

Parker Street Waste Site Public Information Plan Meeting
 Keith Middle School Community Room
 September 22, 2010
 6:00 – 9:00pm

Please note: All questions submitted to the Department of Environmental Stewardship regarding the Parker Street Waste Site between October 6, 2010 and the next PIP meeting will be answered as part of the next PIP meeting, which is targeted for January 2011. This policy will not apply to questions and comments which are submitted as part of a public comment period on a specific document.

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

New Bedford High School

- **Is there a report as to how much money has been used for all the remediation taking place at New Bedford High School (NBHS)?**

The following table includes both assessment and remediation expenses for NBHS.

NBHS Interior		
Service provided	Vendor	Cost (2001-June 30, 2010)
Interior Sampling	BETA	\$18,455.55
Polychlorinated biphenyl (PCB) Source/Sink Mapping, Interior Sampling/Oversight, Specifications/Bid preparation	TRC	\$715,504.29
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	\$144,210.00
	Total Interior	\$1,621,258.84
NBHS Exterior		
Service provided	Vendor	Cost (2001-June 30, 2010)
Soil Sampling	BETA	\$14,854.27
Samples from TRC dumpster	Phoenix	\$225.00

	Environmental	
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	\$1,001,828.72
	Total Exterior	\$1,070,781.55
Total Interior and Exterior Assessment and Remediation expenses		\$2,692,040.39

- **Comment: (I am concerned that) two air monitoring samples were above action limits for volatile organic compounds (VOCs).**

This comment references slide 18 of the presentation, which states that two air monitoring results were above screening limits established by the Massachusetts Department of Environmental Protection (Indoor Air Threshold Values for the Evaluation of a Vapor Intrusion Pathway, Attachment C, updated June 26, 2008). The two locations where these air samples were collected in April 2010 (mechanical room and lecture room D-120) were re-sampled in August 2010. Analytical results for the most recent sampling are currently undergoing quality control review, but the results were below indoor air screening levels at both locations. The new data will be provided in a forthcoming updated fact sheet for New Bedford High School.

Note that exceeding a screening level does not necessarily indicate the existence of a significant risk. In fact, the chemical concentrations detected in April 2010, evaluated together, are not associated with significant risk to human health.

- **Comment: We should give serious consideration to building a new school on a different site.**

The current analytical data for New Bedford High School and risk characterizations which have been conducted in accordance with Massachusetts Contingency Plan procedures indicate that the school and its campus are safe to use.

- **There is no barrier at New Bedford High School like the slab underneath Keith. What makes you think that teachers, students and others are safe?**

See response to the previous question. In addition, please note that an “exposure pathway” (the route a substance takes from its source to its end point, and how people can come into contact with it) to indoor air has not been identified in areas occupied by teachers or students. The City’s investigations to date suggest the following: 1) the only area of the school where subsurface contamination volatile organic compound (VOC)

impacts have been found is the mechanical room; and 2) the only room in the school where indoor air impacts have resulted from subsurface conditions is the mechanical room.

- **Is there a correlation between dioxins and PCB levels in the soils? If there is no correlation, can we truly rule out the possibility of dioxins elsewhere on the site?**

Dioxin 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 Parker Street Waste Site (PSWS). The soil data indicate that polychlorinated biphenyls (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 the prior consultant and TRC.

The TRC soil sampling program was designed to collect samples from biased high (“worst case”) concentrations for chlorinated dioxins/dibenzofurans in soils at the site. Based on an evaluation of the entire analytical results database, 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 biased sampling approach was intended to avoid underestimating risk from exposure to dioxins in campus soil and, in all likelihood, results in overestimating risk.

Regarding a correlation, the intent was to support a qualitative correlation (e.g., to document the co-occurrence of PCBs). The soil sampling locations were chosen, at least in part, because they had some of the higher PCB concentrations observed in soil on the New Bedford High School (NBHS) campus. Note that a rigorous statistical correlation would require the collection of a large number of additional samples over a wider concentration range to attempt to quantify any correlation between PCBs and dioxins/furans. TRC chose an efficient approach of targeting potential high concentration chlorinated dioxin/dibenzofuran areas in lieu of a larger sampling program that would not be expected to influence decisions about how to protect public health and how to comply with the Massachusetts Contingency Plan in general.

One observation from the work is that levels of dioxins in site soil were consistent with background concentrations for soils in urban areas, even in the presence of PCB detections. The City’s consultant continues to evaluate all data collected from the site. Observations pertaining to dioxins and other contaminants that are generated will be documented in the Phase II report being prepared for NBHS.

