

CRAPO HILL LANDFILL UPDATE

Provided by the Greater New Bedford Regional Refuse Management District

April 2016

A message to our neighbors

The Greater New Bedford Regional Refuse Management District, often referred to as “the District,” realizes that the increase in landfill odors over the last few months are unpleasant for our neighbors. We are taking this opportunity to provide information about how to report odors, why landfills generate odors, and our efforts to reduce odors, including our plans to hire a landfill gas expert and permanently cap approximately 7 acres of the landfill. We apologize for any inconvenience and thank you for your patience while we work through these challenges.

Why do landfills generate odors?

As solid waste, or trash, disposed of in a landfill decomposes, it generates landfill gas. Landfill gas is made up mostly of carbon dioxide and methane, but also contains trace amounts of other gases, including hydrogen sulfide. Hydrogen sulfide is the component of landfill gas most often responsible for odors. Even at low concentrations, most people can smell hydrogen sulfide, which sometimes has an odor similar to rotten eggs. Landfill gas is the most common source of off-site odors.

The solid waste itself can also be a source of odors. You are probably familiar with the odor from your own trash barrel. Trucks delivering solid waste to the landfill can also create temporary odors.

What’s being done to reduce the potential for odors?

The District takes several steps to reduce the likelihood of off-site odors. Wells are installed throughout the landfill to collect landfill gas. The gas is piped to the

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“landfill gas to energy facility” located on the site. Here,

ODOR HOTLINE

The District operates a 24/7 odor hotline. Residents can report odors they suspect are coming from the landfill by calling

(508) 763-2423

When calling, please:

- describe the intensity of the odor on a scale of 1 to 5, with 5 being the most intense
- provide the address or specific location where the odor is detected
- describe the odor as best you can (trash smell, gas, rotten eggs)
- provide a telephone number where a District representative can reach you
- It’s helpful if you provide your

the gas is combusted in engines which create electricity. The electricity is sold to the local utility and used to power homes and businesses.

The District also uses soil and other approved materials to cover waste on a daily basis. Clay, which is more effective at preventing gas from escaping from the landfill, is also used to cover the landfill.

If the District is working to control odors, why are there still odors?

There may be several reasons why odors have recently been more persistent. Recent monitoring of landfill gas revealed levels of hydrogen sulfide that are higher than usual. It's not clear why hydrogen sulfide levels are higher than normal. Certain materials can result in greater concentrations of hydrogen sulfide. For example, when gypsum (sheetrock) decomposes, it creates hydrogen sulfide.

There are a few ways landfill gas can cause odors. First, gas which is not captured by the gas collection system can seep out of the landfill. Gas that is collected and sent to the landfill gas to energy plant can leak out of piping. Combustion of gas containing elevated levels of hydrogen sulfide may also result in odors.

What additional efforts will the District take?

The District strives to control odors through daily operational practices. These include covering all waste at the end of the day and covering odorous loads as they are received. The landfill gas collection system and landfill gas to energy plant operate 24/7. The exception is during unscheduled or scheduled "outages," such as facility maintenance or instances when the utility company does not need the electricity. Individual flares are used to collect and burn off landfill gas in areas where the collection system does not reach.

When operational practices alone aren't enough, we take additional steps. Recent steps include:

- Discontinued accepting material that might result in elevated hydrogen sulfide, such as material containing gypsum
- Introduced “ferric hydroxide” over the active area of the landfill to help neutralize hydrogen sulfide production.
- Covered the active area of the landfill with woodchips, which can act as a bio filter, and reduce the potential for odors.
- Installed additional clay soil cover on the outer slopes of the landfill. Clay is less permeable than most soils and can help seal in odor.
- Increased the frequency of landfill gas leak checks within the landfill gas to energy plant from once per week to once every two days. Any leaks found are promptly repaired.
- Increased the frequency of monitoring and adjusting landfill gas wells containing elevated levels of hydrogen sulfide to ensure these wells function efficiently.
- Improved mechanical functions in the landfill gas to energy plant.

We pledge to continue working to confront odor challenges. Upcoming work includes:

- Hire a landfill gas expert to identify areas of persistent odor and help develop a plan to address these.
- Permanently cap approximately 7 acres of recently active landfill. This work is scheduled to begin by July 2016 and should be completed in fall of 2016. As part of this project, approximately 10 new gas wells will be installed prior to capping. This should improve gas collection capability in the area to be capped.
- Investigate technologies to remove hydrogen sulfide from the landfill gas before it is combusted.

Would you like to receive updates on our operations and efforts to control odors?

Email us at lferreira@gnbrmdistrict.org to be added to our email list

OR

Visit our website at www.gnbrmdistrict.org for periodic updates

The Greater New Bedford Regional Refuse Management District serves Dartmouth and New Bedford,. The Crapo Hill Landfill is a fully lined solid waste landfill located in Dartmouth, MA. It began operation in 1995 and serves as disposal facility for waste from Dartmouth, New Bedford, and surrounding areas.

CONTACT US

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PLACE
STAMP
HERE

**Information about the
Crapo Hill Landfill enclosed**