

Project Brief



Digester Improvements Project City of Estherville, Iowa

- ◆ New dual membrane digester covers on primary and secondary digesters w/ high velocity mixing system.
- ◆ Digester gas production and capture increase with equipment upgrade.
- ◆ Prioritizing plant improvements to existing equipment and infrastructure.



Analyzed digester cover and mixing system alternatives due to condition of existing plant equipment. Selected cover and mixing system to best fit the City's request for potential future digester gas re-use to reduce plant operational expenses. Dual membrane cover with high velocity nozzle mixing was selected based on life cycle analysis of alternatives.

Performed a plant evaluation of the existing equipment and infrastructure to prioritize improvements to the facility that will not affect potential future improvements to the facility to meeting compliance with the newly issued NPDES permit.

- ◆ Evaluation of treatment plant and analyzing available technologies to determine the best solution for the client.
- ◆ Determining necessary plant improvements not directly related to NPDES permit compliance.