Application
Monitoring of methane in landfill recovery gas and flare streams, wastewater anaerobic and pulp mill digester gas, mining off-gas, and other industrial processes is a significant component in determining heating value or BTU content. Methane concentration measurement along with that of gas stream mass flow is used to calculate actual pounds per hour carbon emitted. This measurement has grown in value along with rising energy costs. In addition, the Green trend may offer economic incentives for greenhouse gas emission reduction as carbon trading credits help to meet global and corporate initiatives.

Solution
MSA’s Ultima® XIR Gas Monitor with associated flow panel is ideally suited to measure methane (CH4) volume concentration in landfill recovery gas and other recovery gas streams. This system provides a cost-effective solution that features an accurate and reliable alternative to traditional gas chromatograph-based systems. The Ultima XIR Gas Monitor’s minimal required maintenance is especially beneficial for remote site applications with limited on-site operational and maintenance personnel.

Additional landfill applications:
Contact MSA for additional gas detection solutions for landfill gas monitoring including:
- Oxygen, carbon dioxide (CO2), and hydrogen sulfide (H2S) monitoring in recovery gas streams at compressor discharge and odor-control scrubber points.
- H2S and methane (LEL) area monitoring.
Product Specification

- Ultima XIR Gas Monitor with 0-100% methane range using infrared technology
- Extractive sample draw and associated flow components mounted on a 20” W x 25” H metal panel
- Reference: ES 104 & DSK 3054-654 (typical)
- All stainless steel flow component and tubing
- Coalescing filter and automatic drain valve
- Cooling coil
- Field-adjustable flow meter
- 3 LEL-level contact alarm closures
- Low-flow switch with remote indication via contact closure
- Accepts process sample pressure at -1 to 5 psig
- Manual 3-way valve and pushbutton for easy zero and span calibration
- 4-20 mA output
- Meets NEC Class, Div. 1, Groups B, C & D explosion-proof requirements
- 120 VAC power supply (internal to Ultima XIR Gas Monitor)
- Operating temperature: 140° F maximum
- Includes engineered system drawings

For additional information on the Ultima XIR Gas Monitor, please see bulletin #07-2054-MC.