



PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air State Facility
Permit ID: 9-1402-00200/00048
Effective Date: 05/16/2008 Expiration Date: No expiration date

Permit Issued To: RIVERWRIGHT LLC
120 CHILDS ST
BUFFALO, NY 14203

Contact: KEVIN TOWNSELL
RIVERWRIGHT LLC
120 CHILDS ST
BUFFALO, NY 14203
(716) 563-1781

Facility: RIVERWRIGHT
120 CHILDS ST
BUFFALO, NY 14203

Description:

RiverWright Energy, LLC is proposing to construct a 110-million gallon per year (mmgpy) dry mill ethanol production facility at 120 Childs, the former Con Agra plant, in Buffalo, New York. This is a state facility permit to construct and operate the plant. In addition to producing ethanol from number 2 yellow corn, an animal feed called distillers dried grain with solubles (DDGS), will be produced as a byproduct. Facility operations include grain receiving by ship, truck, or rail, storage and milling, a mash preparation process, fermentation process, distillation process, dehydration and evaporation processes, and a DDGS drying process. The facility has chosen to limit emission of Nitrogen Oxides (NO_x), Carbon Monoxide (CO), and Volatile Organic Compounds (VOC's) to below major facility thresholds. They are also limiting emissions to "cap" out of the requirements of Title V permitting, for CO and NO_x with an applicability threshold of 100 tpy each, and from New Source Review, 6 NYCRR part 231-2 for emissions of NO_x and VOC, with an applicability threshold of 100 tpy and 50 tpy respectively. The permit also includes a limit on emissions of acrolein, formaldehyde, and phosphine to meet the requirements of the New York State air toxics program.

The plan for grain delivery is 80% lake freighter and 20% rail delivery. The storage area consists of 4 grain elevators with a maximum storage capacity of 11.6 million bushels of corn. The grain handling operations are subject to New Source Performance Standards (NSPS) 40 cfr 60.300 subpart DD, Standards of Performance for grain elevators. Emissions from ship or rail unloading, and all grain handling and storage operations will vent through baghouses to control particulate emissions. NSPS standards limit particulate emissions from control equipment to 0.01 grains per dscf and 0% opacity. Riverwright will equip baghouses with polytetrafluorethylene (PTFE) membrane on polyester bags, or equivalent, designed to meet 0.00005gr/dscf for additional control of particulates. The facility is also installing upgraded mist eliminators on cooling towers to minimize fine particulate carry out and will be designed for plume abatement.

The mash preparation process is carried out in two production lines of 50 million gallons per year (mmgpy) each. The process begins by blending the corn meal from the milling area with warm



process condensate, steam, alpha amylase, ammonium hydroxide and various recycled process liquids. The liquified mash is then pumped through a beer/mash exchanger prior to entering the fermenting process, distillation process, dehydration/deacidification process and finally ethanol storage and loadout.

The solids from the fermentation process require further processing prior to being sold as DDGS. The wet grain is first sent to centrifuges to remove most of the liquid. The solids from the centrifuges and syrup from the process are conveyed to two drying systems. The outlet from the dryers first vent to two cyclones. The gases are then directed to one of two Anguil Environmental Systems Regenerative Thermal Oxidizers (RTO's). The two RTO's are 3 chamber units designed to meet 99.5% destruction efficiency for all HAPS and VOC's, with a 2 second residence time, operating at 1550 to 1600 degrees Fahrenheit with a 180 feet tall exhaust gas stack. The RTO's effectively minimize Hazardous Air Pollutant Emissions.

Emissions from all fermenters, yeast propagation tank, beer well, process condensate tanks, whole stillage tank, thin stillage tank, syrup tank, centrifuges, centrate tank, carbon dioxide degasser vents, Mol sieve vacuum system vents, evaporator vacuum system vents, distillation vents, ethanol storage tank vents and denaturant tank will all be controlled by one of the two RTO's. The RTO's will be stack tested upon startup and once every 5 years to demonstrate compliance with the limits in this permit. The RTO's will be in use at all times that the process is in operation. Outlet temperature of the RTO's will be continuously monitored and recorded to assure compliance. Regulations listed under 6 NYCRR part 212 detail the requirements for the RTO's.

Emissions of acrolein, formaldehyde, phosphine, furfural, ethanol and acetaldehyde were modeled to determine odor impacts as well as compliance with New York States 6NYCRR part 212 and Air Guide 1 guidance document. The result is that control of acrolein emissions to below Air Guide 1 values by the use of 99.5% efficient RTO's also controlled odor levels to below detection and compliance with air guide 1 for all contaminants mentioned.

Regulations listed under 40 cfr 60 subpart Kb detail the requirements for the ethanol storage tanks. Ethanol is not subject to 6NYCRR part 229 for petroleum and volatile liquid storage and transfer because the vapor pressure of ethanol does not meet the applicability criteria. The denaturant (gasoline) tank is subject to 6NYCRR part 229. The requirements for the denaturant tank are listed under 6 NYCRR part 212.4c for process "LOD" to address the toxic issue. It is equivalent or more stringent than that required by 6NYCRR part 229 or 40 cfr 60 subpart Kb by venting tank breathing and working losses to the RTO's. Emissions from the ethanol load out racks, railcars or tank trucks, will vent to an enclosed flare meeting 95% combustion efficiency that will be on at all times ethanol is being loaded.

