

PERMIT Under the Environmental Conservation Law (ECL)

## **IDENTIFICATION INFORMATION**

Permit Type:	Air State Facility
Permit ID:	2-6101-01278/00001
	Effective Date: 04/08/2014 Expiration Date: 04/07/2024

Permit Issued To:UNITED BIOFUELS INC 823 ELEVENTH AVE NEW YORK, NY 10019

- Contact: TIMOTHY D RUTH UNITED REFINING CO 814 LEXINGTON AVE WARREN, PA 16365 (814) 726-4609
- Facility: UNITED BIOFUELS INC 435 GREENPOINT AVE 435 GREENPOINT AVE BROOKLYN, NY 11222

Description:

THE METRO BIOFUELS LLC IS A BIODIESEL FUEL PRODUCTION FACILITY LOCATED AT 435 GREENPOINT AVE IN BROOKLYN, NEW YORK.

CONSTRUCTION OF PROCESSING FACILITY TO CONVERT VEGETABLE OIL FEEDSTOCK TO BIODIESEL FUEL (METHYL ESTER) IN THE PRESENCE OF METHANOL. INSTALL EQUIPMENT FOR BIODIESEL FUEL PURIFICATION, METHANOL RECOVERY, WASTEWATER TREATMENT AND VAPOR CONTROL.

THE FACILITY PROCESS DISCRIPTION:

-THE PRIMARY PRODUCTS FOR PRODUCTION ARE VEGETABLE OIL, METHANOL, CATALYST.

-THE OUTPUT IS BIODIESEL FUEL, GLYCERIN (BYPRODUCT), AND EXCESS METHANOL.

-THE EXCESS METHANOL IS WASHED OUT FROM BIODIESEL, AND FLASHED OFF THE GLYCERIN.

-PORTION OF METHANOL USED FOR PRODUCTION OF BIODIESEL FUEL AND OTHER PORTION (EXCESS METHANOL) IS PARTIALLY RETURNED TO THE PRODUCTION, AND PARTIALLY EMITTED TO THE AMBIENT AIR. -GLYCERIN, AS A BYPRODUCT, IS PURIFIED TO THE PHARMACEUTICAL QUALITY AND SOLD.

THE EMISSION RATE POTENTIAL (ERP) FOR THE METHANOL, BASED ON THE MODELING TOOL PROVIDED BY ASPENTECH, IS 91,100,000 LBS/YR. AFTER CONTROL THE PTE FOR THE METHANOL IS 5,747 LBS/YR. THE HOURLY PTE EMISSIONS BASED ON 7,000 HR PER YEAR FACILITY OPERATION ARE 0.821 LBS/HR. EMISSION LIMIT OF 0.052 LB OF METHANOL PER 1000 GAL OF BIODIESEL OUTPUT. THIS EMISSION LIMIT SHOULD BE DEMONSTRATED THROUGH A



STACK TEST WHEN THE PERMIT IS ISSUED.

ALSO, THE FACILITY OPERATES A COMBUSTION INSTALLATION CONSISTING OF A 350 HP DUAL-FIRED (NATURAL GAS & FUEL OIL) STEAM BOILER THAT PROVIDES LOW PRESSURE STEAM FOR THE BIODIESEL PRODUCTION AND METHANOL RECOVERY PROCESSES.

ALSO, THE FACILITY OPERATES A 1000 KW NON-EPA CERTIFIED GAS-POWERED ENGINE/GENERATOR THAT PROVIDES ELECTRICAL POWER FOR THE BIODIESEL PRODUCTION AND METHANOL RECOVERY PROCESSES.

THE FACILITY NOX EMISSIONS ARE CAPPED AT 22.5 TONS PER YEAR. THE FACILITY METHANOL EMISSIONS ARE CAPPED AT 2.9 TONS PER YEAR. THE FACILITY PRODUCTION OF BIODIESEL IS LIMITED TO 110,000,000 GALLONS PER YEAR.

THE FACILITY IS SUBJECT TO THE PROVISIONS OF STATE FACILITY REQUIREMENTS SPECIFIED UNDER 6NYCRR 201-7.2.

THE AIR STATE FACILITY PERMIT CONTAINS A LISTING OF THE APPLICABLE FEDERAL, STATE, AND COMPLIANCE MONITORING REQUIREMENTS FOR THE FACILITY.

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, the General Conditions specified and any Special Conditions included as part of this permit.

Permit Administrator:

JOHN F CRYAN NYSDEC 47-40 21ST ST LONG ISLAND CITY, NY 11101-5407

Authorized Signature:

\_\_\_ Date: \_\_\_ / \_\_\_ / \_\_\_\_



### Notification of Other State Permittee Obligations

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

The permittee expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the compliance permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in any compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.



# LIST OF CONDITIONS

### DEC GENERAL CONDITIONS General Provisions

Facility Inspection by the Department Relationship of this Permit to Other Department Orders and Determinations Applications for permit renewals, modifications and transfers Permit modifications, suspensions or revocations by the Department **Facility Level** Submission of application for permit modification or renewal -REGION 2 HEADQUARTERS



### DEC GENERAL CONDITIONS \*\*\*\* General Provisions \*\*\*\* GENERAL CONDITIONS - Apply to ALL Authorized Permits.

## Condition 1: Facility Inspection by the Department Applicable State Requirement: ECL 19-0305

#### Item 1.1:

The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3).

#### Item 1.2:

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

#### Item 1.3:

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

#### Condition 2: Relationship of this Permit to Other Department Orders and Determinations Applicable State Requirement: ECL 3-0301 (2) (m)

#### Item 2.1:

Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

#### Condition 3: Applications for permit renewals, modifications and transfers Applicable State Requirement: 6 NYCRR 621.11

#### Item 3.1:

The permittee must submit a separate written application to the Department for renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.

### Item 3.2:

The permittee must submit a renewal application at least 180 days before expiration of permits for Title V Facility Permits, or at least 30 days before expiration of permits for State Facility Permits.

### Item 3.3:

Permits are transferrable with the approval of the department unless specifically prohibited by the statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

DEC Permit Conditions FINAL



## Condition 4: Permit modifications, suspensions or revocations by the Department Applicable State Requirement: 6 NYCRR 621.13

# Item 4.1:

The Department reserves the right to exercise all available authority to modify, suspend, or revoke this permit in accordance with 6NYCRR Part 621. The grounds for modification, suspension or revocation include:

a) materially false or inaccurate statements in the permit application or supporting papers;
b) failure by the permittee to comply with any terms or conditions of the permit;
c) exceeding the scope of the project as described in the permit application;
d) newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations material the scope of the existing permit;

e) noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

#### \*\*\*\* Facility Level \*\*\*\*

#### Condition 5: Submission of application for permit modification or renewal - REGION 2 HEADQUARTERS Applicable State Requirement: 6 NYCRR 621.6 (a)

#### Item 5.1:

Submission of applications for permit modification or renewal are to be submitted to: NYSDEC Regional Permit Administrator Region 2 Headquarters Division of Environmental Permits 1 Hunters Point Plaza, 4740 21st Street Long Island City, NY 11101-5407 (718) 482-4997



#### Permit Under the Environmental Conservation Law (ECL)

# ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY

#### **IDENTIFICATION INFORMATION**

Permit Issued To:UNITED BIOFUELS INC 823 ELEVENTH AVE NEW YORK, NY 10019

PERMIT

Facility: UNITED BIOFUELS INC - 435 GREENPOINT AVE 435 GREENPOINT AVE BROOKLYN, NY 11222

Authorized Activity By Standard Industrial Classification Code: 2911 - PETROLEUM REFINING

Permit Effective Date: 04/08/2014

Permit Expiration Date: 04/07/2024



#### LIST OF CONDITIONS

#### FEDERALLY ENFORCEABLE CONDITIONS Emission Unit Level

#### EU=U-000B1,EP=00001,Proc=B02,ES=000B1

1 40CFR 60.48c(f)(1), NSPS Subpart Dc: Compliance Demonstration Facility Level

2 6 NYCRR Subpart 201-7: Facility Permissible Emissions

\*3 6 NYCRR Subpart 201-7: Capping Monitoring Condition

\*4 6 NYCRR Subpart 201-7: Capping Monitoring Condition

\*5 6 NYCRR Subpart 201-7: Capping Monitoring Condition

\*6 6 NYCRR Subpart 201-7: Capping Monitoring Condition

\*7 6 NYCRR Subpart 201-7: Capping Monitoring Condition

\*8 6 NYCRR Subpart 201-7: Capping Monitoring Condition

9 6 NYCRR 211.1: Air pollution prohibited

10 6 NYCRR 225-1.2 (b): Compliance Demonstration

11 6 NYCRR 225-1.2 (f): Compliance Demonstration

12 6 NYCRR 225-1.2 (g): Compliance Demonstration

13 6 NYCRR 225-1.2 (h): Compliance Demonstration

14 6 NYCRR 225-1.6 (f): Compliance Demonstration

15 6 NYCRR 227-1.3 (a): Compliance Demonstration

#### EU=U-000B1,Proc=B01,ES=000B1

16 40CFR 60.48c(g)(2), NSPS Subpart Dc: Alternative recordkeeping

#### EU=U-000G1,Proc=GG1,ES=00GG1

17 40CFR 60.4233(e), NSPS Subpart JJJJ: Compliance Demonstration

18 40CFR 63.6595(a)(7), Subpart ZZZZ: Compliance Dates for new RICE at an area source of HAP

