Brookhaven Landfill, Town of Brookhaven, NY

WHO TO CONTACT

Comments and questions are always welcome and should be directed as follows:

Landfill-Related Questions:

NYS DEC Region 1
Division of Materials Management
50 Circle Road,
Stony Brook, NY 11790

(631) 444-0375
R1DMM@dec.ny.gov

https://dec.ny.gov/environmental-protection/waste-management/solid-waste-program/brookhaven-landfill

Permit-Related Questions:

NYS DEC Region 1
Division of Environmental Permits
DEP.R1@dec.ny.gov

Report Odor & Dust Concerns:

NYS DEC Region 1
Odor Complaint Line
(631) 444-0380

Health Concerns or Questions:

NYS Department of Health
(518) 402-7800

To learn more about odors and potential health effects:

NYS Department of Health -
Odors and Health
https://www.health.ny.gov/publications/6500/index.htm

Agency for Toxic Substances and Disease Registry -
Environmental Odors
https://www.atsdr.cdc.gov/odors/

ADDRESSING ENVIRONMENTAL QUALITY AT THE BROOKHAVEN LANDFILL

The New York State Department of Environmental Conservation (DEC) is committed to protecting public health and the environment in the community around the Brookhaven Landfill and across New York State. DEC is providing this community update to inform area residents and interested stakeholders about current and ongoing activities to improve environmental quality in the communities surrounding the Brookhaven Landfill. Updated information is also available on the DEC Brookhaven Landfill webpage.

COVER SYSTEM ACTIVITIES

The town of Brookhaven recently started work on a new phase of its landfill cover system, Phase H. A landfill cover system involves placing a final cover on top of a landfill once it has stopped receiving waste. Landfill covers isolate the waste and act as a barrier to control rainwater infiltration and landfill gas migration.

Cover systems are designed with multiple layers of natural and/or geosynthetic materials of varying permeability based on their intended functions. High permeability layers sit above the waste and include natural or geosynthetic gas venting layers that divert gases from the decomposing waste toward the gas collection system. Such a system could also be expanded to include the installation of additional gas extraction wells, transmission lines, and other components. This layer sits under low permeability layers that serve primarily as barrier layers from the elements.

Synthetic liners known as “geomembranes” are designed to be impermeable and are used in part to prevent rainwater infiltration that would generate leachate. Low-permeability clay liners are also effective at reducing infiltration. DEC currently requires the use of a composite barrier layer system at the Brookhaven landfill. This system utilizes both a geomembrane and geosynthetic clay liner to help ensure that if any rainwater makes its way through potential imperfections in the geomembrane, the clay liner will prevent leakage into the waste. Additionally, those layers help to prevent odorous gases from escaping into the atmosphere.

The uppermost layer of a cover system is a vegetative layer that protects the barrier layer, provides adequate surface drainage, and controls erosion. This final layer allows the closed landfill footprint to be put to productive use as open space for potential future use. Synthetic vegetative layers, such as turf systems, reduce the need for additional soil barrier layers and require less maintenance, while still protecting the underlying geomembrane layer.

