



ENVIRONMENTAL FACT SHEET

City of New Bedford's Environmental Investigation of a Wetland Adjacent to the Keith Middle School

City of New Bedford/TRC, August 2011

This fact sheet describes what the City has done to determine that it is safe for people to play and work at the campus of Keith Middle School and to use their private property near the wetland while environmental work at the wetland continues. The fact sheet also summarizes findings from the investigation of the northern wetland (the wetland area north of the land bridge as shown in Figure 1) and the next steps to address the 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 the campus at Keith Middle School and to work in their nearby yards.

The City hired a contractor to remove **polychlorinated biphenyl (PCB)** impacted sediment (soil that is under water) from the wetland adjacent to the Keith Middle School. Removal occurred in 2006. As part of the *Long-Term Maintenance and Monitoring Implementation Plan* that was developed for the Keith Middle School property in October 2006, the City collects sediment samples for **PCB** analysis from randomly-selected locations along the bottom of the **cap** slope once a year. In May 2008, one of these sediment samples from the northern wetland had **PCB** levels that were higher than the U.S. Environmental Protection Agency (EPA) action level and the level that, when detected, must be reported to the Massachusetts Department of Environmental Protection (MassDEP). The City notified EPA and MassDEP of the finding. In December 2009, the City completed installation of a locked, chain-link perimeter fence as shown in Figure 1 to prevent human contact with the northern wetland while the City's environmental consultant, TRC Environmental Corporation (TRC), conducts further environmental work at the wetland. The fence reminds people to keep away from the northern wetland until work is completed. Meanwhile, it is safe for maintenance staff and other officials to work on the land area (mow the grass, etc.) inside the fence as needed, and it is safe for maintenance staff and residents to use the land that is outside the fence.

Findings from Studies Conducted to Date

On behalf of the City, TRC developed an **Immediate Response Action (IRA)** Plan to evaluate the wetland sediments. TRC collected additional sediment samples in 2008 and 2009, and collected samples from the base of the **cap** slope in 2010 and 2011. TRC issued an **IRA** Completion Report in October 2010 that described the **IRA** investigation and the perimeter fence installation.

TRC conducted an ecological assessment to learn whether **PCBs** and metals are affecting wetland **organisms** or wildlife. TRC collected water, sediment, and surface soil samples and reported results in the *Stage I Environmental Screening and Stage II Environmental Risk Characterization* published in November 2010. A condition of No Significant Risk, as defined by the Massachusetts Contingency Plan, exists for the southern wetland area (south of the land bridge), where **PCB** concentrations in soil and sediment samples are less than 1 milligram per kilogram (mg/kg). **PCB** concentrations in soil and sediment in the northern wetland exceed 1 mg/kg, and further remediation is proposed. EPA reviewed the report and requested clarification of information presented within the report, which TRC has provided.