#### EU=U-000G1,EP=00002,Proc=GG1,ES=00GG1

\*19 6 NYCRR Subpart 201-7: Capping Monitoring Condition

### EU=U-0BFPF

20 6 NYCRR 212.6 (a): Compliance Demonstration

#### STATE ONLY ENFORCEABLE CONDITIONS Facility Level

- 21 ECL 19-0301: Contaminant List
- 22 6 NYCRR 201-1.4: Malfunctions and start-up/shutdown activities
- 23 6 NYCRR Subpart 201-5: Emission Unit Definition
- 24 6 NYCRR 201-5.2 (c): Renewal deadlines for state facility permits
- 25 6 NYCRR 201-5.3 (c): Compliance Demonstration
- 26 6 NYCRR 211.2: Visible Emissions Limited

#### Emission Unit Level

- 27 6 NYCRR Subpart 201-5: Emission Point Definition By Emission Unit
- 28 6 NYCRR Subpart 201-5: Process Definition By Emission Unit

#### EU=U-0BFPF



29 6 NYCRR 212.4 (a): Compliance Demonstration30 6 NYCRR 212.4 (a): Compliance Demonstration

NOTE: \* preceding the condition number indicates capping.



# FEDERALLY ENFORCEABLE CONDITIONS \*\*\*\* Emission Unit Level \*\*\*\*

#### NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS This section contains terms and conditions which are federally enforceable. Permittees may also have other obligations under regulations of general applicability

#### Item A: Sealing - 6 NYCRR 200.5

The Commissioner may seal an air contamination source to prevent its operation if compliance with 6 NYCRR Chapter III is not met within the time provided by an order of the Commissioner issued in the case of the violation. Sealing means labeling or tagging a source to notify any person that operation of the source is prohibited, and also includes physical means of preventing the operation of an air contamination source without resulting in destruction of any equipment associated with such source, and includes, but is not limited to, bolting, chaining or wiring shut control panels, apertures or conduits associated with such source.

No person shall operate any air contamination source sealed by the Commissioner in accordance with this section unless a modification has been made which enables such source to comply with all requirements applicable to such modification.

Unless authorized by the Commissioner, no person shall remove or alter any seal affixed to any contamination source in accordance with this section.

#### Item B: Acceptable Ambient Air Quality - 6 NYCRR 200.6

Notwithstanding the provisions of 6 NYCRR Chapter III, Subchapter A, no person shall allow or permit any air contamination source to emit air contaminants in quantities which alone or in combination with emissions from other air contamination sources would contravene any applicable ambient air quality standard and/or cause air pollution. In such cases where contravention occurs or may occur, the Commissioner shall specify the degree and/or method of emission control required.

#### Item C: Maintenance of Equipment - 6 NYCRR 200.7

Any person who owns or operates an air contamination source which is equipped with an emission control device shall operate such device and keep it in a satisfactory state of maintenance and repair in accordance with ordinary and necessary practices, standards and procedures, inclusive of manufacturer's specifications,



required to operate such device effectively.

#### Item D: Unpermitted Emission Sources - 6 NYCRR 201-1.2

If an existing emission source was subject to the permitting requirements of 6 NYCRR Part 201 at the time of construction or modification, and the owner and/or operator failed to apply for a permit for such emission source then the following provisions apply:

(a) The owner and/or operator must apply for a permit for such emission source or register the facility in accordance with the provisions of Part 201.

(b) The emission source or facility is subject to all regulations that were applicable to it at the time of construction or modification and any subsequent requirements applicable to existing sources or facilities.

#### Item E: Emergency Defense - 6 NYCRR 201-1.5

An emergency constitutes an affirmative defense to an action brought for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

(a) The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An emergency occurred and that the facility owner

and/or

operator can identify the cause(s) of the emergency;

(2) The equipment at the permitted facility causing the emergency was at the time being properly operated;

(3) During the period of the emergency the facility owner and/or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

(4) The facility owner and/or operator notified the Department

within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

(b) In any enforcement proceeding, the facility owner and/or operator seeking to establish the occurrence of an emergency has the burden of proof.



(c) This provision is in addition to any emergency or upset provision contained in any applicable requirement.

#### Item F: Recycling and Salvage - 6 NYCRR 201-1.7

Where practical, any person who owns or operates an air contamination source shall recycle or salvage air contaminants collected in an air cleaning device according to the requirements of 6 NYCRR.

Item G: Prohibition of Reintroduction of Collected Contaminants to the Air - 6 NYCRR 201-1.8 No person shall unnecessarily remove, handle, or cause to be handled, collected air contaminants from an air cleaning device for recycling, salvage or disposal in a manner that would reintroduce them to the outdoor atmosphere.

### Item H: Proof of Eligibility for Sources Defined as Exempt Activities - 6 NYCRR 201-3.2 (a)

The owner and/or operator of an emission source or unit that is eligible to be exempt, may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to 6 NYCRR Subpart 201-3, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

Item I: Proof of Eligibility for Sources Defined as Trivial Activities - 6 NYCRR 201-3.3 (a) The owner and/or operator of an emission source or unit that is listed as being trivial in 6 NYCRR Part 201 may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to 6 NYCRR Subpart 201-3, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

#### Item J: Required Emission Tests - 6 NYCRR 202-1.1



An acceptable report of measured emissions shall be submitted, as may be required by the Commissioner, to ascertain compliance or noncompliance with any air pollution code, rule, or regulation. Failure to submit a report acceptable to the Commissioner within the time stated shall be sufficient reason for the Commissioner to suspend or deny an operating permit. Notification and acceptable procedures are specified in 6 NYCRR Subpart 202-1.

Item K: Open Fires Prohibitions - 6 NYCRR 215.2 Except as allowed by section 215.3 of 6 NYCRR Part 215, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.

#### Item L: Permit Exclusion - ECL 19-0305

The issuance of this permit by the Department and the receipt thereof by the Applicant does not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the Department may have against the Applicant for violations based on facts and circumstances alleged to have occurred or existed prior to the effective date of this permit, including, but not limited to, any enforcement action authorized pursuant to the provisions of applicable federal law, the Environmental Conservation Law of the State of New York (ECL) and Chapter III of the Official Compilation of the Codes, Rules and Regulations of the State of New York (NYCRR). The issuance of this permit also shall not in any way affect pending or future enforcement actions under the Clean Air Act brought by the United States or any person.

Item M: Federally Enforceable Requirements - 40 CFR 70.6 (b) All terms and conditions in this permit required by the Act or any applicable requirement, including any provisions designed to limit a facility's potential to emit, are enforceable by the Administrator and citizens under the Act. The Department has, in this permit, specifically designated any terms and conditions that are not required under the Act or under any of its applicable requirements as being enforceable under only state regulations.

#### FEDERAL APPLICABLE REQUIREMENTS The following conditions are federally enforceable.

Condition 1: Compliance Demonstration



#### Effective between the dates of 04/08/2014 and 04/07/2024

#### Applicable Federal Requirement:40CFR 60.48c(f)(1), NSPS Subpart Dc

#### Item 1.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: U-000B1	Emission Point: 00001
Process: B02	Emission Source: 000B1

Regulated Contaminant(s): CAS No: 007446-09-5 SULFUR DIOXIDE

#### Item 1.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

Fuel supplier certification shall include the following information for distillate oil:

i) The name of the oil supplier, and

ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in §60.41c. 60-Dc 41c defines distillate oil as fuel that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396-78, A standard Specification for Fuel Oils.

