Wells G&H Site Woburn, MA

U.S. EPA | HAZARDOUS WASTE PROGRAM AT EPA NEW ENGLAND

THE SUPERFUND PROGRAM *protects human health and the environment by investigating and cleaning up often-abandoned hazardous waste sites and engaging communities throughout the process. Many of these sites are complex and need long-term cleanup actions. Those responsible for contamination are held liable for cleanup costs. EPA strives to return previously contaminated land and groundwater to productive use.*

SITE BACKGROUND:

Vapor Intrusion & Contaminants of Concern – The Wells G&H Superfund Site contains five source area properties within an approximately 330-acre area located in Woburn, MA. Since 1992, various cleanup actions have been implemented and/or are on-going at the five source area properties. Although groundwater treatment systems installed as part of the EPA-approved remedy for the Site have removed chemicals from over 400 million gallons of groundwater, some concentrations of these chemicals remain in the groundwater.

These chemicals are known as volatile organic compounds (VOCs). VOCs can travel from groundwater into a gas and move through the tiny open spaces between soil particles. This "soil gas", as it is called, can gather under buildings and possibly enter buildings through cracks or holes present in a floor slab, a basement or a crawl space (for example, where utility services enter a home). Once in a building, the colorless and often odorless gas may travel further to upper levels of the building, depending on its insulation and construction. The movement of VOCs from groundwater into soil gas and then into a building is referred to as vapor intrusion. The recently collected indoor air data for the Wells G&H Superfund Site confirm that vapor intrusion does not presently pose a risk to human health at any of the buildings sampled.

PURPOSE OF THIS FACT SHEET:

In January 2011, EPA announced that additional data would be collected in portions of the Wells G&H Superfund Site to evaluate the potential for compounds in groundwater to migrate as vapor into buildings, a condition known as vapor intrusion. Subslab soil gas and indoor air samples have been collected using up-to-date investigation techniques, and EPA has completed a thorough evaluation of those data. The purpose of this fact sheet is as follows:

- Vapor intrusion evaluation & environmental monitoring – Summarizing the results of EPA's vapor intrusion evaluation and upcoming environmental monitoring.
- Cleanup actions – Providing an overview of upcoming cleanup activities.
- Additional information – Providing additional information on public outreach and next steps.

VAPOR INTRUSION EVALUATION & ENVIRONMENTAL MONITORING:

EPA completed the evaluation of data collected at residences and other occupied buildings in the vicinity of the UniFirst, WR Grace, and New England Plastics (NEP) Source Area properties, as well as the commercial building at the UniFirst Source Area property. EPA has arrived at the following conclusions (as documented in EPA's April 2012 Five Year Review Addendum Report):

- No current threat to residences and existing buildings – Vapor intrusion does not pose a health threat inside buildings near the UniFirst, WR Grace and NEP Source Area properties, including residential buildings within the Dewey and Olympia Avenues neighborhood.

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Figure 1. Annual Monitoring

Monitoring Well Locations

Building Footprints

Parcel Lines

UC26 Monitoring Well Locations Identified for Groundwater Annual Monitoring

Building Locations Identified for Indoor Air and Sub Slab Soil Gas Annual Monitoring

Superfund Source Area Property

0 25 50 100
Feet
1 inch = 113 feet

N

Base map: Parcels; MASSGIS

Path: R:\Projects\GIS_2010\104161_WellsGH_Woburn\MXD\GW_IWQuad_Samples_Presentation_062212.mxd

• Potential future threat at the UniFirst Source Area property – In its current condition, vapor intrusion does not pose a health threat inside the commercial building located on the UniFirst Source Area property. There is, however, the potential for future vapor intrusion problems inside the building if the facility is transformed from a commercial storage facility to a residential use. In addition, subslab soil gas concentrations of the chemical compounds tetrachloroethylene (also known as perchloroethylene (PCE)) and trichloroethene (TCE) beneath this building are significantly elevated, and indicate a potential for a future vapor intrusion pathway if building conditions were to change (for example, if cracks were to developed in the foundation or subslab in such a way that allows soil gas to migrate into the building). Upon UniFirst Corporation completing the previously selected soil remedy at the UniFirst Source Area property (see Cleanup Actions below), additional monitoring of the vapor intrusion pathway will be conducted to evaluate remedy performance (see Figure 1).

• Targeted subslab soil gas and indoor air monitoring – As a precaution, EPA is requiring annual sampling of subslab soil gas and indoor air in the commercial building immediately west of the UniFirst Source Area property (see Figure 1). Site-related constituents associated with vapor intrusion were not detected in indoor air above health protective levels in this commercial building. However, elevated levels of PCE were detected in the subslab soil gas beneath the building. Additional monitoring will serve to confirm health protectiveness.

• Expand Annual Groundwater Monitoring – EPA is expanding the number of wells monitored by the UniFirst Corporation and W.R. Grace & Co. under their environmental monitoring programs. See expanded well locations boxed/flagged on Figure 1. Please note that the groundwater at the site is not currently used as a drinking water supply, and has not been used as such since 1979.

CLEANUP ACTIONS:

UniFirst Corporation will conduct a pilot test on the UniFirst Source Area property at 15 Olympia Avenue, Woburn, MA to design and implement the soil remedy. The soil remedy for the UniFirst Source Area property is called In-Situ Soil Volatilization (ISV). It will extract and treat VOCs, including PCE and TCE, from the subsurface soils as well as soil gas, and will also reduce the potential for these vapors to get into the building. Following installation of the ISV system, UniFirst will monitor its performance.

Separate from the vapor intrusion evaluation, W.R. Grace & Co. will implement a soil removal work plan on the WR Grace Source Area property at 369 Washington Street, Woburn, MA.

ADDITIONAL INFORMATION:

• Public Outreach – EPA will hold a Community Meeting at 7:00 PM on June 28, 2012 at Woburn City Hall to present the results of EPA's vapor intrusion evaluation.

• Five Year Review Addendum Report & Human Health Risk Assessment – In April 2012, EPA prepared the Five Year Review Addendum Report that includes "Attachment B - Human Health Risk Assessment for the Vapor Intrusion Pathway" and documents the Agency's vapor intrusion conclusions. A copy of the Five Year Review Addendum Report can be found on EPA's web page for the Site at http://www.epa.gov/region1/superfund/sites/wellsgh. These documents confirm that vapor intrusion does not presently pose a risk to human health at any of the buildings sampled.

CONTACT INFORMATION:

If you have any questions regarding this vapor intrusion evaluation or the current status of the Wells G&H Superfund Site, please contact the EPA personnel listed on page 1 of this fact sheet. EPA is also working closely with the City of Woburn, including Mayor Scott Galvin's office and Alderman City Councilor Darlene Mercer-Bruen, regarding the Wells G&H Site. If there are any questions for Mayor Galvin and Councilor Mercer-Bruen, they can be reached at (781) 897-5901, email: mayor@cityofwoburn.com, and (781) 937-3161, email: bruen-n-bruen@ comcast.net, respectively.