Cedar Hills Landfill True/False Quiz – Answers

Slide 2 – True or False: Landfills are designed to protect the environment.
True
• A system of liners forms a barrier to protect soil, groundwater, and surface water.
• There are also mechanisms to collect liquid and gas produced as a result of burying the garbage.
• Any time a new section (called a cell) of the landfill is opened, a liner system must be installed as well as mechanisms to collect liquid and gas.

Slide 3 – True or False: Water that takes up particles and dissolved materials as it passes through the garbage is called leachate.
True
• Leachate is also created as part of biochemical decomposition of waste.
• At the Cedar Hills landfill, rain is prevented from entering the landfill. The landfill refuse is artificially moistened for better compaction.
• Leachate is stored in ponds up to 14 feet deep with aeration mechanisms.
• 700,000 gallons of leachate are sent to the Renton treatment plant every day.

Slide 4 – True or False: The Cedar Hills Landfill generates methane gas, all of which is flared into the atmosphere.
False
• The landfill produces gas which contains more than 50 percent methane gas.
• More than 90 percent of the landfill gas is converted into pipeline quality natural gas; the remaining ten percent is flared.
• The system is monitored constantly at 600 monitoring points.

Slide 5 – True or False: The landfill creates enough gas to power 27,000 homes in the area for the next 30 years.
True
• The gas, when piped to BioGas, is 50 percent methane, 40 percent CO₂ and 10 percent miscellaneous gases.
• BioGas is a for-profit company that scrubs the gas until it obtains 90 percent methane. It then sells this as energy to the utility and for distribution to the surrounding area.

Slide 6 – True or False: Collecting landfill gas and converting it to reusable fuel keeps greenhouse gases out of the atmosphere.
True
King County converts landfill gas mainly to reusable pipeline quality gas and to a smaller extent into electricity for onsite use.
Slide 7 – **True or False:** The Cedar Hills landfill, which opened in 1965, was originally scheduled to close in 2012.

**True**
The original closure date of 2012 has been extended to 2025.

Slide 8 – **True or False:** The landfill spans 920 acres, all of which are used to store garbage.

**False**

- Only half of the 920 acres is used for garbage. The other 460 acres are needed for facilities for maintenance, monitoring, repair, and administration. There is also a buffer zone between the active landfill area and the community.
- The landfill employs more than 300 employees and operates a self-contained shop.

Slide 9 – **True or False:** Garbage is trucked to the landfill from a system of transfer stations around the county.

**True**

- Once garbage is collected at the curb, it is taken to a transfer station where it is then compacted into trailers for transport to the landfill.
- Between 175 and 190 trailers bring garbage from the transfer stations to the landfill each day.
- Garbage delivered to the transfer station reaches the landfill within two days.

Slide 10 – **True or False:** Once garbage is deposited at the landfill, it sits there without further processing.

**False**
The garbage undergoes biochemical processing to aid in decomposition and landfill gas production. It is compacted and then covered with six inches of soil and gravel called daily cover.

Slide 11 – **True or False:** Approximately 70 percent of items sent to the landfill could be recycled or composted.

**True**

Items found in the landfill that could have been recycled include clothing, shoes, paper, cardboard, and plastic bags. Items that could have been composted are food and food-soiled paper.

Slide 12 – **True or False:** By keeping as much as possible out of the landfill through waste prevention, recycling, and composting, King County residents can extend the life of the landfill even beyond the anticipated closure date of 2025.

**True**
By keeping as much as possible out of the landfill through waste prevention, recycling, and composting, King County residents could extend the life of the landfill even beyond the anticipated closure date of 2025 to possibly 2040.