Monitoring Frequency: PER DELIVERY Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB) Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY \*\*\*\* Facility Level \*\*\*\*

Condition 2: Facility Permissible Emissions Effective between the dates of 04/08/2014 and 04/07/2024

#### Applicable Federal Requirement:6 NYCRR Subpart 201-7

#### Item 2.1:

The sum of emissions from the emission units specified in this permit shall not equal or exceed the following

Potential To Emit (PTE) rate for each regulated contaminant:

CAS No: 000067-56-1 PT Name: METHYL ALCOHOL

PTE: 5,800 pounds per year

CAS No: 0NY210-00-0

PTE: 45,000 pounds per year



#### Name: OXIDES OF NITROGEN

#### Condition 3: Capping Monitoring Condition Effective between the dates of 04/08/2014 and 04/07/2024

#### Applicable Federal Requirement:6 NYCRR Subpart 201-7

#### Item 3.1:

Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

6 NYCRR Subpart 201-6

#### Item 3.2:

Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

#### Item 3.3:

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

### Item 3.4:

On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

#### Item 3.5:

The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

#### Item 3.6:

The Compliance Demonstration activity will be performed for the facility: The Compliance Demonstration applies to:

Emission Unit: U-0BFPF	Emission Point: 00003
Regulated Contaminant(s): CAS No: 000067-56-1	METHYL ALCOHOL

#### Item 3.7:

Compliance Demonstration shall include the following monitoring:

Capping: Yes



Monitoring Type: INTERMITTENT EMISSION TESTING Monitoring Description: Emission limit of 0.821 lb/hr of methanol should be demonstrated through the stack test.

Parameter Monitored: METHYL ALCOHOL Upper Permit Limit: 0.821 pounds per hour Reference Test Method: EPA Method 308 Monitoring Frequency: SINGLE OCCURRENCE Averaging Method: 1 HOUR MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 4: Capping Monitoring Condition Effective between the dates of 04/08/2014 and 04/07/2024

#### Applicable Federal Requirement:6 NYCRR Subpart 201-7

#### Item 4.1:

Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

6 NYCRR Subpart 201-6 6 NYCRR Subpart 231-2

#### Item 4.2:

Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

#### Item 4.3:

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

#### Item 4.4:

On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

#### Item 4.5:

The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

#### Item 4.6:



The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):	
CAS No: 0NY210-00-0	OXIDES OF NITROGEN

#### Item 4.7:

Compliance Demonstration shall include the following monitoring:

### Capping: Yes Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE Monitoring Description:

The facility NOx (oxides of nitrogen) emissions are capped at 22.5 tons per year.

The owner or operator shall maintain a record of the quantity of each fuel fired at the facility. Also, the owner or operator shall calculate NOx emissions (based on the fuel quantity) using the following formula:

D(0.02) + G(90.78) + N1E(3400) + N(230.5) < 45,000 lbs/yr of Oxides of Nitrogen emissions.

Where:

D = 12-month rolling total of distillate oil fired (from boilers) in gals/yr; 0.02 - NOx emission factor in lbs/gal; G = 12-month rolling total of natural gas fired (from boilers) in MMSCF/yr 90.78 lb/mmscf - NOx emission factor based on the manufacturer's NOx emission factor of 0.089 lb/mmBtu and heat content of natural gas 1,020 Btus/scf; N1E = 12-month rolling total of natural gas fired (from exempt emergency engines) in MMSCF/yr; N = 12-month rolling total of natural gas fired (from engine, emission source 00GG1) in MMSCF/vr 230.5 lb/mmscf - NOx emission factor based on the manufacturer's NOx emission rate of 0.7 g/bhp-hr, heat content of natural gas 1,020 Btus/scf, and fuel consumption of 6,800 Btu/hp-hr.

Parameter Monitored: OXIDES OF NITROGEN Upper Permit Limit: 22.5 tons per year Monitoring Frequency: MONTHLY Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY Reporting Requirements: ANNUALLY (CALENDAR) Reports due 30 days after the reporting period. The initial report is due 1/30/2015. Subsequent reports are due every 12 calendar month(s).



### Condition 5: Capping Monitoring Condition Effective between the dates of 04/08/2014 and 04/07/2024

#### Applicable Federal Requirement:6 NYCRR Subpart 201-7

#### Item 5.1:

Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

6 NYCRR Subpart 201-6

#### Item 5.2:

Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

#### Item 5.3:

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

#### Item 5.4:

On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

### Item 5.5:

The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

#### Item 5.6:

The Compliance Demonstration activity will be performed for the facility: The Compliance Demonstration applies to:

Emission Unit: U-000B1	Emission Point: 00001
Process: B01	Emission Source: 000B1

Regulated Contaminant(s): CAS No: 0NY210-00-0 OXIDES OF NITROGEN

#### Item 5.7:

Compliance Demonstration shall include the following monitoring:

Capping: Yes Monitoring Type: INTERMITTENT EMISSION TESTING

> Air Pollution Control Permit Conditions Page 12 FINAL



Monitoring Description:

Emission limit of 90.78 lb/mmscf of NOx when firing natural gas in boiler should be demonstrated through the stack test.

Parameter Monitored: OXIDES OF NITROGEN Upper Permit Limit: 90.78 pounds per million cubic feet Reference Test Method: EPA Method 7 Monitoring Frequency: SINGLE OCCURRENCE Averaging Method: 1-HOUR AVERAGE Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

#### Condition 6: Capping Monitoring Condition Effective between the dates of 04/08/2014 and 04/07/2024

#### Applicable Federal Requirement:6 NYCRR Subpart 201-7

#### Item 6.1:

Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

6 NYCRR Subpart 201-6 6 NYCRR Subpart 231-2

#### Item 6.2:

Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

#### Item 6.3:

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

#### Item 6.4:

On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

#### Item 6.5:

The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

#### Item 6.6:

The Compliance Demonstration activity will be performed for the Facility.

Air Pollution Control Permit Conditions Page 13 FINAL



Regulated Contaminant(s): CAS No: 000067-56-1

METHYL ALCOHOL

### Item 6.7:

Compliance Demonstration shall include the following monitoring:

Capping: Yes Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE Monitoring Description:

The facility METHANOL emissions are capped at 2.9 tons per year.

The owner or operator shall maintain a record of the biodiesel output from the facility and calculate METHANOL emissions using the emission factor of 0.052 lb of METHANOL per 1000 gal of biodiesel output. Also, the owner or operator shall calculate METHANOL emissions using the following formula:

B x 0.052 = 5,800 lb/yr

Where:

B = 12-month rolling total of biodiesel fuel produced in 1000 gal/yr. 0.052 - emission factor for METHANOL in lb per 1000 gal of biodisel output (emission factor is proposed by Envar Services, Inc., the consultant for Metro Biofuels LLC, and based on modeling provided by Aspen Technology, Inc.).

Parameter Monitored: METHYL ALCOHOL Upper Permit Limit: 2.9 tons per year Monitoring Frequency: MONTHLY Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY Reporting Requirements: ANNUALLY (CALENDAR) Reports due 30 days after the reporting period. The initial report is due 1/30/2015. Subsequent reports are due every 12 calendar month(s).

#### **Condition 7: Capping Monitoring Condition** Effective between the dates of 04/08/2014 and 04/07/2024

### Applicable Federal Requirement: 6 NYCRR Subpart 201-7

### Item 7.1:

Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:





6 NYCRR Subpart 201-6

#### Item 7.2:

Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

#### Item 7.3:

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

### Item 7.4:

On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

#### Item 7.5:

The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

### Item 7.6:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):	
CAS No: 000067-56-1	METHYL ALCOHOL

### Item 7.7:

Compliance Demonstration shall include the following monitoring:

Capping: Yes Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS Monitoring Description: Production of biodiesel fuel is limited to 110,000,000 gallons per year.

Work Practice Type: PROCESS MATERIAL THRUPUT Process Material: FUEL Upper Permit Limit: 110,000,000 gallons per year Monitoring Frequency: MONTHLY Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY Reporting Requirements: ANNUALLY (CALENDAR) Reports due 30 days after the reporting period. The initial report is due 1/30/2015. Subsequent reports are due every 12 calendar month(s).



### Condition 8: Capping Monitoring Condition Effective between the dates of 04/08/2014 and 04/07/2024

#### Applicable Federal Requirement:6 NYCRR Subpart 201-7

#### Item 8.1:

Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

6 NYCRR Subpart 201-6

#### Item 8.2:

Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

#### Item 8.3:

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

#### Item 8.4:

On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

#### Item 8.5:

The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

#### Item 8.6:

The Compliance Demonstration activity will be performed for the facility: The Compliance Demonstration applies to:

Emission Unit: U-0BFPF	Emission Point: 00003
Regulated Contaminant(s): CAS No: 000067-56-1	METHYL ALCOHOL

#### Item 8.7:

Compliance Demonstration shall include the following monitoring:

Capping: Yes Monitoring Type: INTERMITTENT EMISSION TESTING

> Air Pollution Control Permit Conditions Page 16 FINAL



Monitoring Description:

Emission limit of 0.052 lb of methanol per 1000 gal of biodiesel output should be demonstrated through the stack test.

