



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Southeast Regional Office • 20 Riverside Drive, Lakeville MA 02347 • 508-946-2700

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Bliss Corner Neighborhood Dartmouth, Massachusetts

Historic Dumping Materials Frequently Asked Questions

February 2019

Introduction

The Massachusetts Department of Environmental Protection (MassDEP) is tasked with ensuring the cleanup of oil and hazardous material releases and with protecting health, safety, public welfare and the environment from oil and/or hazardous material releases.

In the summer of 2018, MassDEP responded to a request from the Town of Dartmouth (Town) to investigate potential environmental hazards in the Bliss Corner area of Dartmouth. In the fall of 2018, MassDEP received nuisance odor complaints from a property owner during the development of a property in the Bliss Corner neighborhood.

In response, MassDEP personnel performed an inspection during which waste material was observed in the shallow soil on certain residential properties, including some lots being developed. The waste material observed typically consists of discolored soil (blackish) containing broken glass, scrap metal, bricks, shingles, and tar-like material. Historic press clips recently provided to MassDEP and the Town described historic dumping activities dating back to at least the 1930s, prior to residential development of this neighborhood. The assessment of the waste material is being conducted in accordance with the Massachusetts Contingency Plan (MCP) – the Commonwealth’s regulations governing the assessment and cleanup of oil and/or hazardous material in the environment.

Limited analytical testing of the soil/waste material has shown elevated concentrations (above the MCP reportable concentrations for residential areas) of oil or hazardous materials, including metals (arsenic, barium, chromium, lead, vanadium, and zinc), polycyclic aromatic hydrocarbons (PAHs), and polychlorinated biphenyls (PCBs). The presence of the oil or hazardous materials at certain concentrations requires response actions pursuant to the MCP. Given the limited nature of this information, further investigation is necessary to determine the extent of the contamination throughout the neighborhood and whether its presence poses a risk to humans, animals or vegetation exposed to it.

This information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5751.

TTY# MassRelay Service 1-800-439-2370

MassDEP Website: www.mass.gov/dep

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At this time, MassDEP requests your assistance if you have knowledge of waste material on your property. The waste material is likely found from the ground surface down to a depth of about 3 feet, and generally consists of discolored (very dark brown to black) soil containing broken glass, scrap metal, construction debris, and bricks, but may also include tires, automobile parts, rubber machine belts, crushed drums, bottles, concrete, shingles, ash, or black viscous tar-like material or liquid. If you are digging or working on your property and encounter any material that fits this description, please limit direct contact and call MassDEP at **1-888-304-1133**.

While MassDEP coordinates upcoming site investigatory work, you can take steps to prevent or minimize potential exposure by avoiding contact with any waste material or growing vegetables or fruit in soil with or near waste material. MassDEP recommends following Best Management Practices (BMPs) for growing vegetables and fruit in urban areas, as described further below.

Another potential route for exposure is from drinking water drawn from private water supply wells within this neighborhood. MassDEP and the Dartmouth Board of Health (BOH) has identified four private water supply wells in the neighborhood and MassDEP has collected and analyzed samples from all four private water supply wells. The analytical results indicate that there were no contaminants associated with the waste material detected in the samples. If you have a private water supply well and/or an irrigation well and are concerned that it may be impacted, please contact MassDEP at **1-888-304-1133** to arrange to have your well sampled. However, please be aware that most residences in this neighborhood are supplied by the Town's municipal water system, whose water is not contaminated.

Some oil and/or hazardous material in the soil can volatilize and impact the indoor air of nearby buildings. However, based on the types of chemicals identified to date, a potential impact to indoor air does not exist.

MassDEP will continue to work with the Dartmouth BOH to determine the nature, source, and extent of this waste material. Additional information will be provided as it becomes available through MassDEP's website and by contacting MassDEP. If you have any questions about the information in this document, please contact Lori Williamson at (508) 946-2803, or via email at lori.williamson@mass.gov. This information can be provided in alternative language or format at your request.

Frequently Asked Questions

Is my property safe?

At this time, MassDEP is in the initial stages of the investigation to determine where the dumping occurred and what materials are now present. MassDEP initially focused its efforts on properties that use private water supply wells for drinking water and those properties that may have visible signs of waste material on or near the ground surface. MassDEP will prioritize these properties for sampling and evaluation. In addition, MassDEP is preparing an Action Plan to sample various locations along public right-of-ways to better define extent of contamination.

What can I do to protect myself, my family, and my pets?

In general, contaminants can enter the body by drinking contaminated water, direct contact with contaminated soil or eating food grown in contaminated soil, or through inhalation of impacted air. It is important to note that if no exposure to the contaminant is occurring, there can be no risk to human health, animals or vegetation. If you observe suspect waste material on your property, MassDEP recommends refraining from digging on your property until an investigation is initiated and completed by

MassDEP. If contact with waste material or digging is necessary, it is recommended that you wear protective clothing including gloves to limit contact with potentially contaminated soils.

