RIPUC Use Only	
Date Application Received:	__ __ / __ __ / __ __
Date Review Completed:	__ __ / __ __ / __ __
Date Commission Action:	__ __ / __ __ / __ __
Date Commission Approved:	__ __ / __ __ / __

GIS Certification #:

_____

RENEWABLE ENERGY RESOURCES ELIGIBILITY FORM

The Standard Application Form
Required of all Applicants for Certification of Eligibility of Renewable Energy Resource
(Version 7 – June 11, 2010)

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION
Pursuant to the Renewable Energy Act
Section 39-26-1 et. seq. of the General Laws of Rhode Island

NOTICE:

When completing this Renewable Energy Resources Eligibility Form and any applicable Appendices, please refer to the State of Rhode Island and Providence Plantations Public Utilities Commission Rules and Regulations Governing the Implementation of a Renewable Energy Standard (RES Regulations, Effective Date: January 1, 2006), and the associated RES Certification Filing Methodology Guide. All applicable regulations, procedures and guidelines are available on the Commission's web site: www.ripuc.org/utilityinfo/res.html. Also, all filings must be in conformance with the Commission's Rules of Practice and Procedure, in particular, Rule 1.5, or its successor regulation, entitled "Formal Requirements as to Filings."

- **Please complete the Renewable Energy Resources Eligibility Form and Appendices using a typewriter or black ink.**

- **Please submit one original and three copies of the completed Application Form, applicable Appendices and all supporting documentation to the Commission at the following address:**

Rhode Island Public Utilities Commission
89 Jefferson Blvd
Warwick, RI 02888
Attn: Renewable Energy Resources Eligibility

In addition to the paper copies, electronic/email submittals are required under Commission regulations. Such electronic submittals should be sent to: Luly E. Massaro, Commission Clerk at lmassaro@puc.state.ri.us

- **In addition to filing with the Commission, Applicants are required to send, electronically or electronically and in paper format, a copy of the completed Application including all attachments and supporting documentation, to the Division of Public Utilities and Carriers and to all interested parties. A list of interested parties can be obtained from the Commission's website at www.ripuc.org/utilityinfo/res.html.**

- **Keep a copy of the completed Application for your records.**

- **The Commission will notify the Authorized Representative if the Application is incomplete.**

- **Pursuant to Section 6.0 of the RES Regulations, the Commission shall provide a thirty (30) day period for public comment following posting of any administratively complete Application.**

- **Please note that all information submitted on or attached to the Application is considered to be a public record unless the Commission agrees to deem some portion of the application confidential after consideration under section 1.2(g) of the Commission's Rules of Practice and Procedure.**

- **In accordance with Section 6.2 of the RES Regulations, the Commission will provide prospective reviews for Applicants seeking a preliminary determination as to whether a facility would be eligible prior to the formal certification process described in Section 6.1 of the RES Regulations. Please note that space is provided on the Form for applicant to designate the type of review being requested.**

- **Questions related to this Renewable Energy Resources Eligibility Form should be submitted in writing, preferably via email and directed to: Luly E. Massaro, Commission Clerk at lmassaro@puc.state.ri.us**

SECTION I: Identification Information

1.1 Name of Generation Unit (sufficient for full and unique identification):
Exeter Agri-Energy

1.2 Type of Certification being requested (check one):
☑ Standard Certification ☐ Prospective Certification (Declaratory Judgment)

1.3 This Application includes: (Check all that apply)[1]

- ☐ APPENDIX A: Authorized Representative Certification for Individual Owner or Operator
- ☐ APPENDIX B: Authorized Representative Certification for Non-Corporate Entities Other Than Individuals
- ☐ APPENDIX C: Existing Renewable Energy Resources
- ☐ APPENDIX D: Special Provisions for Aggregators of Customer-sited or Off-grid Generation Facilities
- ☐ APPENDIX E: Special Provisions for a Generation Unit Located in a Control Area Adjacent to NEPOOL
- ☑ APPENDIX F: Fuel Source Plan for Eligible Biomass Fuels

1.4 Primary Contact Person name and title: **Adam Wintle, Managing Partner, Biogas Energy Partners (BEP)**

1.5 Primary Contact Person address and contact information:
Address: **226 Fogler Road, Exeter, ME 04435**

Phone: **(207) 415-8965** Fax: **(207) 379-3963**
Email: **adam@biogasenergypartners.com**

1.6 Backup Contact Person name and title: **John Wintle, Plant Manager**

1.7 Backup Contact Person address and contact information:
Address: **226 Fogler Road, Exeter, ME 04435**

Phone: **(207) 944-8775** Fax: **(207) 379-3963**
Email: **adam@biogasenergypartners.com**

1.8 Name and Title of Authorized Representative (*i.e.*, the individual responsible for certifying the accuracy of all information contained in this form and associated appendices, and whose signature will appear on the application):
Adam Wintle, Managing Partner, Biogas Energy Partners (BEP)

Appendix A or B (as appropriate) completed and attached? ☐ Yes ☑ No ☐ N/A
Please see attached Statement of Authority (for a Maine LLC), dated August 16, 2011.

[1] Please note that all Applicants are required to complete the Renewable Energy Resources Eligibility Standard Application Form and all of the Appendices that apply to the Generation Unit or Owner or Operator that is the subject of this Form. Please omit Appendices that do not apply.

1.9 Authorized Representative address and contact information:
Address: **226 Fogler Road, Exeter, ME 04435**

Phone: **(207) 415-8965** Fax: **(207) 379-3963**
Email: **adam@biogasenergypartners.com**

1.10 Owner name and title: **Exeter Agri-Energy**
1.11 Owner address and contact information:
Address: **226 Fogler Road, Exeter, ME 04435**

Phone: **(207) 415-8965** Fax: **(207) 379-3963**
Email: **adam@biogasenergypartners.com**

1.12 Owner business organization type (check one):
- ☐ Individual
- ☐ Partnership
- ☐ Corporation
- ☑ Other: **Limited Liability Company**

1.13 Operator name and title: **Exeter Agri-Energy**

1.14 Operator address and contact information:
Address: **226 Fogler Road, Exeter, ME 04435**

Phone: **(207) 415-8965** Fax: **(207) 379-3963**
Email: **adam@biogasenergypartners.com**

1.15 Operator business organization type (check one):
- ☐ Individual
- ☐ Partnership
- ☐ Corporation
- ☑ Other: **Limited Liability Company**

SECTION II: Generation Unit Information, Fuels, Energy Resources and Technologies

2.1 ISO-NE Generation Unit Asset Identification Number or NEPOOL GIS Identification Number (either or both as applicable): **411**

2.2 Generation Unit Nameplate Capacity: **0.98** MW

2.3 Maximum Demonstrated Capacity: **0.98** MW

2.4 Please indicate which of the following Eligible Renewable Energy Resources are used by the Generation Unit: (Check ALL that apply) – *per RES Regulations Section 5.0*

- ☐ Direct solar radiation
- ☐ The wind
- ☐ Movement of or the latent heat of the ocean
- ☐ The heat of the earth
- ☐ Small hydro facilities
- ☑ Biomass facilities using Eligible Biomass Fuels and maintaining compliance with all aspects of current air permits; Eligible Biomass Fuels may be co-fired with fossil fuels, provided that only the renewable energy fraction of production from multi-fuel facilities shall be considered eligible.
- ☐ Biomass facilities using unlisted biomass fuel
- ☐ Biomass facilities, multi-fueled or using fossil fuel co-firing
- ☐ Fuel cells using a renewable resource referenced in this section

2.5 If the box checked in Section 2.4 above is "Small hydro facilities", please certify that the facility's aggregate capacity does not exceed 30 MW. – *per RES Regulations Section 3.32*

☐ ← check this box to certify that the above statement is true
☑ N/A or other (please explain) _____

_____

2.6 If the box checked in Section 2.4 above is "Small hydro facilities", please certify that the facility does not involve any new impoundment or diversion of water with an average salinity of twenty (20) parts per thousand or less. – *per RES Regulations Section 3.32*

☐ ← check this box to certify that the above statement is true
☑ N/A or other (please explain) _____

_____

2.7 If you checked one of the Biomass facilities boxes in Section 2.4 above, please respond to the following:

A. Please specify the fuel or fuels used or to be used in the Unit: **Agricultural waste, food and vegetative material; biogas**

B. Please complete and attach Appendix F, Eligible Biomass Fuel Source Plan. Appendix F completed and attached? ☑ Yes ☐ No ☐ N/A

2.8 Has the Generation Unit been certified as a Renewable Energy Resource for eligibility in another state's renewable portfolio standard?

☑ Yes ☐ No If yes, please attach a copy of that state's certifying order.

Copy of State's certifying order attached? ☑ Yes ☐ No ☐ N/A

SECTION III: Commercial Operation Date

Please provide documentation to support all claims and responses to the following questions:

3.1 Date Generation Unit first entered Commercial Operation: **12 / 29 / 11** at the site.

If the commercial operation date is after December 31, 1997, please provide independent verification, such as the utility log or metering data, showing that the meter first spun after December 31, 1997. This is needed in order to verify that the facility qualifies as a New Renewable Energy Resource.

Documentation attached? ☑ Yes ☐ No ☐ N/A

Attached is the Bangor Hydro Electric Company generation report from December 2011; also attached is the Exeter Agri-Energy Commissioning Report, dated 12/29/11.

3.2 Is there an Existing Renewable Energy Resource located at the site of Generation Unit?

☐ Yes
☑ No

3.3 If the date entered in response to question 3.1 is earlier than December 31, 1997 or if you checked "Yes" in response to question 3.2 above, please complete Appendix C.

Appendix C completed and attached? ☐ Yes ☐ No ☑ N/A

3.4 Was all or any part of the Generation Unit used on or before December 31, 1997 to generate electricity at any other site?

☐ Yes
☑ No

3.5 If you checked "Yes" to question 3.4 above, please specify the power production equipment used and the address where such power production equipment produced electricity (attach more detail if the space provided is not sufficient):

_____

_____

_____

SECTION IV: Metering

4.1 Please indicate how the Generation Unit's electrical energy output is verified (check all that apply):

- ☑ ISO-NE Market Settlement System
- ☐ Self-reported to the NEPOOL GIS Administrator
- ☑ Other (please specify below and see Appendix D: Eligibility for Aggregations): **Exeter Agri-Energy (EAE) has an agreement with Vermont Public Power Supply Authority (VPPSA) whereby VPPSA is the NEPOOL market participant for EAE. VPPSA receives daily metering information from Bangor Hydro Electric Company (EAE's utility company) and subsequently reports it to NEPOOL. EAE does not collect or report any metering data.**

Appendix D completed and attached? ☐ Yes ☑ No ☐ N/A

SECTION V: Location

5.1 Please check one of the following that apply to the Generation Unit:

- ☑ Grid Connected Generation
- ☐ Off-Grid Generation (not connected to a utility transmission or distribution system)
- ☐ Customer Sited Generation (interconnected on the end-use customer side of the retail electricity meter in such a manner that it displaces all or part of the metered consumption of the end-use customer)

5.2 Generation Unit address: **226 Fogler Road, Exeter, ME 04435**

5.3 Please provide the Generation Unit's geographic location information:

A. Universal Transverse Mercator Coordinates: **Zone: 19; Easting: 490589; Northing: 4977783**

B. Longitude/Latitude: **44°57′12.3″N/ 69°7′9.5″W**

5.4 The Generation Unit located: (please check the appropriate box)

- ☑ In the NEPOOL control area
- ☐ In a control area adjacent to the NEPOOL control area
- ☐ In a control area other than NEPOOL which is not adjacent to the NEPOOL control area ← *If you checked this box, then the generator does not qualify for the RI RES – therefore, please do not complete/submit this form.*

5.5 If you checked "In a control area adjacent to the NEPOOL control area" in Section 5.4 above, please complete Appendix E.

Appendix E completed and attached? ☐ Yes ☐ No ☑ N/A

SECTION VI: Certification

6.1 Please attach documentation, using one of the applicable forms below, demonstrating the authority of the Authorized Representative indicated in Section 1.8 to certify and submit this Application.

Corporations

If the Owner or Operator is a corporation, the Authorized Representative shall provide **either**:

(a) Evidence of a board of directors vote granting authority to the Authorized Representative to execute the Renewable Energy Resources Eligibility Form, **or**

(b) A certification from the Corporate Clerk or Secretary of the Corporation that the Authorized Representative is authorized to execute the Renewable Energy Resources Eligibility Form or is otherwise authorized to legally bind the corporation in like matters.

Evidence of Board Vote provided? ❑ Yes ❑ No ☑ N/A

Corporate Certification provided? ❑ Yes ❑ No ☑ N/A

Individuals

If the Owner or Operator is an individual, that individual shall complete and attach APPENDIX A, or a similar form of certification from the Owner or Operator, duly notarized, that certifies that the Authorized Representative has authority to execute the Renewable Energy Resources Eligibility Form.

Appendix A completed and attached? ❑ Yes ❑ No ☑ N/A

Non-Corporate Entities

(Proprietorships, Partnerships, Cooperatives, etc.) If the Owner or Operator is not an individual or a corporation, it shall complete and attach APPENDIX B or execute a resolution indicating that the Authorized Representative named in Section 1.8 has authority to execute the Renewable Energy Resources Eligibility Form or to otherwise legally bind the non-corporate entity in like matters.

