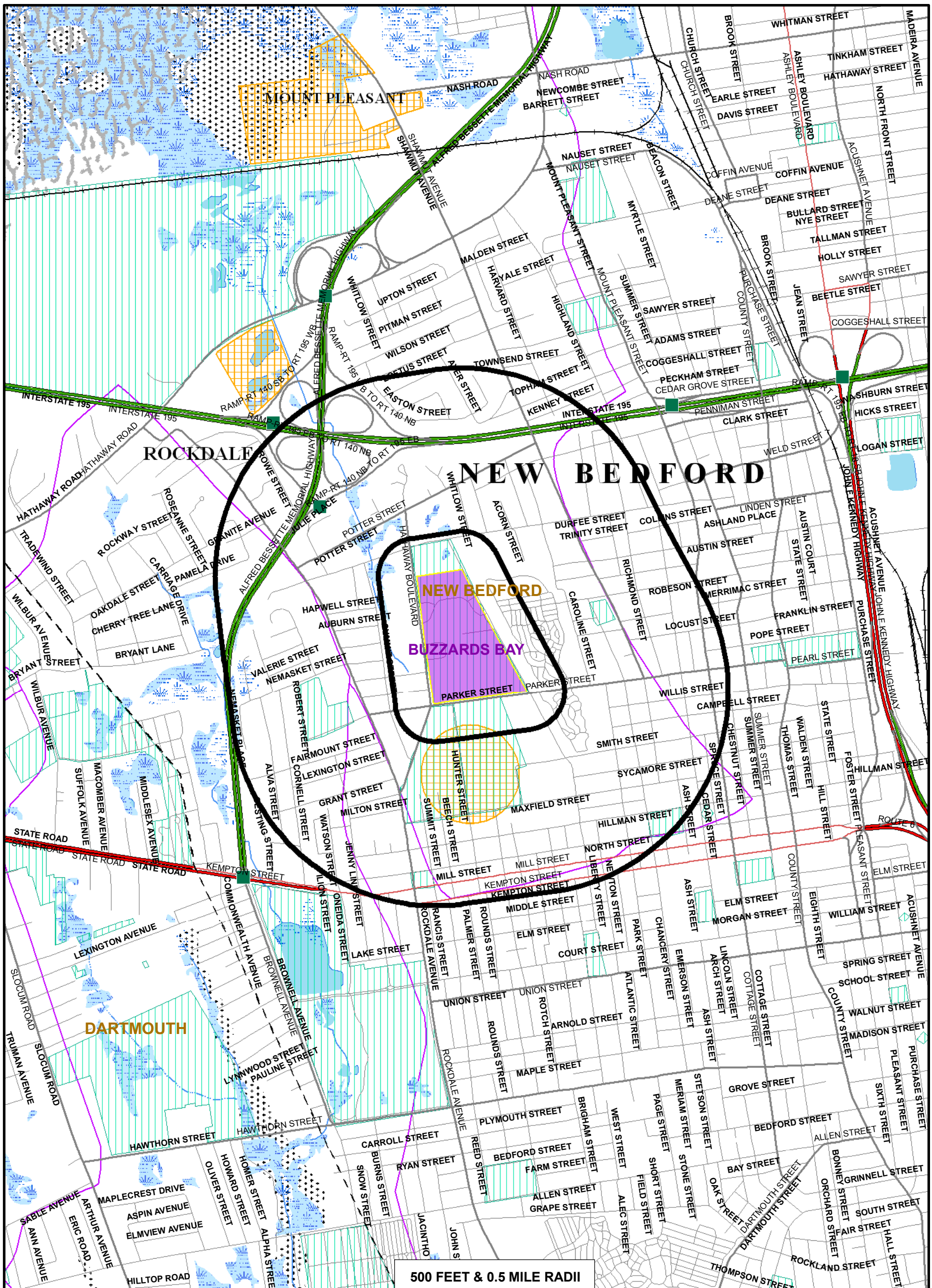
NEW BEDFORD HIGH SCHOOL
NEW BEDFORD, MASSACHUSETTS

SITE LOCATION MAP

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

Drawn: HWB	SCALE : AS SHOWN
Checked: DS	Date: DEC 2010

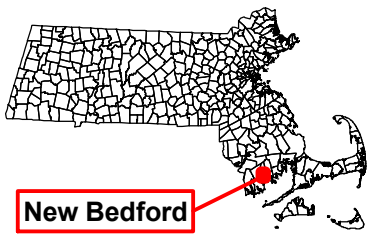
FIGURE 1-1



Roads: Limited Access, Multi-Lane, Major/Minor, Track, Trail
Railroad, Pipline, Powerline
Major Basin, Sub Basin, Perennial Stream, Intermittent Stream, Shoreline, Man made Shrore, Dam, Aqueduct
Wetland, Salt Wetland, Submerged Wetland, Open Water, Reservoir, Tidal Flat/Shoal
Potentially Productive Aquifers: Medium, High Yield
Non-Potential Drinking Water Source Area: Medium, High Yield
EPA Sole Source Aquifer, FEMA 100 Yr. Floodplain, DEP Solid Waste Facility
Approved Zone II, IWPA, Surface Water Supply Zone A
Protected Open Space, ACEC
Estimated Habitat 2007, Certified Vernal Pool 2008
Boundaries: County and Town
Public Water Supplies: Ground, Surface, Non-Community (NTNC, TNC)

