

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

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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



85 McCabe Street

RTN 4-0027363



MassDEP



85 McCabe Street

RTN 4-0027363

- 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



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



Schedule

EVENT	DATE
Execution of Access Agreement	April 1, 2019
Dig Safe Markings	Early April 2019
Completion of Soil Borings/Monitoring Wells	Late April 2019
Receive Sampling Results	Mid to late May 2019
Public Meeting #2	Mid-summer 2019



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

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

