SANBORN HEAD

# Renewable Natural Gas (RNG) Facility Air Permitting

♥ MULTIPLE LOCATIONS IN NEW ENGLAND | MULTIPLE CLIENTS

With the emerging shift of landfill gas reuse toward production of pipeline quality natural gas, or renewable natural gas (RNG), and away from its combustion in traditional energy recovery engines and turbines, Sanborn Head has started working with multiple companies to facilitate the air permitting of these facilities.

## **Key Components:**

- Air Dispersion Modeling
- Air Permitting
- Emissions Estimates

These renewable natural gas projects involved complex air permitting issues related to toxic air pollutant emissions, facility ownership, delegation of responsibility, and implications of NSPS Subpart XXX requirements.

Sanborn Head is providing air modeling and permitting services to Rudarpa for a proposed high British thermal unit (Btu) facility at North Country Environmental Services, Inc. (NCES) Landfill in Bethlehem, NH. Landfill gas is converted to RNG via a process involving hydrogen sulfide removal, temperature swing adsorption with molecular sieves, compression through a membrane system, and a nitrogen rejection unit to remove nitrogen and oxygen. Our permitting effort includes a regenerative thermal oxidizer flare and additional trim flare at the facility.

Sanborn Head is also providing air modeling and permitting services to Archaea Energy for a proposed RNG project at the Juniper Ridge Landfill in Old Town, ME. This project not only includes a facility to convert the landfill gas to RNG but an approximately two-mile long pipeline from the landfill to a Bangor Gas pipeline. This project includes modifying the existing air permit for the landfill as well as applying for an air permit for the RNG facility.



#### **Related People**

Heather Little, PG Project Director

#### **Related Services**

Air Services and Modeling Permitting & Compliance Sustainability Services

### **Related Markets**

Solid Waste