Source: MassGIS/EOEA

MASSACHUSETTS



SITE LOCATION

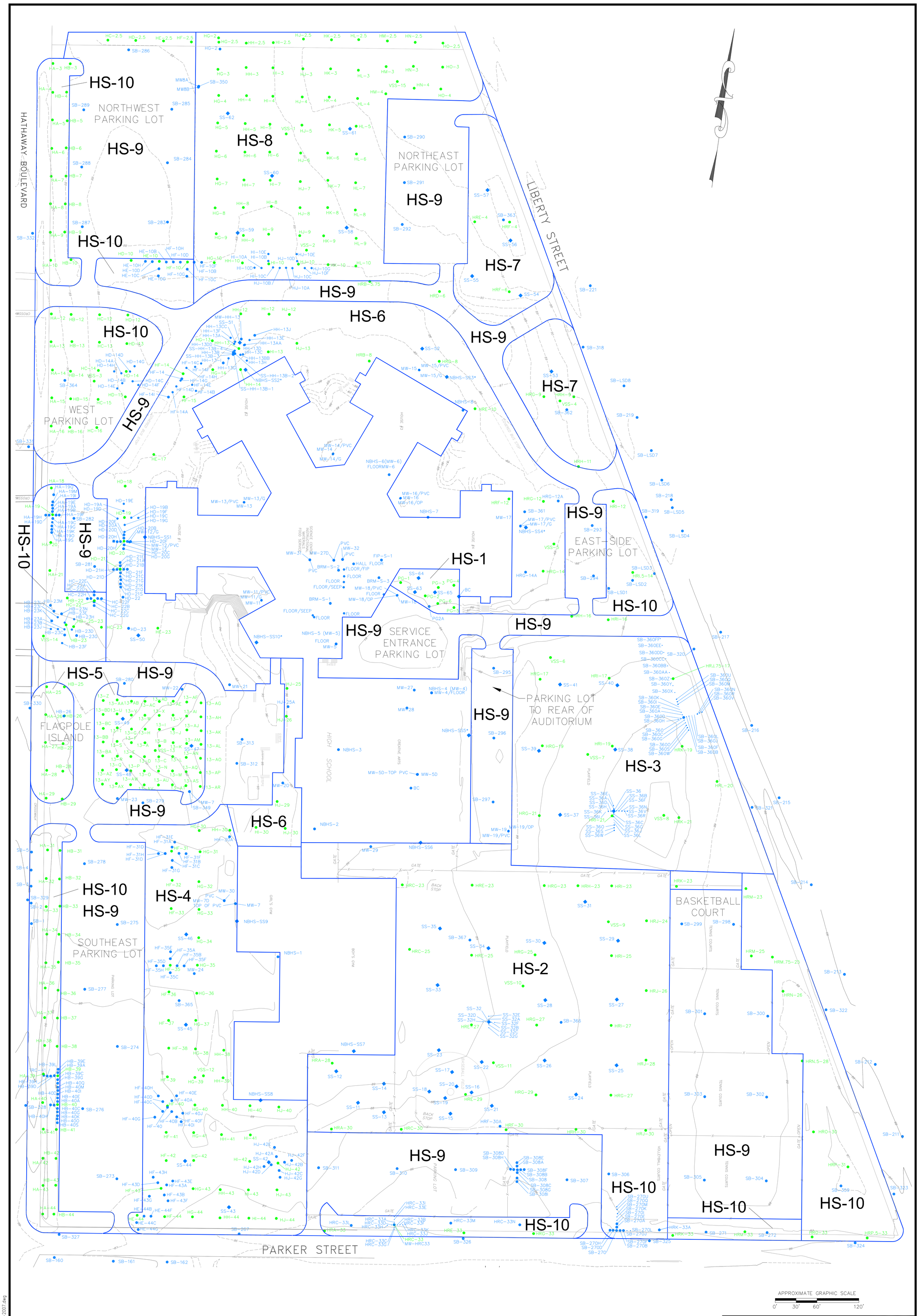
TRC
Wannalancit Mills
650 Suffolk Street
Lowell, MA 01854
978-970-5600

FIGURE 2-1

MA DEP PRIORITY RESOURCE MAP

NEW BEDFORD, MA

0 500 1,000 1,500
Feet



NOTES:

1. MAP PREPARED BASED ON DRAWINGS AND SURVEY DATA PROVIDED BY LAND PLANNING, INC. OF HANSON, MASSACHUSETTS.

2. ALL TRC SAMPLING LOCATIONS SURVEYED BY LAND PLANNING, INC. OF HANSON, MASSACHUSETTS.

3. BETA SAMPLE LOCATIONS ARE APPROXIMATE AND BASED ON THE FIGURE PROVIDED IN THE JUNE 9, 2006 "SUMMARY OF ANALYTICAL DATA, NEW BEDFORD HIGH SCHOOL, NEW BEDFORD, MASSACHUSETTS" BY BETA GROUP, INC. OF NORWOOD, MASSACHUSETTS.

LEGEND:

- TRC SAMPLE LOCATIONS
- VHB/BETA SAMPLE LOCATIONS
- HS-9 EXPOSURE POINT AREA/DESIGNATION

NEW BEDFORD HIGH SCHOOL

NEW BEDFORD, MASSACHUSETTS

NEW BEDFORD HIGH SCHOOL
EXPOSURE POINT AREAS AND SAMPLE LOCATION MAP

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

FIGURE 2-2

DRAWN BY: HWB
CHECKED BY: DNP
DATE: DEC 2010

FILE: T:\E_CAD\115058\NBHS EXP PNTS SAMP 12-10-2007.dwg

BASEMAP: 2007 Aerialphoto

Groundwater Elevation Contour (Feet MSL); dashed where inferred

Monitoring Wells

NOTES: Based on March 13, 2009 groundwater elevation survey. Water table elevations are expressed in feet above mean sea level (AMSC).

