STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

DEPARTMENT ORDER

Peaks Renewables, Inc. **Kennebec County** **Clinton, Maine** **A-1160-75-B-X**	**Departmental** **Findings of Fact and Order** **Sales and Use and Property Tax** **Exemption Certification**

FINDINGS OF FACT

After review of the tax exemption certification application and supporting documents, pursuant to Maine's Sales and Use Tax Law, 36 M.R.S. § 1760(30), and Property Tax Law, §§ 655(1)(N) and 656(1)(E)(2), and the Department of Environmental Protection's (Department) *Rules for the Processing of Applications*, 06-096 C.M.R. ch. 2, the Department has considered the application of Peaks Renewables, Inc., with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

I. APPLICATION SUMMARY

A. History

Peaks Renewables, Inc. (Peaks) intends to construct and operate a renewable natural gas (RNG) production facility located at 839 River Road in Clinton, Maine. Operation of this facility requires Department licensing of, among other things, air pollutant emissions.

B. Facility Overview

Peaks asserts that the primary purpose of the facility is to reduce greenhouse gas emissions created from dairy cow manure. Nearby farms will supply the Peaks facility with dairy cow manure to digest and convert to renewable natural gas. The manure will be received within an enclosed, dedicated structure and pumped through a rock trap into an equalization pit within an existing, repurposed building. The manure will be diluted with wastewater from the milking parlor to meet the desired solids content and mixed to ensure homogenization.

The manure will be pumped to the anaerobic digester designed to accelerate and control the decomposition of organic matter by microorganisms in the absence of oxygen. Anaerobic decomposition results in the conversion of organic matter to raw biogas.

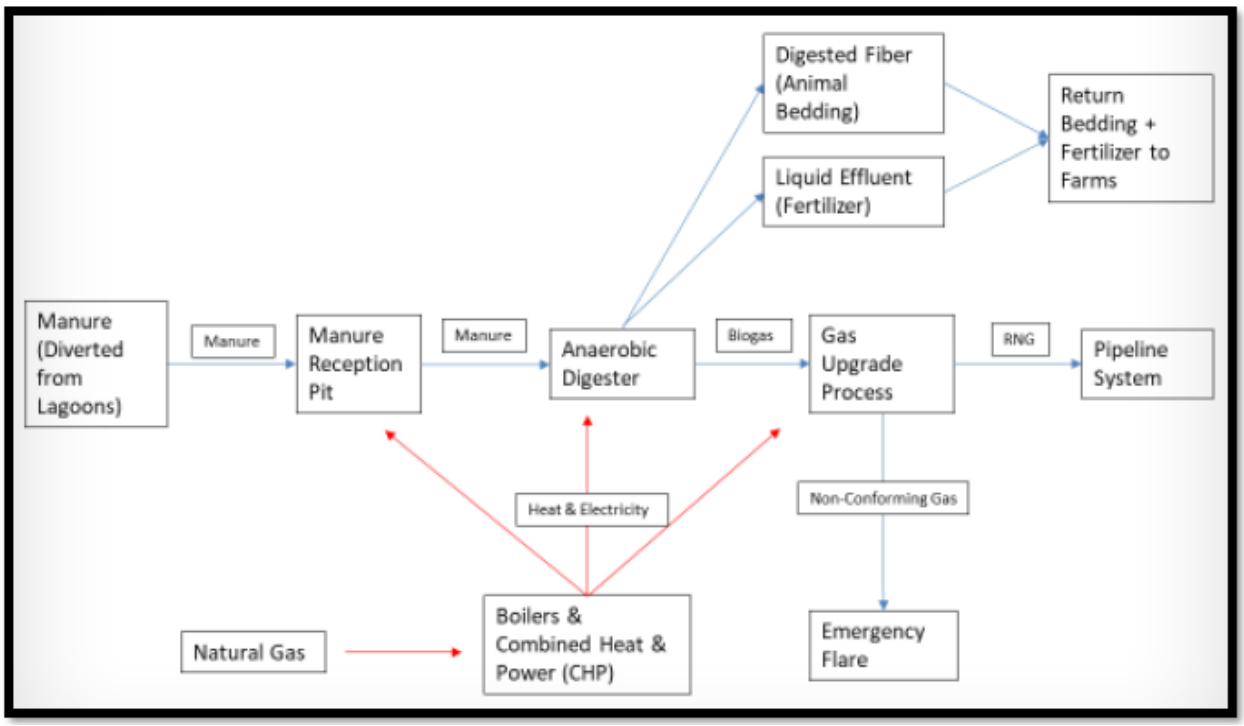
The raw biogas is cleaned to remove impurities such that it meets quality standards and can be injected into the local natural gas pipeline system. The cleaning process produces a tail gas that is scrubbed to remove hydrogen sulfide (H_2S) before being vented to atmosphere.