Parameter Monitored: METHYL ALCOHOL Upper Permit Limit: 0.052 pounds per 1000 gallons Reference Test Method: EPA Method 308 Monitoring Frequency: SINGLE OCCURRENCE Averaging Method: 1-HOUR AVERAGE Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

#### Condition 9: Air pollution prohibited Effective between the dates of 04/08/2014 and 04/07/2024

#### Applicable Federal Requirement:6 NYCRR 211.1

#### Item 9.1:

No person shall cause or allow emissions of air contaminants to the outdoor atmosphere of such quantity, characteristic or duration which are injurious to human, plant or animal life or to property, or which unreasonably interfere with the comfortable enjoyment of life or property. Notwithstanding the existence of specific air quality standards or emission limits, this prohibition applies, but is not limited to, any particulate, fume, gas, mist, odor, smoke, vapor, pollen, toxic or deleterious emission, either alone or in combination with others.

## Condition 10: Compliance Demonstration Effective between the dates of 04/08/2014 and 04/07/2024

### Applicable Federal Requirement:6 NYCRR 225-1.2 (b)

### Item 10.1:

The Compliance Demonstration activity will be performed for the Facility.

#### Item 10.2:

Compliance Demonstration shall include the following monitoring:

# Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

# Monitoring Description:

Owners and/or operators of any stationary combustion installation that fires either solid fuels or oil are limited to the firing of solid fuels or oil with a sulfur content listed in paragraph 6 NYCRR 225-1.(2)(b) through June 30, 2014.

Data collected pursuant to this Subpart must be tabulated and summarized in a form acceptable to the Department, and must be retained for at least five years. The owner of a Title V facility must furnish to the Department such records and summaries, on a semiannual calendar basis, within 30 days after the end of the semiannual period.



All other facility owners or distributors must submit these records and summaries upon request of the Department.

Work Practice Type: PARAMETER OF PROCESS MATERIAL Process Material: DISTILLATES - NUMBER 1 AND NUMBER 2 OIL Parameter Monitored: SULFUR CONTENT Upper Permit Limit: 0.2 percent by weight Monitoring Frequency: PER DELIVERY Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB) Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 11: Compliance Demonstration Effective between the dates of 04/08/2014 and 04/07/2024

#### Applicable Federal Requirement:6 NYCRR 225-1.2 (f)

#### Item 11.1:

The Compliance Demonstration activity will be performed for the Facility.

#### Item 11.2:

Compliance Demonstration shall include the following monitoring:

#### Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Owners and/or operators of commercial, industrial, or residential emission sources that fire number two heating oil on or after July 1, 2012 are limited to the purchase of number two heating oil with 0.0015 percent sulfur by weight or less. Compliance with this limit will be based on vendor certifications.

Data collected pursuant to this Subpart must be tabulated and summarized in a form acceptable to the Department, and must be retained for at least five years. The owner of a Title V facility must furnish to the Department such records and summaries, on a semiannual calendar basis, within 30 days after the end of the semiannual period. All other facility owners or distributors must submit these records and summaries upon request of the Department.

Work Practice Type: PARAMETER OF PROCESS MATERIAL Process Material: NUMBER 2 HEATING OIL Parameter Monitored: SULFUR CONTENT Upper Permit Limit: 0.0015 percent by weight Monitoring Frequency: PER DELIVERY Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB) Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION



# Condition 12: Compliance Demonstration Effective between the dates of 04/08/2014 and 04/07/2024

#### Applicable Federal Requirement:6 NYCRR 225-1.2 (g)

#### Item 12.1:

The Compliance Demonstration activity will be performed for the Facility.

#### Item 12.2:

Compliance Demonstration shall include the following monitoring:

#### Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Owners and/or operators of a stationary combustion installation that fires distillate oil other than number two heating oil are limited to the purchase of distillate oil with 0.0015 percent sulfur by weight or less on or after July 1, 2014. Compliance with this limit will be based on vendor certifications.

Data collected pursuant to this Subpart must be tabulated and summarized in a form acceptable to the Department, and must be retained for at least five years. The owner of a Title V facility must furnish to the Department such records and summaries, on a semiannual calendar basis, within 30 days after the end of the semiannual period. All other facility owners or distributors must submit these records and summaries upon request of the Department.

Work Practice Type: PARAMETER OF PROCESS MATERIAL Process Material: DISTILLATES - NUMBER 1 AND NUMBER 2 OIL Parameter Monitored: SULFUR CONTENT Upper Permit Limit: 0.0015 percent by weight Monitoring Frequency: PER DELIVERY Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB) Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

### Condition 13: Compliance Demonstration Effective between the dates of 04/08/2014 and 04/07/2024

#### Applicable Federal Requirement:6 NYCRR 225-1.2 (h)

#### Item 13.1:

The Compliance Demonstration activity will be performed for the Facility.

### Item 13.2:

Compliance Demonstration shall include the following monitoring:



# Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Owners and/or operators of a stationary combustion installations that fire distillate oil are limited to the firing of distillate oil with 0.0015 percent sulfur by weight or less on or after July 1, 2016. Compliance with this limit will be based on vendor certifications.

Data collected pursuant to this Subpart must be tabulated and summarized in a form acceptable to the Department, and must be retained for at least five years. The owner of a Title V facility must furnish to the Department such records and summaries, on a semiannual calendar basis, within 30 days after the end of the semiannual period. All other facility owners or distributors must submit these records and summaries upon request of the Department.

Work Practice Type: PARAMETER OF PROCESS MATERIAL Process Material: DISTILLATES - NUMBER 1 AND NUMBER 2 OIL Parameter Monitored: SULFUR CONTENT Upper Permit Limit: 0.0015 percent by weight Monitoring Frequency: PER DELIVERY Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB) Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

# Condition 14: Compliance Demonstration Effective between the dates of 04/08/2014 and 04/07/2024

### Applicable Federal Requirement:6 NYCRR 225-1.6 (f)

#### Item 14.1:

The Compliance Demonstration activity will be performed for the Facility.

#### Item 14.2:

Compliance Demonstration shall include the following monitoring:

#### Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

Facility owners subject to this Subpart must submit a written report of the fuel sulfur content exceeding the applicable sulfur-in-fuel limitation, measured emissions exceeding the applicable sulfur-in-fuel limitation, measured emissions exceeding the applicable equivalent emission rate, and the nature and cause of such exceedances if known, for each calendar quarter, within 30 days after the end of any quarterly period in which an exceedances takes place.

Data collected pursuant to this Subpart must be tabulated



and summarized in a form acceptable to the Department, and must be retained for at least five years. The owner of a Title V facility must furnish to the Department such records and summaries, on a semiannual calendar basis, within 30 days after the end of the semiannual period. All other facility owners or distributors must submit these records and summaries upon request of the Department.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 15: Compliance Demonstration Effective between the dates of 04/08/2014 and 04/07/2024

#### Applicable Federal Requirement:6 NYCRR 227-1.3 (a)

#### Item 15.1:

The Compliance Demonstration activity will be performed for the Facility.

#### Item 15.2:

Compliance Demonstration shall include the following monitoring:

#### Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

No person shall operate a stationary combustion installation which exhibits greater than 20 percent opacity (six minute average), except for one 6 minute period per hour of not more than 27 percent opacity. The Department reserves the right to perform or require the performance of a Method 9 opacity evaluation at any time during facility operation.

The permittee will conduct observations of visible emissions from the emission unit, process, etc. to which this condition applies at the monitoring frequency stated below while the process is in operation. The permittee will investigate, in a timely manner, any instance where there is cause to believe that visible emissions have the potential to exceed the opacity standard.

The permittee shall investigate the cause, make any necessary corrections, and verify that the excess visible emissions problem has been corrected. If visible emissions with the potential to exceed the standard continue, the permittee will conduct a Method 9 assessment within the next operating day of the sources associated with the potential noncompliance to determine the degree



of opacity and will notify the NYSDEC if the Method 9 test indicates that the opacity standard is not met.

Records of visible emissions observations (or any follow-up Method 9 tests), investigations and corrective actions will be kept on-site. Should the Department determine that permittee's record keeping format is inadequate to demonstrate compliance with this condition, it shall provide written notice to the permittee stating the inadequacies, and permittee shall have 90 days to revise its prospective record keeping format in a manner acceptable to the Department.