N W E S

1 inch = 230 feet 1 inch = 70.10414 meters

90 0 90 Meters

300 200 100 0 300 Feet

Massachusetts

Site Location

New Bedford

TRC

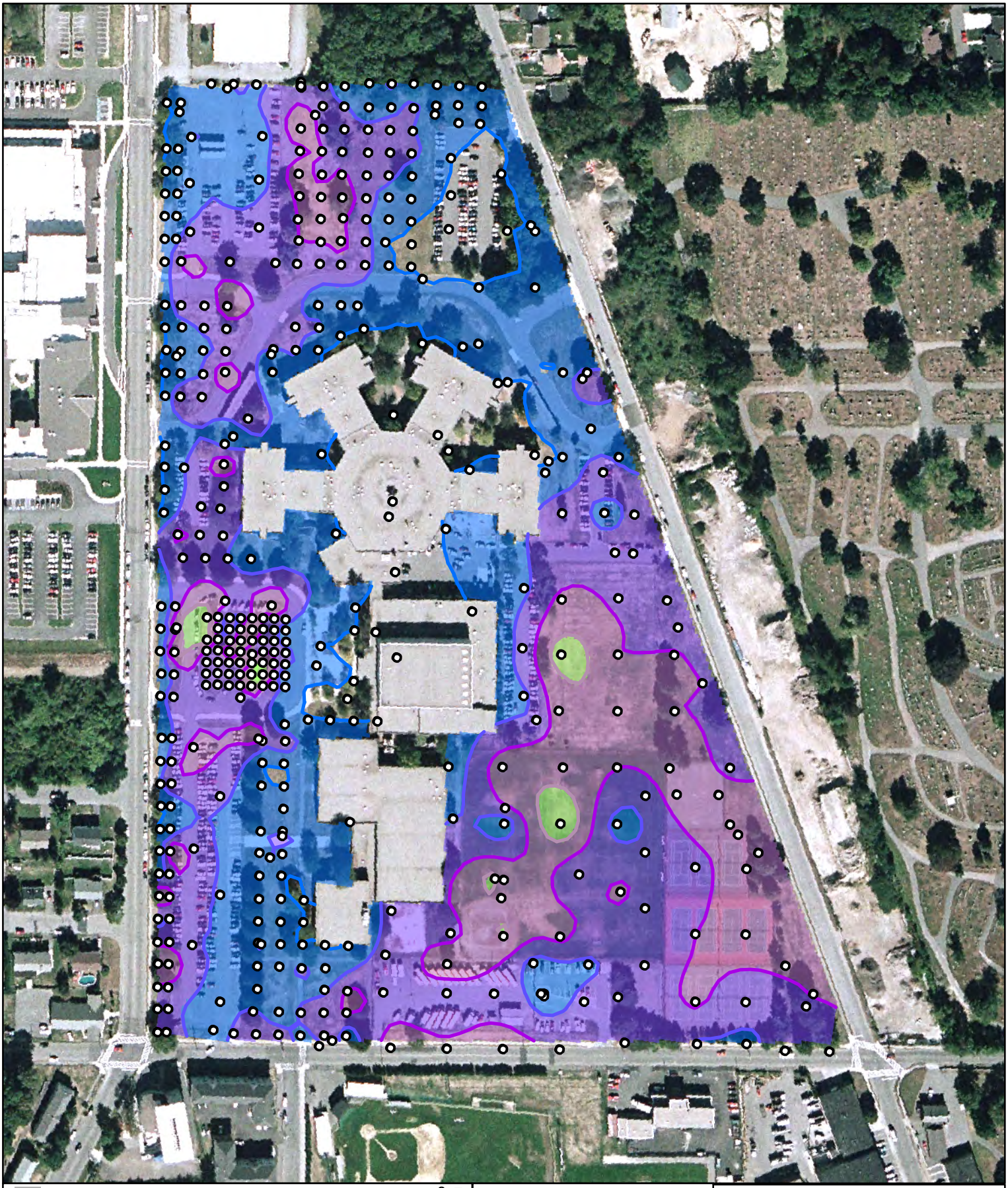
650 Suffolk St.
Wannalancit Mills
Lowell, MA 01854

FIGURE 3-1

NEW BEDFORD HIGH SCHOOL
MARCH 13 2009 GROUNDWATER
ELEVATION MAP (FEET MSL)

NEW BEDFORD, MASSACHUSETTS

R:\Projects\GIS_2007\54634_NBedford\working_for_the_ninth\GW_ELEV_mapping6mxd.mxd



Sampling Locations

Fill Thickness Contours (in Feet)

