



Parker Street Waste Site Public Information Plan (PIP) Meeting

Wednesday — April 14, 2010

Agenda

□ Updates/new developments/future activities

- Walsh, NBHS, KMS, Nemasket Street, Acquired Properties

□ Community Questions

- Responses to questions posed by the Community to the Department of Environmental Stewardship
- Included, where appropriate, in the above subject areas.

City LSP Role

LSP Responsibilities

- ❑ **310 CMR 40.0191 Accurate and Complete Record Keeping** *“No person shall make, or cause any person to make, any false, inaccurate, incomplete or misleading statement in any document which that person keeps or is required to keep pursuant to M.G.L. c. 21E, 310 CMR 40.0000”*
- ❑ **Disclosure of Material Facts (310 CMR 40.0015)** *“identify in the LSP Opinion the material facts, data and other information known ... about the disposal site that is pertinent to the LSP Opinion”*
- ❑ **Certification of Submittals (310 CMR 40.0009)** *“...attest under the pains and penalties of perjury ...the material information contained in this submittal is... true, accurate and complete...”*

Walsh Field

Walsh Field - Regulatory Process Update

□ Release Abatement Measures

➤ Varsity Improvements

➤ Status report - January 11, 2010

➤ Soil management associated with construction and refurbishment activities

➤ Walsh Field Soil Removal

➤ Status report - February 2, 2010

Update/Walsh Field Remediation

Soil Excavation and Landfill Re-use

❑ Regulatory Filing

- RAM Plan - October 2009
- Completed public review period

❑ Actions Taken

- Excavated 1,052 tons of soil
- Soil accepted at Crapo Hill

❑ Future Response Actions

- Summer 2010 – Varsity ball field

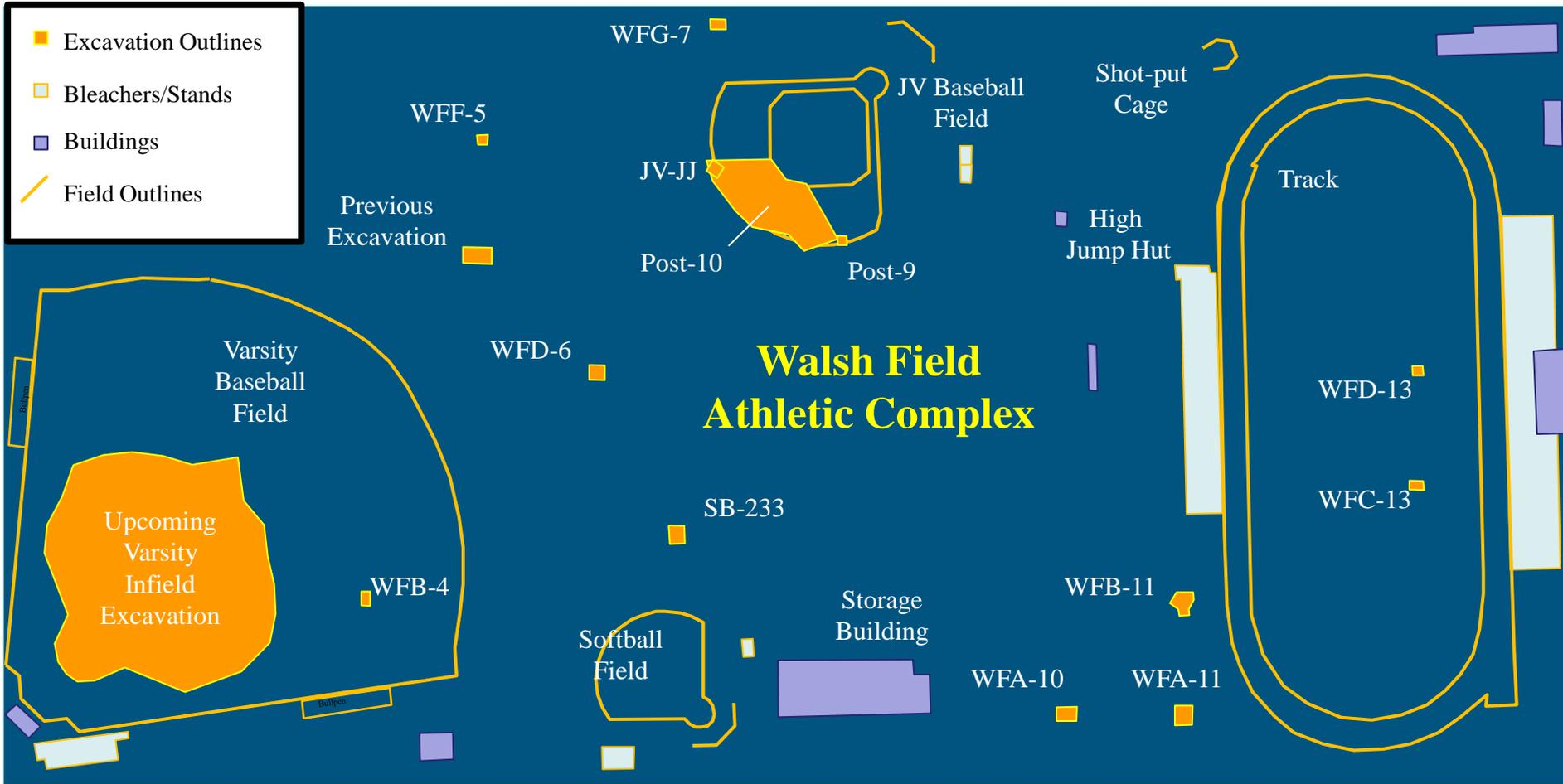
❑ Completion of RAM activities

- Varsity response action
- Varsity improvements

❑ Partial Response Action Outcome to be prepared

- Activity and Use Limitation

Excavation Locations at the Walsh Field Athletic Complex



Community Questions - Walsh Field

Q. Has the remediation work been completed at Paul Walsh Field and if not, when?

A. Response actions at Paul Walsh Field were initiated in the Fall of 2009. Remaining field work includes the excavation of soil from the Varsity Field and associated restoration in Summer 2010.

Q. When remediation work is completed, will the field be perfectly safe for all human activities?

A. The remediation at Paul Walsh Field will render the field permanently suitable for active and passive recreational activities.

