



Landfill gas is a naturally produced when solid waste decomposes within a landfill. At the Fitchburg/Westminster Landfill, the gas is collected via a network of underground pipes located within the waste disposal area. The landfill gas collection system includes gas collection wells, lateral and header pipes, gas condensate removal units, control valves, and blower units for vacuum application. The collected gas is directed to a gas-to-electric power plant or flare where it is safely burned off. The Fitchburg/ Westminster Landfill processes and combusts the landfill gas to create enough renewable energy to power approximately 3,000 homes.

Due to the historic levels of rainfall received at the Fitchburg/Westminster Landfill during 2023, the facility's gas collection system has occasionally been compromised. Excessive amounts of rainfall can, 'flood out' the gas collection pipes, causing landfill gas to leave the site outside of the closed collection system. This can cause temporary odor issues on site and in the surrounding area.

WM is aware of the increase in odor complaints over the past several months and has taken immediate and aggressive action to correct the causes. As noted, because collection pipes that take on water may no longer manage landfill gas, much of the investment has been installing new collection pipes and wells.

To date in 2023, we have completed the following improvements to the Landfill Gas Collection and Control System (GCCS).

- Installed approximately 1,000 linear feet of vacuum pipes to increase vacuum to extraction wells.
- Installed approximately 250 linear feet of horizontal gas collection piping.
- Completed cleaning of the main gas header line to increase overall vacuum to the system.
- Daily tuning of gas well system has improved gas quality to control devices.
- Drilled 6 new extraction wells and connected them to vacuum pipes to withdraw gas.
- Constructed new vacuum pipe to selected wells to improve collection.
- Constructed a new dedicated vacuum pipe to high producing well.
- Hired two new gas technicians to help in daily monitoring and maintenance of the collection system.

Scheduled for completion over the next two months:

- Major vacuum system upgrade will begin in early October to recently installed wells.
- Upgrading existing well heads to quick change well heads that will help fine tune adjustments in the system. 20 on order, ~ 35 replaced already.
- Install approximately 2 acres of temporary membrane cap with under cap gas collection to improve gas collection.
- Installing dewatering pumps in to draw down liquid and improve gas collection.
- Adding mobile odor detection devices.
- Installation of approximately 700 feet of additional horizontal gas collection pipes.

We have also increased our efforts to engage with our neighbors as we undertake these site improvements. WM attended the Town of Westminster Board of Health meeting in July to discuss landfill operations including GCCS enhancements and the Town of Westminster Board of Health meeting on October 4 to discuss GCCS enhancements.

The Fitchburg/Westminster facility has a dedicated phone line for area residents to call when they experience an odor they believe is coming from the facility. We ask residents to please call the following number – 866-987-0985 once an odor has been detected and provide specific details about the time, location, and nature of their observations. This is a dedicated line, managed and investigated by a third party, which allows us to track and quickly respond to any odor complaints.

# Fitchburg/Westminster Landfill 2023