Parameter Monitored: OPACITY Upper Permit Limit: 20 percent Monitoring Frequency: DAILY Averaging Method: 6-MINUTE AVERAGE (METHOD 9) Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

#### Condition 16: Alternative recordkeeping Effective between the dates of 04/08/2014 and 04/07/2024

Applicable Federal Requirement:40CFR 60.48c(g)(2), NSPS Subpart Dc

### Item 16.1:

This Condition applies to Emission Unit: U-000B1 Process: B01

Emission Source: 000B1

Item 16.2: As an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO<sub>2</sub>standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

### Condition 17: Compliance Demonstration Effective between the dates of 04/08/2014 and 04/07/2024

### Applicable Federal Requirement:40CFR 60.4233(e), NSPS Subpart JJJJ

### Item 17.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: U-000G1 Process: GG1 Emission Source: 00GG1

#### Item 17.2:

Compliance Demonstration shall include the following monitoring:



Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description: If the facility starts up a new or reconstructed stationary RICE located at an area source of HAP emissions the facility must comply with the applicable emission limitations and operating limitations in 40 CFR 60 subpart JJJJ upon startup. Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 18: Compliance Dates for new RICE at an area source of HAP Effective between the dates of 04/08/2014 and 04/07/2024

#### Applicable Federal Requirement:40CFR 63.6595(a)(7), Subpart ZZZZ

#### Item 18.1:

This Condition applies to Emission Unit: U-000G1

Process: GG1

Emission Source: 00GG1

#### Item 18.2:

If the facility starts up a new or reconstructed stationary RICE located at an area source of HAP emissions after January 18, 2008, the facility must comply with the applicable emission limitations and operating limitations in subpart ZZZZ upon startup.

## Condition 19: Capping Monitoring Condition Effective between the dates of 04/08/2014 and 04/07/2024

#### Applicable Federal Requirement:6 NYCRR Subpart 201-7

#### Item 19.1:

Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

6 NYCRR Subpart 201-6

#### Item 19.2:

Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

### Item 19.3:

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

Air Pollution Control Permit Conditions Page 23 FINAL



#### Item 19.4:

On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

#### Item 19.5:

The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

#### Item 19.6:

The Compliance Demonstration activity will be performed for:

Emission Unit: U-000G1	Emission Point: 00002
Process: GG1	Emission Source: 00GG1

Regulated Contaminant(s):	
CAS No: 0NY210-00-0	OXIDES OF NITROGEN

#### Item 19.7:

Compliance Demonstration shall include the following monitoring:

Capping: Yes Monitoring Type: INTERMITTENT EMISSION TESTING Monitoring Description: NOx emission factor of 230.5 lb/mmscf for natural gas must be demonstrated through the stack test.

Parameter Monitored: OXIDES OF NITROGEN Upper Permit Limit: 230.5 pounds per million cubic feet Reference Test Method: EPA Method 7 Monitoring Frequency: SINGLE OCCURRENCE Averaging Method: 1-HOUR AVERAGE Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

#### Condition 20: Compliance Demonstration Effective between the dates of 04/08/2014 and 04/07/2024

#### Applicable Federal Requirement:6 NYCRR 212.6 (a)

#### Item 20.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: U-0BFPF

#### Item 20.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL



# DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

No person shall cause or allow emissions having an average opacity during any six consecutive minutes of 20 percent or greater from any process emission source, except only the emission of uncombined water. Compliance with this requirement shall be determined by the facility owner/operator conducting a daily survey of visible emissions when the process is in operation. If any visible emissions are identified, corrective action is required. The Department reserves the right to perform or require the performance of a Method 9 opacity evaluation

Parameter Monitored: OPACITY Upper Permit Limit: 20 percent Reference Test Method: EPA Method 9 Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION Averaging Method: 6-MINUTE AVERAGE (METHOD 9) Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY



#### STATE ONLY ENFORCEABLE CONDITIONS \*\*\*\* Facility Level \*\*\*\*

#### NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS This section contains terms and conditions which are not federally enforceable. Permittees may also have other obligations under regulations of general applicability

Item A:	Public Access to Recordkeeping for Facilities With State Facility Permits - 6 NYCRR 201-1.10 (a)
	Where facility owners and/or operators keep records
	pursuant to compliance with the requirements of 6 NYCRR
	Subpart 201-5.4, and/or the emission capping requirements
	of 6 NYCRR Subpart 201-7, the Department will make such
	records available to the public upon request in accordance
	with 6 NYCRR Part 616 - Public Access to Records.
	Facility owners and/or operators must submit the records
	required to comply with the request within sixty working
	days of written notification by the Department.
Itam D.	Comonal Duarisiana fan Stata Enfanoachla Damuit Tamus and

### Item B: General Provisions for State Enforceable Permit Terms and Condition - 6 NYCRR Part 201-5

Any person who owns and/or operates stationary sources shall operate and maintain all emission units and any required emission control devices in compliance with all applicable Parts of this Chapter and existing laws, and shall operate the facility in accordance with all criteria, emission limits, terms, conditions, and standards in this permit. Failure of such person to properly operate and maintain the effectiveness of such emission units and emission control devices may be sufficient reason for the Department to revoke or deny a permit.

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

### STATE ONLY APPLICABLE REQUIREMENTS The following conditions are state only enforceable.

#### Condition 21: Contaminant List Effective between the dates of 04/08/2014 and 04/07/2024

Air Pollution Control Permit Conditions Page 26 FINAL



#### Applicable State Requirement:ECL 19-0301

#### Item 21.1:

Emissions of the following contaminants are subject to contaminant specific requirements in this permit(emission limits, control requirements or compliance monitoring conditions).

CAS No: 000067-56-1 Name: METHYL ALCOHOL

CAS No: 007446-09-5 Name: SULFUR DIOXIDE

CAS No: 0NY210-00-0 Name: OXIDES OF NITROGEN

#### Condition 22: Malfunctions and start-up/shutdown activities Effective between the dates of 04/08/2014 and 04/07/2024

#### Applicable State Requirement: 6 NYCRR 201-1.4

#### Item 22.1:

(a) The facility owner or operator shall take all necessary and appropriate actions to prevent the emission of air pollutants that result in contravention of any applicable emission standard during periods of start-up, shutdown, or malfunction.

(b) The facility owner or operator shall compile and maintain records of all equipment malfunctions, maintenance, or start-up/shutdown activities when they can be expected to result in an exceedance of any applicable emission standard, and shall submit a report of such activities to the department when requested to do so, or when so required by a condition of a permit issued for the corresponding air contamination source. Such reports shall state whether any violations occurred and, if so, whether they were unavoidable, include the time, frequency and duration of the maintenance and/or start-up/shutdown activities, and an estimate of the emission rates of any air contaminants released. Such records shall be maintained for a period of at least five years and made available for review to department representatives upon request. Facility owners or operators subject to continuous stack monitoring and quarterly reporting requirements need not submit additional reports for equipment maintenance or start-up/shutdown activities for the facility to the department.

(c) In the event that emissions of air contaminants in excess of any emission standard in this Subchapter occur due to a malfunction, the facility owner or operator shall compile and maintain records of the malfunction and notify the department as soon as possible during normal working hours, but not later than two working days after becoming aware that the malfunction occurred. When requested by the department, the facility owner or operator shall submit a written report to the department describing the malfunction, the corrective action taken, identification of air contaminants, and an estimate of the emission rates.

(d) The department may also require the owner or operator to include, in reports described under Subdivisions (b) and (c) of this Section, an estimate of the maximum ground level concentration of each air contaminant emitted and the effect of such emissions.



(e) A violation of any applicable emission standard resulting from start-up, shutdown, or malfunction conditions at a permitted or registered facility may not be subject to an enforcement action by the department and/or penalty if the department determines, in its sole discretion, that such a violation was unavoidable. The actions and recordkeeping and reporting requirements listed above must be adhered to in such circumstances.

### Condition 23: Emission Unit Definition Effective between the dates of 04/08/2014 and 04/07/2024

#### Applicable State Requirement:6 NYCRR Subpart 201-5

#### Item 23.1:

The facility is authorized to perform regulated processes under this permit for: Emission Unit: U-000B1

Emission Unit Description:

A 350 HP DUAL-FIRED (NATURAL GAS & FUEL OIL) STEAM BOILER THAT PROVIDES LOW PRESSURE STEAM FOR THE BIODIESEL PRODUCTION AND METHANOL RECOVERY PROCESSES.