Community Questions - Walsh Field

Q. There have been dibenzofurans found at the site – have they been removed? Will there be further testing for dioxins there?

A. An area of dibenzofuran soil impact was removed from the Varsity outfield during the Fall 2009. Walsh Field is not a target for dioxin sampling.

Community Questions - Walsh Field

Q. What is being used for backfill at the site? Discuss testing for compliance with S-1 standards.

A. Imported burrow material. The applicable S-1 standards are used as a guide to suitability.

Testing includes volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), volatile petroleum hydrocarbons (VPH), extractable petroleum hydrocarbons (EPH), polychlorinated biphenyls (PCBs), metals, pesticides, and herbicides.

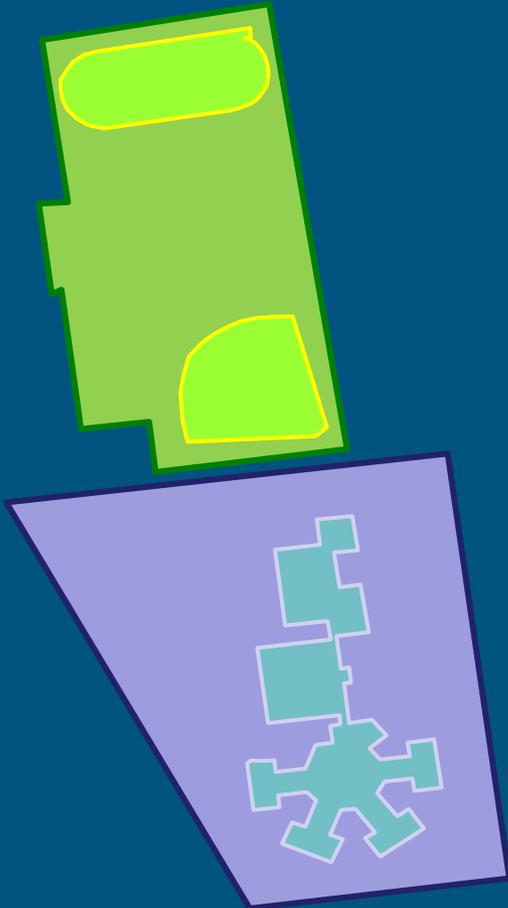
New Bedford High School

Update/Interim Phase II Report

Walsh Field/NBHS Campus

☐ TRC Interim Phase II Report

- Submitted July 21, 2009 (5,000+ pages)
- Supported Phase III analysis for Walsh Field
- No current risk
- Phase II currently being updated



Post-Phase II Report Investigation

Work Completed at NBHS Campus

□ Work performed December 2008 – August 2009

- Soil borings – **386**
- Surface soil samples - **69**
- Over **500** PCB soil analyses
- Approximately **300** PAH soil analyses
- Over **530** metals soil analyses
- Data collected to support remedial planning and risk assessment

Update/Discovery and Reporting

Volatile Organic Compound (VOC) Investigation

❑ Mechanical room seep sampling (December/January/February)

- Detected chlorinated volatile organic compounds VOCs.
 - Two out of four seeps
- No benzene or related compounds detected
- Evaluating sewage-related impacts

❑ Groundwater sampling (January)

- Evaluate association with groundwater
- Evaluate potential for impacts to sewer system

Update/Discovery and Reporting

Volatile Organic Compound (VOC) Investigation

- Field screening of mechanical room indoor air**
 - Photoionization detector (PID) and Draeger tubes
 - No impacts detected

- Modeled potential indoor air impacts**
 - Based on VOC concentrations in seep
 - No Imminent Hazard

- Reported to MassDEP on January 29, 2009**
 - 72-hour notice category
 - Immediate Response Action taken

Update/Initial Response Actions

Volatile Organic Compound (VOC) Investigation

Conducted indoor air sampling (01/31/2010)

