



## ENVIRONMENTAL FACT SHEET

### **City of New Bedford's Environmental Investigation of the Acquired Residential Properties and Nemasket Street Lots**

City of New Bedford/TRC, August 2012

This fact sheet describes what the City has done to determine that it is safe for people to use their private property and to play and work at the campus of Keith Middle School near the City-owned Acquired Residential Properties and Nemasket Street Lots while environmental work at these parcels continues. The location of these parcels is shown in Figure 1. The fact sheet also summarizes findings from the investigations performed for these parcels and the next steps to address these findings. Terms in bold are defined in the Glossary of Terms at the end of the fact sheet.

***It is safe for people to use their yards and the campus at Keith Middle School while investigation of City-owned Acquired Residential Properties and Nemasket Street Lots continues.***

The Acquired Residential Properties and Nemasket Street Lots are surrounded by a locked, chain-linked fence to prevent human contact with the soil while the City and its environmental consultant, TRC Environmental Corporation (TRC), conduct further environmental work. The fence reminds people to keep away from the parcels until work is completed. Meanwhile, it is safe for maintenance staff and other officials to work on the land inside the fence as needed to perform periodic maintenance activities such as mowing. It is also safe for maintenance staff and residents to use the land that is outside the fence.

***Findings from Studies Conducted to Date***

The City submitted a Final **Phase II Comprehensive Site Assessment (CSA)** for the Acquired Residential Properties and Nemasket Street Lots to the Massachusetts Department of Environmental Protection (MassDEP) in January 2012. The Final **Phase II CSA** included the results of investigations conducted by the BETA Group, Incorporated (BETA) and TRC through December 2011. This information was used to identify steps for protecting the health of people and the environment.

A total of approximately 386 soil borings have been advanced across the parcels. Samples were tested for **arsenic, lead** and other metals, **polychlorinated biphenyls (PCBs), polyaromatic hydrocarbons (PAHs)**, extractable petroleum hydrocarbons (EPH), volatile petroleum hydrocarbons (VPH) and/or **volatile organic compounds (VOCs)**. A subset of these soil samples was tested for **dioxin** and **dioxin-like compounds**. Six groundwater monitoring wells were also installed at the parcels and groundwater was tested for **VOCs, PAHs, PCBs** and metals.

The Final **Phase II CSA** includes a risk characterization. A condition of No Significant Risk, as defined by the Massachusetts Contingency Plan, exists for residents and maintenance staff using the land outside the fence. For the land inside the fence, TRC determined that exposures to surface soils do not pose a significant risk to maintenance staff and other officials who work on the land or to trespassers breaching the fence, considering the possibility of inhaling dust, eating a small amount of surface soil, and coming into skin contact with surface soil. Groundwater was determined to pose No Significant Risk. Exposure to deeper soils, however, would not pose a

condition of No Significant Risk. The final remedy for these parcels will ensure that a condition of No Significant Risk exists for current as well as future uses.

**The Next Steps**

The City will release a draft **Release Abatement Measure (RAM)** Plan report by late summer 2012 that explains the remedial work planned for the Acquired Residential Properties. A **Phase III Remedial Action Plan** report that identifies, evaluates and selects a remedial plan for the Nemasket Street Lots will be released later in 2012. The draft reports will be available for public comment for a minimum of 20 days prior to submittal to MassDEP. The City will continue to post at its website all reports and chemical concentration data for the Acquired Residential Properties and Nemasket Street Lots.

**For More Information**

Data related to the Acquired Residential Properties and Nemasket Street Lots are posted at the City’s website <http://www.newbedford-ma.gov/McCoy/sitemap/sitemap.html>; filed under the “Acquired Properties/Nemasket St. Lots” button. Details about the investigation of the parcels are provided in the Final Phase II CSA dated January 2012. If you have additional questions, please contact Cheryl Henlin, City of New Bedford Environmental Stewardship Department, at (508) 991-6188 or by email at [cheryl.henlin@newbedford-ma.gov](mailto:cheryl.henlin@newbedford-ma.gov).

**Figure 1**



## GLOSSARY OF TERMS

**Arsenic** – Naturally occurring chemical element used historically for a variety of purposes, including wood preservatives, herbicides (weed killer), pesticides, and medicine.

**Dioxin** – Term is commonly used to refer to the compound 2,3,7,8-tetrachlorodibenzo-*p*-dioxin. It is also sometimes referred to as 2,3,7,8-TCDD. Dioxin is found everywhere in the environment and is released through nature processes, such as forest fires and volcanic eruptions, and through industrial processes, such as combustion of industrial waste or chemical manufacturing.

**Dioxin-like compound** – Compounds commonly detected in the environment along with dioxin that can cause adverse effects like dioxin. Most are less harmful than dioxin.

**Lead** – Naturally occurring chemical element used in building construction, lead-acid batteries, bullets and shot, weights, and is part of solder, pewter, and alloys, and utilized in paints.

**Phase II Comprehensive Site Assessment (CSA)** - An investigation of a site that describes its history, the nature and extent of chemical impacts, hydrogeological conditions (groundwater distribution and dynamics within soil and bedrock), fate and transport characteristics of chemicals found at the site and a characterization of risk posed by the site to health, safety, public welfare and the environment.

**Phase III Remedial Action Plan** - For sites where closure is not yet possible due to a risk determination, this plan identifies and evaluates a range of remedial options for the site, and selects one of the remedial options for implementation at the site based on a variety of prescribed evaluation criteria.

**Polyaromatic hydrocarbons (PAHs)** – A group of over 100 different chemicals formed during the incomplete burning of coal, oil and gas, garbage, or other organic substances like tobacco or charbroiled meat. PAHs are usually found as a mixture containing two or more of these compounds, such as soot. Some PAHs are manufactured and found in coal tar, crude oil, creosote, and roofing tar, but a few are used in medicines or to make dyes, plastics, and pesticides or are components of petroleum.

**Polychlorinated biphenyls (PCBs)** – Mixtures of up to 209 individual chlorinated compounds. There are no known natural sources of PCBs. Some PCBs can exist as vapor in air to a limited extent. PCBs have no known smell or taste. In the past, PCBs have been used as coolants and lubricants in transformers, capacitors, and other electrical equipment because they do not burn easily and are good insulators.

**Release Abatement Measure (RAM)** – An accelerated remedial response used to reduce risks at a site or increase the cost-effectiveness of future response actions. The remedial response is intended to stabilize, treat, control, minimize or eliminate releases until site closure can be achieved or a more comprehensive remedial action can be implemented.

**Volatile organic compounds (VOCs)** – VOCs include a variety of chemical compounds given off as gases from certain solids or liquids. VOCs are given off by a wide array of products

numbering in the thousands. Examples of products that can give off VOCs when in use, and to some degree when stored, include: paints, lacquers, strippers, cleaning supplies, pesticides, building materials and furnishings, office equipment (e.g., copiers and printers), correction fluids and carbonless copy paper, graphics and craft materials including glues and adhesives, permanent markers, photographic solutions, and fuels and other petroleum-containing products.