The facility must also meet the requirements of NSPS 40 cfr 60.480, subpart VV, Standards of Performance for Equipment leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry. This regulation covers all pumps, valves, lines, compressors, agitators, connectors, and pressure relief devices. The rule specifies monitoring and repair requirements for leaks.

Two boilers rated at 120mmbtu/hr each, natural gas fired only, will supply steam to the facility and are subject to a Nitrogen Oxide limit of 0.10 lb/mmbtu under NSPS 40 cfr 60.40b subpart Db. The boilers will utilize ultra low NOx burner technology to stay under the 100 tons of NOx/ yr cap. NOx emissions from the dryers and RTO contribute approximately 40 tpy towards this cap. Emission factors established during initial stack testing of the RTO will be used to calculate monthly emission rates. Continuous NOx Emission Monitors will be installed on the boilers to insure that the emissions are 0.04



lb/mmbtu (30ppm) or less. The summation of NOx emissions from all sources, monthly, will be used to determine compliance with the annual cap.

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: STEVEN J DOLESKI
DIVISION OF ENVIRONMENTAL PERMITS
270 MICHIGAN AVE
BUFFALO, NY 14203-2999

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 9
HEADQUARTERS

DEC SPECIAL CONDITIONS

Greenhouse gas emissions evaluation condition



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: 6NYCRR 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.

Condition 4: Permit modifications, suspensions or revocations by the Department



Applicable State Requirement: 6NYCRR 621.13

Item 4.1:

The Department reserves the right 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 since the issuance 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 9 HEADQUARTERS

Applicable State Requirement: 6NYCRR 621.6(a)

Item 5.1:

Submission of applications for permit modification or renewal are to be submitted to:

NYSDEC Regional Permit Administrator
Region 9 Headquarters
Division of Environmental Permits
270 Michigan Avenue
Buffalo, NY 14203-2999
(716) 851-7165



DEC SPECIAL CONDITIONS

Condition 6: Greenhouse gas emissions evaluation condition

Applicable State Requirement: 6NYCRR 617

Item 6.1:

Permittee shall, on an annual basis commencing one (1) year after commencement of operations, prepare a report to be submitted to the Department which identifies, discusses, and evaluates the technical and economic feasibility of any commercially practicable methods, techniques, and/or facility improvements to the facility or its operations that would result in the reduction of greenhouse gas emissions (CO₂, CH₄, and N₂O) resulting, directly or indirectly from the production of ethanol at the facility (the "Report"). The Report (described in more detail below) shall include specifically an evaluation of methods, techniques, or facility operation alternatives or improvements that would result in the reduction, recycling, reuse, or elimination of greenhouse gases from the facility. The first report is due on January 1st of the year following commencement of operations and annually by January 1st thereafter.

The report shall include but not be limited to the following:

A evaluation of the facility's capability to retrofit and/or modify production, design, infrastructure and processes to utilize other feedstock, such as cellulosic materials and crop residue, with increased net energy gain and reduced environmental upstream impacts involving agricultural cultivation and land-use;

An evaluation of methods, techniques, or facility operation alternatives or improvements that are technically, economically, and financially feasible and that would result in the reduction, recycling, reuse, or elimination of greenhouse gases at the facility;

An analysis or reference to relevant current research in ethanol production and greenhouse gas emission control, including alternative biomass usage, greenhouse gas capture and control technologies, etc.;

An evaluation of the economic feasibility of all technically feasible greenhouse gas control technologies;

An assessment of possible strategies to increase operational efficiency and reduce water and energy use, including the potential to use combined heat and power, purchase green power and market modified distiller grains or wet distiller grains;

An analysis of upstream greenhouse gas emissions in the production and transport of corn or alternative feed stock used at the facility, and evaluation of measures available to reduce those emissions.



Where appropriate and reasonable, an implementation schedule for each economically feasible control technology including an application for a permit modification when applicable.

The Department must approve each greenhouse gas emission reduction strategy prior to implementation.

The Permittee further agrees to voluntarily join and participate in the Climate Registry.

New York State Department of Environmental Conservation

Permit ID: 9-1402-00200/00048

Facility DEC ID: 9140200200



Permit Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY PERMIT

IDENTIFICATION INFORMATION

Permit Issued To: RIVERWRIGHT LLC
120 CHILDS ST
BUFFALO, NY 14203

Facility: RIVERWRIGHT
120 CHILDS ST
BUFFALO, NY 14203

Authorized Activity By Standard Industrial Classification Code:
2869 - INDUSTRIAL ORGANIC CHEMICALS, NEC

Permit Effective Date: 05/16/2008

Permit Expiration Date: No expiration date.



