

**Crow Wing County Sanitary Landfill** – The Landfill was awarded with “One of the Seven Wonders of the Engineering World” by the Minnesota Society of Professional Engineers in 1992 for constructing the first US RCRA Subtitle D landfill, following stringent design and construction requirements. From this point forward, the Landfill has been an innovative leader in the solid waste industry. The Landfill took on the responsibility of maintaining its leachate on-site by land applying treated leachate over a previously closed landfill on its property in 1995. This reduced both transportation costs and fossil fuel use for trucking leachate to be treated at a waste water treatment plant. The Landfill eliminated offsite treatment of leachate by becoming one of the first landfills in the state to recirculate leachate in 1997. The Landfill further investigated leachate recirculation and became the first in the state to look at Recirculation to Energy (RTE) in 2000 as a way to beneficially reuse accelerated landfill gas (LFG) generation from a small landfill not required to install a LFG collection and control system (GCCS). The RTE study included identifying nearby industries to partner with for reuse of the LFG. The study also included preliminary design of a GCCS and in 2008, a GCCS was constructed to flare off excess LFG. As part of the construction, a LFG-fueled boiler was installed to heat two maintenance buildings on site and thus reducing energy costs and fossil fuel consumption. Overall, recirculation and land application of the landfill’s leachate has allowed the Landfill to save millions of dollars, and with the construction of the GCCS, the Landfill is now selling its carbon emission reductions credits. Recirculation has also allowed the Landfill to extend the life of its disposal areas by accelerating waste settlement.



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The tremendous cost reductions and savings have allowed the Landfill to implement a host of other waste management programs. The Landfill has essentially become a one stop shop for waste disposal of all kinds. The Landfill manages:

- Municipal Solid Waste (MSW)
- Construction and Demolition Debris (C&D)
- Recycling (glass, plastic bottles, newsprint, cardboard, aluminum, and tin cans)
- Household hazardous waste (HHW) collection, reuse, and processing)
- Yard waste composting
- Used oil, filter, and antifreeze recovery
- Tire processing
- Appliance and scrap metal recycling
- Used electronics



- Appliance and scrap metal recycling
- Lead-acid battery recycling
- Illegal dumping/compliance
- Mattress program
- Very Small Quantity Generator (VSQG) communication and information

The Landfill has demonstrated forward thinking and the ability implement new ideas. The GCCS now provides the foundation required to start any LFG reuse project. The potential partners originally identified in the RTE project are ever changing. The Landfill is still actively seeking a partner as it would like to see the LFG beneficially reused instead of flared off. The Landfill offers potential partners the option for a long term land lease agreement for construction of a LFG reuse facility. There is a 30 acre area that can be designated for development of a facility.