SANBORN HEAD

Bethlehem Landfill RNG Air Permitting

BETHLEHEM, NH | RUDARPA, INC.

Sanborn Head assisted Rudarpa, a resource recovery and production company, in developing and implementing their air permitting program for a Renewable Natural Gas (RNG) processing facility located adjacent to the Bethlehem, New Hampshire landfill owned by Casella, Inc.

Key Components:

- Renewable Natural Gas (RNG) Production
- Greenhouse Gas (GHG)/CO2e Emissions Reduction
- Energy Recovery

The processing facility captures landfill gas that is currently being flared at the Bethlehem, New Hampshire landfill. The processing plant separates the landfill gas into marketable gases, with the primary emphasis on methane (CH4). Once processed, the RNG will be transported by truck for injection into existing pipeline facilities owned by Liberty Utilities.

The emissions reduction from converting the flared landfill gas into pipeline quality natural gas is estimated to be 78,000 tons of greenhouse gas (GHG) emissions annually, which is equivalent to taking more than 15,000 passenger cars off the road.

Sanborn Head worked directly with Rudarpa, Inc. to obtain the air permits necessary to construct the processing facility. The air permit application required completing air dispersion modeling of air emissions associated with the compression of the landfill gas into renewable high BTU gas. Sanborn Head's team prepared emissions estimates for a trim flare and regenerative thermal oxidizer; included regulatory compliance considerations; and prepared monitoring plans necessary for operating under the approved air permit. Sanborn Head also served as the liaison between regulatory personnel and our client. The project broke ground in May of 2021 and is expected to be operational sometime mid-year 2023.

Related People

Heather Little, PG
Project Director

Related Services

- Air Services and Modeling
- Renewable Energy
- Sustainability Services

Related Markets

- Solid Waste