Parker Street Waste Site Public Involvement Plan Meeting
Keith Middle School Community Room
March 2, 2011
6:00-9:00pm

Questions and Comments received during the meeting related to the City's work which were not answered that evening

New Bedford High School Phase II Comprehensive Site Assessment

1. **How can the City/TRC say 0-1 ft soil is okay at the school campus if 0-3 ft needs to be excavated from some locations?**

   In general, chemical concentrations are higher in soil that is 1-3 ft below the ground surface than in soil that is 0-1 ft below the ground surface. As a result, TRC's risk analysis indicated that a Condition of No Significant Risk exists for 0-1 ft soils. When TRC included the deeper soils in the risk analysis, this conclusion changed such that a Condition of No Significant Risk does not exist in some areas of the high school campus; these are the areas that have been recommended for excavation. The presence of this 1-foot top layer in this condition provides a measure of protection from exposure to deeper soils for day-to-day activities until the implementation of the proposed remedy.

2. **Can the City/TRC provide more information about groundwater flow across the high school campus, such as a cross-section showing water flow through soil strata?**

   The general flow direction and a discussion of site hydrogeology was provided in groundwater contour Figure 3-1, and Section 3.2.2 of the Phase II Comprehensive Site Assessment, New Bedford High School Campus, dated January 2011. In summary, based on groundwater elevation monitoring conducted in March 2009 to determine groundwater flow direction and gradient across the study area, 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). A geologic profile (a cross-section showing water flow through soil strata) is not necessary to support our investigative findings and/or remediation objectives.

Release Abatement Measure Plan: Soil Excavation and Removal (NBHS campus)

3. **Comment: I am concerned that the expanded parking lot proposed for the northern portion of the campus (4 acres) will be too large.**

   The proposed expanded parking lot area will be approximately 175,000 square feet (approximately 4 acres, as noted during the March 2, 2011 PIP meeting). The proposed parking lot will include approximately 13,834 square feet of basketball courts. The current parking lot area in the north of the NBHS campus is 81,512 square feet, approximately half of the proposed future paved area. The expanded parking lot will include engineering controls to reduce runoff.

4. **Why don't nearby residents have input on when NBHS excavation work is scheduled? I would prefer that work not be conducted during school vacations, on weekends, or on holidays when my family is home.**

   The safety of people using the school's campus and neighboring residents is a top priority for the City. The City has in the recent past received strong input from the surrounding community regarding the performance of remedial actions while students are present. In consideration of this input and to minimize potential safety hazards presented by heavy equipment and trucks, the City intends to conduct this work during a time when school is not in session. The City is coordinating with NBHS administrators in establishing a schedule. Other than nuisance noise and minor traffic delays, nearby residents are not expected to be directly impacted by excavation work occurring at the high school. The City will monitor dust levels during all excavation work and will use dust suppression as necessary to be protective of people's health.

5. **What is the total square footage of the NBHS campus? What is the total square footage of the areas that will be capped (paved) or that will have a building on top of them?**

   The total square footage of the NBHS campus, bounded by Liberty and Parker Streets, Hathaway Boulevard, and the Hetland Rink Property, is 1,543,090 square feet (35 acres). The NBHS building footprint occupies 232,110 square feet of the total area.

   The total square footage of areas to be paved is approximately 243,700 square feet to add to the 742,525 square feet of existing exterior impervious surfaces (*i.e.*, areas that are paved or that have a building on top of them). This additional paving will result in a total area of approximately 986,225 square feet that are paved or covered by the building.

6. **How much will it cost to build the expanded parking lot at the northern portion of the high school campus?**

   The cost to build the northern parking lot area has not been determined as the design of the northern parking lot and associated drainage infrastructure has not been finalized. The City will provide an update when finalized.

<u>New Bedford High School General</u>

7. **What will the maintenance plan be for heating, ventilation, and air conditioning units at NBHS in the future?**

   At this time, no environmental maintenance plan for heating, ventilation, and air conditioning units is required. School Department staff conduct periodic filter changes and repairs as units require mechanical maintenance.