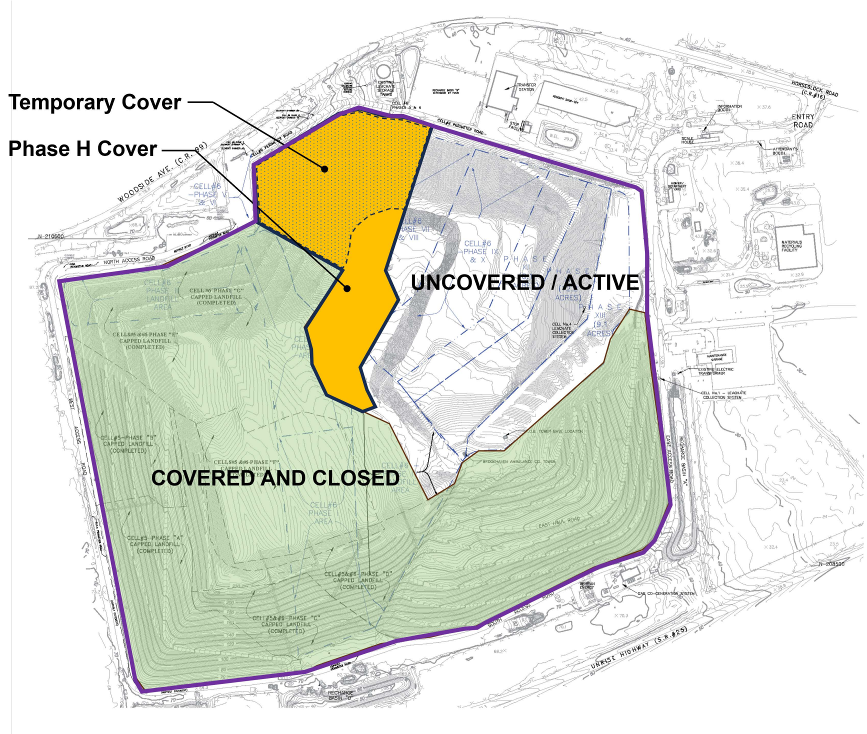

Figure 1: An aerial overview of the Brookhaven Landfill showing the covered and uncovered portions of the landfill.

Approximately 143 acres of the Brookhaven Landfill are covered and closed; roughly 13 additional acres of the landfill have a temporary cover. Phase H of cover construction began in June 2024. The 23.4-acre Phase H cover system replaces the temporary cover and covers additional areas of the landfill mass. The landfill area covered by the Phase H cover system is depicted in Figure 1, and the cover system's layers are shown in Figure 2.

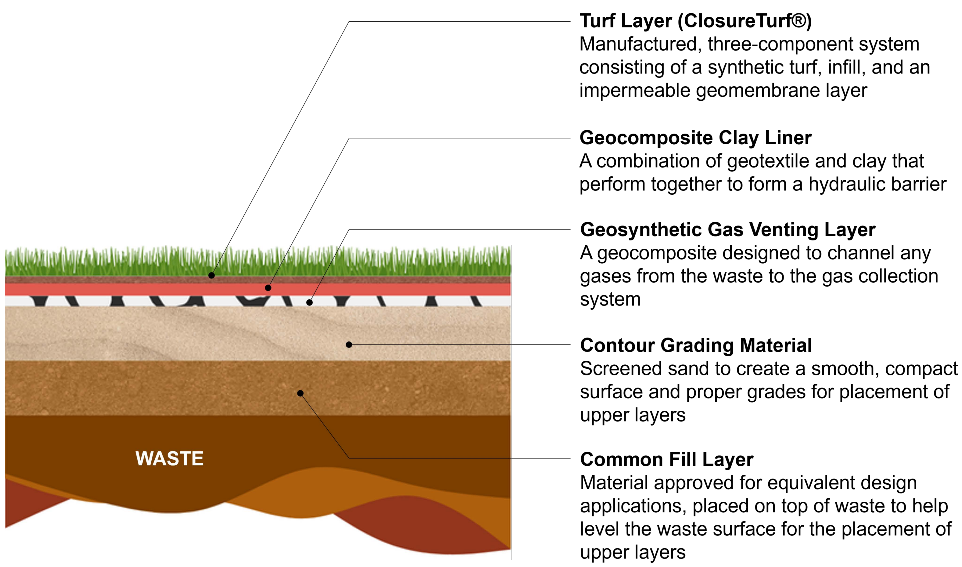

Figure 2: The layers of the Phase H Cover System.

The facility began removing sections of the temporary cover earlier this summer. **The removal of the temporary cover and other cover system activities may result in temporary localized odors.** Community members are encouraged to report odor events to DEC through the Odor Complaint Line at (631) 444-0380. DEC will investigate complaints and determine if additional actions to prevent community impacts are needed. The Phase H cover project is expected to be complete by the end of 2024.