LIST OF CONDITIONS

DEC GENERAL CONDITIONS

General Provisions

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Facility Level

Submission of application for permit modification or renewal-REGION 9 HEADQUARTERS

DEC SPECIAL CONDITIONS

Greenhouse gas emissions evaluation condition

FEDERALLY ENFORCEABLE CONDITIONS

Facility Level

- 1 6NYCRR 200.7: Maintenance of Equipment
- 2 6NYCRR 201-3.2(a): Exempt Sources - Proof of Eligibility
- 3 6NYCRR 202-1.1: Required Emissions Tests
- 4 40CFR 68: Accidental release provisions.
- 5 40CFR 82, Subpart F: Recycling and Emissions Reduction
- 6 6NYCRR 201-7: Facility Permissible Emissions
- *7 6NYCRR 201-7: Capping Monitoring Condition
- *8 6NYCRR 201-7: Capping Monitoring Condition
- *9 6NYCRR 201-7: Capping Monitoring Condition
- 10 6NYCRR 212.4(a): Compliance Demonstration
- 11 6NYCRR 236.2(c): Compliance with Federal regulations
- 12 40CFR 60.7(a), NSPS Subpart A: Date of construction notification -
If a COM is not used.
- 13 40CFR 60.482-1, NSPS Subpart VV: Compliance Demonstration
- 14 40CFR 60.482-2, NSPS Subpart VV: Compliance Demonstration
- 15 40CFR 60.482-3, NSPS Subpart VV: Compliance Demonstration
- 16 40CFR 60.482-4, NSPS Subpart VV: Compliance Demonstration
- 17 40CFR 60.482-5, NSPS Subpart VV: Compliance Demonstration
- 18 40CFR 60.482-6, NSPS Subpart VV: Compliance Demonstration
- 19 40CFR 60.482-7, NSPS Subpart VV: Compliance Demonstration
- 20 40CFR 60.482-8, NSPS Subpart VV: Compliance Demonstration
- 21 40CFR 60.482-9, NSPS Subpart VV: Compliance Demonstration
- 22 40CFR 60.485, NSPS Subpart VV: Compliance Demonstration
- 23 40CFR 60.486, NSPS Subpart VV: Compliance Demonstration
- 24 40CFR 60.487, NSPS Subpart VV: Compliance Demonstration
- 25 40CFR 61, NESHAP Subpart M: National Emission Standard for Asbestos

Emission Unit Level

EU=1-BOILR

- 26 40CFR 60.44b, NSPS Subpart Db: Compliance Demonstration
- 27 40CFR 60.46b(e)(1), NSPS Subpart Db: Compliance and performance requirements.
- 28 40CFR 60.48b(b), NSPS Subpart Db: Oxides of nitrogen monitoring



requirements.

- 29 40CFR 60.48b(e), NSPS Subpart Db: Continuous Monitoring Systems
- 30 40CFR 60.48b(e)(2), NSPS Subpart Db: Compliance Demonstration
- 31 40CFR 60.48b(j), NSPS Subpart Db: PM monitoring exemption.
- 32 40CFR 60.49b(a), NSPS Subpart Db: Compliance Demonstration
- 33 40CFR 60.49b(g), NSPS Subpart Db: Compliance Demonstration
- 34 40CFR 60.49b(h), NSPS Subpart Db: Compliance Demonstration

EU=1-BOILR,Proc=BLR

- 35 6NYCRR 227-1.3(a): Compliance Demonstration

EU=1-MAINP

- 36 6NYCRR 212.4(a): Compliance Demonstration
- 37 6NYCRR 212.4(a): Compliance Demonstration
- 38 6NYCRR 212.4(a): Compliance Demonstration
- 39 6NYCRR 212.4(a): Compliance Demonstration
- 40 6NYCRR 212.4(a): Compliance Demonstration
- 41 6NYCRR 212.4(a): Compliance Demonstration
- 42 6NYCRR 212.6(a): Compliance Demonstration

EU=1-MAINP,Proc=ESL

- 43 40CFR 60.112b(a)(3), NSPS Subpart Kb: Standards for volatile organic compounds (VOC)
- 44 40CFR 60.112b(a)(3)(ii), NSPS Subpart Kb: Compliance Demonstration
- 45 40CFR 60.113b(c), NSPS Subpart Kb: Testing and Procedures
- 46 40CFR 60.115b(c), NSPS Subpart Kb: Reporting and Recordkeeping Requirements
- 47 40CFR 60.116b(a), NSPS Subpart Kb: Compliance Demonstration

EU=1-MAINP,Proc=GHM

- 48 6NYCRR 212.4(a): Compliance Demonstration
- 49 40CFR 60.300, NSPS Subpart DD: Applicability and designation of affected facility
- 50 40CFR 60.302(b)(1), NSPS Subpart DD: Compliance Demonstration
- 51 40CFR 60.302(b)(2), NSPS Subpart DD: Compliance Demonstration
- 52 40CFR 60.302(c)(2), NSPS Subpart DD: Compliance Demonstration
- 53 40CFR 60.302(d), NSPS Subpart DD: Compliance Demonstration
- 54 40CFR 60.303, NSPS Subpart DD: Test methods and procedures

EU=1-MAINP,Proc=LOD

- 55 6NYCRR 212.4(a): Compliance Demonstration

STATE ONLY ENFORCEABLE CONDITIONS

Facility Level

- 56 ECL 19-0301: Contaminant List
- 57 6NYCRR 201-1.4: Unavoidable noncompliance and violations
- 58 6NYCRR 201-5: Emission Unit Definition
- 59 6NYCRR 211.2: Air pollution prohibited

Emission Unit Level

- 60 6NYCRR 201-5: Emission Point Definition By Emission Unit
- 61 6NYCRR 201-5: Process Definition By Emission Unit

NOTE: * preceding the condition number indicates capping.