Building(s): BH

#### Item 23.2:

The facility is authorized to perform regulated processes under this permit for: Emission Unit: U-000G1

Emission Unit Description:

A 1000 KW GAS-POWERED GENERATOR THAT PROVIDES ELECTRICAL POWER FOR THE BIODIESEL PRODUCTION AND METHANOL RECOVERY PROCESSES.

Building(s): SB

#### Item 23.3:

The facility is authorized to perform regulated processes under this permit for: Emission Unit: U-0BFPF

Emission Unit Description:

BIODIESEL FUEL PRODUCTION FACILITY, CONSISTING OF THE FOLLOWING PRODUCTION SYSTEM PROCESSES: 1. BIODIESEL FUEL REACTOR SYSTEM, WASH SYSTEM AND FLASH SYSTEM 1 (BF1) - THE REACTOR SYSTEM PRODUCES BIODIESEL FUEL AND GLYCERIN FROM VEGETABLE OIL, METHANOL AND CATALYST. IT CONSISTS OF TWO REACTOR VESSELS AND TWO COMMON (WITH BF2) COALESCERS TO REMOVE GLYCERIN CO-PRODUCT AND CATALYST FROM THE BIODIESEL FUEL. THE WASH SYSTEM USES WATER TO REMOVE PART OF THE EXCESS METHANOL FROM THE BIODIESEL FUEL. SOME WATER AND METHANOL IS RECYCLED BACK TO THE WASH SYSTEM AND SOME IS SENT TO METHANOL



RECOVERY. THE WASH SYSTEM CONSIST OF TWO WASH MIXERS AND TWO COMMON (WITH BF2) WASH DECANTERS. THE FLASH SYSTEM RECOVERS THE REMAINING EXCESS METHANOL FROM THE **BIODIESEL FUEL. IT CONSISTS OF ONE** EVAPORATOR AND ONE COMMON (WITH BF2) SURGE TANK. THE EVAPORATOR VENTS TO TWO REFRIGERATED WATER CONDENSERS. THE SECOND REFRIGERATED WATER CONDENSER TIES INTO A COMMON VENT HEADER. 2. BIODIESEL FUEL REACTOR SYSTEM, WASH SYSTEM AND FLASH SYSTEM 2 (BF2) - THE REACTOR SYSTEM PRODUCES BIODIESEL FUEL AND GLYCERIN FROM VEGETABLE OIL. METHANOL AND CATALYST. IT CONSISTS OF TWO REACTOR VESSELS AND TWO COMMON (WITH BF1) COALESCERS TO REMOVE GLYCERIN CO-PRODUCT AND CATALYST FROM THE BIODIESEL FUEL. THE WASH SYSTEM USES WATER TO REMOVE PART OF THE EXCESS METHANOL FROM THE BIODIESEL FUEL. SOME WATER AND METHANOL IS RECYCLED BACK TO THE WASH SYSTEM AND SOME IS SENT TO METHANOL RECOVERY. THE WASH SYSTEM CONSISTS OF TWO WASH MIXERS AND TWO COMMON (WITH BF1) WASH DECANTERS. THE FLASH SYSTEM RECOVERS THE REMAINING EXCESS METHANOL FROM THE BIODIESEL FUEL. IT CONSISTS OF ONE EVAPORATOR AND ONE COMMON (WITH BF1) SURGE TANK. THE EVAPORATOR VENTS TO TWO REFRIGERATED WATER CONDENSERS. THE SECOND REFRIGERATED WATER CONDENSER TIES INTO A COMMON VENT HEADER. 3. FIRST STAGE GLYCERIN FLASH SYSTEM (GF1) - TAKES WARM GLYCERIN CO-PRODUCT FROM SECONDARY BIODIESEL COALESCER (AT BF1 AND BF2) AND REMOVES METHANOL. IT CONSISTS OF ONE EVAPORATOR AND ONE SURGE TANK. EVAPORATOR VENTS TO ONE CONDENSER AND ONE REFRIGERATED WATER CONDENSER IN SERIES THAT RECOVER METHANOL. REFRIGERATED WATER CONDENSER TIES INTO A COMMON VENT HEADER.

4. SECOND STAGE GLYCERIN FLASH SYSTEM (GF2A - GF2C) - TAKES GLYCERIN CO-PRODUCT FROM FIRST STAGE EVAPORATOR (AT GF1) AND REMOVES ADDITIONAL METHANOL. IT CONSISTS OF TWO HEAT EXCHANGERS IN SERIES FOR ENERGY RECOVERY, ONE EVAPORATOR AND TWO SURGE TANKS. HEAT EXCHANGERS AND EVAPORATOR VENT TO TWO CONDENSERS AND ONE REFRIGERATED WATER CONDENSER IN SERIES THAT RECOVER METHANOL. REFRIGERATED WATER CONDENSER



TIES INTO A COMMON VENT HEADER. 5. GLYCERIN DISTILLATION SYSTEM (GD1A-GD1B) - TAKES GLYCERIN CO-PRODUCT FROM SECOND STAGE EVAPORATOR (AT GF2) AND PRODUCES FINISHED GLYCERIN BY DISTILLING OUT TRACE METHANOL. IT CONSISTS OF ONE EVAPORATOR, ONE DISTILLATION COLUMN, ONE REFLUX TANK AND ONE SURGE TANK. EVAPORATOR VENTS TO REFRIGERATED WATER CONDENSER. REFRIGERATED WATER CONDENSER AND DISTILLATION COLUMN VENT TO SECOND REFRIGERATED WATER CONDENSER THAT RECOVERS TRACE METHANOL. SECOND REFRIGERATED WATER CONDENSER TIES INTO A COMMON VENT HEADER. 6. METHANOL RECOVERY SYSTEM (MR1) - TAKES MIXTURE OF METHANOL AND WATER FROM ACID WASH DECANTER AND FLASH SURGE TANK (AT BF1 AND BF2), THEN SEPARATES METHANOL FROM WATER. IT CONSISTS OF ONE DISTILLATION COLUMN AND ONE REFLUX TANK. DISTILLATION COLUMN VENTS TO ONE CONDENSER AND ONE **REFRIGERATED CONDENSER IN SERIES THAT** RECOVER METHANOL. REFRIGERATED CONDENSER

Building(s): PA

Condition 24: Renewal deadlines for state facility permits Effective between the dates of 04/08/2014 and 04/07/2024

TIES INTO A COMMON VENT HEADER.

Applicable State Requirement:6 NYCRR 201-5.2 (c)

### Item 24.1:

The owner or operator of a facility having an issued state facility permit shall submit a complete application at least 180 days, but not more than eighteen months, prior to the date of permit expiration for permit renewal purposes.

Condition 25: Compliance Demonstration Effective between the dates of 04/08/2014 and 04/07/2024

### Applicable State Requirement:6 NYCRR 201-5.3 (c)

### Item 25.1:

The Compliance Demonstration activity will be performed for the Facility.

### Item 25.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

Air Pollution Control Permit Conditions Page 30 FINAL



Any reports or submissions required by this permit shall be submitted to the Regional Air Pollution Control Engineer (RAPCE) at the following address:

Division of Air Resources NYS Dept. of Environmental Conservation Region 2 47-40 21st St. Long Island City, NY 11101

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 26: Visible Emissions Limited Effective between the dates of 04/08/2014 and 04/07/2024

## Applicable State Requirement:6 NYCRR 211.2

## Item 26.1:

Except as permitted by a specific part of this Subchapter and for open fires for which a restricted burning permit has been issued, no person shall cause or allow any air contamination source to emit any material having an opacity equal to or greater than 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.

#### \*\*\*\* Emission Unit Level \*\*\*\*

## Condition 27: Emission Point Definition By Emission Unit Effective between the dates of 04/08/2014 and 04/07/2024

#### Applicable State Requirement: 6 NYCRR Subpart 201-5

## Item 27.1:

The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: U-000B1

Emission Point: 00001		
Height (ft.): 36	Diameter (in.): 23	
NYTMN (km.): 4509.71	NYTME (km.): 589.35	Building: BH

## Item 27.2:

The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: U-000G1

Emission Point: 00002 Height (ft.): 40 Diameter (in.): 12

> Air Pollution Control Permit Conditions Page 31 FINAL



NYTMN (km.): 4509.69 NYTME (km.): 589.35 Building: SB

#### Item 27.3:

The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: U-0BFPF

Emission Point:	00003		
Height (ft	t.): 48	Diameter (in.): 3	
NYTMN	(km.): 4509.75	NYTME (km.): 589.39	Building: PA

## Condition 28: Process Definition By Emission Unit Effective between the dates of 04/08/2014 and 04/07/2024

#### Applicable State Requirement: 6 NYCRR Subpart 201-5

#### Item 28.1:

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit:U-000B1Process:B01Source Classification Code: 1-02-006-02Process Description:Firing natural gas in boilers.