After digestion, the manure effluent is sent through a solids separation process to remove most of the remaining solids which are strained and returned to the farms to be used as animal bedding. The liquid component is returned to the farms to be used as a fertilizer.

The proposed facility will also include natural gas-fired boilers to provide heat to the anaerobic digester, a combined heat and power engine/generator to provide process heat and a portion of the facility's electrical needs, and an emergency generator. There is also a proposed flare for safe disposal of gas as needed during startup, shutdown, malfunction, and maintenance activities.

The facility also includes support equipment such as a mechanical building, electrical building, feedstock receiving system, control and data acquisition systems, and facility lighting and security.

Below is a basic flow diagram for the RNG production process.



C. Application

On December 13, 2021, Peaks filed an application seeking property and sales and use tax exemption for the entire RNG production facility, which includes the operations and equipment listed below. The Department deemed the application to be complete for processing on December 14, 2021.

1. Feedstock Reception and Processing

   This equipment is used to receive and prepare for anaerobic digestion incoming dairy cow manure from nearby farms. The equalization pit will combine and process the manure to a specific total solids amount that is ideal for anaerobic digestion. The equalization process prepares a homogeneous manure mixture that is regularly added to the anaerobic digester.

   Feedstock reception and processing encompasses the equipment located in the Manure & Effluent Processing Building including manure pits, screens, mixers, pumps, valves, controls, and system monitoring devices.

   The Equalization Building is a building owned by the nearby Flood Brothers Farm and is not included as part of this application. However, it will contain equipment owned and operated by Peaks that is part of this application including manure pumps, mixers, piping, valves, controls, and system monitoring devices.

2. Anaerobic Digester

   The anaerobic digester is a 37,000 square foot mesophilic mixed plug flow digester designed to heat, mix, and decompose the manure resulting in the production of biogas. This biogas is captured and processed in the upgrade system described later.

   Manure is regularly added to the anaerobic digester (every couple of hours) from the equalization pit. The facility's heating system maintains the digester at approximately 100 °F to ensure bacteria activity. The manure is continually mixed by recycling gas through the manure to enhance manure/bacteria contact and to encourage decomposition. The biogas produced is collected and removed for further processing. After the effluent has been retained for a designated period, it is also removed for further processing.

3. Gas Handling and Upgrading System

   The raw biogas will be scrubbed to remove carbon dioxide (CO_2), hydrogen sulfide (H_2S), and other impurities using a skid-mounted upgrade system. The upgrade system includes an amine scrubber which produces a waste gas stream (tail gas) consisting of CO_2, H_2S at a concentration of up to 8,800 ppmv, water, and trace amounts of methane. Peaks will treat the tail gas to remove H_2S using a biologic scrubber followed by carbon scrubbers. The cleaned gas from the amine scrubber system is sent through carbon media polishers, compressors, deoxygenation units, and dryers prior to delivery to the pipeline.