FEDERALLY ENFORCEABLE CONDITIONS

**** Facility 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 - 6NYCRR Part 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 - 6NYCRR Part 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 - 6NYCRR Part 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 - 6NYCRR Part 201-1.2

If an existing emission source was subject to the permitting requirements of 6NYCRR 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 - 6NYCRR Part 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 - 6NYCRR Part 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 - 6NYCRR Part 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 Part 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 Part 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 Part 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 6NYCRR Part 202-1.

Item K: Visible Emissions Limited - 6 NYCRR Part 211.3

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.

Item L: Open Fires - 6 NYCRR Part 215

No person shall burn, cause, suffer, allow or permit the burning in an open fire of garbage, rubbish for salvage, or rubbish generated by industrial or commercial activities.

Item M: 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 N: 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: Maintenance of Equipment
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:6NYCRR 200.7

Item 1.1:

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.

Condition 2: Exempt Sources - Proof of Eligibility
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:6NYCRR 201-3.2(a)

Item 2.1:

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 this Subpart. 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 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.

Condition 3: Required Emissions Tests
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:6NYCRR 202-1.1

Item 3.1:

For the purpose of ascertaining compliance or non-compliance with any air pollution control code, rule or regulation, the commissioner may require the person who owns such air contamination source to submit an acceptable report of measured emissions within a stated time. Such person shall bear the cost of measurement and preparing the report of measured emissions. Failure of such person to submit a report acceptable to the commissioner within the time stated shall be sufficient reason for the commissioner to suspend or deny a certificate to operate.

Condition 4: Accidental release provisions.
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:40CFR 68

Item 4.1:

If a chemical is listed in Tables 1,2,3 or 4 of 40 CFR §68.130 is present in a process in quantities greater than the threshold quantity listed in Tables 1,2,3 or 4, the following requirements will apply:

- a) The owner or operator shall comply with the provisions of 40 CFR Part 68 and;



b) The owner or operator shall submit at the time of permit issuance (if not previously submitted) one of the following, if such quantities are present:

1) A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR §68.10(a) or,

2) A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan. Information should be submitted to:

Risk Management Plan Reporting Center
C/O CSC
8400 Corporate Dr
Carrollton, Md. 20785

Condition 5: Recycling and Emissions Reduction
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:40CFR 82, Subpart F

Item 5.1:

The permittee shall comply with all applicable provisions of 40 CFR Part 82.

Condition 6: Facility Permissible Emissions
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:6NYCRR 201-7

Item 6.1:

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: 000630-08-0 Name: CARBON MONOXIDE	PTE: 190,000 pounds per year
CAS No: 0NY210-00-0 Name: OXIDES OF NITROGEN	PTE: 190,000 pounds per year
CAS No: 0NY998-00-0 Name: VOC	PTE: 90,000 pounds per year

Condition 7: Capping Monitoring Condition
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:6NYCRR 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:

6NYCRR 201-6.1(a)(1)
40CFR 52-A.21

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:
The Compliance Demonstration applies to:

Emission Unit: 1-BOILR

Emission Unit: 1-MAINP

Regulated Contaminant(s):

CAS No: 000630-08-0 CARBON MONOXIDE

Item 7.7:

Compliance Demonstration shall include the following monitoring:

Capping: Yes

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

Monitoring Description:

Facility-wide emissions of carbon monoxide (CO) are limited to less than 95 tons per year on a 12-month rolling basis. The purpose is to stay below the 100 tpy applicability threshold for Title V permitting. The significant sources contributing to CO emissions are the two boilers, two thermal oxidizers and flare. A stack test is required within 180 days of startup to determine CO



emissions from the boilers, RTO's and flare. The results along with fuel usage and process rates will be used to determine monthly emissions and the annual rolling 12 month average of CO emissions. Estimated CO emissions are at 95 tpy and therefore to insure continuous compliance a portable analyzer or equivalent, approved by the Department, shall be used annually to verify CO emissions from the RTO's and Boilers. The resulting emission rate will be substituted into the calculation for estimating CO emissions from the facility.

A stack test protocol must be submitted to this office at least 45 days prior to the proposed test for approval and the department given an opportunity to witness the test. A stack test report is due within 45 days after the test date. The portable analyzer should be used in conjunction with the approved EPA methods during the initial stack test.

The department must be notified of cap exceedances within 15 days of occurrence.