Also, if you plan to dig, MassDEP requests that you notify the Town of Dartmouth's Board of Health by contacting Mr. Christopher Michaud, Director of Public Health, at (508) 910-1804. If you have a private drinking water well, please contact MassDEP at **1-888-304-1133** for sampling. If your property receives its water from the municipal water supply system, exposure through drinking water, or other uses such as washing, is not a concern. At this time, MassDEP has not identified any contaminants that would pose an inhalation risk to residential indoor air.

What contaminants have been detected in soil?

Very limited analytical testing of the soil/waste material in the neighborhood has shown elevated concentrations of polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), total petroleum hydrocarbons (TPH), lead, arsenic, barium, chromium, vanadium, and zinc. For this reason, MassDEP is developing an Action Plan to further the Department's approach to gaining knowledge of historic dumping within this neighborhood. Additional information for the contaminants identified through the limited testing that has taken place to date is available on the Agency for Toxic Substances & Disease Registry (ATSDR) website at the following links:

PAHs- <https://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=121&tid=25Ahs>

PCBs- <https://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=140&tid=26>

TPH- <https://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=423&tid=75>

Lead- <https://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=93&tid=22>

Arsenic- <https://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=19&tid=3>

Barium- <https://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=326&tid=57>

Chromium- <https://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=61&tid=17>

Vanadium- <https://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=275&tid=50>

Zinc- <https://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=301&tid=54>

Can I continue to garden?

Given the limited nature and extent of information at this time, MassDEP recommends that gardening practices follow the guidance document "Best Management Practices ("BMPs") for Non-Commercial Gardening at Disposal Sites" (WSC#14-910). This document can be viewed in its entirety at <https://www.mass.gov/files/documents/2016/08/om/14-910.pdf>.

Recommended BMPs are summarized below:

- Build raised beds or container gardens, preferably with a water permeable fabric or geotextile membrane as the bottom layer to further reduce exposure to the underlying soils of concern.
- Do not use composted plant materials that were grown in the suspect or contaminated soil.
- Work in the garden when soil is moist or damp to minimize dust.
- Avoid "double-digging" to prevent bringing deep soils to the surface.
- Wear gloves, long sleeves, boots and pants while gardening to prevent skin exposure.
- Remove gardening shoes and garments before entering the home, and wash gardening clothes separately from other clothing.
- Wash hands after gardening.
- Wash all vegetables thoroughly.

How did this contamination come to be located in the neighborhood and who is responsible for the investigation and cleanup, if necessary?

Waste material identified to date is likely associated with historic dumping practices and/or burning of materials from multiple sources and at various times before modern solid waste disposal requirements existed. Although state law makes each property owner responsible for contamination on or coming from his or her property, MassDEP is currently taking the lead to bring about necessary investigatory action and cleanup, if needed, and ensure the protection of human health and the environment.

Can someone test my property? What kinds of tests should be done?

MassDEP is at the beginning stages of the investigation of the properties in the Bliss Corner neighborhood. In the short-term, MassDEP will focus sampling on public right-of-ways to better define the extent of contamination and sample those properties with the greatest potential for exposure to contamination

The Department recommends that individuals who may be inclined to test their own properties consult with MassDEP first. Please contact MassDEP at **1-888-304-1133**.

How does MassDEP protect people from contamination?

MassDEP requires cleanup of sites where concentrations of oil and/or hazardous materials exceed limits established by MassDEP that are protective of human health. These limits are referred to as “Reportable Concentrations” and are established for contaminants in soil and/or groundwater. When these limits are exceeded, a detailed assessment and evaluation of the site is required.

At many locations, no further action is necessary, even though some low levels of contamination may be present. At other locations, the contaminants are found to exceed acceptable levels and cleanup is required. To identify cleanup levels that are protective, MassDEP requires thorough human health and ecological risk assessments to evaluate the potential for health effects from the site. Risk assessments link the contaminant toxicity and expected human exposure with the potential for health effects. The conclusions of the risk assessment determine if cleanup action should be taken at a site to meet MassDEP risk limits and prevent human health effects.

How do I know if my health has been affected?

If you have concerns about your health and possible exposure to contaminants, you should talk with your family doctor. In addition, if you are concerned with exposure to children, the New England Pediatric Environmental Health Specialty Unit specializes in providing helpful health effects information to the public. Its website is <https://www.pehsu.net/region1.html> ; the telephone number is (617) 355-8177. For adults who are concerned with exposures to themselves, contact the Association of Occupational and Environmental Clinics (<http://www.aoec.org/>), formerly associated with the Cambridge Health Alliance (<https://www.challiance.org/>).

Translation Services

Please refer to the attached pages for assistance translating this FAQ Sheet into an alternative language, or feel free to contact Lori Williamson at (508) 946-2803, or via email at lori.williamson@mass.gov. Information can be provided in alternative language or format at your request.