- Five (5) locations including mechanical room and classroom space
- Detected chlorinated volatile organic compounds
- Detected non-chlorinated volatile organic compounds (e.g., benzene)

Indoor air risk assessment

- Keith Middle School protocol
- No significant risk

Published Fact Sheet and Posted on City Website

- First Fact Sheet - February 4, 2010
- Updated Fact Sheet - March 2010

Update/February Vacation Investigation

Volatile Organic Compound (VOC) Investigation

- ❑ Chemical inventory/MSDS Review
- ❑ Building drawings review
- ❑ Field survey of first floor drains/lines/
cracks/sinks
 - A- and B-block
 - Screening and evaluating for potential sealing
 - Target for periodic trap management

Update/February Vacation Investigation

Volatile Organic Compound (VOC) Investigation

- ❑ Seepage mitigation evaluation
 - Specialty vendor visits
- ❑ Sampled 10 storm sewer manholes
- ❑ Sampled five (5) sanitary sewer manholes
- ❑ HVAC, air flow, building pressure evaluations
 - Certified Industrial Hygienist (CIH) system review
 - Mitigation by routine operation of HVAC system

Update/February Vacation Investigation

Volatile Organic Compound (VOC) Investigation

- Nine new monitoring wells installed during February vacation**

- Sampled all new and existing NBHS monitoring wells (16 total)**
 - Limited number of wells with detects
 - No benzene or related compounds detected.
 - Revised groundwater elevation contour map

- Installed/sampled five new monitoring wells within last 2 weeks**

Update/February Vacation Investigation

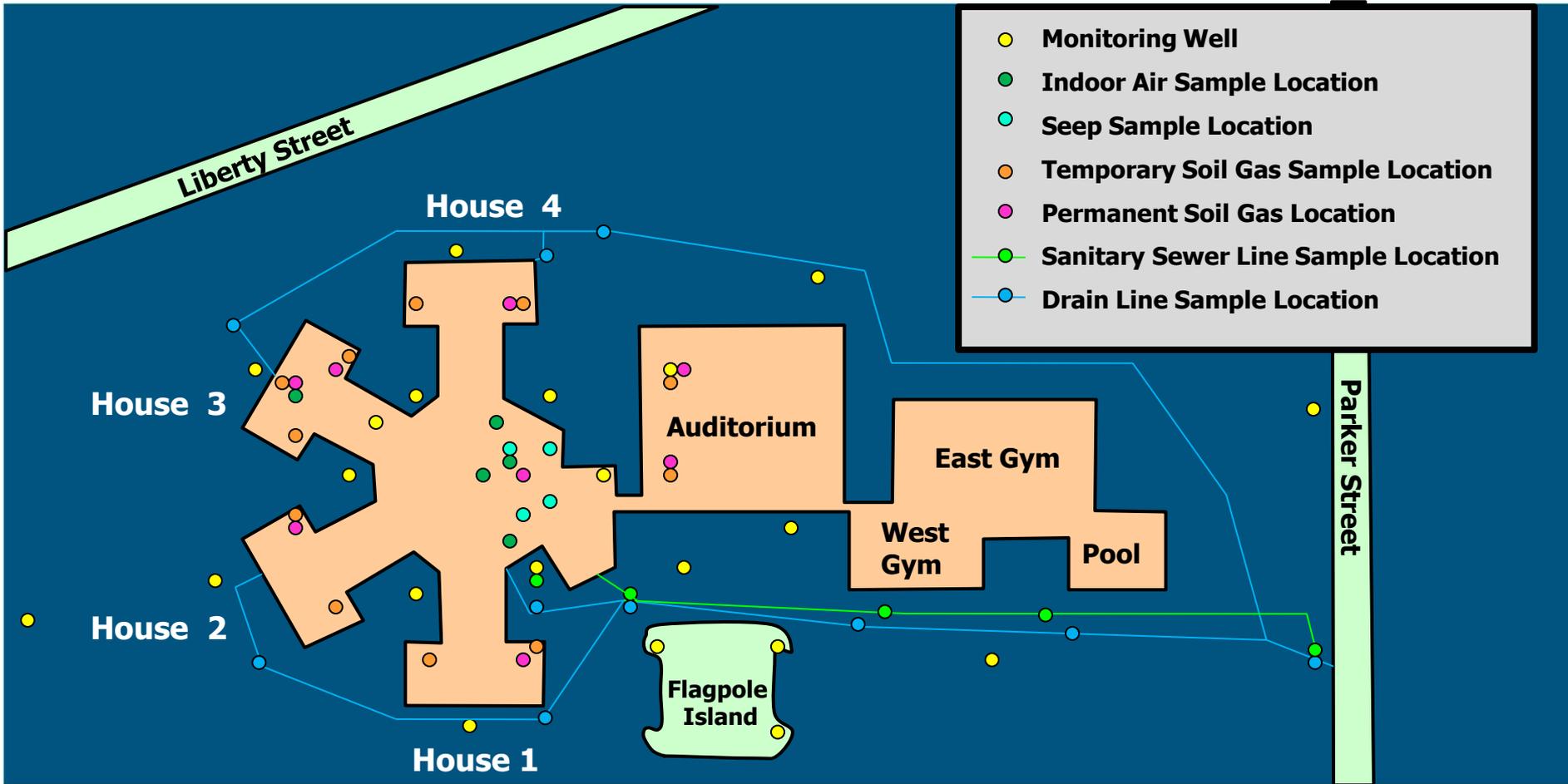
Volatile Organic Compound (VOC) Investigation