Manufacturer Name/Model Number: tbd
Parameter Monitored: CARBON MONOXIDE
Upper Permit Limit: 95 tons per year
Reference Test Method: EPA approved methods
Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL TOTAL ROLLED MONTHLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2009.
Subsequent reports are due every 12 calendar month(s).

Condition 8: Capping Monitoring Condition
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:6NYCRR 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:

6NYCRR 201-6.1(a)(1)
6NYCRR 212.10
6NYCRR 231-2

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.



Pollution Control agency or equivalent.

Manufacturer Name/Model Number: TBD
Parameter Monitored: VOC
Upper Permit Limit: 45 tons per year
Reference Test Method: EPA approved methods
Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL TOTAL ROLLED MONTHLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2009.
Subsequent reports are due every 12 calendar month(s).

Condition 9: Capping Monitoring Condition
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 201-7

Item 9.1:

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:

6NYCRR 201-6.1(a)(1)
6NYCRR 227-2

Item 9.2:

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

Item 9.3:

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 9.4:

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 9.5:

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 9.6:

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



Emission Unit: 1-BOILR

Emission Unit: 1-MAINP

Regulated Contaminant(s):

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

Item 9.7:

Compliance Demonstration shall include the following monitoring:

Capping: Yes

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The facility is limiting emissions of Nitrogen Oxides (NOx) to below the 100 tpy Title V threshold, the 100 tpy applicability threshold for New Source Review in 6 NYCRR part 231-2, and NOx control requirements in 6NYCRR part 227-2 for sources emitting greater than 100 tpy. The sources of NOx are the 2- 120 mmbtu/hr natural gas fired boilers, the distillers grain dryer, that vents to one of two Regenerative Thermal Oxidizers (RTO), and the loading rack flare.

The 2 boilers will be equipped with ultra low NOx burners and Continuous NOx Emission Monitors. They will be designed to meet an emission rate of 0.04 lb/mmbtu which is approximately 30 ppm. An initial stack test for NOx and CO as well as certification of the CEM will insure compliance with this low NOx emission rate. CEM equipment selection and installation must be approved by this department.

The Flare and Thermal Oxidizers will be stack tested within 180 days of startup for NOx, Carbon Monoxide (CO), and other contaminants, as specified elsewhere in this permit, to determine an acceptable emission factor for use in calculating compliance with the annual ton per year caps.

A monthly record of fuel usage, production rate along with the appropriate emission factors as discussed above will be used to calculate the rolling 12 month NOx emission rate and compliance with this condition.

Manufacturer Name/Model Number: TBD

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 95 tons per year

Reference Test Method: epa appv methods

Monitoring Frequency: MONTHLY

Averaging Method: ANNUAL TOTAL ROLLED MONTHLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.



Subsequent reports are due every 12 calendar month(s).

Condition 10: Compliance Demonstration
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:6NYCRR 212.4(a)

Item 10.1:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY075-00-5 PM-10

Item 10.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The cooling towers will be equipped with EVAPCO AT cooling towers or equivalent with high efficiency "fill and drift eliminators" to minimize water carry over. Equipment must meet a design specification that incorporates three changes in air direction and limits water carryover to a maximum of 0.001% of the circulating water rate. Based on a 600,000 gallon per hour circulation rate PM-10 emissions for two towers will be approximately 2.2 tons per year.

Maintenance shall be in accordance with the manufactures requirements. Malfunctions shall be reported as soon as possible but no later than 3 days from occurrence. Maintenance an operations records must be maintained and made available upon request. Monitoring of equipment operation will be based on manufacturers recommendations.

Details of the final mist eliminator design must be submitted to this office for approval prior to construction.

Reference Test Method: TBD

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 11: Compliance with Federal regulations
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:6NYCRR 236.2(c)

Item 11.1:

Components subject to Federal regulations which require either an equal or more stringent leak detection and repair program, or equal or more stringent equipment specifications, are deemed to be



in compliance with the provisions of this Part contingent on the source owner or operator complying with such Federal regulations.

**Condition 12: Date of construction notification - If a COM is not used.
Effective between the dates of 05/16/2008 and Permit Expiration Date**

Applicable Federal Requirement:40CFR 60.7(a), NSPS Subpart A

Item 12.1:

Any owner or operator subject to this part shall furnish the Administrator with the following information:

- 1) a notification of the date construction or reconstruction commenced, post marked no later than 30 days after such date;
- 3) a notification of the actual date of initial start up, post marked within 15 days after such date;
- 4) a notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless the change is specifically exempted under this part. The notice shall be post marked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capability of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional information regarding the change;
- 5) a notification of the date upon which the demonstration of continuous monitoring system performance commences, post marked not less than 30 days prior to such date;
- 6) a notification of the anticipated date for conducting the opacity observations, post marked not less than 30 days prior to such date.

**Condition 13: Compliance Demonstration
Effective between the dates of 05/16/2008 and Permit Expiration Date**

Applicable Federal Requirement:40CFR 60.482-1, NSPS Subpart VV

Item 13.1:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):
CAS No: 0NY998-00-0 VOC

Item 13.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Sec. 60.482-1 Standards: General.