4. Effluent Processing and Storage

Effluent/digestate from the anaerobic digester is sent through a solids separation process. A mechanical screw press is used to separate the solids and liquid portions. The solids are strained and made into animal bedding and returned to the farms. The strained liquids are also returned to the farms to be used as fertilizer.

The Fiber Production & Storage Building is a building owned by the nearby Flood Brothers Farm and is not included as part of this application. However, it will contain equipment owned and operated by Peaks that is part of this application including the mechanical screw press, material handling systems and conveyors, solids separation effluent pit, manure pumps and mixers, controls, and system monitoring devices.

5. Energy Equipment

To meet the energy needs of the facility, Peaks will install a combined heat and power (CHP) reciprocating internal combustion engine powered by pipeline quality natural gas, four natural gas-fired boilers, and a natural gas-fired emergency generator.

6. Additional Support Equipment

The facility will include additional structures and equipment necessary for operation including a feedstock receiving system, mechanical building, electrical building, control and data acquisition systems, and facility lighting and security.

II. OTHER FINDINGS

A. Decision Obligations

In making tax exemption certification decisions, the Department's responsibility is to determine whether an item is eligible for certification pursuant to the laws of the State of Maine. In a case where an exemption certification is approved, Maine Revenue Service has the responsibility of auditing receipts and determining the amount of reduction of sales and use tax liability. Municipal tax assessors perform the same function regarding property tax.

B. Air Pollutants

Methane (CH_4) is a greenhouse gas (GHG) which is considered a regulated air pollutant as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100.

C. Ineligible Property

Pursuant to 36 M.R.S §§ 656(1)(E)(2)(a) and 1760(30), facilities designed, constructed, or installed solely for the benefit of the person for whom they were installed are not considered air pollution control facilities. This includes items such as roadways, parking lots, administrative areas including break rooms and offices, air conditioners, fans, and other mechanical equipment used for non-production purposes (e.g., heating or cooling of admin areas), site security and lighting, and monitoring equipment (unless those monitors are part of a feed-back loop that makes automatic adjustments to control emissions).

In addition, the Department finds that the CHP engine and emergency generator, as described in Section I(C)(5), are also equipment installed solely for the benefit of the facility owner or operator. This equipment provides supplemental electrical power to the facility to offset, or in lieu of, grid power. The CHP makes the process more efficient, and the emergency generator protects facility assets during a power outage, both of which benefit only the owner or operator. They are also emission units that burn fuel and produce air pollutants rather than reduce pollutants. Such equipment is not eligible for tax exemption.

D. Decision Making Process

An air pollution control "facility" is defined by 36 M.R.S. § 656(1)(E)(2) and § 1760(30) as follows:

> *"Facility" means any appliance, equipment, machinery, installation or structures installed, acquired or placed in operation primarily for the purpose of reducing, controlling, eliminating or disposing of industrial or other air pollutants.*
> *Facilities such as air conditioners, dust collectors, fans and similar facilities designed, constructed or installed solely for the benefit of the person for whom installed or the personnel of that person shall not be deemed air pollution control facilities.*

For each system or piece of equipment, all associated piping, electrical, concrete, insulation, and structural installations necessary for the construction and operation of the equipment are also considered part of this system or piece of equipment. For the purposes of sales and use tax certification, the systems or equipment include parts or accessories of a certified facility, materials for the construction, repair or maintenance of a certified facility, and chemicals or supplies that are integral to the effectiveness of a certified facility.

The Department decides whether a facility is eligible for exemption by determining the facility's "primary purpose" as follows:

1. If the facility serves no pollution control function, then its primary purpose is not pollution control and the exemption must be denied.

2. If the facility's only function is pollution control, then its primary purpose is pollution control and the exemption must be granted
3. If the facility serves dual or multiple functions, its "primary" function must be determined.
4. If the facility's primary function is pollution control, then the facility's primary purpose is pollution control and the exemption must be granted.
5. If pollution control is merely a secondary function, then other factors, including taxpayer motivation, must be considered.
6. If the primary motivation for installation of the facility is pollution control, then the Department may conclude that the facility's primary purpose is pollution control and the exemption may be granted.
7. If neither the facility's primary function nor the taxpayer's primary motivation (or other factor considered) is pollution control, then the facility's primary purpose cannot be pollution control and the exemption must be denied.