8. **What is the likelihood of vapor intrusion under the building and under the gyms?**

   TRC has collected soil gas, groundwater and indoor air data from locations to the north, south, east and west of the Mechanical Room. Based on this data, there appears is no evidence of vapor intrusion under the building and gyms located beyond the Mechanical Room. While we have not collected indoor air or subsurface samples from the gym, we have not detected

significant groundwater impacts in samples collected from locations to the north, south and west of the gym. Since groundwater at the site flows from north to south, this is regarded to be sufficient evidence that there is not likely to be groundwater or soil vapor impacts in the vicinity of the gym. Lacking evidence of groundwater or soil vapor impacts beyond the Mechanical Room, there is no reason to further investigate in this area. TRC will continue to evaluate data needs as future data are collected.

9. **If vactor work is ineffective at reducing the levels of trichlorethene noted under the Mechanical Room, are there plans to take up the flooring in the Mechanical Room and put down any kind of barrier? Are there other options for remediating volatile organic compounds (VOCs)?**

   There currently are no plans to take up the flooring in the mechanical room and install a barrier. The City's consultant has advised that current remediation activities, including sealing the cracks in the floor, and evacuating groundwater from the area that exhibits elevated concentrations of VOCs, will be effective in reducing VOCs in the groundwater and vapor intrusion in the Mechanical Room.

   The City will evaluate the effectiveness of the vactoring effort through the sampling and analysis of groundwater after each vactoring event. If ongoing data collection indicates the need for supplemental efforts to achieve the remedial objectives in this area, the City will evaluate options at that time.

10. **Will ongoing air testing be conducted in the Mechanical Room?**

    Additional air testing will be conducted in the Mechanical Room following completion of the mitigation activities in this area.

11. **Comment: I think the City should continue to sample groundwater monitoring well MW-27R for more than one year (four quarterly sampling rounds) after achieving concentrations of chemicals in groundwater that are allowed under the Massachusetts Contingency Plan. (Note: Four quarterly sampling rounds are the minimum amount required by the Massachusetts Department of Environmental Protection).**

    Following the achievement of satisfactory groundwater results, four quarterly groundwater monitoring events are recommended by MassDEP to demonstrate the achievement of cleanup goals. Once the City obtains favorable results from four groundwater monitoring events, the obligation for monitoring is satisfied. In the opinion of the City's consultant, four consecutive quarters of post-remediation monitoring should be more than satisfactory based on experience with other sites.

<u>Site General</u>

12. **What is the cost of all consultants paid to date? What is the cost of all assessment work to date? What were the total expenses under the bond for this project as of January 31, 2011 (or February 28, 2011 if available)? Has City Council approved additional funding for this project?**

The City of New Bedford paid its previous consultant, BETA, approximately $1,166,700.00 for services. However, for a time, BETA billed the City of New Bedford as a subcontractor to VHB; the City of New Bedford paid VHB approximately $2,543,300.00. The total amount paid to BETA and VHB was approximately $3,710,000.00. (Note: This information is also included in the "City Responses to April 2010 PIP Questions" summary, which is available on the City's Parker Street Waste Site website under "Public Involvement Plan Meetings.")

Through January 2011, the City of New Bedford has paid TRC approximately $6,776,960.00 for services.

Please see the response summary for the January 2011 PIP meeting for costs (reported as bills received) as of January 19, 2011. The following table, which has been updated from the January 2011 response summary, includes both assessment and remediation expenses for NBHS through the most recent billing received from vendors, which does not include expenses for all work conducted through March 2, 2011.

NBHS Interior		
Service provided	**Vendor**	**Invoiced Costs (2001-March 2011)**
Interior Sampling	BETA	$18,455.55
Polychlorinated biphenyl (PCB) Source/Sink Mapping, Interior Sampling/Oversight, Specifications/Bid preparation	TRC	$1,164,703.33
Heating, ventilation, and air conditioning (HVAC) duct Cleaning/Exhaust fans	Indoor Air Technologies	$475,554.00
Removal of PCB & Asbestos-Containing Building Materials (ACM)	Triumvirate Environmental	$55,425.00
Cabinets and Shelving	Richard Losordo	$86,410.00
Univents (fabrication, delivery)	DDS Industries	$125,700.00
Removal and Replacement of PCB and ACM containing building materials	WES Construction	$767,603.00
Disposal of PCB-containing ballasts	Triumvirate Environmental	$310.00
Concrete crack- and joint-sealing in Mechanical Room	Hydra Concrete	$5,183.00
Vactor work/drum disposal	Triumvirate Environmental	$4,578.34
	Total Interior	**$2,698,739.22**

