

Colonial Landfill

📍 SORRENTO, LOUISIANA | REPUBLIC SERVICES, INC.



When it comes to serving the community, Republic Services provides sustainable methods to meet the needs of Louisiana residents. To bring about positive change to waste management challenges, Sanborn Head was retained to provide consulting services, and recommendations relative to the landfill's gas collection and control system (GCCS).

Key Components:

- Landfill Gas Collection & Control Systems Design
- Electric Power Supply Design
- Electric Code Compliance Review
- Telemetry Design
- Geotechnical Design
- Condensate Pump Station and Management System Design
- Construction Quality Assurance (CQA) Monitoring

Efforts included developing construction documents for GCCS improvements that included new extraction wells and related header and lateral piping as well as new in-line condensate sumps. Sanborn Head was responsible for developing a new condensate management system configuration to limit clogging potential from calcium carbonate scaling. In addition, our team prepared construction documents to replace an existing enclosed LFG flare, utilizing the existing blowers and control panel and limiting downtime. This included:

- Performing a system evaluation, including the electric power and controls;
- Performing a geotechnical evaluation for the flare foundation;
- Designing the flare foundation and installation; and
- Designing the LFG, electric power, and controls connections to limit flare downtime to one day or less.

Like many landfills across the country, this landfill has been challenged by calcium carbonate precipitation scaling in the force mains of the GCCS condensate management system. The scaling has resulted in significant, and sometimes complete blockages of force mains.

Sanborn Head approached this challenge by evaluating the configuration and operation of the condensate management system to gain an understanding of the potential catalysts of the scaling. As a result, we designed a condensate management system that will limit the potential for scaling, without the need for long-term chemical injection costs.

Related People

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Project Manager

Related Services

Data Management & Visualization

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