- ❑ **Installed/sampled 11 temporary soil gas points**
 - **Low concentration detections**
 - Chlorinated volatile organic compounds
 - Benzene and related compounds
 - No vinyl chloride detected

- ❑ **Installed 8 permanent soil gas points**
 - Sampling scheduled for April vacation
 - Previously installed vapor barrier encountered in all locations

Update/Investigation Locations

Volatile Organic Compound (VOC) Investigation



NBHS Soil Sampling for Dioxins

Proposed Investigation Technical Approach

Sampling approach

- Five soil borings
- Top foot, 1-3 feet, and fill

Analytical suite

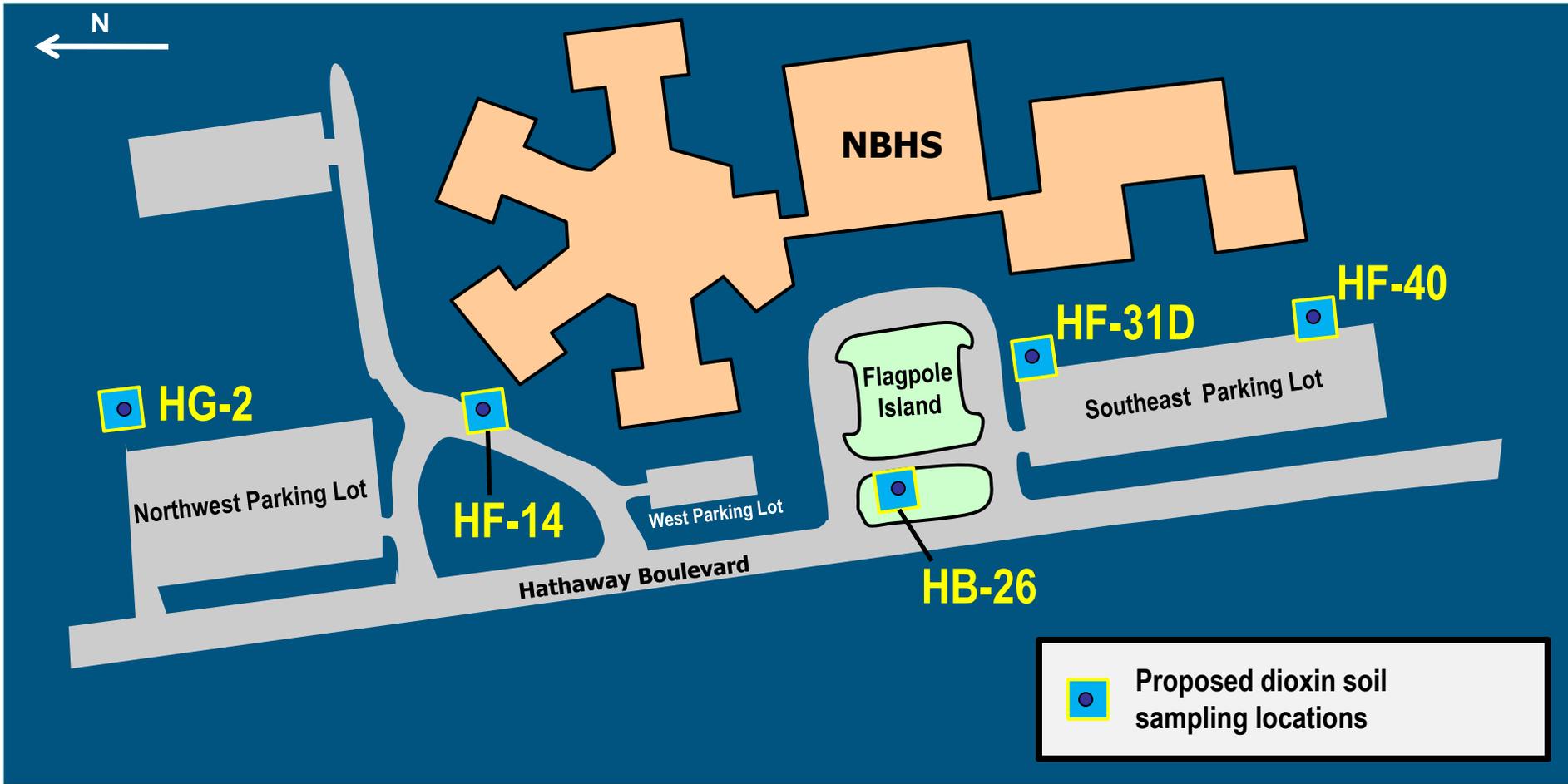
- Chlorinated dioxins and dibenzofurans and PCB congeners
- PAHs, Metals and PCB aroclors
- VOCs, if warranted by screening

Selection based on review of database

Scheduled for tomorrow

NBHS Soil Sampling for Dioxins

Proposed Sampling Locations (approximate)



Community Questions – NBHS

Q. Are volatile organic compounds infiltrating the school in some sections more than others?

A. Analysis is ongoing. This is under evaluation.

Q. What is the suspected source of VOCs in the groundwater beneath the High School? If it is unknown, what is being done to determine the source?