Appendix B completed and attached? ❑ Yes ☑ No ❑ N/A

Please see attached Statement of Authority (for a Maine LLC), dated August 16, 2011.

6.2 Authorized Representative Certification and Signature:

I hereby certify, under pains and penalties of perjury, that I have personally examined and am familiar with the information submitted herein and based upon my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties, both civil and criminal, for submitting false information, including possible fines and punishment. My signature below certifies all information submitted on this Renewable Energy Resources Eligibility Form. The Renewable Energy Resources Eligibility Form includes the Standard Application Form and all required Appendices and attachments. I acknowledge that the Generation Unit is obligated to and will notify the Commission promptly in the event of a change in a generator's eligibility status (including, without limitation, the status of the air permits) and that when and if, in the Commission's opinion, after due consideration, there is a material change in the characteristics of a Generation Unit or its fuel stream that could alter its eligibility, such Generation Unit must be re-certified in accordance with Section 9.0 of the RES Regulations. I further acknowledge that the Generation Unit is obligated to and will file such quarterly or other reports as required by the Regulations and the Commission in its certification order. I understand that the Generation Unit will be immediately de-certified if it fails to file such reports.

Signature of Authorized Representative:

SIGNATURE: _____ DATE: 7/30/12

Authorized Representative
(Title)

GIS Certification #:
———

APPENDIX F
(Revised 6/11/10)
Eligible Biomass Fuel Source Plan
(Required of all Applicants Proposing to Use An Eligible Biomass Fuel)

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISION
Part of Application for Certificate of Eligibility
RENEWABLE ENERGY RESOURCES ELIGIBILITY FORM
Pursuant to the Renewable Energy Act
Section 39-26-1 et. seq. of the General Laws of Rhode Island

Note to Applicants: Please refer to the RES Certification Filing Methodology Guide posted on the Commission's web site (www.ripuc.org/utilityinfo/res.html) for information, templates and suggestions regarding the types and levels of detail appropriate for responses to specific application items requested below. Also, please see Section 6.9 of the RES Regulations for additional details on specific requirements.

The phrase "Eligible Biomass Fuel" (per RES Regulations Section 3.7) means fuel sources including brush, stumps, lumber ends and trimmings, wood pallets, bark, wood chips, shavings, slash, yard trimmings, site clearing waste, wood packaging, and other clean wood that is not mixed with other unsorted solid wastes[2]; agricultural waste, food and vegetative material; energy crops; landfill methane[3] or biogas[4], provided that such gas is collected and conveyed directly to the Generation Unit without use of facilities used as common carriers of natural gas; or neat bio-diesel and other neat liquid fuels that are derived from such fuel sources.

In determining if an Eligible Biomass Generation Unit shall be certified, the Commission will consider if the fuel source plan can reasonably be expected to ensure that only Eligible Biomass Fuels will be used, and in the case of co-firing ensure that only that proportion of generation attributable to an Eligible Biomass Fuel be eligible. Certification will not be granted to those Generation Units with fuel source plans the Commission deems inadequate for these purposes.

This Appendix must be attached to the front of Applicant's Fuel Source Plan required for Generating Units proposing to use an Eligible Biomass Fuel (per Section 6.9 of RES Regulations).

---

[2] Generation Units using wood sources other than those listed above may make application, as part of the required fuel source plan described in Section 6.9 of the RES Regulations, for the Commission to approve a particular wood source as "clean wood." The burden will be on the applicant to demonstrate that the wood source is at least as clean as those listed in the legislation. Wood sources containing resins, glues, laminates, paints, preservatives, or other treatments that would combust or off-gas, or mixed with any other material that would burn, melt, or create other residue aside from wood ash, will not be approved as clean wood.

[3] Landfill gas, which is an Eligible Biomass Fuel, means only that gas recovered from inside a landfill and resulting from the natural decomposition of waste, and that would otherwise be vented or flared as part of the landfill's normal operation if not used as a fuel source.

[4] Gas resulting from the anaerobic digestion of sewage or manure is considered to be a type of biogas, and therefore an Eligible Biomass Fuel that has been fully separated from the waste stream.

F.1 The attached Fuel Source Plan includes a detailed description of the type of Eligible Biomass Fuel to be used at the Generation Unit.

Detailed description attached? ☑ Yes ☐ No ☐ N/A
Comments: _____

F.2 If the proposed fuel is "other clean wood," the Fuel Source Plan should include any further substantiation to demonstrate why the fuel source should be considered as clean as those clean wood sources listed in the legislation.

Further substantiation attached? ☐ Yes ☐ No ☑ N/A
Comments: _____

F.3 In the case of co-firing with ineligible fuels, the Fuel Source Plan must include a description of (a) how such co-firing will occur; (b) how the relative amounts of Eligible Biomass Fuel and ineligible fuel will be measured; and (c) how the eligible portion of generation output will be calculated. Such calculations shall be based on the energy content of all of the proposed fuels used.

Description attached? ☐ Yes ☐ No ☑ N/A
Comments: _____

F.4 The Fuel Source Plan must provide a description of what measures will be taken to ensure that only the Eligible Biomass Fuel are used, examples of which may include: standard operating protocols or procedures that will be implemented at the Generation Unit, contracts with fuel suppliers, testing or sampling regimes.

Description provided? ☑ Yes ☐ No ☐ N/A
Comments: _____

F.5 Please include in the Fuel Source Plan an acknowledgement that the fuels stored at or brought to the Generation Unit will only be either Eligible Biomass Fuels or fossil fuels used for co-firing and that Biomass Fuels not deemed eligible will not be allowed at the premises of the certified Generation Unit. And please check the following box to certify that this statement is true.

☑ ← check this box to certify that the above statement is true
☐ N/A or other (please explain) _____

F.6 If the proposed fuel includes recycled wood waste, please submit documentation that such fuel meets the definition of Eligible Biomass Fuel and also meets material separation, storage, or handling standards acceptable to the Commission and furthermore consistent with the RES Regulations.

Documentation attached? ☐ Yes ☐ No ☑ N/A
Comments: _____

_____

F.7 Please certify that you will file all reports and other information necessary to enable the Commission to verify the on-going eligibility of the renewable energy generators pursuant to Section 6.3 of the RES Regulations. Specifically, RES Regulations Section 6.3(i) states that Renewable Energy Resources of the type that combust fuel to generate electricity must file quarterly reports due 60 days after the end of each quarter on the fuel stream used during the quarter. Instructions and filing documents for the quarterly reports can be found on the Commissions website or can be furnished upon request.

☑ ← check this box to certify that the above statement is true
☐ N/A or other (please explain) _____

_____

F.8 Please attach a copy of the Generation Unit's Valid Air Permit or equivalent authorization.

Valid Air Permit or equivalent attached? ☑ Yes ☐ No ☐ N/A
Comments: _____

_____

F.9 Effective date of Valid Air Permit or equivalent authorization:

03 / 08 / 11

F.10 State or jurisdiction issuing Valid Air Permit or equivalent authorization: **Maine**

Exeter Agri-Energy
Fuel Source Plan
7/30/12

A. Detailed description of the type of Eligible Biomass Fuel to be used at the Generation Unit:

Per the Exeter Agri-Energy (EAE) Solid Waste Order issued by the Maine Department of Environmental Protection (MEDEP) on July 22, 2011, "Only manure and waste silage and Type 1A, Type 1B, and Type 1C food wastes are processed in the facility." (See 'CONCLUSIONS' [1A] on page 9 of the solid waste permit). Type 1A, Type 1B, and Type 1C are defined by *Solid Waste Management Rules: General Provisions, 06-096 CMR 400(1)(Www-Yyy).* [http://www.maine.gov/dep/waste/solidwaste/index.html]

Also, per the Solid Waste Order issued by the MEDEP [B1 – Digester Inputs]: "Manure from Stonyvale Farm will be the primary feedstock for the digester facility, with the use of off-farm organic food waste proposed to increase biogas production. Manure is a natural source of the bacteria necessary for the anaerobic digestion process. Manure will be collected from the Stonyvale Farm dairy barns and pumped directly into the proposed digester system. Off-farm organic food waste will be used to increase gas and energy yields. Off-farm feedstocks are anticipated to include source separated organic wastes including fruits and vegetable waste, fats, oils, and greases (FOG), and other materials deemed favorable for anaerobic digestion."

A minor revision application is pending with the MEDEP to allow processing of glycerin. Glycerin is produced as a byproduct of the biodiesel production process, which converts used cooking oil to renewable energy.

B. Description of what measures will be taken to ensure that only the Eligible Biomass Fuel are used (ex: standard operating protocols or procedures that will be implemented at the Generation Unit, contracts with fuel suppliers, testing or sampling regimes.)

Please refer to the Solid Waste Order issued by MEDEP whereby "Only manure, waste silage, and Type 1A, Type 1B, and Type 1C food wastes shall be processed in the facility." According to Appendix A of the Solid Waste Order [Standard Conditions To All Solid Waste Facility Licenses], EAE is strictly limited to introducing agricultural waste and food and vegetative material to the digester facility.

EAE carefully evaluates the potential feedstocks available from prospective suppliers and obtains analytical data as needed to ensure that the material will be suitable for use in the anaerobic digestion (AD) system. Once

qualified, the material is blended with other feedstocks in the receiving vessel to ensure optimal performance of the AD system. No materials are accepted that have not been prequalified as acceptable. Bills-of-lading are obtained and kept on file to document all deliveries of off-site feedstocks.

C. Acknowledgement that the fuels stored at or brought to the Generation Unit will only be either Eligible Biomass Fuels or fossil fuels used for co-firing and that Biomass Fuels not deemed eligible will not be allowed at the premises of the certified Generation Unit.

The digester uses only manure, waste silage, and food waste (a minor revision is pending to permit the use of waste glycerin from the production of biodiesel). All of these feedstocks are eligible biomass and non-eligible materials will not be introduced to the anaerobic digestion system.

Filing Fee $50.00

LIMITED LIABILITY COMPANY

STATE OF MAINE

STATEMENT OF AUTHORITY

(for a Maine LLC)

Exeter Agri-Energy, LLC

(Name of Limited Liability Company)

_____

Deputy Secretary of State

A True Copy When Attested By Signature

_____

Deputy Secretary of State

Pursuant to 31 MRSA §1542.1, the following persons or existing positions have the authority or limitations on authority to enter into transactions on behalf of this company, or otherwise act for or bind this company as described below:

Adam F. Wintle

(name of person or position)

Authority granted or limitations:

Execute any and all agreements, promissory notes, or other transaction documents on behalf of the company relating to the development of the EAE Anaerobic Digester Project at Stoneyvale Farms, Exeter, Maine. Any and all agreements executed as of the date hereof by Mr. Wintle are ratified.

_____

(name of person or position)

Authority granted or limitations:

(name of person or position)

Authority granted or limitations:

Additional information is set forth in the attached Exhibit _____, and made a part hereof.

***Authorized person(s)**

DATED August 16, 2011

(authorized signature)

Travis E. Fogler, Member
(type or print name and capacity)

(authorized signature)

Aaron Fogler, Member
(type or print name and capacity)

(authorized signature)

Brian M. Rienhardt, Member
(type or print name and capacity)

*Pursuant to 31 MRSA §1676.1B, this statement **MUST** be signed by a person authorized by the limited liability company.

The execution of this certificate constitutes an oath or affirmation under the penalties of false swearing under Title 17-A, section 453.

Please remit your payment made payable to the Maine Secretary of State.

Submit completed form to:

Secretary of State
Division of Corporations, UCC and Commissions
101 State House Station
Augusta, ME 04333-0101
Telephone Inquiries: **(207) 624-7752** Email Inquiries: CEC.Corporations@Maine.gov

Filer Contact Cover Letter

To: Department of the Secretary of State
Division of Corporations, UCC and Commissions
101 State House Station
Augusta, ME 04333-0101

Tel. (207) 624-7752

Name of Entity (s):

Exeter Agri-Energy, LLC

List type of filing(s) enclosed (i.e. Articles of Incorporation, Articles of Merger, Articles of Amendment, Certificate of Correction, etc.) Attach additional pages as needed.

Statement of Authority

Special handling request(s): (check all that apply)

- ☐ Hold for pick up
- ☐ Expedited filing - 24 hour service ($50 additional filing fee per entity, per service)
- ☐ Expedited filing - Immediate service ($100 additional filing fee per entity, per service)

Total filing fee(s) enclosed: $ _____

Contact Information – questions regarding the above filing(s), please call or email: (failure to provide a contact name and telephone number or email address will result in the return of the erroneous filing (s) by the Secretary of State's office)

Andrew Landry, Esq. (Name of contact person)

207-791-3191 (Daytime telephone number)

alandry@preti.com (Email address)

The enclosed filing(s) and fee(s) are submitted for filing. Please return the attested copy to the following address:

Andrew Landry
(Name of attested recipient)

Preti Flaherty
(Firm or Company)

PO Box 1058
(Mailing Address)

Augusta ME 04332
(City, State & Zip)

FCE
Forcier
Consulting
Engineers, P.C.

15 Mariner Heights
Colchester, VT 05446
802-657-3083 (p/f)
802-777-9601 (c)
info@fcevt.com

EXETER AGRI-ENERGY, LLC
ANAEROBIC DIGESTER
COMMISSIONING REPORT

December 29, 2011

Forcier Consulting Engineers, P.C. hereby certifies that the anaerobic digester system at Exeter Agri-Energy, LLC, at the Stonyvale Farm in Exeter, Maine has been installed and tested. The anaerobic digester system is operating as intended for the generation of electricity as of the above date.