Emission Source/Control: 000B1 - Combustion Design Capacity: 14.6 million Btu per hour

#### Item 28.2:

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-000B1 Process: B02 Source Classification Code: 1-02-005-02 Process Description: Firing #2 fuel oil in boilers.

Emission Source/Control: 000B1 - Combustion Design Capacity: 14.6 million Btu per hour

## Item 28.3:

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit:U-000G1Process:GG1Source Classification Code: 2-01-002-02Process Description:Firing natural gas in 1,000 kW generator.

Emission Source/Control: 00GG1 - Combustion Design Capacity: 1,000 kilowatts

## Item 28.4:

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit:U-0BFPFProcess:BF1Source Classification Code:3-06-999-99Process Description:

Air Pollution Control Permit Conditions Page 32 FINAL



PRIMARY REACTOR (R151A) RECEIVES VEGETABLE OIL, METHANOL AND CATALYST FOR PROCESSING. PRIMARY COALESCER (F154) SEPARATES BIODIESEL FUEL FROM GLYCERIN CO-PRODUCT. PROCESS IS REPEATED IN SECONDARY REACTOR (152A) AND SECONDARY COALESCER (F156). GLYCERIN IS CONVEYED TO FIRST STAGE GLYCERIN FLASH SYSTEM (PROCESS GF1). BIODIESEL IS WASHED IN ACID WASH MIXER (M171A) TO REMOVE SOME EXCESS METHANOL. WATER AND SOME METHANOL IS REMOVED IN ACID WASH DECANTER (V173) AND CONVEYED TO METHANOL RECOVERY SYSTEM (PROCESS MR1). PROCESS IS REPEATED IN WATER WASH MIXER (V172A) AND WATER WASH DECANTER (V174). THIS WATER AND METHANOL IS RECYCLED TO THE ACID WASH MIXER (M171A). REMAINING METHANOL IS REMOVED FROM BIODIESEL FUEL IN FLASH EVAPORATOR (V194). BIODIESEL FUEL IS CONVEYED TO FINISHED PRODUCT STORAGE. SEPARATED METHANOL AND TRACE WATER IS COLLECTED BY FLASH CONDENSER (H192) AND FLASH VENT CONDENSER (H193) IN SERIES, DROPPED INTO FLASH SURGE TANK (T197), AND CONVEYED TO METHANOL RECOVERY SYSTEM (PROCESS MR1).

Emission Source/Control: 0H192 - Control Control Type: REFRIGERATED CONDENSER

Emission Source/Control: 0H193 - Control Control Type: REFRIGERATED CONDENSER

Emission Source/Control: 0F154 - Process Design Capacity: 150 pounds per square inch gauge

Emission Source/Control: 0F156 - Process Design Capacity: 150 pounds per square inch gauge

Emission Source/Control: 0T197 - Process Design Capacity: 480 gallons

Emission Source/Control: 0V173 - Process Design Capacity: 150 pounds per square inch gauge

Emission Source/Control: 0V174 - Process Design Capacity: 150 pounds per square inch gauge

Emission Source/Control: 0V194 - Process Design Capacity: 15 pounds per square inch gauge

Emission Source/Control: M171A - Process

Air Pollution Control Permit Conditions Page 33 FINAL



Design Capacity: 150 pounds per square inch gauge

Emission Source/Control: M172A - Process Design Capacity: 150 pounds per square inch gauge

Emission Source/Control: R151A - Process Design Capacity: 150 pounds per square inch gauge

Emission Source/Control: R152A - Process Design Capacity: 150 pounds per square inch gauge

## Item 28.5:

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-0BFPF Process: BF2 Source Classification Code: 3-06-999-99 Process Description: PRIMARY REACTOR (R151B) RECEIVES VEGETABLE OIL, METHANOL AND CATALYST FOR PROCESSING. PRIMARY COALESCER (F154) SEPARATES BIODIESEL FUEL FROM GLYCERIN CO-PRODUCT. PROCESS IS REPEATED IN SECONDARY REACTOR (R152B) AND SECONDARY COALESCER (F156). GLYCERIN IS CONVEYED TO FIRST STAGE GLYCERIN FLASH SYSTEM (PROCESS GF1). BIODIESEL IS WASHED IN ACID WASH MIXER (M171B) TO REMOVE SOME EXCESS METHANOL. WATER AND SOME METHANOL IS REMOVED IN ACID WASH DECANTER (V173) AND CONVEYED TO METHANOL RECOVERY SYSTEM (PROCESS MR1). PROCESS IS REPEATED IN WATER WASH MIXER (V172B) AND WATER WASH DECANTER (V174). THIS WATER AND METHANOL IS RECYCLED TO THE ACID WASH MIXER (M171B). REMAINING METHANOL IS REMOVED FROM BIODIESEL FUEL IN FLASH EVAPORATOR (V294). BIODIESEL FUEL IS CONVEYED TO FINISHED PRODUCT STORAGE. SEPARATED METHANOL AND TRACE WATER IS COLLECTED BY FLASH CONDENSER (H292) AND FLASH VENT CONDENSER (H293) IN SERIES, DROPPED INTO FLASH SURGE TANK (T197), AND CONVEYED TO METHANOL RECOVERY SYSTEM (PROCESS MR1).

Emission Source/Control: 0H292 - Control Control Type: REFRIGERATED CONDENSER

Emission Source/Control: 0H293 - Control Control Type: REFRIGERATED CONDENSER

Emission Source/Control: 0F154 - Process Design Capacity: 150 pounds per square inch gauge



Emission Source/Control: 0F156 - Process Design Capacity: 150 pounds per square inch gauge

Emission Source/Control: 0T197 - Process Design Capacity: 480 gallons

Emission Source/Control: 0V173 - Process Design Capacity: 150 pounds per square inch gauge

Emission Source/Control: 0V174 - Process Design Capacity: 150 pounds per square inch gauge

Emission Source/Control: 0V294 - Process Design Capacity: 15 pounds per square inch gauge

Emission Source/Control: M171B - Process Design Capacity: 150 pounds per square inch gauge

Emission Source/Control: M172B - Process Design Capacity: 150 pounds per square inch gauge

Emission Source/Control: R151B - Process Design Capacity: 150 pounds per square inch gauge

Emission Source/Control: R152B - Process Design Capacity: 150 pounds per square inch gauge

## Item 28.6:

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-0BFPF Process: D1A Source Classification Code: 3-06-999-99 Process Description: THIRD STAGE EVAPORATOR (V523) REMOVES TRACE METHANOL FROM GLYCERIN CO-PRODUCT GENERATED BY FINAL STEP OF SECOND STAGE GLYCERIN FLASH SYSTEM (PROCESS F2C). GLYCERIN CO-PRODUCT IS CONVEYED TO NEXT STEP (PROCESS D2A). EVAPORATED MATERIALS ARE CONVEYED TO THIRD STAGE CONDENSER (H524). CONDENSATE IS RECYCLED TO THE FIRST STAGE GLYCERIN FLASH SYSTEM (PROCESS GF1). METHANOL VAPORS ARE COMBINED WITH THOSE FROM NEXT STEP (PROCESS D2A), RECOVERED BY VACUUM VENT AFTER CONDENSER (H515), DROPPED INTO FIRST STAGE SURGE TANK (T507), AND RETURNED TO RAW MATERIAL STORAGE.

Emission Source/Control: 0H515 - Control Control Type: REFRIGERATED CONDENSER



Emission Source/Control: 0H524 - Control Control Type: REFRIGERATED CONDENSER

Emission Source/Control: 0T507 - Process Design Capacity: 100 gallons

Emission Source/Control: 0V523 - Process Design Capacity: 100 inches of mercury

#### Item 28.7:

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-0BFPF Process: D1B Source Classification Code: 3-01-176-34 Process Description: GLYCERIN DISTILLATION COLUMN (C528) PRODUCES FINISHED GLYCERIN FROM GLYCERIN CO-PRODUCT GENERATED BY PREVIOUS STEP (PROCESS D1A). FINISHED GLYCERIN IS DROPPED INTO REFLUX TANK (T532), AND RETURNED TO RAW MATERIAL STORAGE. METHANOL VAPORS ARE COMBINED WITH THOSE FROM PREVIOUS STEP (PROCESS D1A), RECOVERED BY VACUUM VENT AFTER CONDENSER (H515), DROPPED INTO FIRST STAGE SURGE TANK (T507), AND RETURNED TO RAW MATERIAL STORAGE.

