RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

OFFICE OF AIR RESOURCES
235 Promenade Street
Providence, Rhode Island 02908

5 March 2019

D. Robin Pendleton
Treasurer, Safety and Compliance Officer
Newport Biodiesel, Inc.
312 Connell Highway
Newport, RI 02840

Dear Ms. Pendleton:

The Department of Environmental Management, Office of Air Resources has reviewed and approved your application for biodiesel manufacturing located at 312 Connell Highway, Newport, RI.

Enclosed is a minor source permit issued pursuant to our review of your application (Approval Nos. 2415 & 2416).

Any source with the potential to emit greater than major source thresholds as defined under Air Pollution Control Regulation-Operating Permits (250-RICR-120-05-29) is subject to the Operating Permit Program. Your facility located at 312 Connell Highway, Newport, Rhode Island, is currently subject to the Operating Permit Program as an Emissions Cap Source, with allowable emissions restricted to below the major source threshold. An emissions cap means any emission limitation or physical or operational limitation, imposed in a federally enforceable document that establishes the maximum quantity of emissions which may be released from a stationary source. The Office of Air Resources considers this minor source permit an emissions cap. Air Pollution Control Regulation-Operating Permit Fees (250-RICR-120-05-28) requires stationary sources with an emissions cap to pay an annual compliance/assurance fee of $350.00. Notification concerning the payment of this fee will be mailed to you during the fall of this year.

If there are any questions concerning this permit, please contact me at 401-222-2808, extension 7415 or at stephen.stamand@dem.ri.gov.

Sincerely,

Stephen G. St. Amand
Senior Air Quality Specialist
Office of Air Resources

cc: Newport Building Official

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR RESOURCES

MINOR SOURCE PERMIT

NEWPORT BIODIESEL, INC.

APPROVAL NOs. 2415 & 2416

Pursuant to the provisions of Air Pollution Control Regulation-Permits, 250-RICR-120-05-9, this minor source permit is issued to:

Newport Biodiesel, Inc.

For the following:

Process equipment for converting used cooking oil into biodiesel fuel product (Approval No. 2415) and for the installation of a Falmouth Products Incorporated, Model No. FALCO 600 catalytic oxidizer (Approval No. 2416).

Located at: *312 Connell Highway, Newport, RI 02840*

This permit shall be effective from the date of its issuance and shall remain in effect until revoked by or surrendered to the Department. This permit does not relieve *Newport Biodiesel, Inc.* **from compliance with applicable state and federal air pollution control rules and regulations. The design, construction and operation of this equipment shall be subject to the attached permit conditions and emission limitations.**

Laurie A. Grandchamp

Laurie Grandchamp, P.E., Chief
Office of Air Resources

3/5/19

Date of issuance

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR RESOURCES

Permit Conditions and Emission Limitations

NEWPORT BIODIESEL, INC.

APPROVAL NOs. 2415 & 2416

A. Emission Limitations

1. Volatile Organic Compounds (VOC)

   a. The catalytic oxidizer must reduce VOC emissions by 98% or greater, unless outlet emissions are below 5 ppmv.

   b. The total quantity of VOC emissions discharged to the atmosphere from the entire facility shall not exceed 1000 pounds of VOC per calendar month based upon a 12-month rolling average.

2. Hazardous Air Pollutant (HAP) Emission Limitations

   The total quantity of Hazardous Air Pollutant (HAP) emitted from the entire facility shall not exceed 1,000 pounds of any one (1) HAP or any combination of HAPs per calendar month based upon a 12-month rolling average.

3. Listed Toxic Air Contaminants Emission Limitations

   The total quantity of emissions discharged to the atmosphere from the entire facility of any listed toxic air contaminant shall not exceed the minimum quantity for that contaminant as specified in 250-RICR-120-05-9.17, Appendix A in any consecutive 12-month period. Emissions from activities exempted from the provisions of Air Pollution Control Regulation-Air Toxics 250-RICR-120-05-22.5(B) are not included in this limitation.

4. Storage tanks

   a. All storage tanks that store VOCs and are filled from a tank truck, shall have a vapor balance system that is designed and operated to route VOCs displaced from loading of the storage tank to the tank truck from which the storage tank is filled. Alternatively, emissions from tank vents shall be routed to the catalytic oxidizer for treatment.

   b. Tank trucks must have a current certification in accordance with the U.S. Department of Transportation (DOT) pressure test requirements of 49 CFR 180 for tank trucks.

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c. VOCs must only be unloaded from tank trucks when the vapor balancing system are connected to the storage tank's vapor balance system. Alternatively, emissions from tank vents shall be routed to the catalytic oxidizer for treatment.

d. No pressure relief device on the storage tank or tank truck shall open during loading or as a result of temperature changes (breathing losses).

e. The pressure relief device on all storage tanks that store VOCs and or HAPs shall be set to no less than 1.25 psig at all times to minimize breathing losses.

