



FACT SHEET

City of New Bedford's Environmental Investigation of the Former Payne Cutlery Property, located at 295 Phillips Avenue

City of New Bedford, November 2012

This fact sheet has been prepared by New Bedford's Department of Environmental Stewardship to provide general information about the Former Payne Cutlery Property (the "site"), as well as key points of TRC Environmental Corporation's (TRC; the City's environmental consultant for this site) *Analysis of Brownfields Cleanup Alternatives* (ABCA) released on November 16, 2012 for public comment. The Department of Environmental Stewardship defers to the contents of the proposed ABCA and recommends a review of the entire document to prepare public comment. A glossary of bolded terms is included at the end of the fact sheet.

Site History

From 1963 to 1987, the former factory building was owned by Payne Cutlery Corporation, which manufactured cutting shears and manicure products. Payne Cutlery later declared bankruptcy. The property was sold in 1989 and was used as a storage facility for chemicals in addition to the hazardous materials that Payne Cutlery had left on site. Other businesses also operated out of the factory building.¹

Between 1992 and 1993, the U.S. Environmental Protection Agency (EPA) removed deteriorating and damaged drums and packages containing hazardous materials from the property. The City of New Bedford acquired the property in 2000, demolished the structurally-unsound building, and began assessing it using EPA Brownfields Assessment Grant Funds. The assessment indicated that trichloroethene (TCE), a solvent used in Payne's operations, was present in soil and groundwater above **Massachusetts Contingency Plan (MCP)** standards. The soil was also found to contain other chemicals [chlorinated **volatile organic compounds (VOCs)**, 2-butanone, nickel, and petroleum]. Since groundwater was present at a relatively shallow depth and it contained high levels of TCE, the City conducted indoor air sampling in neighboring houses and apartments to evaluate whether indoor air had been impacted by this chemical. All indoor air samples collected from "living space" or "work areas" were below Massachusetts Department of Environmental Protection Imminent Hazard concentrations for TCE. Groundwater monitoring wells were installed at the site around the same time, and samples were collected to evaluate groundwater impacts.

In 2010, the City constructed a parking lot on the southeastern corner of the former Payne Cutlery property to provide more off-street parking for area residents. In 2012, the City conducted further groundwater sampling and indoor air sampling, as well as interior and exterior soil gas sampling. The groundwater investigation shows that concentrations of chlorinated VOCs have decreased since the 2001 investigation, but that they are still present at concentrations above regulatory standards. Indoor air quality in indoor spaces appears to remain unimpacted by chemical concentrations in the soil and/or groundwater.

¹ Source: EPA Region 1 Press Release, Dec. 1, 1999 "Chemical Company to repay EPA costs to clean up hazardous waste warehouse."

The Next Steps

Crawlspace Ventilation Modifications at Taber Mill Apartments: The majority of Taber Mill's approximately 41,000 square foot building is underlain by a crawlspace with a dirt floor; a small portion of the building has a basement storage area with a concrete floor. Both the crawl space and basement are vented by a system of two fans leading to 13 vents. TRC has proposed replacing the two fans with a single fan to create a constant negative pressure (air would be drawn into the basement and crawlspace and discharged outside the building). During the warmer months, the fan would run continuously to provide one air change per hour. In the winter months, the flow rate would be reduced so that it would still create a negative pressure, but not draw in as much air.

Permanganate Injection at former Payne Cutlery property: The City and its consultant have selected the addition of permanganate to groundwater to reduce VOC concentrations. Permanganate provides oxygen to the groundwater, speeding up natural chemical degradation processes. This treatment does not result in any harmful chemical additives being left behind. The City will schedule the injection of permanganate into the subsurface in a treatment area measuring about 3,500 square feet to reduce the concentrations of TCE that are currently found in shallow groundwater. Within the treatment area, permanganate will be injected to depths of 2-15 feet below ground at up to 50 locations. The injection process is expected to take three to five days to complete.

Groundwater samples will be collected from at least six existing monitoring wells located within and downgradient from the injection area at least four weeks after the permanganate injection has been completed. If permanganate is detected in any of the samples collected during the first post-injection monitoring event, a second groundwater sampling event will be performed after another 4-6 weeks, and will continue until permanganate is no longer detected.

Why is the City going to alter the crawlspace ventilation system at Taber Mill Apartments if sampling results to date have shown no significant risk?

The City, working in collaboration with the management of Taber Mill, would like to proactively take steps to ensure that there is no means for vapors that may enter the building through the crawlspace's dirt floor to travel to other parts of the building.

Will the permanganate treatment fully clean up the chemicals at the former Payne Cutlery property?

No, the permanganate is meant to decrease the concentrations of TCE in shallow groundwater, but other chemicals may remain in deeper soil and groundwater. The City has grant funding from EPA that can be spent at this property to begin addressing the issues, but since starting its investigation, the City has learned that the grant funding it was awarded by EPA will not be enough to fully address the problem. The City will continue to work with MassDEP and others to determine a more comprehensive remedy for this property.

Is it safe to stay in my house/apartment while permanganate is being injected into the ground?

Yes. Since no buildings in this area have a private well, there is no opportunity for permanganate to impact nearby residents. There may be some limited road closures since several injection points are proposed within Coffin Avenue. Operations are not expected to extend beyond normal business hours.

For More Information

A meeting will be held on **Tuesday, November 27, 2012, from 6:00 p.m. to 7:00 p.m.** in the **Buttonwood Park Senior Center and Warming House (near the pond)**, Oneida Street and Lt. Walter Fuller Memorial Parkway, New Bedford, MA. The City of New Bedford and TRC will discuss proposed remediation activities for the site, as presented in the ABCA, and community members will have an opportunity to ask questions. A Portuguese interpreter will be available at the meeting. To request Spanish or other interpretation services for this meeting, please contact Mali Lim at New Bedford Community Services at 508-961-3136 or via email at Mali.Lim@newbedford-ma.gov no later than Tuesday, November 20th.

EPA has published a general fact sheet called “A Citizen’s Guide to Chemical Oxidation,” which can be viewed online at <http://clu-in.org/download/citizens/oxidation.pdf>.

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

Massachusetts Contingency Plan (MCP) - A set of state-specific regulations that guide reporting requirements, assessment, and, if necessary, the cleanup of properties where soil, sediments, and/or groundwater is found to have been impacted by oil or hazardous materials. Full reference at 310 CMR 40.000.

Volatile organic compounds (VOCs) – VOCs are 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., printers), correction fluids and carbonless copy paper, graphics and craft materials (e.g., glues and adhesives), markers, photographic solutions, and fuels and other petroleum-containing products.