1. Each owner or operator subject to the provisions of this subpart shall demonstrate compliance with the



requirements of Secs. 60.482-1 through 60.482-10 for all equipment within 180 days of initial startup.

2. Compliance with Secs. 60.482-1 to 60.482-10 will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in Sec. 60.485.

3. Equipment that is in vacuum service is excluded from the requirements of Secs. 60.482-2 to 60.482-10 if it is identified as required in Sec. 60.486(e)(5).

4. Reporting as required by Sec. 60.487.

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 12 calendar month(s).

Condition 14: Compliance Demonstration
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:40CFR 60.482-2, NSPS Subpart VV

Item 14.1:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 14.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Sec. 60.482-2 Standards: Pumps in light liquid service.

(a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in Sec. 60.485(b), except as provided in Sec. 60.482-1(c) and paragraphs (d), (e), and (f) of this section.

(2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

(b)(1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(2) If there are indications of liquids dripping from the pump seal, a leak is detected.

(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Sec. 60.482-9.

(2) A first attempt at repair shall be made no later



than 5 calendar days after each leak is detected.

(d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (a), Provided the following requirements are met:

(1) Each dual mechanical seal system is--

(i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or

(ii) Equipment with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of Sec. 60.482-10; or

(iii) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

(2) The barrier fluid system is in heavy liquid service or is not in VOC service.

(3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

(4) Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.

(5)(i) Each sensor as described in paragraph (d)(3) is checked daily or is equipped with an audible alarm, and

(ii) The owner or operator determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(6)(i) If there are indications of liquids dripping from the pump seal or the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined in paragraph (d)(5)(ii), a leak is detected.

(ii) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Sec. 60.482-9.

(iii) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(e) Any pump that is designated, as described in Sec. 60.486(e)(1) and (2), for no detectable emission, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a), (c), and (d) of this section if the pump:

(1) Has no externally actuated shaft penetrating the pump housing,

(2) Is demonstrated to be operating with no detectable



emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in Sec. 60.485(c), and

(3) Is tested for compliance with paragraph (e)(2) of this section initially upon designation, annually, and at other times requested by the Administrator.

(f) If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a process or to a fuel gas system or to a control device that complies with the requirements of Sec. 60.482-10, it is exempt from paragraphs (a) through (e) of this section.

(g) Any pump that is designated, as described in Sec. 60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of paragraphs (a) and (d)(4) through (6) of this section if:

(1) The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a) of this section; and

(2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in paragraph (c) of this section if a leak is detected.

(h) Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of paragraphs (a)(2) and (d)(4) of this section, and the daily requirements of paragraph (d)(5) of this section, provided that each pump is visually inspected as often as practicable and at least monthly.

(i) Reporting as required by Sec. 60.487.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 12 calendar month(s).

Condition 15: Compliance Demonstration

Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:40CFR 60.482-3, NSPS Subpart VV



as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Sec. 60.482-9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(h) A compressor is exempt from the requirements of paragraphs (a) and (b) of this section, if it is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process or fuel gas system or to a control device that complies with the requirements of Sec. 60.482-10, except as provided in paragraph (i) of this section.

(i) Any compressor that is designated, as described in Sec. 60.486(e) (1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a)-(h) if the compressor:

(1) Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the methods specified in Sec. 60.485(c); and

(2) Is tested for compliance with paragraph (i)(1) of this section initially upon designation, annually, and at other times requested by the Administrator.

(j) Reporting as required by Sec. 60.487.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 12 calendar month(s).

Condition 16: Compliance Demonstration
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 60.482-4, NSPS Subpart VV

Item 16.1:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 16.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Sec. 60.482-4 Standards: Pressure relief devices in



gas/vapor service.

(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in Sec. 60.485(c).

(b)(1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in Sec. 60.482-9.

(2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in Sec. 60.485(c).

(c) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in Sec. 60.482-10 is exempted from the requirements of paragraphs (a) and (b) of this section.

(d)(1) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of paragraphs (a) and (b) of this section, provided the owner or operator complies with the requirements in paragraph (d)(2) of this section.

(2) After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in Sec. 60.482-9.

(e) Reporting as required by Sec. 60.487.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 12 calendar month(s).

Condition 17: Compliance Demonstration

Effective between the dates of 05/16/2008 and Permit Expiration Date



Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING
DESCRIPTION

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 12 calendar month(s).

Condition 18: Compliance Demonstration
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:40CFR 60.482-6, NSPS Subpart VV

Item 18.1:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 18.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Sec. 60.482-6 Standards: Open-ended valves or lines.

(a)(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in Sec. 60.482-1(c).

(2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.

(b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.

(c) When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (a) at all other times.

(d) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of paragraphs (a), (b) and (c) of this section.

(e) Open-ended valves or lines containing materials which would autocatalytically polymerize or would present



an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in paragraphs (a) through (c) of this section are exempt from the requirements of paragraphs (a) through (c) of this section.

(f) Reporting as required by Sec. 60.487.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 12 calendar month(s).