0 2 4 6 8

0-2 2-4 4-6 6-8

0 50 100 150 200 250 Feet

Massachusetts

Site Location

New Bedford

TRC

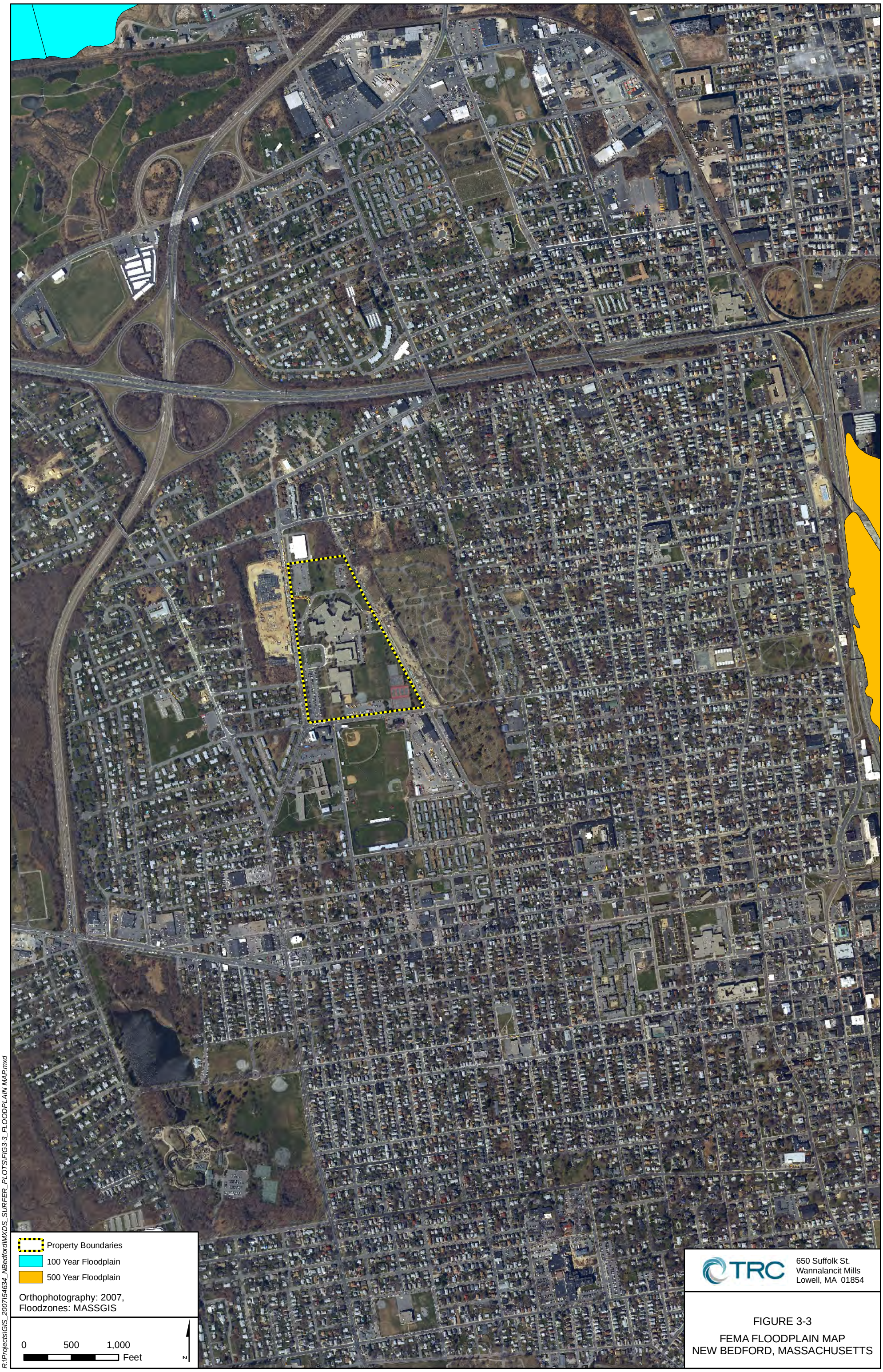
650 Suffolk St.
Wannalancit Mills
Lowell, MA 01854

FIGURE3-2

FILL THICKNESS MAP

NEW BEDFORD, MASSACHUSETTS

R:\Projects\GIS_2007\54634_NBedford\MXDS_SURFER_PLOTS\School_Area_Fill_Thickness_121310.mxd