- **The dioxins found near the flagpole are a big concern, yet the area is not fenced off. Can you respond to this?**

Erecting a fence around the flag pole area is not necessary. The current analytical data for New Bedford High School and risk characterizations which have been conducted in accordance with Massachusetts Contingency Plan procedures indicate that the school and its campus are safe to use. The risk characterization included the dioxin, dibenzofuran, and polychlorinated biphenyl congener soil data.

- **Clear windows are important for kids. Can we consider window replacements to promote a healthy, sunny environment?**

Concerns about the type of windows (clear vs. frosted) which are installed in the building would be best addressed to the School Department. Any window replacement undertaken by the City of New Bedford for polychlorinated biphenyl (PCB) impacts associated with the window installation materials will share this goal of promoting a healthier environment, and would be managed accordingly.

- **At what point would the soil around NBHS be safe for planting food crops, such as through a gardening or greenhouse program?**

Planting of food crops in site soil for human or animal consumption at New Bedford High School will be restricted under the future Activity and Use Limitation (AUL). The use of enclosed planters or raised beds filled with pre-characterized soil and separated from underlying site soil would be suitable for a gardening program.

New McCoy/Nemasket/Keith Middle School

- **What were the exact findings from the Nemasket lot that the city references in the lawsuit? Where exactly were the samples taken from, and at what depth? Do these findings represent an imminent hazard for this community?**

The City is not at liberty to discuss the details of matters in litigation. For sample locations and associated sample depths, please see the figure and data tables posted on the City of New Bedford's Parker Street Waste Site Website, Nemasket Street Lots page as "Nemasket Street Lot Sampling Data - August - September, 2005 (BETA)". The Nemasket Street Lots do not represent an Imminent Hazard to the community under the Massachusetts Contingency Plan (MCP; 310 CMR 40.0000).

Acquired Properties

- **The lawns of the acquired, now owned by the City of New Bedford, properties have yet to see a lawnmower except for the land that abuts my property, and I think that is because my husband and I called the environmental stewardship office everyday for a week. My question is when do they plan to cut that grass?**

The Department of Public Facilities (DPF) will cut the grass as needed through the end of October. It has not been mowed yet because the Department of Public Infrastructure (DPI) needed to remove debris that would obstruct or potentially damage the equipment used to mow the grass at these parcels, and DPI was waiting for the Department of Environmental Stewardship to provide guidance on whether the silt fence and hay bales on the acquired properties would be removed at this time. Late in the week of September 20th, the Department of Environmental Stewardship notified DPI that the silt fence and hay bales will be remaining on site until the next phase of work. DPI was able to allocate personnel to clear debris from the sites on Friday, October 1st. The Department of Environmental Stewardship notified DPF that the properties are ready to be mowed on October 1st. Department of Environmental Stewardship staff will meet with DPF staff on site October 7th to address DPF's remaining questions.

- **I have heard about this supposed time line for the city to do something with those properties [acquired properties]; what is the time line and what are they going to do?**

The City has committed to providing a Phase II report to the Massachusetts Department of Environmental Protection (MassDEP) for the acquired properties by May 20, 2011. The preparation of this report may require further investigation activities. The City has not yet determined what the final use of these parcels will be.

General

- **How much money was appropriated for this project overall? How much has been spent and what happens if we run out of funds?**

Initial appropriation, including expenses associated with the construction of Keith Middle School: \$103,687,860.00

Spent as of June 30, 2010: \$81,343,176.61

The financial resources needed to complete the further planned investigations are in place.

- **We are concerned about health, contamination, and financial issues here. We have already spent a lot of money on this and we don't see an end. Am I correct that on October 6th you will present a dollar amount of how much has been spent, including on past and present consultants?**

Yes – the \$81,343,176.61 quoted in the previous question includes past and present consultants' expenses through June 30, 2010, as well as construction expenses for Keith Middle School.

Public Comments and Questions received during the meeting related to the City's work which were answered (provided here for clarity)

Walsh

- **Has there been testing for dioxins or dibenzofurans in Walsh Field? If so, what happened?**

The City has not conducted testing for dioxins at Walsh Field. The City did test for dibenzofurans and detected them in sample WFB-4, located in the varsity outfield. This sample location was excavated and removed from the site during the fall of 2009.

New Bedford High School

- **How much more money will be needed for long term maintenance? Why not build a new school?**

Without knowing the full extent of future work, the City is not able to accurately estimate that cost. The current school is safe to use.

