

Gas Collection and Control System at Tower Landfill



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Melissa Green

Senior Project Director

Landfill Gas at Tower Landfill



- **A gas collection and control system (GCCS) is installed to extract landfill gas (LFG) from within the waste mass.**
- **A GCCS is used:**
 - To minimize the potential migration of LFG into adjacent soils
 - To minimize the potential migration of LFG into the atmosphere
- **LFG comprises of methane, carbon dioxide, and other trace gases.**
- **Current GCCS at Tower Landfill Consists of:**
 - 97 Wells
 - 4,000 standard cubic feet per minute (scfm) Enclosed Flare

Gas Collection System



Control System

- **Enclosed Flare Installed On:**
 - February 9, 2023
- **Source Test Performed On:**
 - July 13, 2023
- **Flare Temperature:**
 - 1,600.5°F
- **Currently Combusting:**
 - App. 2,100 scfm

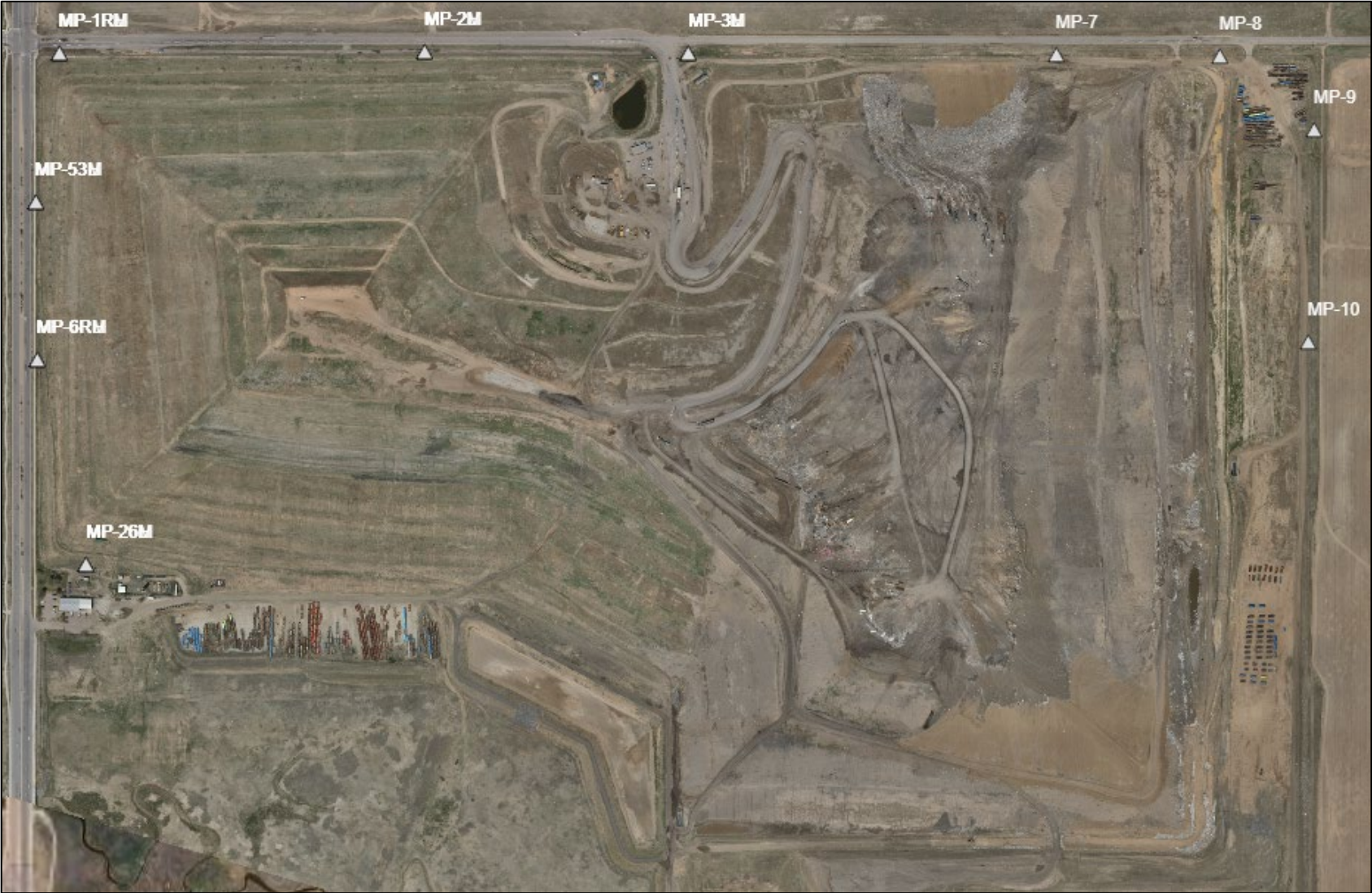


Lateral Monitoring

Quarterly Methane Probe Monitoring

- **6 CCR 1007-2 Part 1, Section 2.3.1 (A)**
 - Twenty-five percent (25%) of the lower explosive limit (LEL) [one percent (1%) by volume in air for methane] within facility structures
- **6 CCR 1007-2 Part 1, Section 2.3.1 (B)**
 - At the boundary, the LEL which is five percent (5%) by volume in air for methane.
 - 10 perimeter probes
 - 6 of the 10 are cluster probes
 - Total of 22 readings