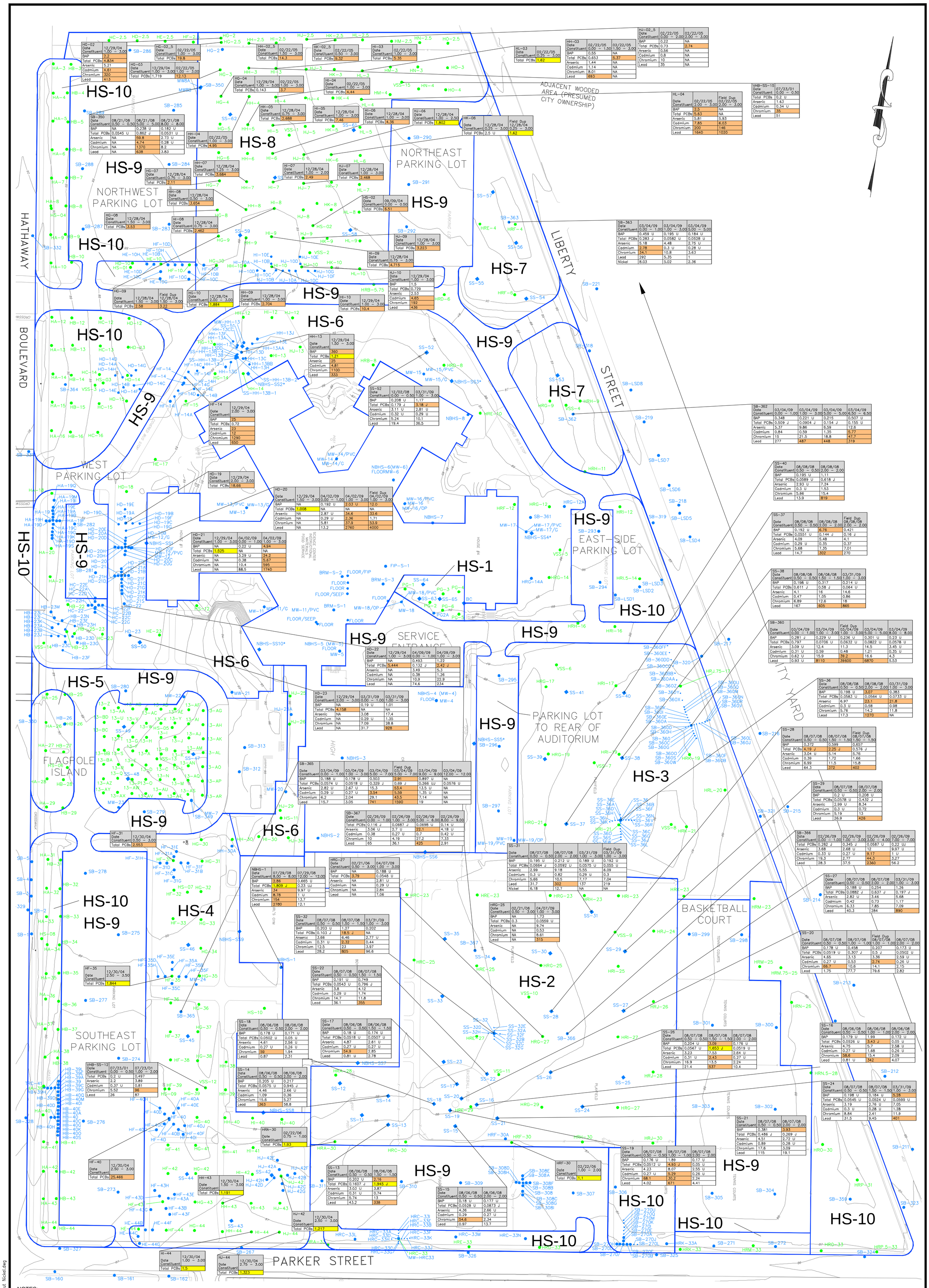


TRC
650 Suffolk St.
Wannalancit Mills
Lowell, MA 01854

FIGURE 3-3

FEMA FLOODPLAIN MAP
NEW BEDFORD, MASSACHUSETTS

R:\Projects\GIS_2007\54634_NBedford\MXDS_SURFER_PLOTS\FIG3-3_FLOODPLAIN MAP.mxd



NOTES:

1. MAP PREPARED BASED ON DRAWINGS AND SURVEY DATA PROVIDED BY LAND PLANNING, INC. OF HANSON, MASSACHUSETTS.

2. ALL TRC SAMPLING LOCATIONS SURVEYED BY LAND PLANNING, INC. OF HANSON, MASSACHUSETTS.

3. BETA SAMPLE LOCATIONS ARE APPROXIMATE AND BASED ON THE FIGURE PROVIDED IN THE JUNE 9, 2006 "SUMMARY OF ANALYTICAL DATA, NEW BEDFORD HIGH SCHOOL, NEW BEDFORD, MASSACHUSETTS" BY BETA GROUP, INC. OF NORWOOD, MASSACHUSETTS.

LEGEND:

- TRC SAMPLE LOCATIONS
- VHB/BETA SAMPLE LOCATIONS
- HS-9 — EXPOSURE POINT AREA/DESIGNATION

Summary of Regulatory Comparison Criteria for Soil (mg/kg)

Contaminant Names	S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RCS-1	TSCA
Benzo(a)pyrene (BAP)	2	2	4	4	2	N/A
Total PCBs	2	2	3	3	2	1
Arsenic	20	20	20	20	20	N/A
Cadmium	2	2	30	30	2	N/A
Chromium	30	30	200	200	30	N/A
Lead	300	300	300	300	300	N/A

NOTES:
1. ALL UNITS IN MG/KG UNLESS OTHERWISE SPECIFIED.
2. RESULTS PROVIDED ARE FOR REPRESENTATIVE PARAMETER CONCENTRATIONS ABOVE SOIL CLEANUP STANDARDS (FOR INVESTIGATIVE SAMPLES ONLY).

MG/KG - MILLIGRAMS PER KILOGRAM (DRY WEIGHT).
J - ESTIMATED VALUE.
NA - SAMPLE NOT ANALYZED FOR THE LISTED ANALYTE.
N/A - NOT APPLICABLE.
PCBS - POLYCHLORINATED BIPHENYLS.
RC - REPORTABLE CONCENTRATION.
TSCA - TOXIC SUBSTANCES CONTROL ACT.
U - COMPOUND WAS NOT DETECTED AT SPECIFIED QUANTITATION LIMIT.
UJ - ESTIMATED NON-DETECT.

VALUES SHOWN IN PEACH BACKGROUND EXCEED ONE OR MORE OF THE LISTED MASSDEP METHOD 1 STANDARDS.

VALUES SHOWN IN YELLOW BACKGROUND EXCEED TSCA BUT ARE LESS THAN THE LISTED MASSDEP METHOD 1 STANDARDS AND RC.

SAMPLE LOCATION
SAMPLE DATE

SB-308 Date Constituent	07/23/08 3.50 – 3.50	07/23/08 6.00 – 6.00
BAP	564	0.698 U
Total PCBs	0.105 U	0.192 UJ
Arsenic	15	10.5 U
Cadmium	0.49	1.05 U
Chromium	5.15	2.1 U
Lead	503	5.22

CONTAMINANT NAME /ABBREVIATION

SAMPLE DEPTH (DEPTH RANGE) IN FEET

APPROXIMATE GRAPHIC SCALE
0' 30' 60' 120'