A. Analysis is ongoing. This is under evaluation.

Q. Will the CEP be eliminated or mitigated to the extent feasible before the end of the current school year? Before the beginning of the next school year (fall 2010)?

A. Analysis is ongoing. CEP mitigation measures are discussed in the March 2010 IRA Plan posted on the City's website.

Community Questions – NBHS

Q. What are the remediation plans for soil around NBHS?

A. Currently evaluating remedial approaches for the NBHS campus.

Q. Will TRC conduct methane testing at NBHS?

A. There are no plans for methane testing at this time.

Community Questions - NBHS

Q. Will TRC test drinking water in various areas of the school including the cafeteria and if so when?

A. Testing of drinking water at NBHS is not part of TRC's scope of services. The School Department currently tests the drinking water at NBHS.

Q. Will sampling at NBHS and Nemasket Street Lot be conducted seasonally (winter vs. summer) to compare conditions and see if there is a change in contaminant conditions?

A. There are no plans for seasonal sampling.

Community Questions - NBHS

Q. Outreach to parents of students – how can this be implemented?

A. For this meeting, the Department of Environmental Stewardship dropped off flyers at Keith Middle School and New Bedford High School for distribution to students and staff. Both principals confirmed that they implemented the *I-Alert System* for this meeting.

New Bedford High School Building Materials

Update/NBHS Building Materials

Anticipated Schedule for 2010

□ Action

- Removal/Abatement Plan (RAP)
- Plans and specs
- Implementation

□ Date/Time Frame

- March 2010
- Submitted to City March 2010
- Summer 2010

Update/NBHS Building Materials

2010 Response Actions

- B-Block Univent removal and replacement
- Wall paint (Rooms B-230, A-211-3, A-213-4)
- Foam furnishings beyond useful lifetime
- Maintenance/covering
- Incidental asbestos management
- Address per the regulations in consultation with EPA*

Update/NBHS Building Materials/Other Future Activities

- Schedule further abatement per EPA regulations**
- Collect data for remedial planning**
- Continue maintenance measures**

Community Questions

NBHS Building Materials

Q. Provide a list of classrooms where PCB Bulk Wastes have been removed as well as classrooms that remain to be addressed?

A. During the summer of 2009, oversaw the removal of the following building material items:

- Laminated cabinets (B-319-3, A-205-4, and B-240)
- Painted sheet rock walls (A-206-4)
- Furniture and gym mats with polyurethane foam (various locations)

In Summer of 2010, B-Block Univents removal and replacement and wall paint (Rooms B-230, A-211-3, A-213-4).

Community Questions

NBHS Building Materials

Q. What are the most current air quality test results of the entire school with special consideration to the areas around the rooms where TRC has been conducting removal of PCB contaminated materials?

A. Collected 24 interior air samples for PCBs in February 2008. The results and accompanying letter dated April 2008 are posted on the City's website.

Community Questions

NBHS Building Materials

Q. How are the materials being contained within the classrooms before being brought out?

A. Work performed in negative pressure enclosure with HEPA filtration to the exterior of the building. Dust monitoring immediately outside the Containment Area. Additional monitoring for fibers where asbestos containing materials (ACM) are involved. PCB Bulk Product Wastes double wrapped in plastic prior to transfer to staging area for disposal.

Community Questions – NBHS Building Materials

Q. How are the tools used for this work decontaminated before being brought out?

A. Contaminated building materials were double wrapped with 6 mil poly sheeting and sealed with duct tape. HEPA vacuums used to remove dust and debris. Areas wiped down with a tri-sodium phosphate (TSP) cleaning solution and rags. Containment, wrapped contaminated materials, and equipment also wiped down with TSP cleaning solution.

Acquired Residential Properties

Acquired Properties - Regulatory Process Update

□ Acquired Residential Properties

➤ Modified Demolition RAM

➤ Status Report - January 11, 2010

➤ Further work to be determined pending foundation results

□ Related Regulatory Activity

➤ EPA approval for foundation sampling

➤ Received March 3, 2010

Update/Acquired Residential Properties

Foundation Sampling Program

- One sample for every 10 feet of perimeter
- Sampled concrete in direct contact with soil
 - For shallow foundations, samples collected from outside
 - For deeper foundations, samples collected by coring from inside
- Contingent analysis of adjacent soil samples
- Foundation coating asbestos analysis
- EPA demo approval contingent upon the results

Acquired Residential Properties

Future Activities

- Data collection to support remedial planning
- Develop conceptual remedial approach

Community Questions

Acquired Residential Properties – Remediation Related

Q. When all the houses that are located on contaminated land near Keith have been demolished, will you remediate the land or cap it and use for what?