Condition 19: Compliance Demonstration
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:40CFR 60.482-7, NSPS Subpart VV

Item 19.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 19.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Sec. 60.482-7 Standards: Valves in gas/vapor service and in light liquid service.

(a) Each valve shall be monitored monthly to detect leaks by the methods specified in Sec. 60.485(b) and shall comply with paragraphs (b) through (e), except as provided in paragraphs (f), (g), and (h), Sec. 60.483-1, 2, and Sec. 60.482-1(c).

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c)(1) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.

(2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.

(d)(1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in Sec. 60.482-9.



(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(e) First attempts at repair include, but are not limited to, the following best practices where practicable:

- (1) Tightening of bonnet bolts;
- (2) Replacement of bonnet bolts;
- (3) Tightening of packing gland nuts;
- (4) Injection of lubricant into lubricated packing.

(f) Any valve that is designated, as described in Sec. 60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph (a) if the valve:

- (1) Has no external actuating mechanism in contact with the process fluid,
- (2) Is operated with emissions less than 500 ppm above background as determined by the method specified in Sec. 60.485(c), and
- (3) Is tested for compliance with paragraph (f)(2) of this section initially upon designation, annually, and at other times requested by the Administrator.

(g) Any valve that is designated, as described in Sec. 60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of paragraph (a) if:

- (1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a), and
- (2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.

(h) Any valve that is designated, as described in Sec. 60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of paragraph (a) if:

- (1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.
- (2) The process unit within which the valve is located either becomes an affected facility through Sec. 60.14 or Sec. 60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor, and
- (3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.



(i) Reporting as required by Sec. 60.487.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: VOC's

Parameter Monitored: VOC

Upper Permit Limit: 10000 parts per million (by volume)

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

DESCRIPTION

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 12 calendar month(s).

Condition 20: Compliance Demonstration
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 60.482-8, NSPS Subpart VV

Item 20.1:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 20.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC
OPERATIONS

Monitoring Description:

Sec. 60.482-8 Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors.

(a) If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the owner or operator shall follow either one of the following procedures:

(1) The owner or operator shall monitor the equipment within 5 days by the method specified in Sec. 60.485(b) and shall comply with the requirements of paragraphs (b) through (d) of this section.

(2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak.

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c)(1) When a leak is detected, it shall be repaired



as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Sec. 60.482-9.

(2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(d) First attempts at repair include, but are not limited to, the best practices described under Sec. 60.482-7(e).

(e) Reporting as required by Sec. 60.487.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: VOC's

Parameter Monitored: VOC

Upper Permit Limit: 10000 parts per million (by volume)

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 12 calendar month(s).

Condition 21: Compliance Demonstration
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:40CFR 60.482-9, NSPS Subpart VV

Item 21.1:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 21.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Sec. 60.482-9 Standards: Delay of repair.

(a) Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.

(b) Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.

(c) Delay of repair for valves will be allowed if:

(1) The owner or operator demonstrates that emissions



of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and

(2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with Sec. 60.482-10.

(d) Delay of repair for pumps will be allowed if:

(1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and

(2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

(e) Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

(f) Reporting as required by Sec. 60.487.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 12 calendar month(s).

Condition 22: Compliance Demonstration

Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:40CFR 60.485, NSPS Subpart VV

Item 22.1:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 22.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Sec. 60.485 Test methods and procedures.

(a) In conducting the performance tests required in Sec. 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of



this part or other methods and procedures as specified in this section, except as provided in Sec. 60.8(b).

(b) The owner or operator shall determine compliance with the standards in Secs. 60.482, 60.483, and 60.484 as follows:

(1) Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used:

- (i) Zero air (less than 10 ppm of hydrocarbon in air); and
- (ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane.

(c) The owner or operator shall determine compliance with the no detectable emission standards in Secs. 60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f), and 60.482-10(e) as follows:

(1) The requirements of paragraph (b) shall apply.

(2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(d) The owner or operator shall test each piece of equipment unless he demonstrates that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used:

(1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference--see Sec. 60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment.

(2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid.

(3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, paragraphs (d) (1) and (2) of this section shall be used to resolve the disagreement.



(e) The owner or operator shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply:

(1) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20 deg.C (1.2 in. H2O at 68 deg.F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference--see Sec. 60.17) shall be used to determine the vapor pressures.

(2) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 deg.C (1.2 in. H2O at 68 deg.F) is equal to or greater than 20 percent by weight.

(3) The fluid is a liquid at operating conditions.

(f) Samples used in conjunction with paragraphs (d), (e), and (g) of this section shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.

(g) The owner or operator shall determine compliance with the standards of flares as follows:

(1) Method 22 shall be used to determine visible emissions.

(2) A thermocouple or any other equivalent device shall be used to monitor the presence of a pilot flame in the flare.

(3) The maximum permitted velocity for air assisted flares shall be computed using the following equation:

$$V_{max} = K1 + K2(HT)$$

Where:

V_{max} = Maximum permitted velocity, m/sec (ft/sec)
 HT = Net heating value of the gas being combusted, MJ/scm (Btu/scf).