NEW BEDFORD HIGH SCHOOL

NEW BEDFORD, MASSACHUSETTS

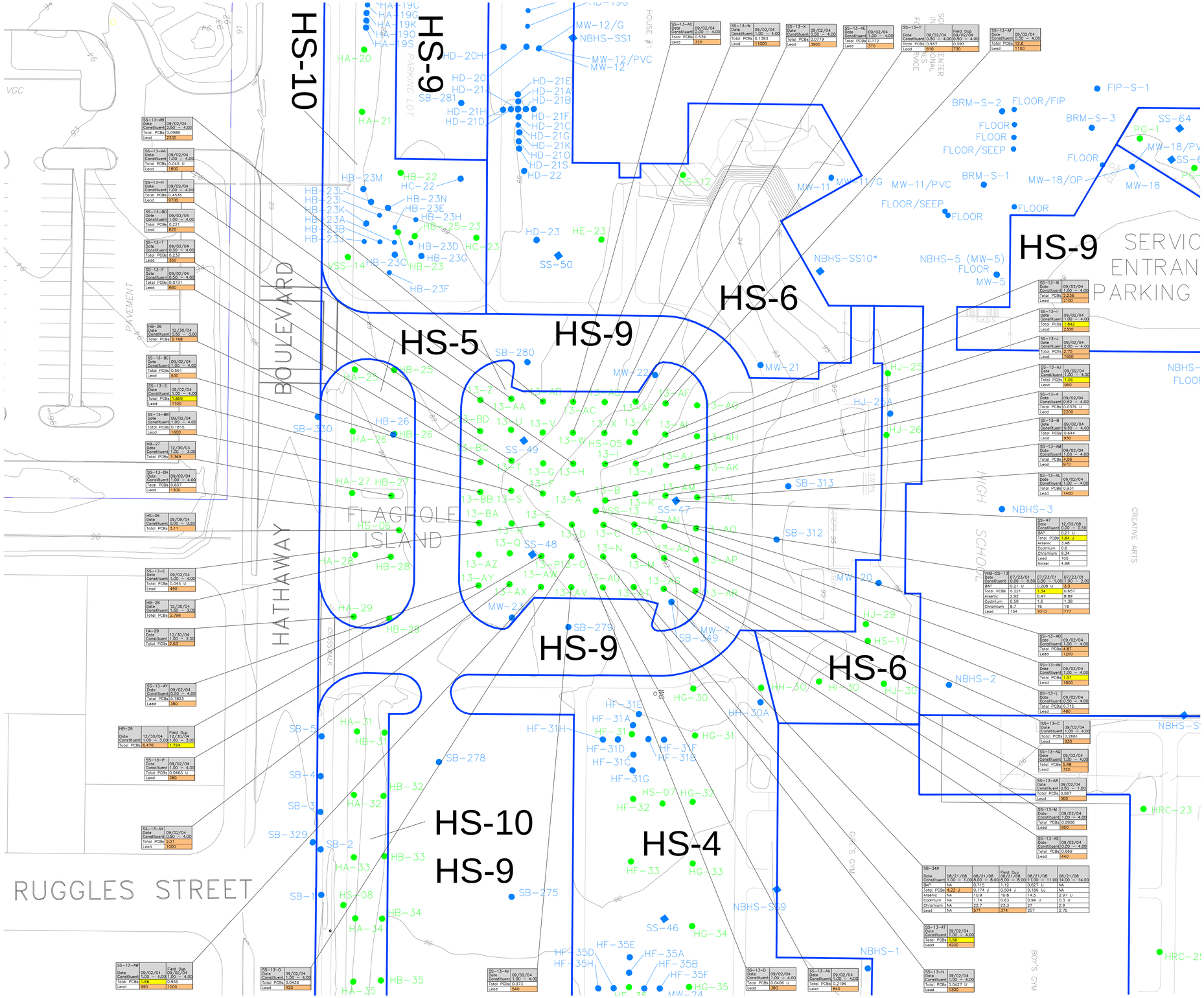
SOIL RESULTS SUMMARY MAP
(EXPOSURE POINT 1, 2, 3, 4, 6, 7, 8)

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

FIGURE 4-1

DRAWN BY: PZ
CHECKED BY: DNP
DATE: DEC 2010

FILE: Q:\GEOSC\GISKEY\Projects\NewBedford\NBHS RAM PLAN-Results_without Nickel.dwg



LEGEND:

- TRC SAMPLE LOCATIONS
- VHB/BETA SAMPLE LOCATIONS
- HS-9 EXPOSURE POINT AREA/DESIGNATION

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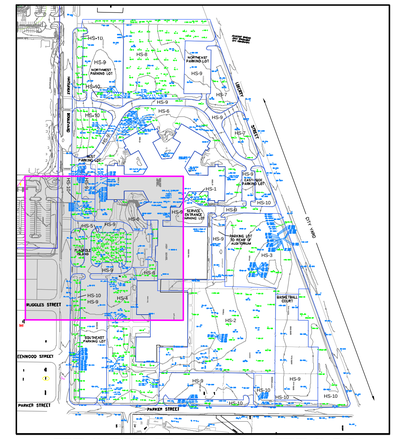

FIGURE LOCATION

Summary of Regulatory Comparison Criteria for Soil (mg/kg)						
Contaminant Names	S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RCS-1	TSCA
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Total PCBs	2	2	3	3	2	1
Arsenic	20	20	20	20	20	N/A
Cadmium	2	2	30	30	2	N/A
Chromium	30	30	200	200	30	N/A
Lead	300	300	300	300	300	N/A

NOTES:
1. ALL UNITS IN MG/KG UNLESS OTHERWISE SPECIFIED.
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SB-308		
Date	07/23/08	07/23/08
Constituent	3.50 – 3.50	6.00 – 6.00
BAP	564	0.698 U
Total PCBs	0.105 U	0.192 UJ
Arsenic	15	10.5 U
Cadmium	0.49	1.05 U
Chromium	5.15	2.1 U
Lead	503	5.22