This certification is based on system inspection, testing by the gen-set installer, and utility interconnection. The new gen-set consists of a 1,000 kW Gauscor gen-set installed by Martin Machinery.

Forcier Consulting Engineers, P.C.

John D. Forcier, P.E.
President

Bangor Hydro
ELECTRIC COMPANY

Thursday December 29, 2011

Adam Wintle
Exeter Agri-Energy, LLC
226 Fogler Road
Exeter, Maine 04435

RE: Exeter Agri-Energy Generation Interconnection to Bangor Hydro Electric System
Final Permission to Commence Parallel Operation

Dear Mr. Wintle,

Bangor Hydro Electric Company hereby accepts and approves Exeter Agri-Energy generation for parallel operation on the Bangor Hydro Electric Company electrical distribution system in Exeter Maine. Generator operation shall be in compliance with the terms, conditions and procedures set forth in the Interconnection Agreement and the Community-Based Renewable Energy Project Power Purchase Agreement. To maintain ongoing permission for parallel operation, Exeter Agri-Energy shall provide as built drawings of the installation by January 29, 2012.

Respectfully Submitted;

Robert L. Platt
Project Manager, Transmission Development
Bangor Hydro Electric Company

THREE-C ELECTRICAL COMPANY, INC.
Power Systems Specialists

December 29, 2011

Exeter Agri-Energy
Stonyvale Farm
Exeter, Maine
Attn.: Mr. Adam Wintle

Re: Stonyvale Farm/Exeter Agri-Energy System Acceptance Testing

Dear Adam,

This letter is being sent to confirm that Three-C Electrical Company has completed the following acceptance testing for the Exeter Agri-Energy Project.

- Intertie/Generator Protection Relay Testing
- CT Testing
- PT Testing

The testing was witnessed by a Bangor Hydro Electric Company representative and the results were determined to be satisfactory. Three-C will issue a final report within thirty (30) days of completion of the testing.

Sincerely,

Ed Stott
Project Manager

Exeter Agri-Energy

EQUIPMENT START-UP REPORT

Date: Wednesday Day: 12-28-11 Project: Exeter Agri-Energy

Owner: Exeter Agri-Energy- Stonyvale Farms

Contractor: Fastco Corporation(General Construction),

Equipment Type: Martin Machine Generator Equipment Location on Site: Connex Bldg

Equipment Manufacturer: Martin Machine

By signing/initialling below I certify the following pertaining to the equipment noted above:

Initials/Date	
LS 12/28/11	Has been Installed according the project plans and manufacturers specifications.
LS 12/28/11	Has been properly oiled
LS 12/28/11	Has been properly rotated
LS 12/28/11	Has been properly set.
LS 12/28/11	Has been tested locally
LS 12/28/11	Has been tested via the PLC
LS 12/29/11	Has been put into service for its intended purpose on this project
LS/12/28/11	Has an operations and maintenance manual on site that I have reviewed.
LS/12/29/11	Has been properly locked and tagged

John Wintle		JKW		12/28/11
Owner's Representative	(print)	(initial)	(sign)	(date)
	James H. Carey		Fastco Corp	12/28/11
Contractor	(print)	(initial)	(sign)	(date)
	Seibel	LCS	Seibel	12/28/11
Manufacturer Representative (print) (If applicable/available)		(initial)	(sign)	(date)

Exeter Agri-Energy

EQUIPMENT START-UP REPORT

Date: Dec 2011 Day: 16th Project: Exeter Agri-Energy

Owner: Exeter Agri-Energy- Stonyvale Farms

Contractor: Fastco Corporation(General Construction),

Equipment Type: PLC Pannel Equipment Location on Site:

Equipment Manufacturer: Green-Tec LLC

By signing/initialling below I certify the following pertaining to the equipment noted above:

Initials/Date	
TS.	Has been Installed according the project plans and manufacturers specifications.
NA	Has been properly oiled
NA.	Has been properly rotated
TS	Has been properly set.
TS	Has been tested locally
TS	Has been tested via the PLC
TS	Has been put into service for its intended purpose on this project
NA	Has an operations and maintenance manual on site that I have reviewed.
NA	Has been properly locked and tagged

	(print)	(initial)	(sign)	(date)
Owner's Representative	John Wintle	JKW	John W	12/16/11
Contractor				
Manufacturer Representative (If applicable/available)	Titus Steiner	TS		12/16/11

Exeter Agri-Energy

EQUIPMENT START-UP REPORT

Date: 12/20/11 Day: Tuesday Project: Exeter Agri-Energy

Owner: Exeter Agri-Energy- Stonyvale Farms

Contractor: Fastco Corporation(General Construction),

Equipment Type: Hydraulic Units tanks lids Equipment Location on Site: Receiving Bldg

Equipment Manufacturer: GROW

By signing/initialling below I certify the following pertaining to the equipment noted above:

Initials/Date	
12/20/11	Has been Installed according the project plans and manufacturers specifications.
12/20/11	Has been properly oiled
12/20/11	Has been properly rotated
12/20/11	Has been properly set.
12/20/11	Has been tested locally
12/21/11	Has been tested via the PLC
12/20/11	Has been put into service for its intended purpose on this project
12/21/11	Has an operations and maintenance manual on site that I have reviewed.
12/20/11	Has been properly locked and tagged

John Wintle	JKW		12/20/2011	
Owner's Representative	(print)	(initial)	(sign)	(date)
Contractor	(print)	(initial)	(sign)	(date)
Grillo Desjardins			12/20/11	
Manufacturer Representative (If applicable/available)	(print)	(initial)	(sign)	(date)

Exeter Agri-Energy

EQUIPMENT START-UP REPORT

Date: 12/20/11 Day: Tuesday Project: Exeter Agri-Energy

Owner: Exeter Agri-Energy- Stonyvale Farms

Contractor: Fastco Corporation(General Construction),

Equipment Type: Hydraulic Units Valves Equipment Location on Site: Observation Bldg

Equipment Manufacturer: GCW

By signing/initialling below I certify the following pertaining to the equipment noted above:

Initials/Date	
GD 20/12/11	Has been Installed according the project plans and manufacturers specifications.
GD 20/12/11	Has been properly oiled
GD 20/12/11	Has been properly rotated
GD 20/12/11	Has been properly set.
GD 20/12/11	Has been tested locally
GD 20/12/11	Has been tested via the PLC
GD 20/12/11	Has been put into service for its intended purpose on this project
GD 20/12/11	Has an operations and maintenance manual on site that I have reviewed.
GD 20/12/11	Has been properly locked and tagged

John White	J	JW		12/20/2012
Owner's Representative	(print)	(initial)	(sign)	(date)
Contractor	(print)	(initial)	(sign)	(date)
Gilles Desjardins	GD			20/12/11
Manufacturer Representative (If applicable/available)	(print)	(initial)	(sign)	(date)

Exeter Agri-Energy

EQUIPMENT START-UP REPORT

Date: 12/20/11 Day: Tuesday Project: Exeter Agri-Energy

Owner: Exeter Agri-Energy- Stonyvale Farms

Contractor: Fastco Corporation(General Construction),

Equipment Type: Chopper Pump # 1 Equipment Location on Site: Top of # 1 receiving tank

Equipment Manufacturer: CROW

By signing/initialling below I certify the following pertaining to the equipment noted above:

Initials/Date

GD 12/20/11 Has been Installed according the project plans and manufacturers specifications.

GD 12/20/11 Has been properly oiled

GD 12/20/11 Has been properly rotated

GD 12/20/11 Has been properly set.

GD 12/20/11 Has been tested locally

GD 12/20/11 Has been tested via the PLC

GD 12/20/11 Has been put into service for its intended purpose on this project

GD 12/20/11 Has an operations and maintenance manual on site that I have reviewed.

GD 12/20/11 Has been properly locked and tagged

John White		JKW		12/20/2011
Owner's Representative	(print)	(initial)	(sign)	(date)
Contractor	(print)	(initial)	(sign)	(date)
Gilles Desjardins		GD		12/20/11
Manufacturer Representative (If applicable/available)	(print)	(initial)	(sign)	(date)

Exeter Agri-Energy

EQUIPMENT START-UP REPORT

Date: 12/20/11 Day: Tuesday Project: Exeter Agri-Energy

Owner: Exeter Agri-Energy- Stonyvale Farms

Contractor: Fastco Corporation(General Construction),

Equipment Type: Mixer # 2 Digester Equipment Location on Site: Side wall digester # 2

Equipment Manufacturer: GDW

By signing/initialling below I certify the following pertaining to the equipment noted above:

Initials/Date

- GD 12/20/11 Has been Installed according the project plans and manufacturers specifications.
- GD 12/20/11 Has been properly oiled
- GD 12/20/11 Has been properly rotated
- GD 12/20/11 Has been properly set.
- GD 12/20/11 Has been tested locally
- GD 12/20/11 Has been tested via the PLC
- GD 12/20/11 Has been put into service for its intended purpose on this project
- GD 12/20/11 Has an operations and maintenance manual on site that I have reviewed.
- GD 12/20/11 Has been properly locked and tagged

John Wintle		JKW		12/20/2011
Owner's Representative	(print)	(initial)	(sign)	(date)
Contractor	(print)	(initial)	(sign)	(date)
Gilles Desjardins		GD		12/20/11
Manufacturer Representative (If applicable/available)	(print)	(initial)	(sign)	(date)

Exeter Agri-Energy

EQUIPMENT START-UP REPORT

Date: 12/20/11 Day: Tuesday Project: Exeter Agri-Energy

Owner: Exeter Agri-Energy- Stonyvale Farms

Contractor: Fastco Corporation(General Construction),

Equipment Type: Chopper Pump # 2 Equipment Location on Site: Top of # 2 receiving tank

Equipment Manufacturer: GOLN

By signing/initialling below I certify the following pertaining to the equipment noted above:

Initials/Date	
GD 12/20/11	Has been Installed according the project plans and manufacturers specifications.
GD 12/20/11	Has been properly oiled
GD 12/20/11	Has been properly rotated
GD 12/20/11	Has been properly set.
GD 12/20/11	Has been tested locally
GD 12/20/11	Has been tested via the PLC
GD 12/20/11	Has been put into service for its intended purpose on this project
GD 12/20/11	Has an operations and maintenance manual on site that I have reviewed.
	Has been properly locked and tagged

John Wintle		JKW		12/20/2011
Owner's Representative	(print)	(initial)	(sign)	(date)
Contractor	(print)	(initial)	(sign)	(date)
Gilles Desjardins		GD		12/20/11
Manufacturer Representative (If applicable/available)	(print)	(initial)	(sign)	(date)

Exeter Agri-Energy

EQUIPMENT START-UP REPORT

Date: 12/20/11 Day: Tuesday Project: Exeter Agri-Energy

Owner: Exeter Agri-Energy- Stonyvale Farms

Contractor: Fastco Corporation(General Construction),

Equipment Type: Mixer # 1 Digester Equipment Location on Site: Side wall digester #1

Equipment Manufacturer: GSW

By signing/initialling below I certify the following pertaining to the equipment noted above:

Initials/Date	
GSW 12/20/11	Has been Installed according the project plans and manufacturers specifications.
GSW 12/20/11	Has been properly oiled
GSW 12/20/11	Has been properly rotated
GSW 12/20/11	Has been properly set.
GSW 12/20/11	Has been tested locally
GSW 12/20/11	Has been tested via the PLC
GSW 12/20/11	Has been put into service for its intended purpose on this project
GSW 12/20/11	Has an operations and maintenance manual on site that I have reviewed.
GSW 12/20/11	Has been properly locked and tagged

John Wintle		JKW		12/20/2011
Owner's Representative	(print)	(initial)	(sign)	(date)
Contractor	(print)	(initial)	(sign)	(date)
Grillos Desjardins		GSW		12/20/11
Manufacturer Representative (If applicable/available)	(print)	(initial)	(sign)	(date)

STATE OF MAINE
PUBLIC UTILITIES COMMISSION

Docket No. 2011-166

May 24, 2011

EXETER AGRI-ENERGY, LLC
Request for Certification for RPS Eligibility

ORDER GRANTING NEW RENEWABLE RESOURCE CERTIFICATION

WELCH, Chairman; VAFIADES and LITTELL, Commissioners

I. SUMMARY

The Exeter Agri-Energy Biogas Facility is certified as a Class I new renewable resource that is eligible to satisfy Maine's new renewable resource portfolio requirement pursuant to Chapter 311, § 3(B) of the Commission rules.

II. BACKGROUND

A. New Renewable Resource Portfolio Requirement

During its 2007 session, the Legislature enacted an Act To Stimulate Demand for Renewable Energy (Act). P.L. 2007, ch. 403 (codified at 35-A M.R.S.A. § 3210(3-A)). The Act added a mandate that specified percentages of electricity that supply Maine's consumers come from "new" renewable resources.[1] Generally, new renewable resources are renewable facilities that have an in-service date, resumed operation or were refurbished after September 1, 2005. The percentage requirement starts at one percent in 2008 and increases in annual one percent increments to ten percent in 2017, unless the Commission suspends the requirement pursuant to the provisions of the Act.