A. This is under evaluation by the City.

New Andre McCoy Field

New McCoy Field

Regulatory Process Update

☐ MassDEP Regulatory Activity

- New McCoy Construction RAM – Status Report
2/11/2010
 - >2,400 tons of impacted soil removed to date
- Utility-Related Abatement Measure – Status Report
1/15/2010

☐ EPA Regulatory Activity

- Work conducted in coordination with EPA

New Andre McCoy Field - Future Activities

- Release Abatement Measure Closure Report

- Incorporate data into updated Phase II Report

- Partial Response Action Outcome
 - Activity and Use Limitation

Keith Middle School

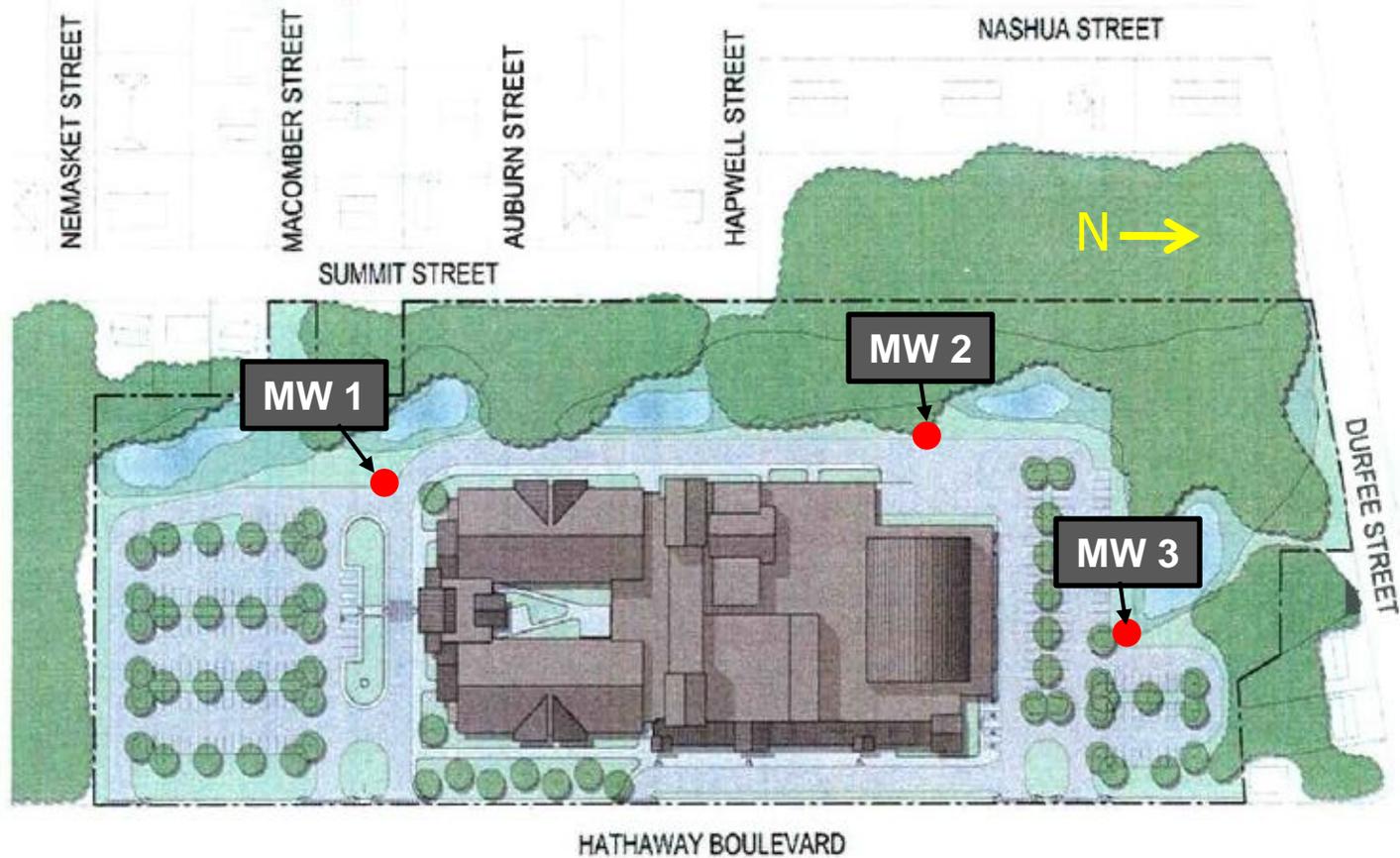
Keith Middle School - Regulatory Process Update

- ❑ **Wetland Sediment PCB – Immediate Response Action**
 - Status Report - March 10, 2010
 - Fence installation completed – Fall 2009/Winter 2010
 - Investigation, ecological risk assessment, and remedial planning on-going

- ❑ **Long-Term Monitoring, Maintenance and Implementation Plan (LTMMIP)**
 - Cap Inspections – twice/year – 2009 completed
 - Indoor Air and Vent Monitoring – three-times/year – 2009 completed
 - Wetland Inspection – once/year – 2009 completed
 - Groundwater Sampling – twice/year – 2009 completed
 - Site Personnel Training – once/year – 2009 completed