SAMPLE LOCATION
SAMPLE DATE
CONTAMINANT NAME /ABBREVIATION
SAMPLE DEPTH (DEPTH RANGE) IN FEET

APPROXIMATE GRAPHIC SCALE
0' 10' 20' 30' 60'

NEW BEDFORD HIGH SCHOOL
NEW BEDFORD, MASSACHUSETTS

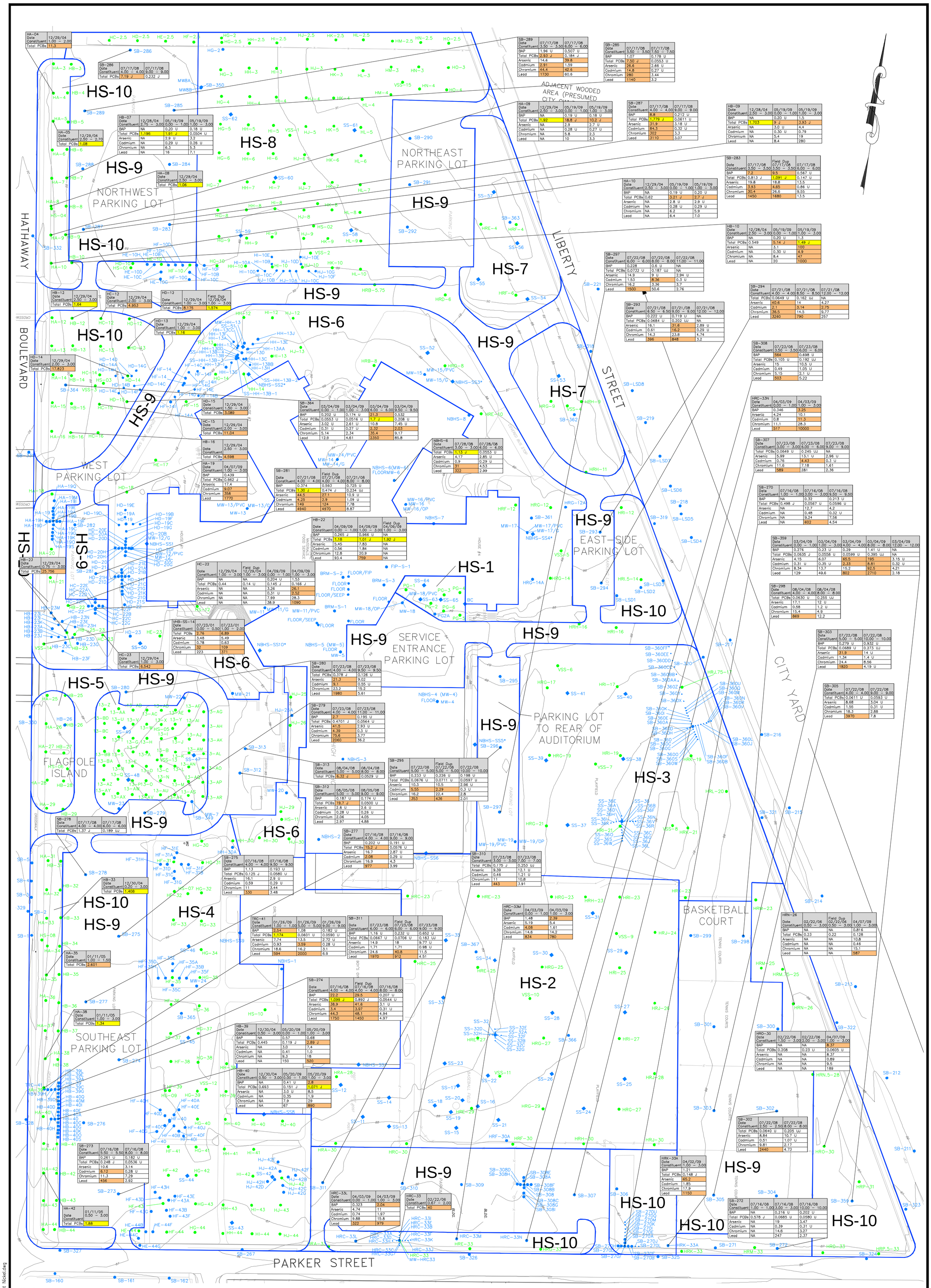
SOIL RESULTS SUMMARY MAP
(EXPOSURE POINT 5)

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

DRAWN BY: PZ
CHECKED BY: DNP
DATE: DEC 2010

FIGURE 4-2

FILE: Q:\GEOSCI\GSKEYProjects\NBHS RAM PLAN-Results_without Nickel.dwg



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LEGEND:

- TRC SAMPLE LOCATIONS
- VHB/BETA SAMPLE LOCATIONS
- HS-9 — EXPOSURE POINT AREA/DESIGNATION

Summary of Regulatory Comparison Criteria for Soil (mg/kg)

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Benzo(a)pyrene (BAP)	2	2	4	4	2	N/A
Total PCBs	2	2	3	3	2	1
Arsenic	20	20	20	20	20	N/A
Cadmium	2	2	30	30	2	N/A
Chromium	30	30	200	200	30	N/A
Lead	300	300	300	300	300	N/A

NOTES:
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2. RESULTS PROVIDED ARE FOR REPRESENTATIVE PARAMETER CONCENTRATIONS ABOVE SOIL CLEANUP STANDARDS (FOR INVESTIGATIVE SAMPLES ONLY).

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VALUES SHOWN IN PEACH BACKGROUND EXCEED ONE OR MORE OF THE LISTED MASSDEP METHOD 1 STANDARDS.

