

Prairie View Landfill and Recycling Facility | Will County, Illinois

Asset Development Consulting



The Prairie View Landfill and Recycling Facility in Will County, Illinois, accepted its first load of municipal solid waste (MSW) on Jan. 19, 2004. The County wanted to boost its capacity, as well as analyze the possibility of upgrading the biogas to pipeline-quality to be injected into the renewable natural gas (RNG) pipeline.

Successfully taking an RNG project from concept to commissioning requires deep knowledge of clean fuels regulations, fuel markets, and carbon markets. The County hired EcoEngineers to assess the overall feasibility of expanding the existing facility or upgrading the gas to pipeline-quality RNG. Ultimately, the County decided to move forward with the design and implementation of an RNG upgrading facility at the landfill. EcoEngineers is continuing to work for the County by assisting in the implementation phase of the work.

Key Performance

- Overall project feasibility including capital expenditures, operating expenditures, and potential revenues
- Risk mitigation analysis
- Analysis of potential upgrading technologies, vendors
- Assistance with design and construction partnership selection
- Pipeline interconnection consulting
- RNG offtake, market analysis, and placement
- Overall project coordination with County staff, leadership, and the board

Key Results

- Today, the site takes in an average of 3,000 tons of MSW a day and generates approximately 4,000 scfm of landfill gas, most of which is flared.
- The landfill gas project has a payback of less than three years and is currently in the design phase, with construction scheduled in fall 2020 and full operations in late 2021 or early 2022.
- **Project duration:** April 2019-present
- **EcoEngineers team:** Brad Pleima, Jim Ramm, Sean Gassen
- **Project reference available upon request.**