- ❑ **Results/reports published on the City's website.**

Update/Keith Middle School LTMMIP Groundwater Monitoring Well Locations



Update/Keith Middle School Wetland PCB Investigation/Evaluation

☐ Toe of Slope Investigation

- Scope coordinated with EPA
- 12 soil cap edge borings
- Four foot sediment/soil cores
- 41 samples collected
 - PCBs
 - Metals

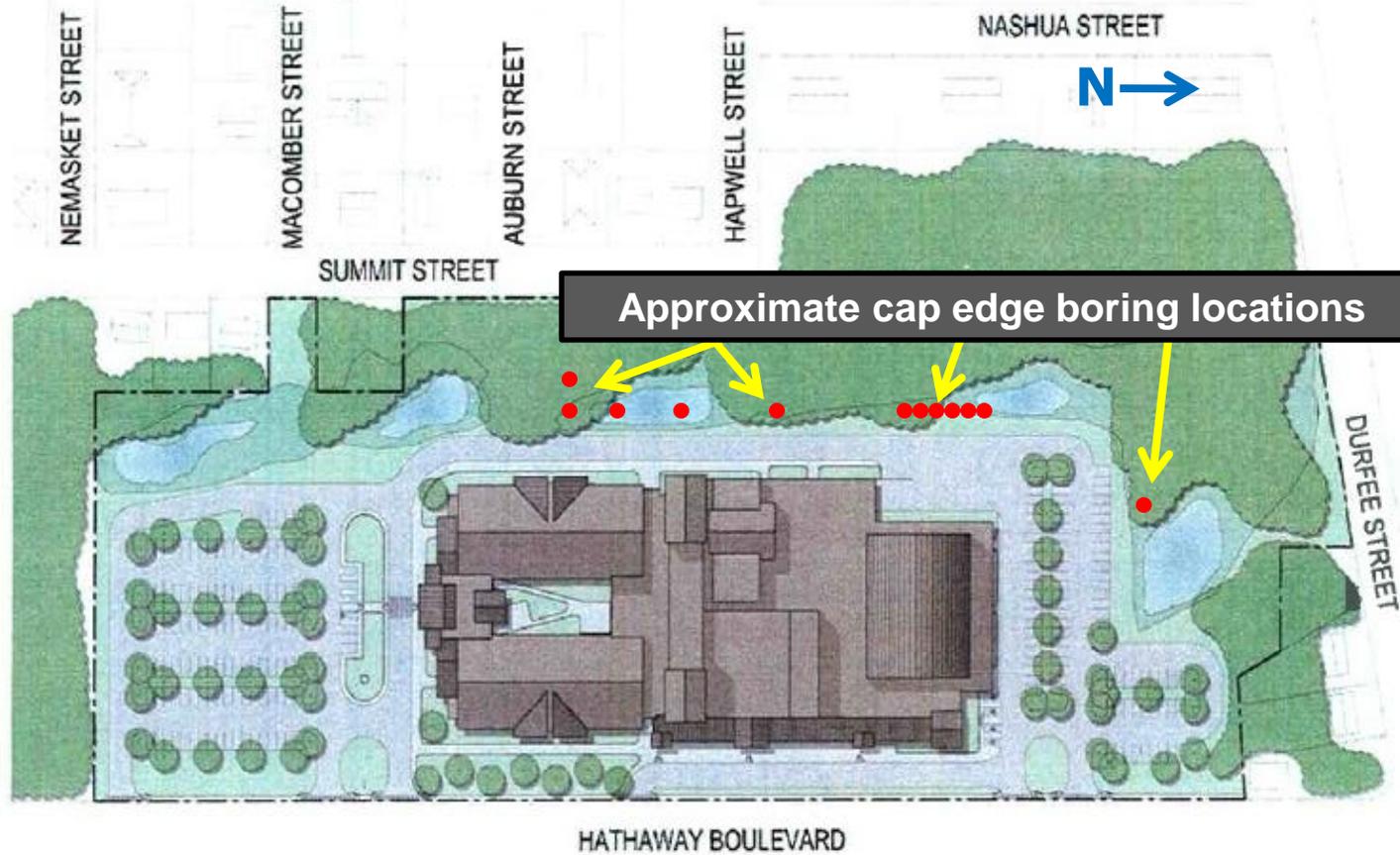
☐ Findings

- Shallow sediment detections
- No fill encountered in borings

☐ Data Availability/Presentation

- IRA Status Report – March 10, 2010

Update/Keith Middle School Cap Edge Boring Locations (approximate)



Community Questions – Wetland Related

Q. What are the most current results for the PCBs and other contaminants in the wetland behind KMS? Has the source of the high levels of PCBs there been identified and if so, where?

A. Current results in the 3/10/10 IRA Status Report. The source of the PCBs is under evaluation.

Q. Has it been determined how the wetlands behind Keith became re-contaminated? If not, what is the schedule to determine this?