- **Regarding the inventory of ballasts – would it be better to replace them all with more energy efficient lights? Is this more affordable?**

In 2005/2006, the School Department replaced the majority of the school's fluorescent ballasts. The new bulbs increased energy efficiency. The City conducted an inventory in August and September 2010 to determine how many polychlorinated biphenyl (PCB)-containing ballasts remain, and to better understand the safest and most cost-effective way to handle the remaining fixtures. The City will provide updates via the weekly site activities notice (published Sundays in the *Standard-Times*) and the online EPA-MassDEP-City of New Bedford Site Activities Calendar (linked to the "This Week's Site Activities" subpage of the Parker Street Waste Site website) as future plans regarding the fluorescent ballasts become established.

- **Two volatile organic compound (VOC) samples were above limits. Given that the testing was done during school vacation, do you really think there would be interference in the air skewing the results (from solvents etc)?**

Yes. As referenced on slide 18 of the presentation, two results were above screening limits established by the Massachusetts Department of Environmental Protection (Indoor Air Threshold Values for the Evaluation of a Vapor Intrusion Pathway, Attachment C, updated June 26, 2008). Although students and most academic staff are not in the building during school vacations, maintenance staff are often busy with projects throughout the building, such as cleaning floors, desks, and other surfaces, which can lead to such detections. Certain classes, such as the automotive shop near classroom D-120 at New Bedford High School, also use materials such as brake cleaners that contain VOCs, the residues of which may persist for some time. Sometimes the products that are

regularly used in the school for maintenance or educational purposes are detected during air sampling, making it hard to distinguish between a chemical being used intentionally and a chemical that is present in the environment around the building. Chemicals can off-gas even from closed containers. Nevertheless, the school is currently safe to use.

- **Is the list on your slides of upcoming interior remediation work complete? Is that the complete scope?**

The list referenced in the question can be found on slide 11 of the presentation, and includes the following items: foam furnishings, light fixtures/old ballasts, painted surfaces, submit removal and abatement plan to the Environmental Protection Agency (EPA) during the winter 2010/2011. These are the current areas of interior work that the City expects to address next summer; the list is subject to change based on consultations with EPA.

- **Can you explain the difference between polychlorinated biphenyls (PCBs) and dioxins*, and why we are so concerned about dioxins?**

Given evidence in the scientific literature, both PCBs and dioxins have the potential to impact human health depending on the level of exposure. Dioxins can affect multiple organ systems, and many regulatory authorities have concluded that PCBs and dioxins may cause cancer in humans. The Environmental Protection Agency's current estimate of dioxin cancer potency greatly exceeds its estimate of PCB cancer potency. Given the concern about dioxin toxicity, TRC targeted its soil sampling with the goal of identifying the highest concentrations of dioxins that might be present anywhere on the high school campus. This approach avoids underestimating risk from exposure to dioxins in campus soil and, in all likelihood, results in overestimating risk. The City used these dioxin concentration data in conjunction with the Massachusetts Department of Environmental Protection's recommended risk assessment methodology and concluded that there is no significant risk to individuals using the high school campus.

*"dioxin" refers to 2,3,7,8-tetrachlorodibenzo-*p*-dioxin plus all compounds that are structurally-related to 2,3,7,8-tetrachlorodibenzo-*p*-dioxin.

- **Did you test for polychlorinated biphenyl (PCB) levels in the daycare room (physical infrastructure, not air)?**

In addition to the air samples recently collected, three different materials have been sampled in the daycare room (room A-227-4) including vinyl base cove (1.39 mg/kg total PCBs), laminate adhesive (non detect at a laboratory reporting limit of 0.940 mg/kg) and paint (4.184 mg/kg total PCBs). None of these results indicates a need for remedial action for the materials tested.

- **Was dioxin testing done outside the daycare room on the playground area?**

No, dioxin samples were collected from five locations on the west side of the school building where, based on existing analytical data, the City would be likely to find the highest concentrations of dioxins present on campus.

- **Is HF-31 the only location with polychlorinated biphenyl (PCB) concentrations in soil in excess of 50 parts per million (ppm) on the high school's campus?**

Yes, HF-31 is the only location on the high school campus where a soil concentration of total PCBs over 50 ppm has been detected through sampling of in-place soil.

- **Regarding the ventilation and heating systems – under what circumstances would all of these unit ventilators be replaced? How adequate are the ventilation systems in the classrooms?**

The 31 unit ventilators (or univents) that were replaced this summer contained a polychlorinated biphenyl (PCB) and asbestos lining. All of the other univents in the school have been visually inspected, and they do not contain the same lining, so other univents can be replaced at the School Department's discretion. With respect to the ventilation system overall, it is the City's understanding that the building Energy Management System which was installed in 2009 has led to significant improvements in providing adequate ventilation to all areas of the school, including classrooms.