As required by the Act, the Commission modified its portfolio requirement rule (Chapter 311) to implement the "new" renewable resource requirement. *Order Adopting Rule and Statement of Factual and Policy Basis,* Docket No. 2007-391 (Oct. 22, 2007). The implementing rules designated the "new" renewable resource

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[1] Maine's electric restructuring law, which became effective in March 2000, contained a portfolio requirement that mandated that at least 30% of the electricity to supply retail customers in the State come from eligible resources, which are either renewable or efficient resources. 35-A M.R.S.A. § 3210(3). The Act did not modify this 30% requirement.

requirement as "Class I"[2] and incorporated the resource type, capacity limit and the vintage requirements as specified in the Act. The rules thus state that a new renewable resource used to satisfy the Class I portfolio requirement must be of the following types:

- fuel cells;
- tidal power;
- solar arrays and installations;
- wind power installations;
- geothermal installations;
- hydroelectric generators that meet all state and federal fish
- passage requirement; or
- biomass generators, including generators fueled by landfill gas.

In addition, except for wind power installations, the generating resource must not have a nameplate capacity that exceeds 100 MW. Finally, the resource must satisfy one of four vintage requirements. These are:

1) renewable capacity with an in-service date after September 1, 2005;

2) renewable capacity that has been added to an existing facility after September 1, 2005;

3) renewable capacity that has not operated for two years or was not recognized as a capacity resource by the ISO-NE or the NMISA and has resumed operation or has been recognized by the ISO-NE or NMISA after September 1, 2005; or

4) renewable capacity that has been refurbished after September 1, 2005 and is operating beyond its useful life or employing an alternate technology that significantly increases the efficiency of the generation process.

The implementing rules (Chapter 311, § 3(B)(4)) establish a certification process that requires generators to pre-certify facilities as a new renewable resource under the requirements of the rule and provides for a Commission determination of resource eligibility on a case-by-case basis.[3] The rule contains the information that must be included in a petition for certification and specifies that the Commission shall provide an opportunity for public comment if a petitioner seeks certification under

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[2] The "new" renewable resource requirement was designated as Class I because the requirement is similar to portfolio requirements in other New England states that are referred to as "Class I." Maine's pre-existing "eligible" resource portfolio requirement is designated as Class II.

[3] In the *Order Adopting Rule* at 6, the Commission noted that a request for certification can be made at any time so that a ruling can be obtained before a capital investment is made in a generation facility.

vintage categories 2, 3 and 4. Finally, the rule specifies that the Commission may revoke a certification if there is a material change in circumstance that renders the generation facility ineligible as a new renewable resource.

B. Petition for Certification

On May 2, 2011, Exeter Agri-Energy LLC filed a petition to certify its Biogas Facility (Facility) as a Class I renewable resource. The 980 kW combined heat and power facility is located in Exeter, Maine and will be fueled exclusively with biogas generated by anaerobic digestion of cattle manure and off-farm organic wastes. The petition states that the facility is expected to commence operation in September 2011.

III. DECISION

The Commission has delegated to the Director of the Electric and Gas Division the authority to certify generation facilities as Class I new renewable resources pursuant to Chapter 311, § 3(B) of the Commission rules. *Delegation Order,* Docket No. 2008-184 (April 23, 2008). Based on the information provided by Exeter Agri-Energy, I conclude that the Facility satisfies the resource type, capacity limit and vintage requirements of the rule. The Facility is fueled solely by biomass-derived biogas, its capacity does not exceed 100 MW, and it will have commenced commercial operations after September 1, 2005. Accordingly, the Exeter Agri-Energy Facility is hereby certified as a Class I new renewable resource that is eligible to satisfy Maine's new renewable resource portfolio requirement pursuant to Chapter 311, § 3(B)(3)(a) of the Commission rules. Exeter Agri-Energy shall provide timely notice to the Commission of any material change in the operation of the facility, including the type of fuel used in the generation process, from that described in the petition filed in this proceeding.

BY ORDER OF THE DIRECTOR OF THE ELECTRIC AND GAS UTILILTY INDUSTRIES

Faith Huntington

Faith Huntington

Applicant Copy
attn: John Winkler

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

DEPARTMENT ORDER

IN THE MATTER OF

EXETER AGRI-ENERGY	)	SOLID WASTE ORDER
EXETER, PENOBSCOT COUNTY, MAINE	)	
RESIDUAL PROCESSING FACILITY	)	
S-022362-WK-A-N	)	
(APPROVAL WITH CONDITIONS)	)	NEW LICENSE

Pursuant to the provisions of the *Maine Hazardous Waste, Septage and Solid Waste Management Act*, 38 M.R.S.A. §§ 1301 to 1319-Y, and the *Solid Waste Management Rules: General Provisions*, 06-096 CMR 400 (last amended July 20, 2010), the *Solid Waste Management Rules: Water Quality Monitoring, Leachate Monitoring, and Waste Characterization*, 06-096 CMR 405 (last amended June 16, 2006), the *Solid Waste Management Rules: Processing Facilities*, 06-096 CMR 409 (last amended July 20, 2010), the *Solid Waste Management Rules: Beneficial Use of Solid Wastes*, 06-096 CMR 418 (last amended June 16, 2006), and the *Solid Waste Management Rules: Agronomic Utilization of Residuals*, 06-096 CMR 419, (last amended December 19, 1999), the Department of Environmental Protection (Department) has considered the application of EXETER AGRI-ENERGY (EAE or applicant) with its supportive data, agency review comments and other related materials on file and FINDS THE FOLLOWING FACTS:

1. APPLICATION SUMMARY

Exeter Agri-Energy requests approval to construct and operate an anaerobic digester adjacent to Stonyvale Farm on the Fogler Road in Exeter to co-digest food processing waste along with cow manure and waste silage from the farm to produce biogas fuel for a 1-megawatt electric generator. The co-generator will provide electric power as well as heat to optimize digester operation and dry solid materials exiting the digester for use as stock bedding at the farm. Liquid waste exiting the digester will be piped to, and stored in, existing manure pits at the farm, and land-applied by Stonyvale, Inc. pursuant to Maine Pollutant Discharge Elimination System Permit and Waste Discharge License #W009034-5S-A-N. The application was accepted as complete for processing on April 27, 2011.

2. PROJECT DESCRIPTION

A. Description of Proposed Facility: Exeter Agri-Energy is a wholly-owned subsidiary of Stonyvale, Inc. EAE is proposing installation of a solid waste

processing facility consisting of an anaerobic digester system with two parallel 1500 cubic meter (396,000 gallon) digesters, two 100 cubic meter (26,400 gallon) off-farm feedstock receiving tanks, a solid separator, a co-generation unit, and appurtenant structures. The digester system is designed by CH-Four Biogas Inc. Manure from Stonyvale Farm will be the primary feedstock for the digester facility, with some waste silage and off-farm food waste added subject to availability to increase gas production.

The solid waste processing facility footprint will be approximately 0.5 acres. This will include the two anaerobic digesters (with room for a possible third in the future), the waste handling area (two receiving/storage tanks), emergency generator, two emergency flares, the co-generation building, and the solids separator facility.

B. Digester Inputs:

(1) Inputs: Manure from Stonyvale Farm will be the primary feedstock for the digester facility, with the use of off-farm organic food waste proposed to increase biogas production. Manure is a natural source of the bacteria necessary for the anaerobic digestion process. Manure will be collected from the Stonyvale Farm dairy barns and pumped directly into the proposed digester system.

Off-farm organic food waste will be used to increase gas and energy yields. Off-farm feedstocks are anticipated to include source-separated organic wastes including fruit and vegetable waste, fats, oils, and greases (FOG), and other materials deemed favorable for anaerobic digestion. Processing and use of these waste materials requires license approval from the Department pursuant the *Solid Waste Management Rules: Processing Facilities*, 06-096 CMR 409 (last amended July 20, 2010). Addition of these feedstocks may increase energy output as much as 40%. These residuals will arrive at the facility by truck, and will be transferred into two heated 100 cubic meter (26,400 gallon) storage and pretreatment tanks. A chopper pump will be used to slurry incoming materials and achieve feedstock homogenization, as needed. The chopper pump will also be used to transfer the off-farm feedstocks from the receiving tanks into the digester system.

(2) Solid Waste Characterization: Food wastes currently proposed for use in the digester system have been characterized as fats, oils, and grease, or FOG. Future feedstocks are anticipated to include source-separated organic wastes including fruit and vegetable waste, and pre-consumer food processing waste from commercial vendors. These feedstocks will all be

characterized as Type 1A, 1B, or 1C wastes as defined by *Solid Waste Management Rules: General Provisions*, 06-096 CMR 400(1)(Www-Yyy) (last amended July 20, 2010). The applicant has submitted letters of intent from potential vendors indicating these materials are commercially available and currently utilized in facilities such as that proposed.

C. Digester Outputs/Residual and Secondary Material Distribution Plan: Outputs from the digesters will include gas, liquid, and solid materials.

(1) Biogas: Biogas produced in the digester facility (approximately 60% methane and 40% carbon dioxide) will be combusted to power a 1-megawatt generator and provide heat to meet the thermal requirements of the digester system, which will be operated mesophilically at approximately 104 degrees Fahrenheit. Leachate from gas treatment will be recycled into the receiving tanks and then consolidated back into the digester.

Two solar-powered continuous-ignition flares have been designed to combust biogas during system outages. Other back-up equipment includes an emergency generator and back-up boiler system. The biogas generator equipment and appurtenant systems have been licensed by the Department and will be operated pursuant to Air Emission License #A-1047-71-A-N.

(2) Liquid: Solid and liquid digested material will be processed in a solids separator. The liquid fraction will be piped to, and stored in, existing manure pits at the farm, and land-applied by Stonyvale, Inc. pursuant to Maine Pollutant Discharge Elimination System Permit and Waste Discharge License #W009034-5S-A-N.

(3) Solids: The solid portion of the digested material will consist primarily of fibrous matter sufficiently coarse to be separated from the liquid residue by the solids separator, with 99% of influent pathogens killed by the anaerobic digestion process. This material will either be land-applied pursuant to *Solid Waste Management Rules: Agronomic Utilization of Residuals* 06-096 CMR 419, (last amended December 19, 1999); or dried using heat generated by biogas combustion and returned to Stonyvale Farm for use as farm animal bedding. (Material destined for land application might also be dried.) Use of this material as bedding will be regulated under the *Solid Waste Management Rules: Beneficial Use of Solid Wastes*, 06-096 CMR 418 (last amended June 16, 2006).

The Department finds that the solid residual from the digester, so treated, will perform as an acceptable substitute for other bedding materials it will replace.

The Department finds that, prior to land application of the solid residual from the digester, the applicant should test the residual once for target semi-volatile organic compounds, baseline nutrients, nitrogen, and total inorganic compounds, as defined in *Solid Waste Management Rules: Water Quality Monitoring, Leachate Monitoring, and Waste Characterization* 06-096 CMR 405 (last amended June 16, 2006). Results of this initial testing should be used to develop a Waste Characterization and Sampling Plan and a Residual Utilization Plan in conformance with the applicable provisions of 06-096 CMR 419. The Plans should be submitted for Department review and approval prior to agronomic utilization of the material.

3. TITLE, RIGHT, OR INTEREST

The four-acre project site is owned by Stonyvale, Inc. and leased to Exeter Agri-Energy. The applicant has submitted copies of Stonyvale, Inc.'s property deed, and the lease to EAE.

The Department finds that the applicant has demonstrated sufficient title, right, or interest to the property on which the proposed facility is to be located.

4. FINANCIAL ABILITY

Construction costs for the project are estimated at $2.9 million. The applicant has submitted financial documents demonstrating sufficient funding available from Farm Credit of Maine, the United States Department of Agriculture – Rural Development, Efficiency Maine, and the Maine Public Utilities Commission to operate the project in a manner consistent with state environmental standards and laws.

The Department finds that the applicant has demonstrated it has the financial ability to design, construct, operate, maintain, and close the proposed facility in a manner consistent with all applicable requirements.

5. TECHNICAL ABILITY

The project will be operated in conjunction with Stonyvale, Inc., whose staff currently operates all the equipment, machinery, and controls associated with the management of a dairy farm with 1200 milking head equivalent of cattle. CH-Four Biogas Inc. of Ottawa, Canada, the developer of the digester system will provide technical assistance as may be

necessary during construction and start-up. CH-Four Biogas Inc., in conjunction with Weston & Sampson® and Pearson & Associates, has prepared the Construction Contract Bid Documents. Weston & Sampson® is the Maine Licensed Professional Engineer of Record. Construction oversight will be provided by EAE and Forcier Consulting Engineers, a subcontractor to CH-Four Biogas Inc.

The Department finds that the applicant has the technical ability to design, construct, operate, maintain, and close the proposed facility in a manner consistent with state environmental requirements, including the Maine Solid Waste Laws and Rules.

6. TRAFFIC

The project will be located on a four-acre parcel adjacent to Stonyvale Farm on the Fogler Road. Fogler Road is an unpaved gravel road. Sight distances at the site are approximately ¼ mile and ½ mile. The applicant states that there will be less than two vehicle trips per day to deliver organic residuals to the facility. The applicant expects that liquid materials will be delivered in 5,000 to 8,000 gallon tank trucks; and that solid materials will be delivered in 50-cubic yard trailers. If road postings or other limitations prevent delivery of off-farm feedstocks, the proposed facility can be operated with manure alone, albeit with reduced energy yield. Liquid materials (manure and the liquid fraction of material exiting the digesters) will be transported to, and from, Stonyvale Farm in pipelines.

