



DEPARTMENT ORDER

**Exeter Agri-Energy, LLC
Penobscot County
Exeter, Maine
A-1047-71-H-M**

**Departmental
Findings of Fact and Order
Air Emission License
Amendment #2**

FINDINGS OF FACT

After review of the air emission license amendment application, staff investigation reports, and other documents in the applicant’s file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

Exeter Agri-Energy, LLC (EAE) was issued Air Emission License A-1047-71-F-R/M on February 20, 2018, for the operation of emission sources associated with their anaerobic digesters and electric co-generation facility. The license was subsequently amended on September 9, 2024 (A-1047-71-G-A) to install two boilers, a compressed natural gas upgrader system, a fourth anerobic digester, and a 300,000-gallon mixing tank.

The equipment addressed in this license amendment is located at 226 Fogler Rd, Exeter, Maine.

EAE has requested a minor revision to their license in order to notate the change in vendors for the Compressed Natural Gas Upgrader.

B. Emission Equipment

The following equipment is addressed in this air emission license amendment:

Process Equipment

Emission Unit ID	Equipment	Capacity (gallons)	Process Rate	Pollution Control Equipment	Stack #
CNG Upgrader	Compressed Natural Gas Upgrader System	TBD	1,500 scf/min	Activated carbon adsorber system	N/A

C. Application Classification

All rules, regulations, or statutes referenced in this air emission license refer to the amended version in effect as of the date this license was issued.

This amendment will not increase licensed emissions of any pollutant. Therefore, this amendment is determined to be a minor revision and has been processed as such.

D. Facility Classification

The facility is licensed as follows:

- As a natural minor source of criteria pollutants, because no license restrictions are necessary to keep facility emissions below major source thresholds for criteria pollutants; and
- As an area source of hazardous air pollutants (HAP), because the licensed emissions are below the major source thresholds for HAP.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. Separate control requirement categories exist for new and existing equipment.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Change of Vendors for Compressed Natural Gas Upgrader

During the phased installation of the equipment described in amendment A-1047-71-G-A, the cost of equipment from the selected vendor for the Compressed Natural Gas Upgrader significantly increased, causing EAE to consider alternative suppliers. Since the project initiation, equipment was identified from an alternative vendor that is able to meet the same methane capture efficiency specifications as equipment from the originally selected vendor and exceed the hydrogen sulfide removal efficiency of the previously specified equipment.

With the change in equipment suppliers, minor changes to the details of the BACT analysis are noted below regarding the Activated Carbon Adsorber System (ACAS) used to control emissions of hydrogen sulfide from the Compressed Natural Gas Upgrader. The following is an updated equipment description for the ACAS:

EAE has proposed to install an ACAS, which will consist of three activated carbon canisters. Two of these vessels contain active carbon for the removal of hydrogen sulfide, and the other vessel removes volatile organic compounds. EAE will use continuous analyzers to monitor hydrogen sulfide levels in the gas coming out of the ACAS system to optimize timing for media replacement. When hydrogen sulfide breakthrough measures above a specific setpoint, which will be at or below the proposed 10 ppmdv limit for tailgas hydrogen sulfide, the operator will be notified. The upgrader system will need to be shut down for a brief time while the activated carbon media is replaced. With the proposed upgrader system, any hydrogen sulfide that passes through the carbon filtration stage will pass through the upgrader's molecular sieve membranes and end up in the product gas rather than being emitted in the tailgas. The upgrader system continuously monitors the product gas for quality assurance, and if the hydrogen sulfide level is greater than 3 ppmdv, which is the specification for the compressed natural gas being produced, a portion of the product gas will be recirculated through the upgrader to allow an additional treatment stage. There is a particulate filter to capture any carbon dust that escapes the ACAS, which is located at the ACAS outlet and before the upgrader membranes inlet to protect the membranes from fouling.

This change in equipment vendor and corresponding change in ACAS description will not result in the increase in any licensed emission rate, nor will it change the findings of the BACT analysis described in air emission license amendment A-1047-71-G-A.

C. Annual Emissions

This license amendment will not change the facility's licensed annual emissions.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards, and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License Amendment A-1047-71-H-M subject to the conditions found in Air Emission License A-1047-71-F-R/M, and in amendment A-1047-71-G-A.

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Severability. The invalidity or unenforceability of any provision of this License Amendment or part thereof shall not affect the remainder of the provision or any other provisions. This License Amendment shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

This amendment will not change any conditions of Air Emission License A-1047-71-F-R/M (issued 2/20/2018) or in Amendment A-1047-71-G-A (issued 9/9/2024).

DONE AND DATED IN AUGUSTA, MAINE THIS 21st DAY OF APRIL, 2026.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:  for
MELANIE LOYZIM, COMMISSIONER

The term of this license amendment shall be ten (10) years from the issuance of Air Emission License A-1047-71-F-R/M (issued 2/20/2018).

[Note: If a renewal application, determined as complete by the Department, is submitted prior to expiration of this license, then pursuant to Title 5 M.R.S. § 10002, all terms and conditions of the license shall remain in effect until the Department takes final action on the license renewal application.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 12/22/25

Date of application acceptance: 12/30/25

This Order prepared by Chris Ham, Bureau of Air Quality.