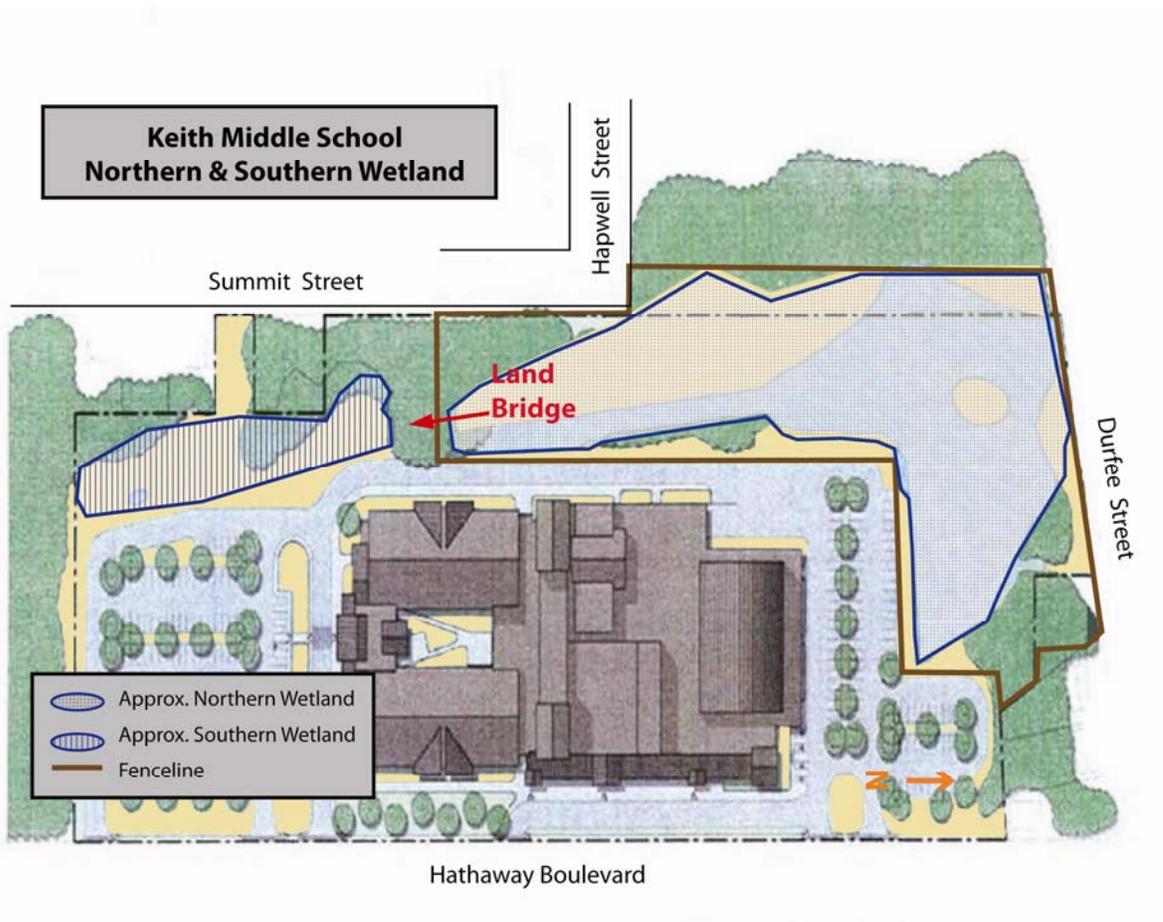
The Next Steps

TRC, working in conjunction with the City, will release a draft Phase II Comprehensive Site Assessment report that discusses the nature and extent of chemical impacts in the wetland by August 31, 2011. The draft report 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 wetland.

For More Information

Data related to the wetland are posted at the City’s website <http://www.newbedford-ma.gov/McCoy/sitemap/sitemap.html>; filed under the “Wetlands” button. Details about TRC’s investigation of the wetland are provided in the August 2008 *Immediate Response Action Plan* for Release Tracking Number 4-21300, **IRA** Status Reports dated October 2008, April 2009, September 2009, and March 2010, and the **IRA** Completion report dated October 2010. The other sampling and inspections that are part of the *Long-Term Maintenance and Monitoring Implementation Plan* at Keith Middle School are the subjects of a separate fact sheet also posted at the City’s website. 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.

Figure 1



GLOSSARY OF TERMS

Cap – The three feet of clean backfill in landscaped areas and the two feet of clean backfill in paved areas, as well as the fabric underneath these soil layers, that was brought to the site when the school was being built in 2006. This fabric and the soil on top of it keep people from coming into contact with soil impacted by **PCBs**, heavy metals, and polyaromatic hydrocarbons. The cap is inspected three times a year by a qualified engineer, and is maintained according to the EPA-approved Long-Term Monitoring and Maintenance Implementation Plan.

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. 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. The manufacture of PCBs was stopped in the U.S. in 1977. Products made before 1977 that may contain PCBs include: certain building materials, such as caulking, paint, adhesive and fluorescent lighting fixtures; electrical devices containing PCB capacitors and transformers; and hydraulic oils.

Organism – An individual form of life that is capable of growing, processing nutrients, and usually reproducing such as animals (fish, birds) and the microscopic forms of life that live in the water.

Immediate Response Action (IRA) – An assessment and/or remedial action that is started as soon as possible after an issue has been identified to address time-critical site conditions.