The Department finds that the applicant has made adequate provisions for the safe and uncongested movement of traffic of all types into, out of, and within the proposed solid waste facility.

7. SETBACKS AND BUFFERS

None of the project facilities will be within a 100-year floodplain, within 100 feet of the solid waste boundary of a landfill, within 100 feet of public roads or property boundaries, within 300 feet to public water supply wells, or within 500 feet of any residence. No project facilities will be within 100 feet of a protected natural resource, with the exception of two buried forcemains crossing a small stream. The forcemains will carry manure to the project from the Stonyvale Farm barns, and liquid digestion products back to the farm for storage and utilization. The waste handling area, except for the forcemain crossing, will be in conformance with all required setbacks. The forcemains will be installed no less than 3 feet beneath the stream bed and will be fully encased in concrete.

The Department finds that the proposed facility meets the siting standards in 06-096 CMR 409(2)(A), provided the proposed stream crossing is accomplished in conformance with the *Natural Resources Protection Act,* 38 M.R.S.A. § 480-A-HH and the *Natural*

Resources Protection Act - Permit by Rule Standards, 06-096 CMR 305 (last amended July 15, 2009).

8. EXISTING USES AND SCENIC CHARACTER

The proposed anaerobic digester facility will be constructed adjacent to, and operated in conjunction with, the existing Stonyvale Farm. The proposed digester facilities will be constructed in the immediate vicinity of existing development associated with Stonyvale Farm, including a sawmill, a storage building, and two feed silos. The area between the proposed digester facility and the Fogler Road is currently paved, and the site is partially screened from the road by a wooded buffer.

The Department finds that the proposed facility will not present a bird hazard to aircraft. All incoming feedstocks will be stored in enclosed tanks and digested material will leave the site within the proposed pipelines. There are no recognized historic sites or established public viewing areas in the vicinity. Noise generation will be consistent with that associated with the ongoing agricultural activities.

Accordingly, the Department finds that the proposed facility will have no unreasonable adverse effect on existing uses or scenic character.

9. AIR QUALITY

A. Air Emissions License: On March 8, 2011, the Department issued Air Emission License #A-1047-71-A-N to the applicant for the proposed biogas generator equipment and appurtenant systems associated with the facility.

B. Odor: Stonyvale Farm currently stores manure in open pits designed for this purpose. Once the proposed anaerobic digestion facility is in operation, this manure will be piped from the farm directly into the digesters. The anaerobic digestion of manure is expected to reduce its odor. Odors from off-farm feedstocks will be minimized by their storage in the receiving tanks. Tank hatches will be closed except during deliveries.

C. Dust: The working surface of the receiving facility will continue to be paved, and will not be a source of dust emissions. The limited additional vehicular access resulting from facility operations is estimated to be less than two vehicles per day, so dust from the unpaved access road will not be appreciably increased from current conditions.

The Department finds that the proposed facility will have no unreasonable adverse effect on air quality.

10. SURFACE WATER QUALITY/EROSION

The site area slopes from the south towards the north at approximately a 10 % grade. Surface stormwater is intercepted before it runs onto the site by a roadside swale on the south side of Fogler Road. It is then conveyed to the stream that runs through the property. There are no existing stormwater drainage structures at the site. Existing stormwater moves by sheet flow and shallow concentrated flow from the impervious structures and pavement adjacent to Fogler Road towards the north to the existing stream and wetlands.

There will be two major areas of construction that will result in the disturbance of soil. These will be the construction of the anaerobic digester tanks and waste handling area, and the installation of the forcemain piping carrying manure from Stonyvale Farm to the digester facility and liquid effluent back to the farm's existing manure storage structures from the digester. The proposed digester tanks will be 60 feet in diameter and constructed of concrete. They will be constructed approximately ten feet below grade. The applicant estimates their construction will disturb approximately 0.80 acre, and that installation of the forcemain pipes will disturb approximately 0.30 acre. The applicant has submitted an erosion and sedimentation control plan in accordance with Maine's *Erosion and Sediment Control BMPs*, dated March 2003. Proposed erosion and sedimentation controls include the installation of hay bales and silt fence at locations downgradient of soil disturbance and temporary and permanent seeding of disturbed areas.

The Department finds that the proposed facility will have no unreasonable adverse effect on surface water quality and will not cause unreasonable sedimentation or erosion of soil.

11. OTHER NATURAL RESOURCES

Construction of the proposed facility will require two additional Department permits: a permit-by-rule for the utility stream crossing pursuant to the *Natural Resources Protection Act,* 38 M.R.S.A. § 480-A et seq. (NRPA), and a Maine Pollutant Discharge Elimination System General Permit for construction activity. No federal wetlands permitting is required.

The Department finds the proposed facility will have no unreasonable effect on other natural resources in the municipality or neighboring municipalities, provided that the proposed utility crossing and other construction activities in conformance with the required NRPA and MEPDES permits.

12. GROUNDWATER QUALITY AND LEAK DETECTION

There are no mapped significant groundwater aquifers in the vicinity of the proposed facility.

06-096 CMR 400(4)(K)(1)(c) requires that the proposed facility may not pose an unreasonable threat to the quality of an underlying fractured bedrock aquifer. Additionally, 06-096 CMR 409(2)(B)(4) requires that the facility design must include provisions to contain, collect and treat any leachate generated at the facility, and 06-096 CMR 409(4)(B)(1) requires that the processing facility must be operated and maintained in a manner that assures it will not contaminate groundwater. Since the proposed anaerobic digesters and associated storage tanks will be situated below grade, the Department finds that, within 60 days of issuance of this Order, the applicant should submit a plan, for Department review and approval, which provides for the detection of subsurface leaks which may occur from the facility. This plan may be submitted as part of the operations manual.

13. UTILITIES

The requirements for the interconnection to the existing electrical grid have yet to be fully specified. Bangor Hydro Electric Company has estimated these to include extension of 3-phase service 15,500 feet to the project, with appurtenant equipment.

Existing on-site utilities (septic system and drinking water well) at Stonyvale Farm will be utilized by staff operating the anaerobic digestion facility. There will be no significant demand increase on those utilities. Production of additional solid waste requiring disposal is expected to be negligible.

The Department finds the applicant has made adequate provision for utilities, and that the proposed facility will not have an unreasonable adverse effect on existing or proposed utilities in the municipality or area served by those utilities.

14. FLOODING

The site of the proposed anaerobic digestion facility is not within a 100-year flood zone. The applicant has submitted stormwater calculations required by 06-096 CMR 400(M)(2). Low impact development stormwater controls are proposed to be implemented including limiting tree clearing, construction of pervious access roads, and delaying peak flows via sheet flow.

The Department finds that the proposed facility will not unreasonably cause or increase flooding on-site or on adjacent properties nor create an unreasonable flood hazard to a structure.

15. OPERATIONS MANUAL

The applicant indicates an operations manual will be provided after all processing equipment has been purchased and installed.

The Department finds that the applicant should submit, for Department review and approval, an operations manual that meets the criteria set forth in 06-096 CMR 409(4)(A). The facility should not be operated until the Department has issued written approval of the operations manual.

16. FACILITY OPERATIONS

The proposed facility must be operated in conformance with the requirements set forth in 06-096 CMR 409(4)(B) through (I).

BASED upon the above Findings of Fact, and subject to the Conditions listed below, the Department makes the following CONCLUSIONS:

1. The proposed project will not pollute any waters of the State, contaminate the ambient air, constitute a hazard to health or welfare, nor create a nuisance, provided that:

   A. Only manure and waste silage and Type 1A, Type 1B, and Type 1C food wastes are processed in the facility;

   B. There is no on-site waste storage except in the two receiving tanks as proposed;

   C. Within 60 days of issuance of this Order, the applicant submits a plan, for Department review and approval, which provides for the detection of subsurface leaks which may occur from the facility;

D. Prior to operation of the facility, the applicant submits, for Department review and approval, an operations manual that meets the criteria set forth in 06-096 CMR 409(4)(A); and

E. Prior to land application of the solid residual from the digester, the applicant tests the residual once for target semi-volatile organic compounds, baseline nutrients, nitrogen, and total inorganic compounds, as defined in 06-096 CMR 405(6)(D)(2); and uses the results of this initial testing to develop a Waste Characterization and Sampling Plan and a Residual Utilization Plan in conformance with applicable provisions of 06-096 CMR 419, and submits them for Department review and approval prior to agronomic utilization of the material.

2. **The applicant has demonstrated sufficient title, right, or interest to the property on which the proposed facility will be located.**

3. The applicant has the financial capacity and technical ability to operate the project in a manner consistent with State environmental standards.

4. The applicant has made adequate provisions for traffic movement of all types into, out of, and within the site.

5. The proposed processing facility and agronomic utilization activities fit harmoniously into the existing natural environment and will not adversely affect existing uses, scenic character, air quality, or other natural resources in the municipality or in neighboring municipalities.

6. The proposed facility will be on soil types suitable to the nature of the undertaking and will not cause unreasonable erosion of soil or sediment, nor inhibit the natural transfer of soil.

7. The applicant has made adequate provisions for utilities, including water supplies, sewerage facilities, solid waste disposal, and roadways required for the project, and the proposed facility will not have an unreasonable adverse affect on the existing or proposed utilities and roadways in the municipality or area served by those services.

8. The activity will not unreasonably cause or increase the flooding of the area or adjacent properties nor create an unreasonable flood hazard to any structure.

EXETER AGRI-ENERGY	11	SOLID WASTE ORDER
EXETER, PENOBSCOT COUNTY, MAINE	)	
RESIDUAL PROCESSING FACILITY	)	
S-022362-WK-A-N	)	
(APPROVAL WITH CONDITIONS)	)	NEW LICENSE

THEREFORE, the Department APPROVES the above-noted application of EXETER AGRI-ENERGY, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations:

1. The applicant shall comply with the Standard Conditions of Approval, a copy attached as Appendix A.

2. The applicant shall comply with all applicable sections of 06-096 CMR 400, 06-096 CMR 405, 06-096 CMR 409, 06-096 CMR 418, and 06-096 CMR 419.

3. The applicant shall submit record drawings, signed and stamped by the Maine Licensed Professional Engineer supervising the project, at the conclusion of construction activities.

4. Only manure, waste silage, and Type 1A, Type 1B, and Type 1C food wastes shall be processed in the facility.

5. There shall be no on-site waste storage except in the two receiving tanks as proposed.

6. Within 60 days of issuance of this Order, the applicant shall submit a plan, for Department review and approval, which provides for the detection of subsurface leaks which may occur from the facility.

7. Prior to operation of the facility, the applicant shall submit, for Department review and approval, an operations manual that meets the criteria set forth in 06-096 CMR 409(4)(A).

8. Prior to agronomic utilization of the solid residual from the digester, the applicant shall test the material once for target semi-volatile organic compounds, baseline nutrients, nitrogen, and total inorganic compounds, as defined in 06-096 CMR 405; and use the results of this initial testing to develop a Waste Characterization and Sampling Plan and a Residual Utilization Plan in conformance with applicable provisions of 06-096 CMR 419, and submit them for Department review and approval prior to agronomic utilization of the material.

9. The applicant shall forward all analytical results to the Department within 30 days of receipt.

EXETER AGRI-ENERGY	12	SOLID WASTE ORDER
EXETER, PENOBSCOT COUNTY, MAINE	)	
RESIDUAL PROCESSING FACILITY	)	
S-022362-WK-A-N	)	
(APPROVAL WITH CONDITIONS)	)	NEW LICENSE

10. On or before February 28th of each year, the applicant shall submit to the Department an annual report for the previous calendar year's activities which must include information required in accordance with 06-096 CMR 409(4)(H), 06-096 CMR 418(8), and 06-096 CMR 419(6).

DONE AND DATED AT AUGUSTA , MAINE , THIS 22nd DAY

OF July, 2011.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
Patricia W. Aho, Acting Commissioner

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE APPEAL PROCEDURES.

Date of initial receipt of application 4/4/2011
Date of application acceptance 4/27/2011

Date filed with Board of Environmental Protection

This Order prepared by Roger Johnstone, Bureau of Remediation & Waste Management.

Xrj73283/dlb

Filed

JUL 27 2011

State of Maine
Board of Environmental Protection

Appendix A

STANDARD CONDITIONS TO ALL SOLID WASTE FACILITY LICENSES

STRICT CONFORMANCE WITH THE STANDARD AND SPECIAL CONDITIONS OF THIS APPROVAL IS NECESSARY FOR THE PROJECT TO MEET THE STATUTORY CRITERIA FOR APPROVAL. VIOLATIONS OF THE CONDITIONS UNDER WHICH A LICENSE IS ISSUED SHALL CONSTITUTE A VIOLATION OF THAT LICENSE AGAINST WHICH ENFORCEMENT ACTION MAY BE TAKEN, INCLUDING REVOCATION.