5. Process vessels

a. All VOC and/or HAP-containing process vessels shall be either totally closed vessels or equipped with tightly fitted covers that are vented to an air pollution control system.

b. All VOC and/or HAP emissions generated from any process vessel shall be captured and discharged to an air pollution control system consisting of a catalytic oxidizer.

6. Odors

Any air contaminant or combination of air contaminants discharged to the atmosphere from the facility shall not create an objectionable odor beyond the property line of the facility. Odor evaluations shall be conducted according to the provisions of Air Pollution Control Regulation-Odors 250-RICR-120-05-17.

7. Opacity

Visible emissions from the catalytic oxidizer exhaust shall not exceed 10% opacity (six-minute average). Where the presence of uncombined water is the only reason for failure to meet the requirements of this condition, such failure shall not be a violation of this permit.

B. Operating Requirements

1. The catalytic oxidizer shall be operated according to its design specifications whenever the emission units vented to the control system are emitting air contaminants.

2. The operating temperature of the catalytic oxidizer's combustion chamber shall be maintained at or above 626°F whenever any emission units are being discharged to the oxidizer, or at a lower temperature that has been demonstrated in the most recent compliance test to achieve the required 98% control efficiency.

3. There shall be no bypassing of the air pollution control equipment during times when VOCs and or HAPs are being discharged to the device.

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4. All emissions generated from VOC and/or HAP-containing process equipment, including the Pretreatment Esterification Reactor, MeOH/MeOX Batch Tank, Biodiesel Transesterification Reactors, Water Wash Tanks, Soapstock Tank, Glycerin Waste Tank, Used Water/MeOH Tank, and the Sealant Reservoir shall be captured, contained and routed to the Pre-Treatment Condensers for treatment prior to discharge to the catalytic oxidizer.

5. The maximum outlet exhaust gas temperature of each Pre-treatment Condenser shall not exceed 65°F, except during routine maintenance shall not exceed 16 hours per year, per condenser. Only one condenser at a time shall be taken out of service for maintenance.

C. Monitoring

1. The operating temperature of the oxidizer's catalyst bed shall be continuously monitored, indicated and recorded. The device must be capable of monitoring temperature with an accuracy of +/-1 percent of the temperature being monitored in degrees Celsius or +/-1 degree Celsius, whichever is greater. The temperature sensor or thermocouple must be installed in the vent stream of the catalyst bed.

   The equipment to continuously monitor the operating temperature of the oxidizer's catalyst bed must be calibrated and maintained according to the manufacturer's specifications. The calibration of the chart recorder, data logger or temperature indicator must be verified once per year or the chart recorder, data logger or temperature indicator must be replaced.

2. The catalytic oxidizer and monitoring equipment shall be inspected at least once per month to assure that the control system is operating properly, and that no leaks or malfunctions have occurred or are occurring. The date, time and results shall be recorded.

3. The owner/operator shall perform an annual leak inspection of all equipment in VOC and/or HAP service. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. Each piece of equipment that is in VOC and or HAP service shall be inspected when in service.

4. The outlet exhaust temperature of each Pre-treatment Condenser shall be monitored and recorded continuously.

D. Recordkeeping and Reporting

1. The owner/operator shall maintain the following records:

   a. A log of operating time for the catalytic oxidizer and monitoring equipment;

   b. A maintenance log for the catalytic oxidizer, and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages;

   c. The bed temperature of the catalytic oxidizer;

d. The date when the catalyst bed is replaced;

e. The outlet exhaust gas temperature of each Pre-treatment Condenser;

f. All measurements, performance evaluations, calibration checks and maintenance or adjustments for each continuous monitor; and

g. All VOC and/or HAP emissions generated by the facility from the process including any fugitive emissions.

2. The owner/operator shall, on a monthly basis, no later than 15 days after the first of the month, determine the total quantity of VOCs discharged to the atmosphere from the entire facility. The owner/operator shall keep records of this determination and provide such records to the Office of Air Resources upon request.

3. The owner/operator shall notify the Office of Air Resources in writing within 15 days of determining that the total quantity of VOCs discharged to the atmosphere from the entire facility exceeds 1000 pounds per calendar month based upon a 12-month rolling average.

4. The owner/operator shall, on a monthly basis, no later than 15 days after the first of the month, determine the total quantity of HAP emissions discharged to the atmosphere from the entire facility. Monthly and 12-month rolling averages shall be calculated. The 12-month rolling average shall be used for comparison with emission limitations. The owner/operator shall keep records of this determination and provide such records to the Office of Air Resources upon request.

5. The owner/operator shall notify the Office of Air Resources in writing, within 15 days of determining that the total quantity of HAP emissions discharged to the atmosphere from this facility exceeds 1,000 pounds of any one (1) HAP or any combination of HAPs per calendar month (12-month rolling average).