(Note: See Town of Jay v. Androscoggin Energy, LLC et al. 2003 ME 64, ¶16, 822 A2 1114.)

The applicant requested the entire facility be certified as air pollution control equipment.

E. Functions

In determining the facility's primary purpose, the Department must first determine the facility's function, i.e., what the facility physically does.

The facility processes dairy manure that would otherwise be stored in a lagoon until it could be land-applied as fertilizer. Lagoon storage can last for several months, especially during the winter, during which time the manure decomposes anaerobically producing methane that is freely released into the atmosphere. By processing the manure in the facility's anaerobic digester, methane that would otherwise be released is captured and put to beneficial use. The processing of the manure at the facility will both reduce emissions of methane to the atmosphere and produce a saleable product.

The facility differs from other renewable energy projects, such as wind or solar installations, in that the facility directly captures emissions of methane that would otherwise be freely released. Whereas operation of wind or solar facilities does not, by itself, directly prevent emissions of any regulated air pollutant.

The Department finds that the facility has dual functions and that a secondary function of the facility is pollution control. Its primary function is to process waste manure to produce a saleable renewable natural gas product. A secondary function is to reduce emissions of methane by minimizing the amount of time the manure spends in lagoons.

F. Motivation for Installation

Because the Department finds that pollution control is a secondary function of the facility, the Department must consider the applicant's motivation for installation of the facility.

In its application, Peaks stated that the facility will capture the methane emitted from manure, convert it to pipeline quality natural gas, and put the gas to beneficial use. Several agencies, including the U.S. Environmental Protection Agency, have established renewable fuels programs which require participants to purchase fuels from renewable sources such as RNG from dairy cow manure. As one such RNG operation, Peaks intends to participate in these programs and states in the application:

> *The ability of the project to prevent fugitive emissions from entering the atmosphere, thereby generating saleable environmental attributes, is the sole reason why the project is economically feasible to develop, build and operate. The revenue sourced from attribute sales to the RFS [Renewable Fuel Standards Program] and LCFS [Low Carbon Fuel Standard] programs provides 90% of the overall project revenue. Revenue from the sale of natural gas represents a small portion (10%) of the overall project revenue.*

Thus, the bulk of the proposed revenue stream for the facility comes from payment for emissions reductions. The Department therefore finds that Peaks' primary motivation for installation of the facility is pollution reduction and that the primary purpose of the facility is pollution control.

ORDER

Based on the Findings of Fact in this Order, the Department makes the following CONCLUSIONS:

1. The Department hereby finds that the facility as a whole is an air pollution control facility qualifying for an exemption from property tax pursuant to 36 M.R.S. § 656 (1)(E) with the exception of the equipment listed in Section II(C) and the facilities owned or operated by Flood Brothers Farm.

2. The Department hereby finds that the facility as a whole is an air pollution control facility qualifying for an exemption from sales and use tax pursuant to 36 M.R.S. § 1760(30) with the exception of the equipment listed in Section II(C) and the facilities owned or operated by Flood Brothers Farm

THEREFORE, the Department APPROVES certification of the Peaks facility as air pollution control equipment but DENIES the certification of equipment listed in Section II(C) and any facilities owned or operated by Flood Brothers Farm.

DONE AND DATED IN AUGUSTA, MAINE THIS 22nd DAY OF MARCH, 2022.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____ for ____
MELANIE LOYZIM, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 12/13/2021
Date of application acceptance: 12/14/2021

Date filed with the Board of Environmental Protection:

This Order prepared by Lynn Muzzey, Bureau of Air Quality.

FILED

MAR 22, 2022

State of Maine
Board of Environmental Protection