1. **Approval of Variations from Plans.** The granting of this approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed by the license. Any consequential variation from these plans, proposals, and supporting documents is subject to review and approval prior to implementation.
2. **Compliance with All Applicable Laws.** The licensee shall secure and comply with all applicable federal, state, and local licenses, permits, authorizations, conditions, agreements, and orders prior to or during construction and operation, as appropriate.
3. **Compliance with All Terms and Conditions of Approval.** The licensee shall submit all reports and information requested by the Department demonstrating that the licensee has complied or will comply with all terms and conditions of this approval. All preconstruction terms and conditions must be met before construction begins.
4. **Transfer of License.** The licensee may not transfer the solid waste facility license or any portion thereof without approval of the Department.
5. **Initiation of Construction or Development Within Two Years.** If the construction or operation of the solid waste facility is not begun within two years of issuance of within 2 years after any administrative and judicial appeals have been resolved, the license lapses and the licensee must reapply to the Department for a new license unless otherwise approved by the Department.
6. **Approval Included in Contract Bids.** A copy of the approval must be included in or attached to all contract bid specifications for the solid waste facility.
7. **Approval Shown to Contractors.** Contractors must be shown the license by the licensee before commencing work on the solid waste facility.
8. **Background of key individuals.** A licensee may not knowingly hire as an officer, director or key solid waste facility employee, or knowingly acquire an equity interest or debt interest in, any person convicted of a felony or found to have violated a State or federal environmental law or rule without first obtaining the approval of the Department.
9. Fees. The licensee must comply with annual license and annual reporting fee requirements of the Department's rules.
10. Recycling and Source Reduction Determination for Solid Waste Disposal Facilities. This condition does not apply to the expansion of a commercial solid waste disposal facility that accepts only special waste for landfilling.

SOLID WASTE
ANNUAL LICENSE & ANNUAL REPORT FEE
INFORMATION SHEET

ANNUAL LICENSE FEE

All licensed solid waste facilities are required to pay an annual license fee. These fees assist in supporting the costs associated with the Department's ongoing license compliance activities. A facility's annual license fee is due on the anniversary date of the license (i.e., the date that the license was signed).

To simplify the payment process for annual license fees, invoices will be sent out quarterly to all facilities with an anniversary date falling within that quarter. The amount of the annual license fee is variable dependent upon the type of facility being operated. A fee sheet is attached for your information. To determine the fee that your facility will be assessed on an annual basis, locate the type of facility for which you are licensed in the left-hand column. Follow across to the middle column headed "License Fee" to locate the amount of the fee. If you hold multiple solid waste facility licenses from the Department, you will be assessed the appropriate fee for each facility license at the time of the license anniversary date.

EXAMPLE: Facility X is issued a license on February 10, 2010. Fee will be due annually beginning on March 31, 2011.

ANNUAL REPORT FEE

Solid waste facilities which have been licensed or relicensed under applicable rules valid on or after May 24, 1989 are eligible to forgo relicensing. As an alternative to relicensing, facilities are required, in part, to comply with annual facility reporting rules and beginning 5 years after the license issue date to pay the associated annual report fee. The annual report fee assists in supporting the Department's solid waste licensing and annual report review activities.

The annual report fee is to be paid at the time the annual report is submitted. The amount of the annual report fee is equal to 20% of the amount that would have been paid for a relicensing fee. A fee sheet is attached for your information. To determine the annual report fee that your facility will be assessed on an annual basis beginning 5 years after the license issue date, locate the type of facility for which you are licensed in the left-hand column. Follow across to the far right-handed column headed "Report Fee" to locate the amount of the fee. If you hold multiple solid waste facility licenses from the Department, you will be required to submit the appropriate fee for each facility license with an annual report.

EXAMPLE: Facility X is issued a license in 2010 in accordance with rules valid on or after May 24, 1989. Submission of the first annual report will be required in accordance with the rules. No fee is due with the report until 2015 - five years after the license issuance date.

Please note that these fees are subject to change by the Legislature.
The DEP will notify you if these fees change.

Solid Waste Division Fee Schedule Effective November 1, 2010 to October 31, 2011

ATS Code	Description	Appl Process Fee	Appl Lic Fee / Annual	Total Application Fee - New	Annual Report Fee**
BRWM - SOLID WASTE					
WB	Existing Non-Secure Municipal Landfill <15,000 people	$ 5,018	$ 1,434*	$ 6,452	$ 789
WC	Non-Secure Municipal Landfill >15,000 people	$ 5,018	$ 5,018*	$ 10,036	$ 1,505
WD	Secure Landfill	$ 7,170	$ 12,188*	$ 19,358	$ 3,155
WD	Minor Revision for Secure Landfill	$ 805	$ 134	$ 939	
WE	Secure Landfill -Woodwaste, Landclearing/Demolition Debris	$ 4,026	$ 6,710*	$ 10,736	$ 1,745
WE	Minor Revision for Secure Landfill -Woodwaste, Landclearing/Demolition	$ 402	$ 134	$ 536	
WF	Non-Secure Landfill -Woodwaste, Landclear/DemoDebris <6acres	$ 939	$ 1,075*	$ 2,014	$ 309
WN	Closing Plan for Secure Landfill	$ 2,150	$ 2,150	$ 4,300	
WO	Closing Plan for Non-Secure Landfill	$ 716	$ 716	$ 1,432	
W1	Alternative Approval of a Municipal Landfill Closing Plan	$ 358	$ 358	$ 716	
WQ	Landfill-Preliminary Information Reports	$ 250	$ 250	$ 500	
WR	Landfill License Transfers	$ 716	$ 250	$ 966	
W5	Public Benefit Determination	$ 234	$ 234	$ 468	
W6	Landfill - Post-Closure Report	$ 234	$ 234	$ 468	
WG	Incineration - MSW/Special Waste	$ 5,018	$ 7,170*	$ 12,188	$ 1,936
WW	Incineration - License Transfers	$ 250	$ 250	$ 500	
W2	Incineration-Municipal own/operate w/License Cap <10 ton/day	$ 5,018	$ 1,433*	$ 6,451	$ 788
WH	Reduced Procedure for Transfer Station - Storage Facility	$ 791	$ 250*	$ 1,041	$ 129
WH	Transfer Station - Storage Facility	$ 1,075	$ 250*	$ 1,325	$ 158
WI	Tire Storage Facility	$ 574	$ 645*	$ 1,219	$ 186
WK	Processing Facility NOT MSW Composting or Residuals	$ 1,003	$ 1,003*	$ 2,006	$ 301
WV	Beneficial Use-Fuel Substitution	$ 939	$ 671*	$ 1,610	$ 228
WL	On-Going Beneficial Use NOT Utilization wo/Risk-Assessment	$ 939	$ 268*	$ 1,207	$ 148
WM	On-Going Beneficial Use NOT Utilization with/Risk-Assessment	$ 1,878	$ 671*	$ 2,549	$ 322
W3	One-Time Beneficial Use NOT Utilization wo/Risk-Assessment	$ 939	$ 268	$ 1,207	
W4	One-Time Beneficial Use NOT Utilization with Risk-Assessment	$ 1,878	$ 671	$ 2,549	
W7	Beneficial Use NOT Utilization - Reduced Procedure	$ 517	$ 129*	$ 646	$ 78
WS	Special Waste Disposal - 1 time =/< 6 cubic yards	$ 71	$ 71	$ 142	
WT	Special Waste Disposal - 1 time > 6 cubic yards	$ 143	$ 143	$ 286	
WU	Special Waste Disposal - Routine	$ 430	$ 430	$ 860	
WX	License Transfer Other Than Landfill or Incineration	$ 143	$ 143	$ 286	
WZ	Solid Waste Facility Pilot Permit	$ 71	$ 71	$ 142	
88	362-A Experiments - All Bureaus	$ 250	$ 250	$ 500	
	permit by rule for on-going activities	$ 136	$ 136*	$ 272	$ 41
	permit by rule for one-time activities	$ 136	$ 136	$ 272	
	license transfer of a permit by rule	$ 136		$ 136	
	All minor revisions other than landfills	$ 268		$ 268	

BRWM - SEPTAGE					
S1	Municipal Septage Management Compliance -Septage Designation	$ 71	$ 36	$ 107	
S2	Septage Non-Utilization Site (Disposal)	$ 738	$ 358*	$ 1,096	
S3	Septage Utilization Site	$ 738	$ 358*	$ 1,096	
S4	Septage Storage Site	$ 71	$ 107*	$ 178	

DEP INFORMATION SHEET

Appealing a Commissioner's Licensing Decision

Dated: May 2004 Contact: (207) 287-2811

SUMMARY

There are two methods available to an aggrieved person seeking to appeal a licensing decision made by the Department of Environmental Protection's (DEP) Commissioner: (1) in an administrative process before the Board of Environmental Protection (Board); or (2) in a judicial process before Maine's Superior Court. This INFORMATION SHEET, in conjunction with consulting statutory and regulatory provisions referred to herein, can help aggrieved persons with understanding their rights and obligations in filing an administrative or judicial appeal.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

DEP's *General Laws*, 38 M.R.S.A. § 341-D(4), and its *Rules Concerning the Processing of Applications and Other Administrative Matters* (Chapter 2), 06-096 CMR 2.24 (April 1, 2003).

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

The Board must receive a written notice of appeal within 30 calendar days of the date on which the Commissioner's decision was filed with the Board. Appeals filed after 30 calendar days will be rejected.

HOW TO SUBMIT AN APPEAL TO THE BOARD

Signed original appeal documents must be sent to: Chair, Board of Environmental Protection, c/o Department of Environmental Protection, 17 State House Station, Augusta, ME 04333-0017; faxes are acceptable for purposes of meeting the deadline when followed by receipt of mailed original documents within five (5) working days. Receipt on a particular day must be by 5:00 PM at DEP's offices in Augusta; materials received after 5:00 PM are not considered received until the following day. The person appealing a licensing decision must also send the DEP's Commissioner and the applicant a copy of the documents. All the information listed in the next section must be submitted at the time the appeal is filed. Only the extraordinary circumstances described at the end of that section will justify evidence not in the DEP's record at the time of decision being added to the record for consideration by the Board as part of an appeal.

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

The materials constituting an appeal must contain the following information at the time submitted:

1. *Aggrieved Status.* Standing to maintain an appeal requires the appellant to show they are particularly injured by the Commissioner's decision.
2. *The findings, conclusions or conditions objected to or believed to be in error.* Specific references and facts regarding the appellant's issues with the decision must be provided in the notice of appeal.
3. *The basis of the objections or challenge.* If possible, specific regulations, statutes or other facts should be referenced. This may include citing omissions of relevant requirements, and errors believed to have been made in interpretations, conclusions, and relevant requirements.
4. *The remedy sought.* This can range from reversal of the Commissioner's decision on the license or permit to changes in specific permit conditions.

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

DARRYL N. BROWN
COMMISSIONER

Exeter Agri-Energy, LLC
Penobscot County
Exeter, Maine
A-1047-71-A-N

Departmental
Findings of Fact and Order
Air Emission License

After review of the air emissions license application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., §344 and §590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

Exeter Agri-Energy, LLC (Exeter Agri-Energy) submitted an air emission application for an anaerobic digester facility at Stonyvale Farm (226 Fogler Road, Exeter, Maine) for the purpose of digesting cow manure and organic food processing waste material. The digester will provide biogas fuel for a 1 megawatt (MW) electric generator, which in turn will provide heat to the farm and optimize the anaerobic digester temperature. A flare and back-up biogas boilers will also be part of the operation for those times the generator is down.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Fuel Burning Equipment

Equipment	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type, % sulfur	Stack #
1 MW Cogeneration Unit	9.5	15,767 scf/hr	Biogas	1
Backup Boiler	3.1	5,167 scf/hr	Biogas	2
Emergency Flare	9.5	15,767 scf/hr	Biogas	N/A
Emergency Generator (125 kW)	1.3	9.3 gal/hr	Diesel	
Saw Mill Diesel Drive (166 hp)	1.5	10.7 gal/hr	Diesel	

C. Application Classification

A new source is considered a major source based on whether or not expected emissions exceed the "Significant Emission Levels" as defined in the Department's regulations. The emissions for the new source are determined by the maximum future license allowed emissions, as follows:

Pollutant	Max. Future License (TPY)	Sig. Level
PM	5.0	100
PM_{10}	5.0	100
SO_2	2.8	100
NO_x	22.3	100
CO	31.7	100
VOC	10.2	50

The Department has determined Exeter Agri-Energy is a minor source and the application has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (as amended).

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 CMR 100 (as amended). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 CMR 100 (as amended). BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

Process Description

Exeter Agri-Energy is a wholly-owned subsidiary of Stonyvale, a dairy farm with 1200 milking head equivalent of cattle. Exeter Agri-Energy is proposing to install an anaerobic digester system with two parallel digester units (1500 m^3 each) to produce biogas from cow manure generated on-site and eventually also from off-site generated food wastes. Manure will be collected from the dairy barns on an ongoing basis and pumped directly into the anaerobic digester system. The direct

and constant supply of manure minimizes the potential for aerobic degradation and odor.

