Investigation of Waste Material in the Bliss Corner Neighborhood Dartmouth, Massachusetts

Gerard Martin and Lori Williamson
Massachusetts Department of Environmental Protection

March 21, 2019
Tonight’s Agenda

• Assessments conducted to-date
• Contaminants detected to-date (Contaminants of Concern)
• MassDEP’s proposed initial investigation
• Potentially Responsible Parties (PRPs)
• Role of other agencies
• Questions
85 McCabe Street
RTN 4-0027363

- July 2018 – Dartmouth Environmental Affairs Coordinator called MassDEP to report a release of petroleum from drums during excavation activities
- July 2018 – MassDEP inspected property and observed tar-like liquid, metal objects, tires, glass, and other debris. A strong petroleum odor was noted
- August 2018 – MassDEP issued Notice of Responsibility (NOR)/Request for Immediate Response Action (IRA) Plan to property developer
- August 2018 – Immediate Response Action (IRA) Plan submitted
Soil sampling was conducted in July and October 2018

Laboratory analytical results identified the following above cleanup standards:

- **Polychlorinated biphenyls** (PCBs)
- **Metals** (arsenic, barium, chromium, lead, vanadium, and zinc)
- **Volatile organic compounds** (VOCs - benzene, ethylbenzene, and xylenes)
- **Polycyclic aromatic hydrocarbons** (PAHs - acenaphthene, naphthalene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, phenanthrene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, and 2-methylnaphthalene)

Licensed Site Professional (LSP) provided MassDEP with newspaper article documenting dumping waste in the area in the 1930s/1940s
20 Kraseman Street
RTN 4-0027576

• October 2018 - In response to the newspaper article MassDEP and the Town Board of Health inspect 20 Kraseman Street where redevelopment activities were known to be occurring
  – Waste material was observed and MassDEP requested testing of the material

• December 2018 – MassDEP received notification of PCBs at 15.4 parts per million (ppm) in shallow soil (0 to 3 feet)
  – This is a condition that could pose an Imminent Hazard and requires that an Immediate Response Action (IRA) be conducted.

• December 2018 – MassDEP issued Notice of Responsibility (NOR)/Request for Immediate Response Action (IRA) Plan to property developer
20 Kraseman Street
RTN 4-0027576
• Four soil samples were collected in November 2018

• Laboratory analytical results identified polychlorinated biphenyls (PCBs) above applicable concentrations that pose or could pose an Imminent Hazard

• December 2018 – A temporary fence was installed around the property to prevent access to the contaminated soil

• March 2019 – MassDEP received notification that additional soil sampling confirmed potential Imminent Hazard with 960 ppm of PCBs in top 1 foot of soil

• More secure fencing and erosion control will be installed
Contaminants of Concern

• Polychlorinated biphenyls (PCBs)

• Metals
  – Arsenic, barium, chromium, lead, vanadium and zinc

• Volatile organic compounds (VOCs)
  – Benzene, ethylbenzene and xylenes

• Polycyclic aromatic hydrocarbons (PAHs)
  – Acenaphthylene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, 2-methylnaphthalene, naphthalene and phenanthrene
Private Well Sampling

• January 2019 - MassDEP collected samples from private drinking water supply wells in the neighborhood
  – Most residences are supplied water from the Dartmouth Water Division of the Department of Public Works

• Samples were analyzed for:
  – Polychlorinated biphenyls (PCBs)
  – Metals (antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, nickel, selenium, silver, thallium, vanadium, and zinc)
  – Polycyclic aromatic Hydrocarbons (PAHs)
  – Volatile organic compounds (VOCs)
  – Extractable petroleum hydrocarbons (EPH) and volatile petroleum hydrocarbons (VPH)

• All sampling results were below drinking water standards
Proposed Sampling – Phase 1

• MassDEP is proposing to install soil borings and monitoring wells within Town-owned rights-of-way

• Working with Town of Dartmouth to obtain access

• MassDEP has hired Green Environmental

• Borings/wells will be installed using a track-mounted Geoprobe® rig
Proposed Boring/Monitoring Wells

- Sharp Street
- McCabe Street
- Milton Street
- Grant Street
- Donald Street

Approximately ½ Mile
## Schedule

<table>
<thead>
<tr>
<th>EVENT</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Execution of Access Agreement</td>
<td>April 1, 2019</td>
</tr>
<tr>
<td>Dig Safe Markings</td>
<td>Early April 2019</td>
</tr>
<tr>
<td>Completion of Soil Borings/Monitoring Wells</td>
<td>Late April 2019</td>
</tr>
<tr>
<td>Receive Sampling Results</td>
<td>Mid to late May 2019</td>
</tr>
<tr>
<td>Public Meeting #2</td>
<td>Mid-summer 2019</td>
</tr>
</tbody>
</table>
Potentially Responsible Parties (PRPs)

Chapter 21E makes the following persons liable:

• The owner or operator of a site;
• Any person who owned or operated the site at the time of storage or disposal of any hazardous material;
• Any person who arranged for the transport or disposal of hazardous material to or at a site;
• Any person who transported any hazardous material to a site; and
• Any person who otherwise caused or is legally responsible for a release
Potentially Responsible Parties (PRPs)

- MassDEP has not yet identified PRPs
- Newspaper articles from the 1930s and 1940s describe historic dumping
- MassDEP issued Requests for Information (RFIs) to New Bedford and Dartmouth for records related to historic dumping
- MassDEP is attempting to collect information to identify:
  - the nature and sources of the waste material
  - where the waste was generated
  - how and when the waste material was transported to the area
  - who owned the properties at the time waste material was deposited
Potentially Responsible Parties (PRPs)

- MassDEP is attempting to collect information that could help to identify “causally responsible” parties to conduct assessment and cleanup activities.

- Homeowners will not be responsible for the costs that MassDEP incurs in conducting this investigation.

- MassDEP recognizes the unique circumstances here and will endeavor to achieve assessment and cleanup with minimal impact to the residents.
Involvement of Other Agencies

- Massachusetts Department of Public Health (DPH)
  - Is working with MassDEP to listen to resident’s concerns

- US Environmental Protection Agency (EPA)
  - MassDEP has had preliminary discussions with EPA
  - Depending on results of search for causally responsible parties, may seek EPA assistance in the future
How to Minimize Exposure

• Avoid direct contact with waste material
  – Refrain from digging until MassDEP completes its investigation
  – If digging is necessary, wear protective clothing, footwear and gloves
  – If you plan to dig, MassDEP recommends you notify the Town of Dartmouth Board of Health by calling (508) 910-1804

• Avoid growing fruits and vegetables in waste material
  – MassDEP recommends following “Best Management Practices (BMPs) for Non-Commercial Gardening at Disposal Sites” (WSC#14-910), which can be found at: https://www.mass.gov/files/documents/2016/08/om/14-910.pdf

• If you have a private drinking water well, that has not been sampled by MassDEP, please call the Department at 1-888-304-1133
Questions?
Contact Information

- Gerard Martin, Deputy Regional Director
  MassDEP BWSC SERO
  gerard.martin@mass.gov
  (508) 946-2799

- Lori Williamson, MassDEP BWSC SERO
  lori.williamson@mass.gov
  (508) 946-2803

- MassDEP’s Bliss Corner webpage:
  https://www.mass.gov/service-details/bliss-corner-neighborhood-dartmouth-ma