



ENVIRONMENTAL FACT SHEET

CITY OF NEW BEDFORD'S DEMOLITION ACTIVITIES AT

101, 102, AND 111 GREENWOOD STREET AND 98, 108, AND 118 RUGGLES STREET

CITY OF NEW BEDFORD/TRC, JUNE 2010

This fact sheet describes the results of environmental investigations that have been conducted at the six properties acquired by the City, what to expect during demolition, an estimated timeframe for demolition, and best management practices that will be applied during demolition to protect the health and safety of people living, working, and/or visiting at properties next to the acquired properties. Terms in bold are defined in the Glossary of Terms at the end of the Fact Sheet.

Results of environmental investigations

The City's previous environmental consultant, BETA Group, Inc. (BETA), collected soil samples at all six properties from December 2005 through June 2006. The City's current environmental consultant, TRC Environmental Corporation (TRC), collected more soil samples at 102 Greenwood Street in June 2008. Several of the soil samples had chemical concentrations above their applicable Massachusetts Contingency Plan (MCP) soil cleanup standards. Detected chemicals included **polyaromatic hydrocarbons (PAHs)**, metals, **polychlorinated biphenyls (PCBs)**, and **total petroleum hydrocarbons (TPH)**. Three properties, 101 and 102 Greenwood Street and 118 Ruggles Street, had at least one soil sample with levels of **PCBs** that were more than 50 milligrams per kilogram (mg/kg), which requires the Environmental Protection Agency (EPA) to oversee site activities under the Toxic Substances Control Act (TSCA). Although not required, the City installed one chain-link, locked fence around 102 Greenwood Street and another chain-link, locked fence around the remaining five properties to limit access.

In March and April 2010, samples of the concrete foundations were collected to determine whether the foundations had been impacted by PCBs potentially present in the surrounding soil, and to help evaluate how the foundations will be managed. PCBs were detected in the subgrade concrete foundation at 102 Greenwood Street at concentrations that would require EPA regulation, and will be disposed of at a licensed disposal facility. At 118 Ruggles Street, PCBs were also detected in a layer of insulating foam on the outside of the foundation at concentrations that would require EPA regulation, but not in the foundation itself. The City plans to separate the foam from the foundation and dispose of it at a licensed disposal facility. If the City is not able to remove the foam from the foundation, the foundation will be sent off-site for disposal. The foundations at the other four properties do not require EPA regulation. These foundations will be crushed on-site and left in place per Massachusetts Department of Environmental Protection (MassDEP) guidelines for recycling concrete.

What to expect during demolition and estimated timeframes

After receiving approval of demolition plans from MassDEP and EPA, the City anticipates demolition activities will be completed within five weeks of continuous work, ending no later than mid-August 2010 (assuming a start date no later than July 12th). This schedule includes up to one week to bring heavy equipment and other materials to the site (mobilization), two weeks for demolition, and two weeks for backfilling and restoration. Prior to demolition, debris around the yards will be removed. Shrubs and trees requiring removal will be cut to ground level and removed. The City's Department of Public Infrastructure (DPI), working with the Department of Environmental Stewardship and TRC, will demolish the buildings. The demolition materials (other than concrete foundation materials) will be placed directly into roll off containers and disposed of at New Bedford Waste Services' facility on

Shawmut Avenue in New Bedford. Foundation materials will be managed as discussed previously. Backfill material that has been tested to ensure that it meets Massachusetts soil cleanup standards will be delivered to the site, and an excavator will be used to spread, compact, and grade the material so that the footprints of the houses are filled in to match the existing surrounding grade. The City will cover the disturbed areas with approximately 3- to 4-inches of loam, and will spread grass seed or hydroseed.

Best management practices

Equipment Decontamination. Equipment that comes into direct contact with concrete determined to be actual or potential **PCB Remediation Waste** or with soil will be dry brushed and swabbed with a solvent prior to leaving the site. This includes decontaminating equipment when it is moved between 102 Greenwood Street and the other five properties. The excavator will move around the properties on steel plates as much as possible to minimize contact with soil around the houses.

Dust monitoring. TRC will conduct real-time dust monitoring upwind and downwind of the work area during building demolitions, foundation removal, basement slab breaking, and backfilling activities. TRC will also place one dust monitor between the work zone and the nearest property (e.g., residence, school, etc.) regardless of the wind direction. If dust levels exceed the EPA National Ambient Air Quality Standard at sampling locations for 15 minutes or longer, City staff will increase dust suppression activities (i.e., water sprays).

Volatile organic compound (VOC) air monitoring. **VOC** air monitoring will be performed using an instrument called a photo-ionization detector (PID). Since **VOCs** have not been detected in soil, they are not expected to be detected in air in significant quantities during demolition, but field monitoring of the breathing zone for **VOCs** will be conducted as a precaution. TRC will also periodically monitor **VOCs** at the dust monitoring stations during instrument checks.

For More Information

The full Revised Modified Release Abatement Measure Plan for the acquired properties, which includes a more complete discussion of the items highlighted in this fact sheet, is posted at the City's website <http://www.newbedford-ma.gov/McCoy/sitemap/sitemap.html>; filed under the "Acquired Properties" heading. The results of the concrete foundation sampling are presented in the memorandum titled "Residential Foundation Sampling Results" (May 2010), which is also available on the City's website. Future plans for the properties are under evaluation. If you have additional questions, please contact Cheryl Henlin, City of New Bedford Environmental Stewardship Department, at (508) 991-6188 or email cheryl.henlin@newbedford-ma.gov.

GLOSSARY OF TERMS

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. PAHs are 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 a 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.

PCB Remediation Waste –Materials (in this case, foam and concrete foundations) whose source of PCBs is the release from a source containing PCBs at a concentration greater than 50 mg/kg (in this case, soil) and not from manufacture.

Total petroleum hydrocarbons (TPH) – A large family of several hundred chemical compounds that originally come from crude oil. Scientists divide TPH into groups of petroleum hydrocarbons that act alike in soil or water. Some chemicals that may be found in TPH are hexane, jet fuels, mineral oils, benzene, toluene, xylenes, naphthalene, and fluorene, as well as other petroleum products and gasoline components. However, it is likely that samples of TPH will contain only some, or a mixture, of these chemicals. (Source: ATSDR ToxFAQs for TPH, August 1999)

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 include: paints and lacquers, paint strippers, cleaning supplies, pesticides, building materials and furnishings, office equipment such as copiers and printers, correction fluids and carbonless copy paper, graphics and craft materials including glues and adhesives, permanent markers, and photographic solutions. Fuels/petroleum products contain VOCs. All of these products can release VOCs when in use, and, to some degree, when stored.