Emission Source/Control: 0H515 - Control Control Type: REFRIGERATED CONDENSER

Emission Source/Control: 0C528 - Process Design Capacity: 50 pounds per square inch gauge

Emission Source/Control: 0T507 - Process Design Capacity: 100 gallons

Emission Source/Control: 0T532 - Process Design Capacity: 500 gallons

#### Item 28.8:

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-0BFPF Process: F2A Source Classification Code: 3-06-999-99 Process Description: GLYCERIN HEAT EXCHANGER 1 (H510) COOLS GLYCERIN CO-PRODUCT GENERATED BY FIRST STAGE GLYCERIN FLASH SYSTEM (PROCESS GF1) AND REMOVES ADDITIONAL METHANOL. GLYCERIN CO-PRODUCT IS CONVEYED TO NEXT STEP (PROCESS F2B). METHANOL VAPORS ARE

> Air Pollution Control Permit Conditions Page 36 FINAL



RECOVERED BY SECOND STAGE PARTIAL CONDENSER (H513), SECOND STAGE TOTAL CONDENSER (H514) AND VACUUM VENT AFTER CONDENSER (H515) IN SERIES, DROPPED INTO EITHER FIRST STAGE SURGE TANK (T507) OR SECOND STAGE SURGE TANK (T518), AND RETURNED TO RAW MATERIAL STORAGE.

Emission Source/Control: 0H513 - Control Control Type: TUBE AND SHELL CONDENSER

Emission Source/Control: 0H514 - Control Control Type: TUBE AND SHELL CONDENSER

Emission Source/Control: 0H515 - Control Control Type: REFRIGERATED CONDENSER

Emission Source/Control: 0H510 - Process Design Capacity: 1,182 square feet

Emission Source/Control: 0T507 - Process Design Capacity: 100 gallons

Emission Source/Control: 0T518 - Process Design Capacity: 100 gallons

## Item 28.9:

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-0BFPF Process: F2B Source Classification Code: 3-06-999-99 Process Description: GLYCERIN HEAT EXCHANGER 2 (H511) FURTHER COOLS GLYCERIN CO-PRODUCT GENERATED BY PREVIOUS STEP (PROCESS F2A) AND REMOVES ADDITIONAL METHANOL. GLYCERIN CO-PRODUCT IS CONVEYED TO NEXT STEP (PROCESS F2C). METHANOL VAPORS ARE RECOVERED BY SECOND STAGE PARTIAL CONDENSER (H513), SECOND STAGE TOTAL CONDENSER (H514) AND VACUUM VENT AFTER CONDENSER (H515) IN SERIES, DROPPED INTO EITHER FIRST STAGE SURGE TANK (T507) OR SECOND STAGE SURGE TANK (T518), AND RETURNED TO RAW MATERIAL STORAGE.

Emission Source/Control: 0H513 - Control Control Type: TUBE AND SHELL CONDENSER

Emission Source/Control: 0H514 - Control Control Type: TUBE AND SHELL CONDENSER

Emission Source/Control: 0H515 - Control



Control Type: REFRIGERATED CONDENSER

Emission Source/Control: 0H511 - Process Design Capacity: 255 square feet

Emission Source/Control: 0T507 - Process Design Capacity: 100 gallons

Emission Source/Control: 0T518 - Process Design Capacity: 100 gallons

## Item 28.10:

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-0BFPF Process: F2C Source Classification Code: 3-06-999-99 Process Description: SECOND STAGE EVAPORATOR (V516) REMOVES ADDITIONAL METHANOL FROM GLYCERIN CO-PRODUCT GENERATED BY PREVIOUS STEP (PROCESS F2B). GLYCERIN CO-PRODUCT IS CONVEYED TO GLYCERIN DISTILLATION SYSTEM (PROCESS GD1) FOR ADDITIONAL PROCESSING. EVAPORATED METHANOL IS RECOVERED BY SECOND STAGE PARTIAL CONDENSER (H513), SECOND STAGE TOTAL CONDENSER (H514) AND VACUUM VENT AFTER CONDENSER (H515) IN SERIES, DROPPED INTO TANK (T518), AND RETURNED TO RAW SECOND STAGE SURGE TANK (T518), AND RETURNED TO RAW MATERIAL STORAGE.

Emission Source/Control: 0H513 - Control Control Type: TUBE AND SHELL CONDENSER

Emission Source/Control: 0H514 - Control Control Type: TUBE AND SHELL CONDENSER

Emission Source/Control: 0H515 - Control Control Type: REFRIGERATED CONDENSER

Emission Source/Control: 0T507 - Process Design Capacity: 100 gallons

Emission Source/Control: 0T518 - Process Design Capacity: 100 gallons

Emission Source/Control: 0V516 - Process Design Capacity: 40 pounds per square inch gauge

## Item 28.11:

This permit authorizes the following regulated processes for the cited Emission Unit:



Emission Unit: U-0BFPF Process: GF1 Source Classification Code: 3-06-999-99 Process Description: FIRST STAGE EVAPORATOR (V505) REMOVES METHANOL FROM WARM GLYCERIN CO-PRODUCT GENERATED BY BOTH REACTOR SYSTEMS (PROCESSES BF1 AND BF2). WARM GLYCERIN CO-PRODUCT IS CONVEYED TO SECOND STAGE GLYCERIN FLASH SYSTEM (PROCESS F2A) FOR ADDITIONAL PROCESSING. EVAPORATED METHANOL IS RECOVERED BY FIRST STAGE AFTER CONDENSER (H503) AND FIRST STAGED VENT CONDENSER (H504) IN SERIES, DROPPED INTO FIRST STAGE SURGE TANK (T507). AND RETURNED TO RAW MATERIAL STORAGE.

Emission Source/Control: 0H503 - Control Control Type: TUBE AND SHELL CONDENSER

Emission Source/Control: 0H504 - Control Control Type: REFRIGERATED CONDENSER

Emission Source/Control: 0T507 - Process Design Capacity: 100 gallons

Emission Source/Control: 0V505 - Process Design Capacity: 75 pounds per square inch gauge

## Item 28.12:

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-0BFPF Process: MR1 Source Classification Code: 3-06-999-99 Process Description: METHANOL DISTILLATION COLUMN (C373) SEPARATES METHANOL FROM WASH WATER GENERATED BY BOTH REACTOR SYSTEMS (PROCESSES BF1 AND BF2). WATER IS RECYCLED TO THE BIODIESEL FUEL WASH SYSTEMS (PROCESSES BF1 AND BF2). SEPARATED METHANOL IS RECOVERED BY OVERHEAD CONDENSER (H380) AND VENT CONDENSER (H381) IN SERIES, DROPPED INTO METHANOL RECOVERY REFLUX TANK (T382), AND RETURNED TO RAW MATERIAL STORAGE.

Emission Source/Control: 0H380 - Control Control Type: TUBE AND SHELL CONDENSER

Emission Source/Control: 0H381 - Control Control Type: REFRIGERATED CONDENSER



Emission Source/Control: 0C373 - Process Design Capacity: 30 pounds per square inch gauge

Emission Source/Control: 0T382 - Process Design Capacity: 100 gallons

## Condition 29: Compliance Demonstration Effective between the dates of 04/08/2014 and 04/07/2024

## Applicable State Requirement:6 NYCRR 212.4 (a)

#### Item 29.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: U-0BFPF

Regulated Contaminant(s): CAS No: 000067-56-1 METHYL ALCOHOL

#### Item 29.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

No person shall cause or allow emissions that exceed the applicable permission rate as determined from Table 2, Table 3, or Table 4 of 6NYCRR Part 212 for the environmental rating issued by the commissioner.

Parameter Monitored: METHYL ALCOHOL Upper Permit Limit: 0.821 pounds per hour Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION Averaging Method: 1-HOUR AVERAGE Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 30: Compliance Demonstration Effective between the dates of 04/08/2014 and 04/07/2024

## Applicable State Requirement:6 NYCRR 212.4 (a)

#### Item 30.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: U-0BFPF

Regulated Contaminant(s): CAS No: 000067-56-1 METHYL ALCOHOL

#### Item 30.2:

Compliance Demonstration shall include the following monitoring:

Air Pollution Control Permit Conditions Page 40 FINAL



## Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

No person shall cause or allow emissions that exceed the applicable permission rate as determined from Table 2, Table 3, or Table 4 of 6NYCRR Part 212 for the environmental rating issued by the commissioner.

Parameter Monitored: METHYL ALCOHOL Lower Permit Limit: 99 percent reduction Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION Averaging Method: 1-HOUR AVERAGE Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

