

Gas Sampling and Analysis of Landfill with Highly Elevated Temperatures

EIL prepared and implemented a highly detailed gas sampling and analysis plan under intense regulatory scrutiny.

The sampling and evaluation work provided assurance to all stakeholders that uncontrolled exothermic reactions were not occurring.

Client: Confidential Location: Western US

EIL developed and implemented an investigation plan, approved by USEPA, at a landfill with gas temperatures as high as 175°F. The plan included: development of lab protocols, quality assurance procedures, sampling protocols, project goals and performance criteria.

Monitoring and sampling consisted of measuring landfill gas temperatures of each gas well at 10-foot intervals and performing CO analysis and VOC analysis.

<u>CO Analysis</u> – CO concentrations were measured with Draeger tubes before obtaining a canister sample.

<u>Gas Sampling</u> – A gas sample was collected and analyzed for CO and VOC using a Summa Canister for each well. In additon, a field analyzer was used to check sample line integrity.

<u>VOC Analysis</u> – Gas samples for the wells were analyzed for all the TO-15 parameters.

Analysis of the data demonstrated uncontrolled exothermic reactions were not occurring in the waste mass. This prevented the landfill owner from having to implement expensive and difficult fire-related remedial measures.



Thorough understanding of the project goals and regulations, combined with sophisticated testing, led to a successful outcome for our client.