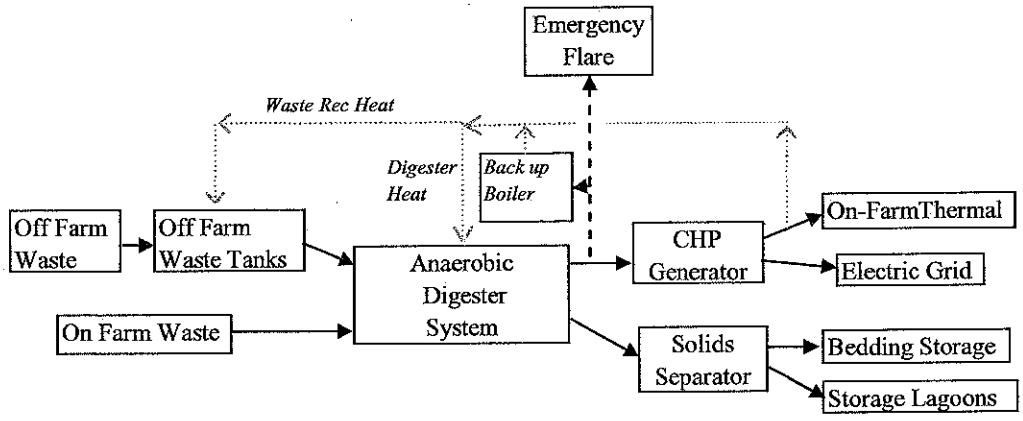
The off-farm organic feedstocks which may be used in the future include source-separated organic wastes such as fruit and vegetable waste, fats, oils, and greases. These off-farm feedstocks will be stored and pre-treated in one of two heated receiving tanks. A chopper pump would be used to slurry incoming material and pump materials from the receiving tanks into the anaerobic digester system where they would be co-digested with the manure.

The biogas from the anaerobic digester system, made up of approximately 60% methane and 40% carbon dioxide (CO_2), will provide fuel for an electric generator. The generator will produce both thermal energy to be used on-site and electricity for the grid.

Effluent material will go through a solid separator. The solid portion will be used as livestock bedding and the liquid portion will be land-applied as a nutrient-rich organic fertilizer.

The system will include a biogas fired boiler and a flare. When the cogeneration unit is offline, the biogas will be used to fire the back-up boiler. The excess digester gas produced during generator downtime and not used by the back-up boiler will be flared.

Below is a diagram of Exeter Agri-Energy's proposed process:



Stonyvale Farms also owns and operates two small diesel units adjacent to the anaerobic digester system, one is an emergency generator and one is a direct drive unit used to power a small sawmill. These units are included in this license since Stonyvale Farms owns Exeter Agri-Energy and they are on the same site.

B. Cogeneration Unit

The proposed combined heat and power generator is a 1475 hp unit (9.5 MMBtu/hr), manufactured in 2010 by Guascor Power. This 1 MW generator will fire biogas produced from the anaerobic digester system. The cogeneration unit is considered a combined heat and power generator (producing both electrical energy to the grid and thermal heat for the facility). The cogeneration unit will have its own stack and the stack shall be at least 20 feet in height, which is expected to meet ambient air quality standards.

NSPS Requirements
The generator is subject to the New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart JJJJ, *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines*. The applicability for this engine is under the category of engines manufactured after July 1, 2007 with a maximum engine power greater than or equal to 500 hp burning landfill/digester gas (§60.423(a)(4)(i)). Owners of these units are required to purchase an engine certified to the standards of Subpart JJJJ, Table 1 (manufacturer certification is acceptable).

NESHAP Requirements
The generator is also subject to 40 CFR Part 63, Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines*. The generator is considered a new stationary reciprocating internal combustion engine at an area HAP source (construction commenced on or after June 12, 2006); however, since the unit is subject to 40 CFR Part 60, Subpart JJJJ there are no further requirements under 40 CFR Part 60, Subpart ZZZZ (§63.6590(c)(1)).

BACT
Exeter Agri-Energy submitted a BACT analysis as part of the license application. The summary of the BACT analysis for the generator is the following:

PM/PM_{10}– The options for controlling particulate matter from the generator include add-on controls and good operating practices. Add on-controls were not considered for this unit. The anaerobic digester system uses a particulate filter to remove particulate matter from the biogas prior to combustion. The cogeneration unit has its own fuel and air filters which further remove particulates and improves engine performance and reliability. These filters, inherent combustion efficiencies of a new lean burn unit, and good operating practices were proposed as BACT, with the PM emission limit for the generator based on the emission standard in *Fuel Burning Equipment Particulate Emission Standard*, 06-096 CMR 103 (as amended).

The BACT emission limit for PM/PM_{10} from the generator is 0.12 lb/MMBtu (1.14 lb/hr).

SO_2 – Sulfur dioxide emissions result from the combustion oxidation of hydrogen sulfide (H_2S) and possibly other reduced sulfur compounds formed through the anaerobic digestion process. H_2S and other reduced sulfur compounds can also lead to corrosion in the fuel handling systems. Based on evaluations of uncontrolled sources, raw H_2S concentrations were estimated to be approximately 2000 parts per million by volume (ppmv). However, the proposed system converts H_2S to sulfate (SO_4) which remains in the liquid effluent. A small percentage of air is injected into the digester head space which biologically converts most of the H_2S present in the digester gas zone to SO_4, with the remaining H_2S concentration expected to be below 200 ppm. Exeter Agri-Energy proposes this internal system design technology as BACT to minimize SO_2. External H_2S removal systems exist, but were not considered for this facility due to cost effectiveness.

The BACT emission limit for SO_2 from the generator is 0.65 lb/hr. This is based on assuming complete conversion of 250 ppmv of H_2S in the fuel.

NO_X – Exeter Agri-Energy evaluated various options for controlling nitrogen oxides from the generator. NO_X emissions from internal combustion engines are primarily reduced by optimizing combustion to limit NO_X formation or by using control systems such as selective catalytic reduction (SCR), selective non-catalytic reduction (SNCR), biogas firing, lean burn combustion, Ignition Timing Retard, and derating.

SCR is an add-on control which uses urea or ammonia injection along with a catalyst to react with the NO_X in the flue gas to form water and nitrogen. No information was found regarding the use of SCR in digester gas fired internal combustion engines, however a recent report by the California Air Resources Board stated that the use of SCR in landfill gas combustion systems is experimental; stable, long-term operation of similar waste gas systems has not, to date, been achieved in practice. Therefore, SCR was not considered technologically feasible for Exeter Agri-Energy.

SNCR is an add-on control which also uses ammonia or urea injection, but without a catalyst. The reaction requires the injection point at a specific temperature (1600-2100°F), which is above the expected 975°F Exeter Agri-Energy exhaust temperature, therefore SNCR was not considered feasible for the facility.

Firing biogas fuel can be considered a part of a NO_X emissions reduction control strategy. Biogas has large amounts of CO_2, causing peak engine

temperatures to be reduced, and thereby minimizing NO_X formation. This is a viable method to reducing NO_X from the generator.

Lean burn combustion engines are designed to be operated at high excess air levels resulting in lower combustion temperatures and therefore lower NO_X emissions. Lean burn combustion simultaneously minimizes emissions of NO_X along with PM, CO, and VOC. Lean burn technology for digester gas-fired internal combustion engines is widely accepted as BACT. Exeter Agri-Energy is proposing to use a lean burn technology generator.

Ignition timing retard delays the ignition timing to minimize peak combustion temperature. NO_X formation can be greatly reduced, but CO and PM emissions potentially increase, along with a decrease in engine performance and operational stability. Exeter Agri-Energy is proposing to adjust ignition timing to optimize both NO_X and CO emissions.

Proper operation and good combustion and maintenance practices minimize emissions for all pollutants including NO_X. The cogeneration unit's fuel and air filters improve engine performance and the anaerobic digester system utilizes a condenser system to remove moisture from the biogas prior to combustion. Exeter Agri-Energy will maintain the anaerobic digester system and generator unit in accordance with the manufacturers' written instruction for proper operation and maintenance.

Derating, consisting of limiting the engine capacity to less than full power, reduces NO_X formation by reducing cylinder pressures and temperatures. Derating is not considered economically justified at this time due to the relatively low NO_X emissions from this unit.

Exeter Agri-Energy proposed the use of biogas fuel, lean burn combustion technology, ignition timing retard tuning, proper operation, and good combustion and maintenance practices as BACT for the generator to minimize NO_X emissions.

The BACT emission limit for NO_X from the generator is 4.9 lb/hr. This is based on tuning the generator to 1.5 g/hp-hr, which is more stringent than the 2.0 g/hp-hr emissions requirement found in Table 1 of 40 CFR Part 60, Subpart JJJJ.

CO – The options for controlling carbon monoxide from the generator include good combustion control and an add-on oxidation catalyst. Add on-controls were not considered for this unit. The inherent combustion efficiencies of a new lean burn unit and good operating practices were proposed as BACT.

The BACT emission limit for CO from the generator is 7.2 lb/hr. This is based on tuning the generator to 2.2 g/hp-hr, which is more stringent than the 5.0 g/hp-hr emissions requirement found in Table 1 of 40 CFR Part 60, Subpart JJJJ.

VOC – The options for controlling volatile organic compounds from the generator include good combustion control and an add-on oxidation catalyst. Add on-controls were not considered for this unit. The inherent combustion efficiencies of a new lean burn unit and good operating practices were proposed as BACT.

The BACT emission limit for VOC from the generator is 2.3 lb/hr. This is based on tuning the generator to 0.7 g/hp-hr, which is more stringent than the 1.0 g/hp-hr emissions requirement found in Table 1 of 40 CFR Part 60, Subpart JJJJ.

Opacity – Visible emissions from the cogeneration unit shall not exceed 20% opacity on a 6 minute block average, except for no more than two (2) six (6) minute block averages in a 3 hour period.

Greenhouse Gases – The operation of digesters in general is promoted by the US Department of Agriculture and the Department of Energy as a method of reducing greenhouse gas emissions. The overall methane and CO_2 emissions from the farm will be significantly reduced by the operation of the digester and the firing of biogas in the cogeneration unit. Exeter Agri-Energy is proposing to operate the anaerobic digester system with methane collection and cogeneration as part of their greenhouse gas emissions control strategy.

Periodic Monitoring

Exeter Agri-Energy shall keep records of the hours of operation of the cogeneration unit on a 12 month rolling total basis.

Exeter Agri-Energy shall test a grab sample of anaerobic digester outlet gas (prior to the cogeneration unit inlet) and test for H_2S and total sulfur within 4 months and again at 12 months of beginning operation.

Compliance with the emission requirements in 40 CFR Part 60, Subpart JJJJ shall be demonstrated by certification from the manufacturer or an initial performance test and subsequent tests every 8760 hours or 3 years, whichever comes first, if a manufacturer certification is unavailable

C. Back-up Boiler

The 3.1 MMBtu/hr biogas fired boiler will be used for back-up to provide heat to the anaerobic digester system and feedstock tanks when the cogeneration unit is down.

This unit is a modern boiler design which optimizes fuel use efficiency and minimizes emissions through combustion optimization. Low NO_X burners are available at a greater cost, as are possible other controls, however these are not considered justifiable due to the small size and minimal emissions from the boiler. Gas combustion inherently has low SO_2 and PM emissions. BACT is proposed to be the use of a new high efficiency biogas-fired boiler.

The BACT emission limits for the back-up boiler were based on the following:

PM/PM_{10} – 0.12 lb/MMBtu based on 06-096 CMR 103 (0.37 lb/hr).
SO_2 – conversion of 250 ppm of H_2S (0.21 lb/hr)
NO_X – 100 lb/MMscf: AP-42, Table 1.4-1 dated 7/98 (0.17 lb/MMBtu, 0.52 lb/hr)
CO – 84 lb/MMscf: AP-42, Table 1.4-1 dated 7/98 (0.14 lb/MMBtu, 0.43 lb/hr)
VOC – 5.5 lb/MMscf: AP-42, Table 1.4-2 dated 7/98 (0.01 lb/MMBtu, 0.03 lb/hr)
Opacity – Visible emissions from the boiler shall not exceed an opacity of 10% on a 6 minute block average basis, except for no more than one (1) six (6) minute block average in a 3 hour period.

Note that the emission factors used from AP-42 Table 1.4 are for natural gas firing in a boiler and not necessarily specific to biogas. For the lb/MMBtu calculations, a digester gas heat value of 600 Btu/scf was used from AP-42 Table 3.1-1 dated 4/2000.

D. Digester Flare

The digester flare is rated at 9.5 MMBtu/hr and will be used when the cogeneration unit is not available. The flare will be able to combust all biogas from the digester and associated structures during an emergency or maintenance period. By flaring the biogas, the resulting emissions are safer and more environmentally friendly than if venting the biogas uncontrolled. There will also be a reduction in odor, the destruction of VOCs, and the conversion of H_2S to SO_2 which would not occur with direct venting.

The flare will not produce an increase in emissions for any pollutant compared to the operation of the cogeneration unit. BACT is proposed to be the use of the flare for control of digester gases during downtime of the cogeneration unit.

The BACT emission limits for the flare were based on the following:

PM/PM_{10} – 0.12 lb/MMBtu based on 06-096 CMR 103 (1.14 lb/hr).
SO_2 – conversion of 200 ppm of H_2S (0.52 lb/hr)
NO_X – 0.07 lb/MMBtu: AP-42, Table 13.5-1 dated 9/91 (0.67 lb/hr)
CO – 0.37 lb/MMBtu: AP-42, Table 13.5-1 dated 9/91 (3.51 lb/hr)
VOC – 0.14 lb/MMBtu: AP-42, Table 13.5-1 dated 9/91 (1.33 lb/hr)
Opacity – Visible emissions from the flare shall not exceed an opacity of 10% on a 6 minute block average basis, except for no more than one (1) six (6) minute block average in a 3 hour period.

Periodic Monitoring

Exeter Agri-Energy shall maintain a log of when the flare is in operation.

E. Emergency Generator

The emergency generator, manufactured in 2001, is a 125 kW Katolight generator with a John Deere engine rated at 1.3 MMBtu/hr (9.3 gal/hr). The unit fires diesel fuel and is used to provide back-up power for the facility.