NBHS Exterior		
Service provided	**Vendor**	**Invoiced Costs (2001-March 2011)**
Soil Sampling	BETA	$14,854.27
Samples from TRC dumpster	Phoenix Environmental	$225.00
Soil Excavation, Transport	D.W. White	$12,055.43
Soil Transfer, Container Rental	Normans Enterprises	$12,950.00
Soil Transport: Shawmut Transfer Station to CWM Chemical in New York	Triumvirate Environmental	$27,108.45
Sewer line camera inspection	City's Dept. of Public Infrastructure	$1,759.68
Exterior Investigation Follow-up/Remedial Planning	TRC	$1,422,110.76
Liberty St. Drainage excavated soil Transportation & Disposal	Clean Harbors	$12,959.22
HF-31 Transportation & Disposal (PCB-impacted soil)	Triumvirate Environmental	$5,054.44
HF-31 Disposal (soil regulated under the Massachusetts Contingency Plan)	Greater New Bedford Regional Refuse Management District	$2,012.04
HF-31 backfill	Medeiros & Sons	$1,124.09
Temporary fencing for HF-31	Valtran	$748.00
Poly sheeting to line trucks for soil transport to Crapo Hill Landfill	Frank Corp.	$720.00
	Total Exterior	**$1,513,681.36**
Total Interior and Exterior Assessment and Remediation expenses (2001-March 2011)		**$4,212,420.60**

The project expenses through February 28, 2011, which include expenses associated with the construction of Keith Middle School, total $85,275,104.24. There has been no request to City Council to approve additional funding for this project.

13. **Did the Massachusetts Department of Public Health's study impact current actions at all?**

MDPH has only issued reports to individual participants regarding serum PCB data so far; MDPH has not yet issued a summary report on findings, which would be accessible to the City as well as to all community members. It is not anticipated that the MDPH study results would impact remediation decisions.

The following update was provided to the City by MDPH via e-mail following the PIP meeting:
In the late spring, MDPH/BEH (Bureau of Environmental Health) plans to conduct two public meetings: an afternoon session on indoor air and serum PCB data and cancer incidence with regard

to school personnel and an evening presentation on cancer and serum PCB testing data in the PSWS neighborhood. The exact date has not been set.

14. Please provide more information on John Levy's (a Boston University [BU] professor) health study in New Bedford.

Dr. Jon Levy, in collaboration with other researchers, has just begun a three-year study in New Bedford to investigate patterns of attention deficit hyperactivity disorder and cardiovascular disease and possible stressors associated with these conditions. They will study both chemical stressors and non-chemical stressors, such as diet, family history of disease, low birth weight, and socioeconomic status. See the *Standard-Times* article from February 13, 2011 for more information:
http://www.southcoasttoday.com/apps/pbcs.dll/article?AID=/20110213/NEWS/102130328/-1/NEWS01.
The following link connects to Dr.Levy's biography and other information at BU's website:
http://sph.bu.edu/index.php?option=com_sphdir&id=239&Itemid=617263&INDEX=16846.

15. How much time elapsed between the completion of remediation work in the Keith Middle School wetlands and the discovery of additional polychlorinated biphenyl (PCB) impacts?

Eighteen months elapsed between the completion of the wetland remediation work at the Keith Middle School (KMS) and the discovery of PCBs in sediments above MCP reporting criteria. The remediation of PCB impacts to the KMS Wetland was completed under the direction of BETA in December 2006. The results of sediment sampling for PCBs, performed by TRC in accordance with the Long-Term Monitoring and Maintenance Implementation Plan (LTMMIP), received on June 9, 2008 indicated that sediments contained a concentration of total PCBs at 16.56 mg/Kg. Subsequent sampling is documented in TRC prepared reports addressing this detection; these reports are available on the City of New Bedford's Parker Street Waste Site website on the "Wetlands" page.