A. This is under evaluation.

Community Questions – Wetland Related

- Q. When will the results of the MCP Ecological Risk Characterization be available? Will this be delayed until the September 2010 status report?
- A. The City expects to release the results of the ecological risk report in Summer 2010.

KMS Indoor Air and Vent Monitoring

Update/Keith Middle School

Air Monitoring for Polychlorinated Biphenyls

- PCBs KMS indoor air equivalent/less than background air**
- PCBs below EPA Action Level (0.05 ug/m³)**
- PCBs present in vent samples periodically**
- Risk evaluation shows no risk above MassDEP criteria**

Update/Keith Middle School

Air Monitoring for Volatile Organic Compounds (VOCs)

VOCs in vents decreasing in concentration over time

- Includes compounds in soil gas (performing as designed)

VOCs detected in indoor air

- Background concentrations (off-gassing of building materials)
- Also attributable to maintenance activities
- HVAC off during sample collection

Keith Middle School - Future Activities

- LTMMIP Implementation

- LTMMIP Revisions

- Wetland ecological risk investigation and reporting

- Remedial planning for wetland

Community Questions – KMS Air Monitoring

Q. Can the KMS air handling system be shut down for an indoor air sampling event? Would this be useful data?

A. Yes it can. In fact, it is shut down during each of the three monitoring events conducted each year.

The KMS Building Management System (BMS) automatically shuts down the HVAC system during weekends and holidays for energy savings. All of the routine sampling is conducted during holiday periods.

Nemasket Street Lots

Nemasket Lots - Regulatory Process Update

MassDEP Regulatory Activity

- Consulting with MassDEP on process.

EPA Regulatory Activity

- EPA/TSCA approval of site activities sought by City

Update/Nemasket Lots

Environmental Investigation

□ Investigation Program

➤ Geophysics

- Electromagnetic induction survey (EM)
- Ground penetrating radar (GPR)

➤ Test pit investigation

- Visual inspection of subsurface
- Examination of buried items
- Field/professional judgment soil sample collection

➤ Soil borings

- Scope/need to be determined following geophysics and test pit work

Community Questions

Nemasket Lot Related

Q. Could groundwater from the Nemasket Lot (former Bethel AME Property) carry contamination over to the Keith Middle School, church, and the NBHS sites? Has it?

A. Groundwater elevation data collected thus far indicates groundwater flow is toward the southeast at the Nemasket Lot, away from KMS and NBHS. The fill impacts at the site are associated principally with PAHs, PCBs, and metals. PAHs, PCBs, and metals have low aqueous solubility and are not expected to migrate with groundwater.

Q. When will the remediation of the Nemasket Street Lots start?

A. The Nemasket Street Lots are under evaluation.

Other Community Questions

Community Questions

General Site Questions

Q. When and where will dioxin testing occur?

A. Dioxin testing of soil is currently planned for 2010 at the NBHS campus and the Nemasket Street Parcels.

Q. How does flooding impact contaminant transport?

A. The majority of the site is not impacted by flooding since most areas are elevated. Areas subject to flooding are evaluated on a case by case basis.

Community Questions

General Site Question – Superfund Sites/Sullivan’s Ledge

Q. Does TRC think groundwater is moving contaminants from known Superfund sites like Sullivan’s Ledge to PSWS?

A. No. At Sullivan’s Ledge “...on a regional scale, groundwater flow in the overburden, shallow bedrock and deep bedrock is to the north...” based on the EPA Record of Decision Summary, Sullivan’s Ledge Superfund Site page 6 (EPA, 1989).

The PSWS is south of Sullivan’s Ledge so no groundwater should flow from Sullivan’s Ledge to PSWS.

Community Questions

General Site Question – Water table

Q. As the water table rises seasonally, can it contaminate the soil it is traveling through?

A. This type of impact is common with certain types of contaminants (e.g., free-phase petroleum), which have not been detected at the PSWS.

The fill impacts at the site are associated principally with PAHs, PCBs, and metals. PAHs, PCBs, and metals have low aqueous solubility and are not expected to migrate with groundwater.

Community Questions

General Site Question – Chemical effects

Q. What are the synergistic effects of all the chemicals at this site on human health both short term and long term? What are the additive or multiplicative effects of these chemicals?

A. Chemicals present together in the environment as mixtures may act independently or they may exhibit additive, synergistic or antagonistic effects on human health.

USEPA and MassDEP guidance recommend using the assumption of additivity for environmental mixtures, and the City has made this assumption in its evaluation of chemical concentration data collected from the Site to date.

The City will perform a risk assessment that covers all areas of the Site and incorporates all chemical concentration data before reaching final decisions about the need for response actions.

Community Questions

General Site Question

Q. By when will the DPW yard be investigated?

A. There are no plans for investigation of the DPW yard at this time.

Q. Mass. Dept. of Public Health Study.

A. Information about the MassDPH Health Study can be obtained from Jan Sullivan, Director, Community Assessment Program at the Bureau of Environmental Health (617-624-5757).

Thank You for Your Time and Attention

Questions are Welcome