- **Regarding vapors, when will the critical exposure pathway be mitigated? Twelve months seems too long.**

A critical exposure pathway (CEP) does not necessarily indicate the existence of a significant risk. Indeed, at New Bedford High School, the City has evaluated the risk, and found that there is no significant risk. The vapors which have been detected are below Massachusetts Department of Environmental Protection (MassDEP) screening standards, but because they were detectable, regulations consider this a CEP, and it is appropriate for the City to investigate and evaluate mitigation measures. Since the CEP for volatile organic compounds (VOCs) was first identified in January 2010 (as discussed in the April PIP presentation, which is available on the Parker Street Waste Site website under "Public Involvement Plan Meetings"), the City collected numerous additional samples of indoor air, slab soil gas, groundwater and seep water since notifying MassDEP of the issue. A description of all phases of this work conducted to date has been provided both in the April 2010 PIP presentation (activities leading up to the reporting of the issue, and response actions conducted since reporting through April 2010) and the September 2010 PIP presentation (activities from April, August, and September), both of which are available on the City's "Public Involvement Plan Meeting" webpage. Also, note that the City took precautionary steps to mitigate potential vapor intrusion by sealing floor cracks and plugging floor drains to eliminate potential vapor pathways, and has undertaken an evaluation of seep mitigation measures. The City

has committed to submitting a Modified Immediate Response Action (IRA) Plan to the Massachusetts Department of Environmental Protection (MassDEP) by January 21, 2011.

- **For the dense non-aqueous phase liquid (DNAPL, a liquid that does not dissolve in water) that was observed in the groundwater monitoring well being installed in the mechanical area, what exact element was found?**

Trichloroethylene (TCE) and related volatile organic compounds were detected in a sample of this liquid. TCE was the primary compound detected.

- **Are contaminated materials being taken away from this site in a way that does not negatively affect other communities?**

Yes, impacted materials such as soil and building materials, which have been removed from the New Bedford High School campus, have been disposed of at licensed facilities which are permitted to receive such waste located in Michigan (EQ in Bellville, MI), New York (CWM Chemical Services, LLC in Model City, NY), or locally (Crapo Hill Landfill in New Bedford/Dartmouth, MA) depending on the type and level of impact.

Note also that the City is not just protecting the other communities. During removal from inside the school, we are protecting the users of the facility. The interior removals are performed under containment, and monitoring is done outside the containment to ensure that contamination is not spread. Following the removal, inspection and testing are performed to ensure that the area is safe to reoccupy. In addition, all of the materials removed are double wrapped with polyethylene sheeting to ensure that the contaminated materials are not spread during storage and transport to the disposal facility (see sections 2.5 through 2.7 of the March 2010 *Removal and Abatement Plan*). All of this work is conducted under the supervision of trained professionals.

During removal of impacted soils conducted outdoors, environmental monitoring is conducted for dust and vapors, and dust suppression is employed under oversight by environmental field professionals. The environmental monitoring and dust suppression approaches are described in plans that receive written approval of the Massachusetts Department of Environmental Protection (MassDEP).

General

- **Is the City going to collect samples at Sintra Heights?**

No, the City of New Bedford will not collect samples at Sintra Heights.

- **The fact sheet on environmental monitoring at Keith Middle School includes a statement that it is safe to occupy the school and use the campus. Can the same statement be made about New Bedford High School?**

Yes. Please see the City of New Bedford's fact sheet entitled "Environmental Investigation of the New Bedford High School Building and Campus" (July 2010), available on the City's Parker Street Waste Site website or directly at:

http://www.newbedford-ma.gov/McCoy/2010/Final_NBHS_Fact_Sheet_with_dioxin_7.6.10.pdf.

Questions for agencies other than the City's Department of Environmental Stewardship

For the Environmental Protection Agency (EPA)/Massachusetts Department of Environmental Protection (MassDEP)

Forwarded to EPA/MassDEP via e-mail on 9/28/10. Please note that David Johnston of MassDEP replied to several questions during the PIP meeting, and EPA has responded to other community members directly.

For the Agency for Toxic Substances and Disease Registry (ATSDR)

Forwarded to ATSDR via e-mail on 9/28/10. Please note that Bill Sweet and Tarah Somers addressed questions as part of the PIP meeting. For further information, please contact Bill Sweet at (617) 918-1940 or sweet.william@epa.gov or Tarah Somers at (617) 918-1493 or somers.tarah@epa.gov.