

## GCCS Design and Development Plans

*Prepared year-by-year landfill gas collection and control system (GCCS) design and development plans for a 6-year period for nine active landfills.*

*The development plans served as a valuable tool to assist site personnel with planning and budgeting of capital requirements and future expansions of the GCCS.*

Client: Confidential  
Location: Midwestern U.S.

Prepared updated versions of the GCCS Design Plans for multiple landfills. The design plans were packaged for submittal to the applicable state regulatory agencies.

Prepared 6-year GCCS design and development phasing plans for multiple landfills. The phasing progressed thru the overall time period on a year-by-year basis.

Incorporated existing as-built portions of the site systems in with the proposed GCCS designs resulting in plan sets that included grading, system layouts, and details.

Performed engineering analyses including landfill gas generation modeling and optimization of pipe layouts/sizing using KY Gas Model.

Prepared requests for applicable site specific NSPS variances.

Prepared detailed material quantity estimate tables, on a phase-by-phase basis, to allow site personnel to quantitatively forecast capital needs over the 6-year period.

Reduced likelihood of unbudgeted construction projects and installing GCCS infrastructure that is unexpectedly made inoperable by ongoing waste filling.



— Max flow 1557 scfm; 31% of total flow  
— Max flow 4784 scfm; 67% of total flow  
— Max flow 1475 scfm; 30% of total flow  
— Max flow 410 scfm; 11% of total flow