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SAMPLE LOCATION
SAMPLE DATE

SB-308		
Date	07/23/08	07/23/08
Constituent	3.50 – 3.50	6.00 – 6.00
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CONTAMINANT NAME /ABBREVIATION

SAMPLE DEPTH (DEPTH RANGE) IN FEET

APPROXIMATE GRAPHIC SCALE
0' 30' 60' 120'

NEW BEDFORD HIGH SCHOOL

NEW BEDFORD, MASSACHUSETTS

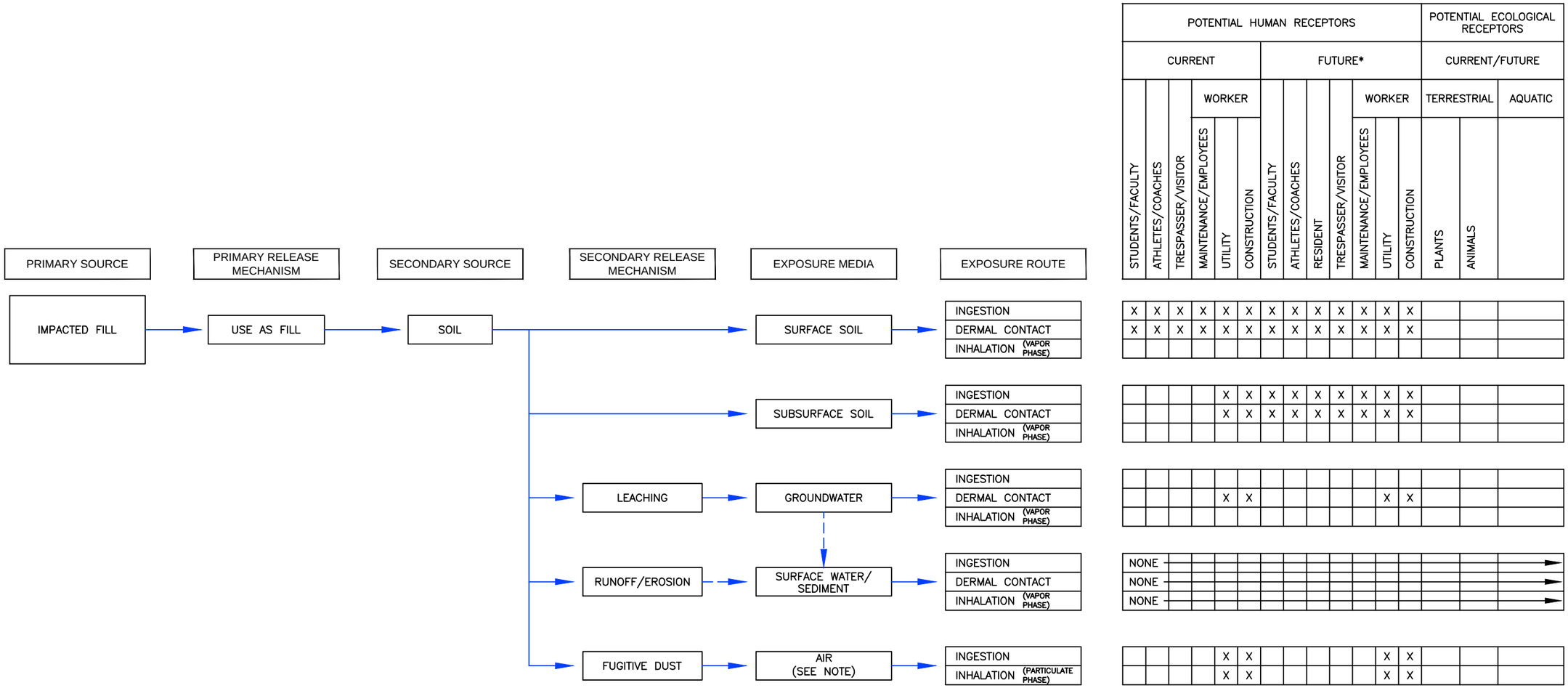
SOIL RESULTS SUMMARY MAP
(EXPOSURE POINT 9, 10)

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

FIGURE
4-3

DRAWN BY: PZ
CHECKED BY: DNP
DATE: DEC 2010

FILE: Q:\GEOSCI\GISKEY\Projects\NewBedford\NBHS RAM PLAN-Results_without Nickel.dwg



LEGEND:

X — POTENTIALLY COMPLETE EXPOSURE PATHWAYS IDENTIFIED

- - - → CURRENTLY ASSUMED TO BE AN INCOMPLETE PATHWAY

* — ASSUMES UNRESTRICTED FUTURE USE

NOTE:

THE VAPOR INTRUSION PATHWAY IS ONLY COMPLETE AT THE NEW BEDFORD HIGH SCHOOL MECHANICAL ROOM DUE TO ELEVATED SOIL GAS CONCENTRATIONS BENEATH THIS ROOM AND A GROUNDWATER SEEP WITHIN THE ROOM. BECAUSE THE MECHANICAL ROOM IS NOT OCCUPIED, NO QUANTITATIVE EVALUATION OF THE VAPOR INTRUSION PATHWAY HAS BEEN CONDUCTED.

NEW BEDFORD HIGH SCHOOL
NEW BEDFORD, MASSACHUSETTS

SCHEMATIC
CONCEPTUAL SITE MODEL

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

FIGURE
5-1

DRAWN BY: HWB
CHECKED BY: DNP
DATE:
DEC 2010

FILE: T:\E_CAD\115058\NBHS - SCHEMATIC SITE MODEL.dwg