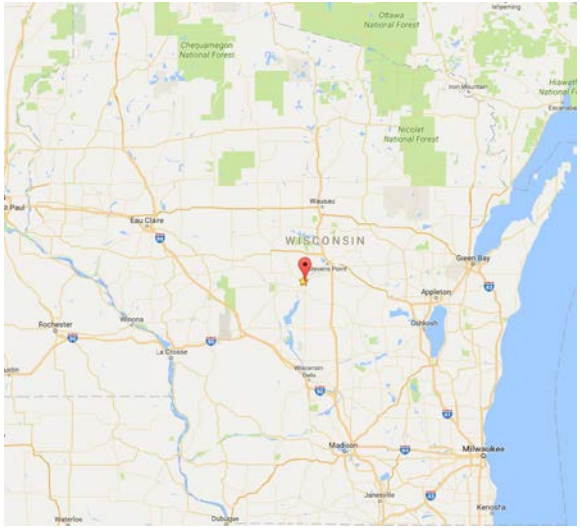
Biogas Collaboration
in
Wisconsin Rapids



Mayor Zach Vruwink

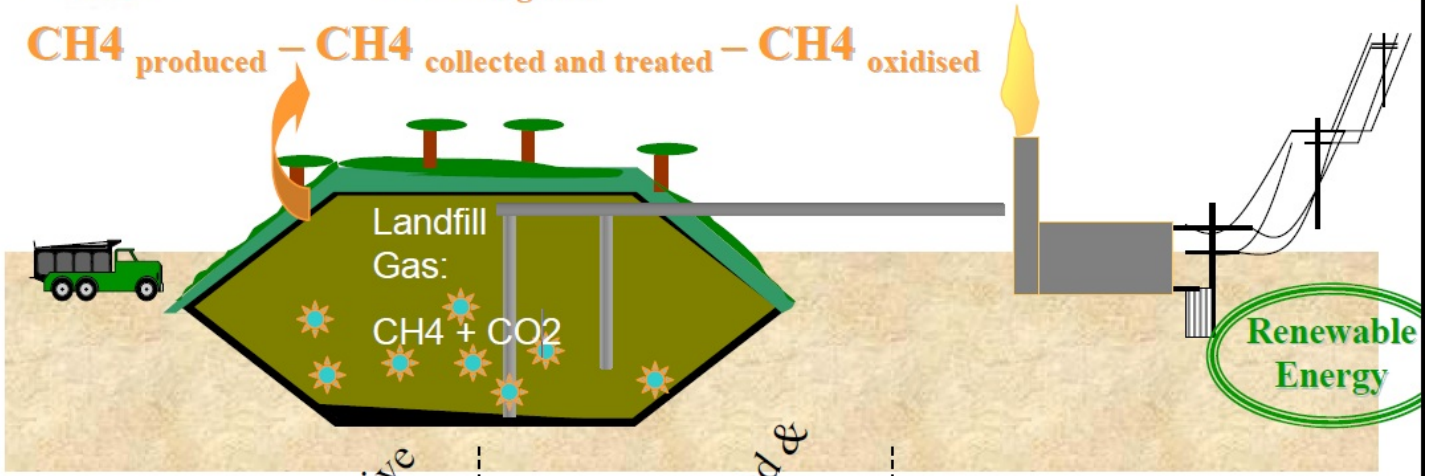
Wisconsin Rapids

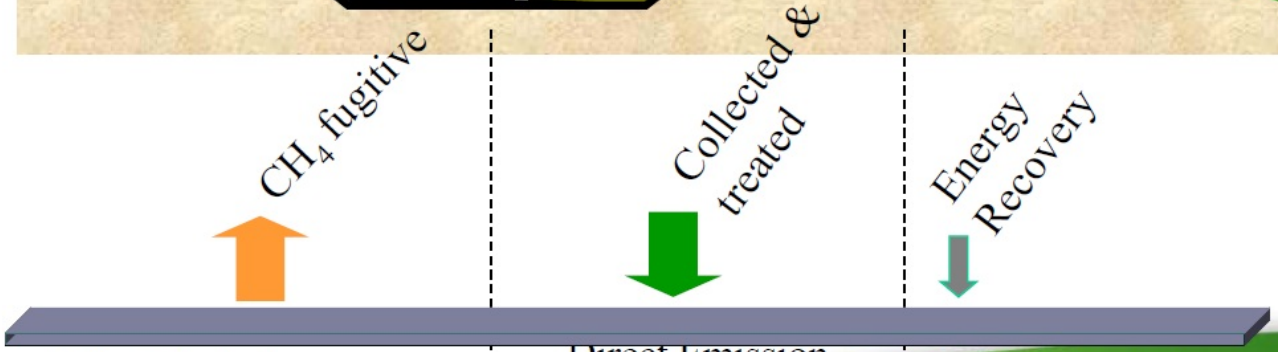
@zachvruwink

- In 2005, Ocean Spray invested $75 million in adding two cranberry production lines to the Wisconsin Rapids plant.
- During this process, Ocean Spray kept energy and environmental efficiency a priority with:
  - **Wastewater treatment facility,**
  - Energy-efficient lighting,
  - **A partnership with landfill** to convert methane from the landfill into clean energy to power their operations.

Landfill Methane Emissions

$$CH4_{fugitive} = CH4_{produced} - CH4_{collected\ and\ treated} - CH4_{oxidised}$$





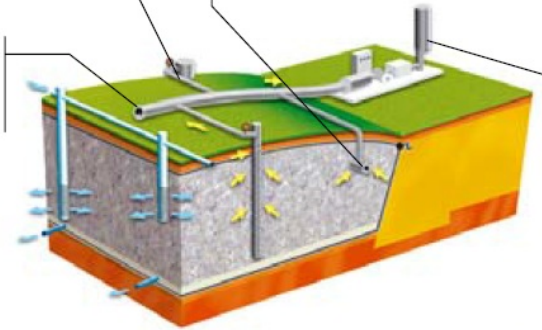
Components of Landfill Gas Collection System

Vertical Wells

Horizontal trenches

Blower / Flare Station

Above-ground header



VEOLIA ENVIRONMENTAL SERVICES

Cranberry Creek Landfill

- Advanced partnered with Ocean Spray to turn landfill gas (LFG) from the Cranberry Creek landfill into energy for the Ocean Spray Plant.
- How it works:
  - LFG is compressed, filtered and dried at an onsite compressor station at the landfill.
  - The LFG is then conveyed from the landfill to the plant through a 2.4 kilometer pipeline.
- The methane gas from the pipeline powers Ocean Spray's steam boilers which fuels the cranberry concentrators.

Cranberry Creek Pipeline

Environmental Results

- For Veolia, methane burnoff at the landfill has been cut by two-thirds (nearly 7,000 tons a year).
  - The environmental benefits of the emissions reduction is equivalent to planting 15,000 trees or removing carbon monoxide emissions from 12,000 cars.
  - In 2006, the site received the “Gold Star Award” from the Solid Waste Association of North America (SWANA) for this project.
- For Ocean Spray, gas costs were projected to be cut by 25%.
  - Actual Results: A 27% reduction in gas costs and savings to Ocean Spray of over $1.7 million

Jenbacher @ WR WWTP

Partnership Benefits Our Community

- This expansion has brought with it not only a modern and energy efficient manufacturing facility but job opportunities for our community.
  - Ocean Spray employs 153 at the plant, as well as over 100 growers throughout the State.
- The LFG project has built in the infrastructure to similarly support additional businesses in the future.
  - This makes our community an attractive destination for businesses seeking options that are both economical and environmentally friendly.
- Wastewater Treatment plant methane digester supplements energy costs purchased from the market