6. The owner/operator shall, on a monthly basis, no later than 15 days after the first of the month, determine the total quantity of each listed toxic air contaminant in 250-RICR-120-05-9.17, Appendix A discharged to the atmosphere from the entire facility. Monthly and 12-month rolling averages shall be calculated. The 12-month rolling average shall be used for comparison with emission limitations. The owner/operator shall keep records of this determination and provide such records to the Office of Air Resources upon request.

7. The owner/operator shall notify the Office of Air Resources in writing, within 15 days of determining that the total emissions discharged to the atmosphere from the entire facility, of any listed toxic air contaminant exceeds the minimum quantity for that contaminant as specified in 250-RICR-120-05-9.17, Appendix A.

8. For any leak detected pursuant to Condition C.3 of this permit, the owner/operator shall record the following information:

a. The name of the leaking equipment;

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b. The date and time the leak is detected;

c. The action taken to repair the leak;

d. The date and time the leak is repaired.

9. For any leak inspection conducted pursuant to Condition C.3 of this permit during which no leaks are detected, the owner/operator shall record the following information:

a. A record that the inspection was performed;

b. The date and time of the inspection;

c. A statement that no leaks were detected.

10. The owner/operator shall notify the Office of Air Resources of any anticipated noncompliance with the terms of this permit or any other applicable air pollution control rules and regulations.

11. The owner/operator shall notify the Office of Air Resources in writing of any planned physical or operational changes to any equipment covered under this approval that would:

a. Change the representation of the facility in the application.

b. Alter the applicability of any state or federal air pollution rules or regulations.

c. Result in the violation of any terms or conditions of this permit.

d. Qualify as a modification under 250-RICR-120-05-9.

Such notification shall include:

- Information describing the nature of the change.
- Information describing the effect of the change on the emission of any air contaminant.
- The scheduled completion date of the planned change.

Any such change shall be consistent with the appropriate regulation and have the prior approval of the Director.

12. The owner/operator shall notify the Office of Air Resources, in writing, of any noncompliance with the terms of this permit within 30 calendar days of becoming aware of such occurrence and supply the Director with the following information:

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a. The name and location of the facility;

b. The subject source(s) that caused the noncompliance with the permit term;

c. The time and date of first observation of the incident of noncompliance;

d. The cause and expected duration of the incident of noncompliance;

e. The estimated rate of emissions (expressed in lbs/hr or lbs/day) during the incident and the operating data and calculations used in estimating the emission rate.

f. The proposed corrective actions and schedule to correct the conditions causing the incidence of noncompliance.

13. All records required by this permit shall be maintained for a minimum of five years after the date of each record and shall be made available to representatives of the Office of Air Resources upon request.

E. Malfunctions

1. The owner/operator may seek to establish that a malfunction of any air pollution control system that would result in noncompliance with any of the terms of this permit or any other applicable air pollution control rules and regulations was due to unavoidable increases in emissions attributable to the malfunction. To do so, the owner/operator must demonstrate to the Office of Air Resources that:

a. The malfunction was not attributable to improperly designed air pollution control equipment, lack of preventative maintenance, careless or improper operation, or operator error;

b. The malfunction is not part of a recurring pattern indicative of inadequate design, operation or maintenance;

c. Repairs were performed in an expeditious fashion. Off-shift labor and overtime should be utilized, to the extent practicable, to ensure that such repairs were completed as expeditiously as practicable.

d. All possible steps were taken to minimize emissions during the period of time that repairs were performed.

e. Emissions during the period of time that the repairs were performed will not:

(1) Cause an increase in the ground level ambient concentration at or beyond the property line in excess of that allowed by 250-RICR-120-05-22; and

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(2) Cause or contribute to air pollution in violation of any applicable state or national ambient air quality standard.

f. The reason that it would be impossible or impractical to cease the source operation during said period.

g. The owner/operator's actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence.

This demonstration must be provided to the Office of Air Resources, in writing, within two working days of the time when the malfunction occurred and contain a description of the malfunction, any steps taken to minimize emissions and corrective actions taken.

The owner/operator shall have the burden of proof in seeking to establish that noncompliance was due to unavoidable increases in emissions attributable to the malfunction.

F. Other Permit Conditions

1. To the extent consistent with the requirements of this approval and applicable federal and state laws, the facility shall be designed, constructed, and operated in accordance with the representation of the facility in the permit application.

2. The owner/operator shall shut down any emission unit in the event of a malfunction of the air pollution control equipment that results in, or that could result in, emissions in excess of the permit limits. The unit shall remain shut down until the malfunction has been identified and corrected.

3. Employees of the Office of Air Resources and its authorized representatives shall be allowed to enter the facility at all times for the purpose of inspecting any air pollution source, investigating any condition it believes may be causing air pollution or examining any records required to be maintained by the Office of Air Resources.

4. At all times, including periods of startup, shutdown and malfunction, the owner/operator shall, to the extent practicable, maintain and operate the facility in a manner consistent with good air pollution control practice for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this permit have been achieved. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Office of Air Resources which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the source.