The generator is subject to 40 CFR Part 63, Subpart ZZZZ. The generator is considered an existing stationary reciprocating internal combustion engine located at an area source of HAP emissions and the unit was constructed or reconstructed before June 12, 2006 (§69.6590(a)(1)(iii).

BACT includes a limit of 500 hours/year and the use of ultra low sulfur fuel (15 ppm, 0.0015%).

The BACT emission limits for the emergency generator were based on the following:

PM/PM_{10} – 0.12 lb/MMBtu based on 06-096 CMR 103 (0.15 lb/hr).
SO_2 – use of 0.0015% sulfur (0.002 lb/hr)
NO_X – 6.9 g/bhp-hr: EPA Tier 1 specifications for diesel engines built from 1997 to 2003 with a capacity of 100 to 175 hp (2.56 lb/hr)
CO – 0.95 lb/MMBtu: AP-42, Table 3.3-1 dated 10/96 (1.24 lb/hr)
VOC – 0.36 lb/MMBtu: AP-42, Table 3.3-1 dated 10/96 (0.47 lb/hr)
Opacity – Visible emissions from the emergency generator shall not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period.

Periodic Monitoring

Exeter Agri-Energy shall maintain records of hours of operation of the emergency generator through the use of the elapsed time meter on the unit.

The emergency generator shall comply with the applicable requirements of 40 CFR Part 63, Subpart ZZZZ for emergency stationary CI RICE and black start stationary CI RICE, including: changing the oil and filter every 500 hours of operation or annually, whichever comes first; inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary; and inspect the air cleaner every 1000 hours of operation or annually, whichever comes first (§63.6603(a) and Table 2(d)). Due to the 500 hour limit of operation, the inspections and changing of the oil and filters shall be done annually to meet the requirements of 40 CFR Part 63, Subpart ZZZZ.

F. Sawmill Diesel Drive Unit

The sawmill drive unit, installed in 2003 is a 166 hp John Deere unit rated at 1.5 MMBtu/hr (10.7 gal/hr). The unit fires diesel fuel and is used to provide power for the sawmill.

The generator is subject to 40 CFR Part 63, Subpart ZZZZ. The generator is considered an existing stationary reciprocating internal combustion engine located at an area source of HAP emissions and the unit was constructed or reconstructed before June 12, 2006 (§69.6590(a)(1)(iii).

BACT includes a limit of 200 hours/year and the use of ultra low sulfur fuel (15 ppm, 0.0015%).

The BACT emission limits for the sawmill diesel drive unit were based on the following:

PM/PM_{10} – 0.12 lb/MMBtu based on 06-096 CMR 103 (0.18 lb/hr).
SO_2 – use of 0.0015% sulfur (0.002 lb/hr)
NO_X – 6.9 g/bhp-hr: EPA Tier 1 specifications for diesel engines built from 1997 to 2003 with a capacity of 100 to 175 hp (2.53 lb/hr)
CO – 0.95 lb/MMBtu: AP-42, Table 3.3-1 dated 10/96 (1.43 lb/hr)
VOC – 0.36 lb/MMBtu: AP-42, Table 3.3-1 dated 10/96 (0.54 lb/hr)
Opacity – Visible emissions from the sawmill diesel drive unit shall not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period.

Periodic Monitoring

Exeter Agri-Energy shall maintain records of hours of operation of the sawmill diesel drive through the use of the elapsed time meter on the unit.

The sawmill diesel drive shall comply with the applicable requirements of 40 CFR Part 63, Subpart ZZZZ for non-emergency, non-black start CI stationary RICE $\leq$ 300 hp, including: changing the oil and filter every 1000 hours of operation or annually, whichever comes first; inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary; and inspect the air cleaner every 1000 hours of operation or annually, whichever comes first (§63.6603(a) and Table 2(d)). Due to the 200 hour limit of operation, the inspections and changing of the oil and filters shall be done annually to meet the requirements of 40 CFR Part 63, Subpart ZZZZ.

G. Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed an opacity of 20%, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20% in any one (1) hour.

H. General Process Emissions

Visible emissions from any general process source shall not exceed an opacity of 20% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period.

I. Annual Emissions

Exeter Agri-Energy shall be restricted to the following annual emissions, calculated with the cogeneration unit operating 8760 hrs/year, the emergency generator operating 500 hrs/year, and the sawmill diesel drive unit operating 200 hrs/year, based on a 12 month rolling total:

Total Licensed Annual Emissions for the Facility
Tons/year
(used to calculate the annual license fee)

	PM	PM_{10}	SO_2	NO_x	CO	VOC
Cogeneration Unit*	5.0	5.0	2.8	21.4	31.3	10.0
Emergency Generator	0.04	0.04	0.0005	0.64	0.30	0.12
Sawmill Diesel Drive Unit	0.02	0.02	0.002	0.25	0.14	0.05
Total TPY	**5.0**	**5.0**	**2.8**	**22.3**	**31.7**	**10.2**

* This is worst case scenario. The operation of the back-up flare/back-up boiler when the cogeneration unit is not available has the same or lower emissions as the cogeneration unit.

III. AMBIENT AIR QUALITY ANALYSIS

According to 06-096 CMR 115, the level of air quality analyses required for a minor new source shall be determined on a case-by case basis. Based on the information available in the file, and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source.

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,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-1047-71-A-N subject to the following conditions.

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

STANDARD CONDITIONS

(1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S.A. §347-C).

(2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115. [06-096 CMR 115]

(3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 CMR 115]

(4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 CMR 115]

(5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353. [06-096 CMR 115]

(6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 115]

(7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 115]

(8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 CMR 115]

(9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an

application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 CMR 115]

(10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 CMR 115]

(11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:

A. perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
   1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
   2. pursuant to any other requirement of this license to perform stack testing.

B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

C. submit a written report to the Department within thirty (30) days from date of test completion.

[06-096 CMR 115]

(12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:

A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and

B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a

demonstration of compliance under normal and representative process and operating conditions.
[06-096 CMR 115]

(13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 CMR 115]

(14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 CMR 115]

(15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 CMR 115]

SPECIFIC CONDITIONS

(16) **Cogeneration Unit**

A. The cogeneration unit (9.5 MMBtu/hr) shall fire biogas. [06-096 CMR 115, BPT]

B. Emissions from the cogeneration unit shall not exceed the following:

Pollutant	lb/MMBtu	Origin and Authority
PM	0.12	06-096 CMR 103(2)(B)(1)(a)

C. Emissions from the cogeneration unit shall not exceed the following [06-096 CMR 115, BPT]:

PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
1.14	1.14	0.65	4.9	7.2	2.3

D. Visible emissions from the cogeneration unit shall not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [06-096 CMR 101]

E. The stack for the cogeneration unit shall be a minimum of 20 feet in height. [06-096 CMR 115, BACT]

F. The cogeneration unit shall utilize timing retard to minimize emissions and shall keep records on site documenting the ideal settings for the unit. [06-096 CMR 115, BACT]

G. Exeter Agri-Energy shall keep records of the hours of operation of the cogeneration unit on a monthly and 12 month rolling total basis. [06-096 CMR 115, BACT]

H. Within 4 months of commencing operation and again at 12 months after commencing operation, Exeter Agri-Energy shall test a grab sample of anaerobic digester outlet gas (prior to the cogeneration unit inlet) and test for H_2S and total sulfur. Additional testing shall be upon request. [06-096 CMR 115, BACT]

I. NSPS, 40 CFR Part 60, Subpart JJJJ
   1. The cogeneration unit shall be equipped with a non-resettable hour meter. [40 CFR 60.4237 and 06-096 CMR 115, BACT]
   2. The cogeneration unit is subject to emission requirements set forth in 40 CFR 60, Subpart JJJJ. Compliance with these emission requirements shall be demonstrated by certification from the manufacturer or an initial performance test and subsequent tests every 8760 hours or 3 years, whichever comes first, if a manufacturer certification is unavailable. [40 CFR 60, Subpart JJJJ]
   3. Exeter Agri-Energy shall meet all requirements of 40 CFR Part 60, Subpart JJJJ for the cogeneration unit.

(17) **Back-up Boiler**

A. The back-up boiler (3.1 MMBtu/hr) shall fire biogas and shall be operated as a back-up to the cogeneration unit. [06-096 CMR 115, BACT]

B. Emissions from the back-up boiler shall not exceed the following:

Pollutant	lb/MMBtu	Origin and Authority
PM	0.12	06-096 CMR 103

C. Emissions from the back-up boiler shall not exceed the following [06-096 CMR 115, BACT]:

PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
0.37	0.37	0.21	0.52	0.43	0.03

D. Visible emissions from the back-up boiler shall not exceed an opacity of 10% on a 6 minute block average basis, except for no more than one (1) six (6) minute block average in a 3 hour period. [06-096 CMR 101, BACT]

(18) **Flare**

A. The flare (9.5 MMBtu/hr) shall fire biogas and shall be operated when the cogeneration unit is off-line. [06-096 CMR 115, BACT]

B. Emissions from the flare shall not exceed the following:

Pollutant	lb/MMBtu	Origin and Authority
PM	0.12	06-096 CMR 103

C. Emissions from the flare shall not exceed the following [06-096 CMR 115, BACT]:

PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
1.14	1.14	0.52	0.67	3.51	1.33

D. Visible emissions from the flare shall not exceed an opacity of 10% on a 6 minute block average basis, except for no more than one (1) six (6) minute block average in a 3 hour period. [06-096 CMR 115, BACT]

E. A log recording date, time, and duration of flare operations shall be maintained. [06-096 CMR 115, BACT]

(19) **Emergency Generator (1.3 MMBtu/hr)**

A. The emergency generator shall fire only diesel fuel with a maximum sulfur content not to exceed 15 ppm (0.0015%). Compliance with the sulfur content shall be based on fuel records from the supplier showing the type of fuel delivered and the sulfur content of the fuel. Exeter Agri-Energy may utilize any fuel currently in storage for the emergency generator, but all future purchases must meet the 15 ppm sulfur limit. [06-096 CMR 115, BACT]

B. The emergency generator shall be limited to 500 hours per year of total operation based on a 12 month rolling total. Compliance shall be demonstrated by the use of the elapsed time meter and a monthly log. [06-096 CMR 115, BACT]

C. Emissions from the emergency generator shall not exceed the following:

Pollutant	lb/MMBtu	Origin and Authority
PM	0.12	06-096 CMR 103(2)(B)(1)(a)

D. Emissions from the emergency generator shall not exceed the following [06-096 CMR 115, BACT]:

PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
0.15	0.15	0.002	2.56	1.24	0.47

E. Visible emissions from the emergency generator shall not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [06-096 CMR 101]

F. The emergency generator shall comply with the applicable requirements of 40 CFR Part 63, Subpart ZZZZ, including the following:
1. change the oil and filter annually;
2. inspect all hoses and belts annually and replace as necessary; and
3. inspect the air cleaner annually.

[40 CFR Part 63, Subpart ZZZZ, including §63.6603(a)]

(20) **Sawmill Diesel Drive Unit (1.5 MMBtu/hr)**

A. The sawmill diesel drive unit shall fire only diesel fuel with a maximum sulfur content not to exceed 15 ppm (0.0015%). Compliance with the sulfur content shall be based on fuel records from the supplier showing the type of fuel delivered and the sulfur content of the fuel. Exeter Agri-Energy may utilize any fuel currently in storage for the sawmill diesel drive unit, but all future purchases must meet the 15 ppm sulfur limit. [06-096 CMR 115, BACT]

B. The sawmill diesel drive unit shall be limited to 200 hours per year of total operation based on a 12 month rolling total. Compliance shall be demonstrated by the use of the elapsed time meter and a monthly log. [06-096 CMR 115, BACT]

C. Emissions from the sawmill diesel drive unit shall not exceed the following:

Pollutant	lb/MMBtu	Origin and Authority
PM	0.12	06-096 CMR 103(2)(B)(1)(a)

D. Emissions from the sawmill diesel drive unit shall not exceed the following [06-096 CMR 115, BPT]:

PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
0.18	0.18	0.002	2.53	1.43	0.54

E. Visible emissions from the sawmill diesel drive unit shall not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [06-096 CMR 101]

F. The sawmill diesel drive unit shall comply with the applicable requirements of 40 CFR Part 63, Subpart ZZZZ, including the following:
1. change the oil and filter annually;
2. inspect all hoses and belts annually and replace as necessary; and
3. inspect the air cleaner annually.

[40 CFR Part 63, Subpart ZZZZ, including §63.6603(a)]

(21) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed an opacity of 20%, except for no more than five (5)

minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20% in any one (1) hour. [06-096 CMR 101]

(22) **General Process Sources**

Visible emissions from any general process source shall not exceed an opacity of 20% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period. [06-096 CMR 101]

(23) Exeter Agri-Energy shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S.A. §605).

DONE AND DATED IN AUGUSTA, MAINE THIS 8th DAY OF March , 2011.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Patricia W. Aho, Dept. Comm.
DARRYL N. BROWN, COMMISSIONER

The term of this license shall be five (5) years from the signature date above.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: December 29, 2010
Date of application acceptance: January 11, 2011

Date filed with the Board of Environmental Protection:

This Order prepared by Kathleen E. Tarbuck, Bureau of Air Quality.

Filed
MAR 10 2011
State of Maine
Board of Environmental Protection