



DTG Landfill Data Report

41 Rocky Top Rd, Yakima, WA 98908

The Yakima Health District (YHD) conducts a comprehensive assessment to evaluate for the presence of subsurface fire at the DTG Landfill. YHD also tracks the effectiveness of suppression efforts using several types of data. The primary indicators of fire activity are elevated carbon monoxide (figures 1a, 1b, 1c, and 1d) and temperature (figures 2a and 2b) in the subsurface.

YHD, and a dedicated landfill fire consultant review and analyze data that takes into account air emissions data, temperature readings, and field conditions to determine the existence of fire activity. The data helps to understand where the fire is located, if it appears to be spreading, and to support decisions on suppression efforts.

Currently, ambient air sampling is being conducted seven days a week to ensure there are no public health risks to the community. At this point, the recorded air quality reading does not indicate any hazardous levels of gases leaving the landfill.

Gas Probe Map of DTG Landfill

Below is a map of gas probe locations at the DTG Landfill. These gas probe (GP) locations are where the following parameters can be measured from the subsurface: Carbon Monoxide, Hydrogen Sulfide, Volatile Organic Compounds, Methane, Lower Explosive Limit, Oxygen, Hydrogen, and Temperature.





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Carbon Monoxide Summary (Figures 1a, 1b, 1c, 1d)

Carbon monoxide (CO) is a good indicator of subsurface landfill fire. CO is typically present when materials burn without enough oxygen to support complete combustion. Elevated levels of CO in landfills can indicate fire activity is present, or at least that additional monitoring is warranted. CO is currently elevated to as high as 9,000 ppm providing a strong indication that subsurface fire is present.

Figure 1a: Subsurface CO from GP monitors 1,3,4,5
March 29- June 9, 2023

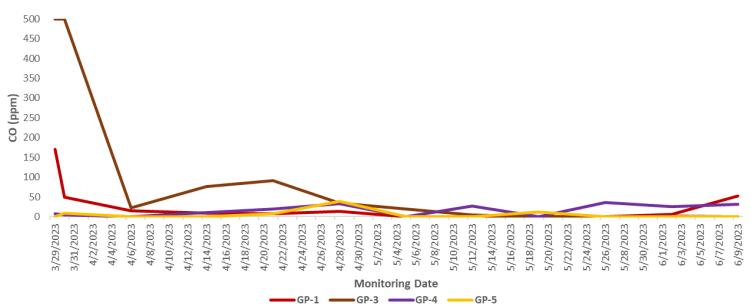


Figure 1c: Subsurface CO from GP monitors 1,3,4,5
June 16- August 11, 2023

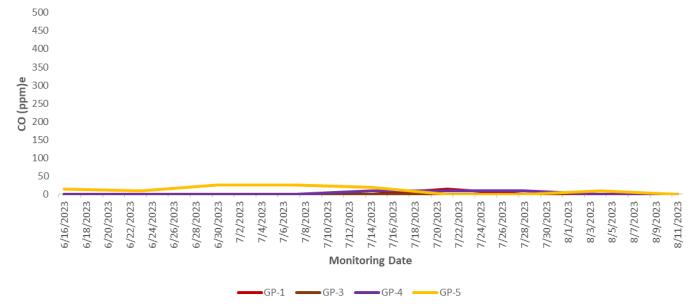


Figure 1b: Subsurface CO from GP monitors 2,6,7,8
March 29- June 9, 2023

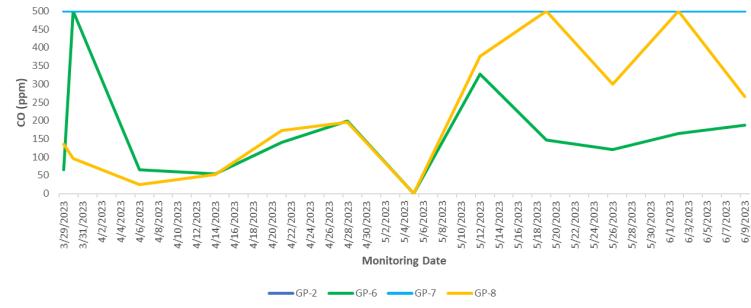
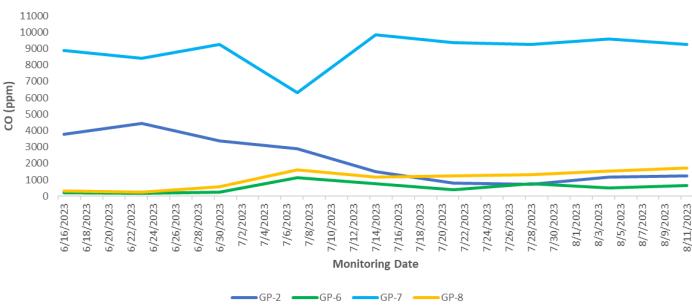


Figure 1d: Subsurface CO from GP monitors 2,6,7,8
June 16- August 11, 2023



Temperature Summary (Figures 2a, 2b)

Temperature is another primary indicator of subsurface landfill fire activity. Landfill temperatures are typically elevated to 100-140 (F) and sometimes as high as 180 F due to natural biological decomposition and processes. However, higher than expected temperatures, rising temperatures, or rapid fluctuations can indicate the presence of fire or that additional monitoring is warranted. Temperatures are currently near 500 (F) at several locations, providing a strong indication that subsurface fire is present.

Figure 2a: Subsurface Temperature (F) from GP monitors 4,5,6,7,8
April 6- August 11, 2023

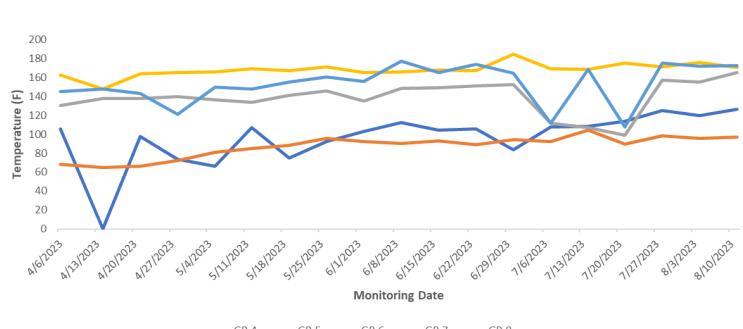


Figure 2b: Subsurface Temperature (F) from GP monitors 1,2,3
April 6- August 11, 2023

