## Development and Implementation of an Integrated Post-Closure Care Plan

EIL

EIL performed a global assessment of a closed landfill with a history of regulatory challenges and operational problems. With the prioritized list of issues developed during the assessment, EIL helped the City of Gary to formulate and implement a comprehensive plan to improve compliance and reduce long-term monitoring and maintenance costs.

Client: City of Gary, Indiana – Department of Environmental Affairs Location: Gary Sanitary Landfill, Gary, Indiana

Performed a global assessment of a closed landfill with a history of regulatory challenges and operational problems including a nonfunctioning gas system owned by a bankrupt third-party landfill gas to energy developer.

Advised owner on options related to air compliance and regulatory strategies while bankruptcy proceedings were ongoing for gas rights owner.

Compiled prioritized list of issues to be addressed with associated costs, risks, and benefits. Worked with owner to refine list and develop a comprehensive post-closure strategy that fit owner's constraints.

Determined strategies, led negotiations with IDEM to exempt the site from NSPS monitoring, and prepared permit applications.

Provided review and support associated with issuance of a Title V Operating Permit. Led negotiations with IDEM to develop and ultimately approve alternative, more cost-effective gas system features for installation. Prepared revised GCCS Design Plan and developed compliance schedule.

Designed, permitted, and installed perimeter landfill gas migration control systems.







Inspected, monitored, operated, troubleshot, and maintained blower/flare system, extraction well system, and passive solar flares.

Coordinated registration and reporting to comply with the Greenhouse Gas (GHG) Mandatory Reporting Rule Program.

Reviewed groundwater monitoring data and led negotiations with IDEM to address concerns.

Coordinated and prepared Annual Groundwater Sampling and Analysis Report in accordance with permit requirements.

Investigated integrity and effectiveness of an existing slurry wall and completed necessary repairs.

Investigated integrity and effectiveness of the unconventional final cover system.

Investigated presence of landfill gas in the landfill cover and led negotiations with IDEM regarding corrective actions.

Investigated cause of the lack of vegetation on the landfill cover. Permitted, installed and monitored progress of various vegetation tests, designed and installed various interim sedimentation and erosion control features, and led negotiations with IDEM regarding improvements to final cover.

Evaluated the existing surface water management system, and prepared designs to improve effectiveness of surface water management system.

Performed routine monitoring, maintenance, inspection, and reporting as part of landfill's post-closure care program.







