



October 2023

Cedar Hills Regional Landfill Landfill Gas Flaring FAQ

History and Current Status of Landfill Gas Collection

What is the history of landfill gas collection at the Cedar Hills Regional Landfill?

In the 1980s, King County installed a landfill gas extraction system at Cedar Hills Regional Landfill to modernize its operations and comply with new environmental standards. Methane generated by decomposing garbage was collected and “flared” (burned off) in compliance with environmental permits, and this practice continues today. In 2008, the division entered an agreement with BioEnergy Washington (BEW) to develop a gas purification plant project to convert the landfill gas that was previously flared into renewable energy. Since BEW began operations, the division has sent the landfill gas subject to the agreement to the BEW plant, but because of occasional maintenance required by BEW or the County, the County has always had to flare some of the landfill gas. The older areas of the landfill tend to produce gas that is not compatible for conversion by BEW so it is also flared in accordance with our environmental permits.

Is King County currently flaring landfill gas at Cedar Hills?

Yes. King County is currently flaring the landfill gas as required by the environmental permits as BEW is not currently operating.

How is landfill gas managed?

High-tech equipment is used to monitor, control, and measure the landfill gas characteristics and volume as it is captured within the vacuum-based system. King County performs quarterly surface scans of the landfill to seek out potential fugitive emissions and address them as appropriate. It is the frequent re-evaluation of the system performance and maintenance that ensures the system is well-managed and functions optimally.

Once collected, landfill gas is conveyed via pipeline to the flares for destruction or, when in operation, to BEW for processing. Some of the gas is converted to electricity for use on site by BEW, however most is cleaned of impurities and made into compressed natural gas and sold to Puget Sound Energy.



Environmental Health/Regulation

What about the health and safety of neighbors?

The Cedar Hills Regional Landfill is staffed 24/7 with skilled professionals who are trained and certified in the best management practices established by the Solid Waste Association of North America, or SWANA.

Protecting our workers and the public is a top priority. Our landfill operations are subject to permit conditions and regulations by Public Health – Seattle & King County, the US Environmental Protection Agency (EPA), Puget Sound Clean Air Agency (PSCAA) and the Washington State Department of Ecology to safeguard public health, the environment, and the nearby community. SWD Operations is responsible for ensuring compliance for 33 groundwater monitoring wells near an aquifer, seven stormwater monitoring points, and over 700 gas wells.

We regularly monitor and report on the quality of the air, groundwater, leachate (landfill wastewater) and stormwater, and we restrict or prohibit the disposal of many types of waste that could be harmful or toxic.

Who are our regulators?

As noted above, King County works with many regulators at the local, state, and federal levels to ensure safety for our workers and the public and to be good stewards of the environment. For air quality issues, we are regulated by PSCAA, the Washington State Department of Ecology, and the EPA. We also work with King County Industrial Waste program to monitor our leachate (wastewater), and with Public Health – Seattle & King County to ensure we meet local public health and safety regulations.