Methane Probe Locations

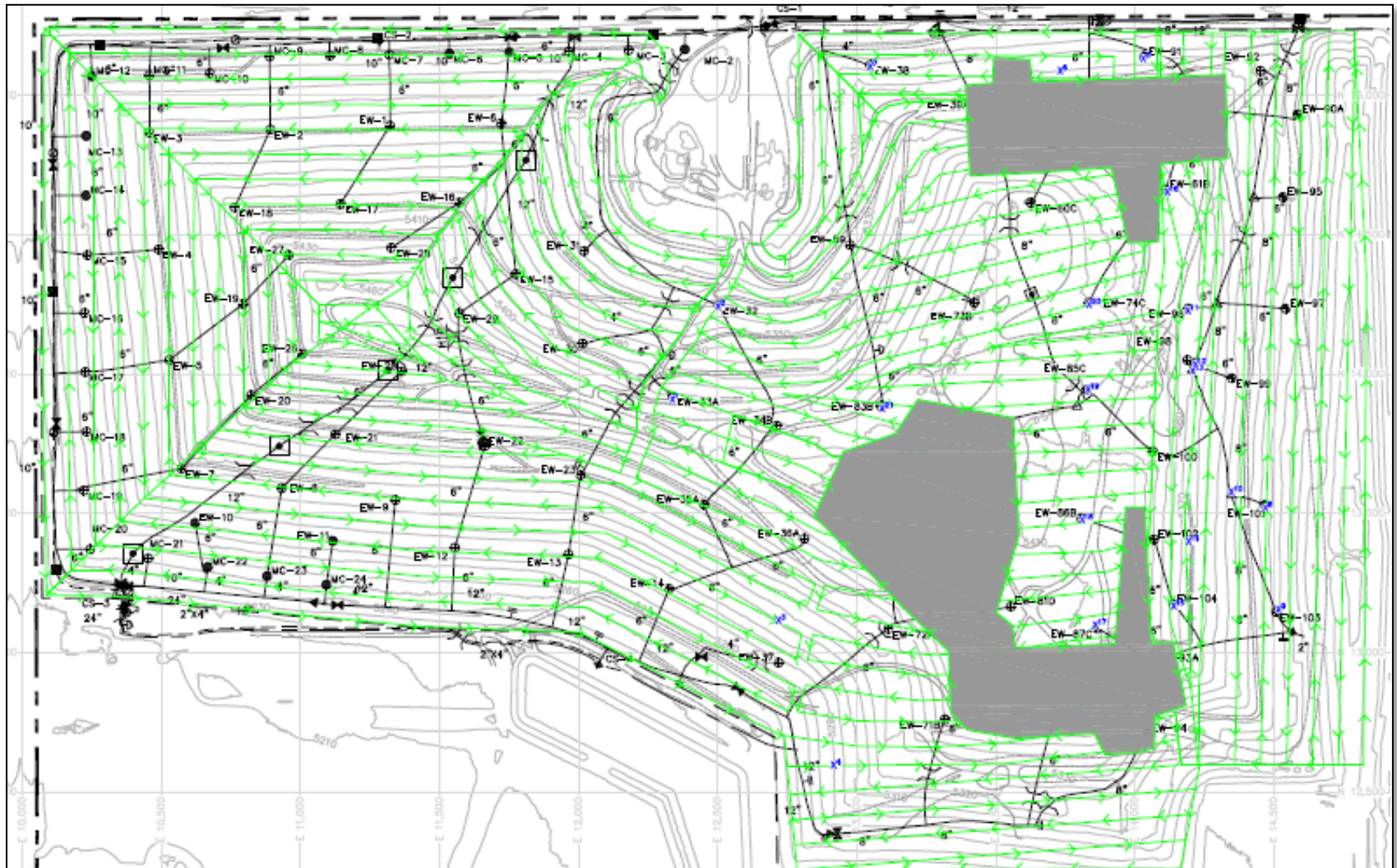


Vertical Monitoring

Quarterly Surface Emissions Monitoring

- **Around the perimeter** of the collection area
- Along a pattern that **traverses the landfill** at no more than 30-meter intervals
- At all **cover penetrations**
- Where visual observations indicate **elevated concentrations** of landfill gas
 - Distressed vegetation and cracks or seeps in the cover
- **Areas that may be excluded**
 - Areas with steep slopes or other **dangerous areas**
 - Working face, segregated asbestos areas, etc.

Surface Emissions Monitoring Walking Path





Weaver
Consultants
Group

Melissa Green

mgreen@wcgrp.com

720-529-0132