$K1 = 8.706$ m/sec (metric units) = 28.56 ft/sec (English units)

$K2 = 0.7084$ m⁴/(MJ-sec) (metric units)= 0.087 ft⁴/(Btu-sec) (English units)

(4) The net heating value (HT) of the gas being combusted in a flare shall be computed using the following equation:

$$HT = K\{\text{SUM}(i=1 \text{ to } n)C_iH_i\}$$

Where:

$K =$ Conversion constant, 1.740×10^7 (g-mole)(MJ)/(ppm-scm-kcal) (metric units)= 4.674×10^8 [(g-mole)(Btu)/(ppm-scf-kcal)] (English units)

$C_i =$ Concentration of sample component "i," ppm



H_i = net heat of combustion of sample component "i" at 25 deg.C and 760 mm Hg (77 deg.F and 14.7 psi), kcal/g-mole

(5) Method 18 and ASTM D2504-67, 77, or 88 (Reapproved 1993) (incorporated by reference--see Sec. 60.17) shall be used to determine the concentration of sample component "i."

(6) ASTM D2382-76 or 88 or D4809-95 (incorporated by reference--see Sec. 60.17) shall be used to determine the net heat of combustion of component "i" if published values are not available or cannot be calculated.

(7) Method 2, 2A, 2C, or 2D, as appropriate, shall be used to determine the actual exit velocity of a flare. If needed, the unobstructed (free) cross-sectional area of the flare tip shall be used.

(h) Reporting as required by Sec. 60.487.

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 12 calendar month(s).

Condition 23: Compliance Demonstration

Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:40CFR 60.486, NSPS Subpart VV

Item 23.1:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 23.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Sec. 60.486 Recordkeeping requirements.

(a)(1) Each owner or operator subject to the provisions of this subpart shall comply with the recordkeeping requirements of this section.

(2) An owner or operator of more than one affected facility subject to the provisions of this subpart may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility.

(b) When each leak is detected as specified in Secs. 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the



following requirements apply:

(1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

(2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in Sec. 60.482-7(c) and no leak has been detected during those 2 months.

(3) The identification on equipment except on a valve, may be removed after it has been repaired.

(c) When each leak is detected as specified in Secs. 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

(1) The instrument and operator identification numbers and the equipment identification number.

(2) The date the leak was detected and the dates of each attempt to repair the leak.

(3) Repair methods applied in each attempt to repair the leak.

(4) "Above 10,000" if the maximum instrument reading measured by the methods specified in Sec. 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm.

(5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.

(7) The expected date of successful repair of the leak if a leak is not repaired within 15 days.

(8) Dates of process unit shutdowns that occur while the equipment is unrepaired.

(9) The date of successful repair of the leak.

(d) The following information pertaining to the design requirements for closed vent systems and control devices described in Sec. 60.482-10 shall be recorded and kept in a readily accessible location:

(1) Detailed schematics, design specifications, and piping and instrumentation diagrams.

(2) The dates and descriptions of any changes in the design specifications.

(3) A description of the parameter or parameters monitored, as required in Sec. 60.482-10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.

(4) Periods when the closed vent systems and control devices required in Secs. 60.482-2, 60.482-3, 60.482-4,



and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame.

(5) Dates of startups and shutdowns of the closed vent systems and control devices required in Secs. 60.482-2, 60.482-3, 60.482-4, and 60.482-5.

(e) The following information pertaining to all equipment subject to the requirements in Secs. 60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for equipment subject to the requirements of this subpart.

(2)(i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of Secs. 60.482-2(e), 60.482-3(i) and 60.482-7(f).

(ii) The designation of equipment as subject to the requirements of Sec. 60.482-2(e), Sec. 60.482-3(i), or Sec. 60.482-7(f) shall be signed by the owner or operator.

(3) A list of equipment identification numbers for pressure relief devices required to comply with Sec. 60.482-4.

(4)(i) The dates of each compliance test as required in Secs. 60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f).

(ii) The background level measured during each compliance test.

(iii) The maximum instrument reading measured at the equipment during each compliance test.

(5) A list of identification numbers for equipment in vacuum service.

(f) The following information pertaining to all valves subject to the requirements of Sec. 60.482-7(g) and (h) and to all pumps subject to the requirements of Sec. 60.482-2(g) shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump.

(2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.

(g) The following information shall be recorded for valves complying with Sec. 60.483-2:

(1) A schedule of monitoring.

(2) The percent of valves found leaking during each monitoring period.



(h) The following information shall be recorded in a log that is kept in a readily accessible location:

(1) Design criterion required in Secs. 60.482-2(d)(5) and 60.482-3(e)(2) and explanation of the design criterion; and

(2) Any changes to this criterion and the reasons for the changes.

(i) The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in Sec. 60.480(d):

(1) An analysis demonstrating the design capacity of the affected facility,

(2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol, and

(3) An analysis demonstrating that equipment is not in VOC service.

(j) Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location.

(k) The provisions of Sec. 60.7 (b) and (d) do not apply to affected facilities subject to this subpart.

(l) Reporting as required by Sec. 60.487.

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 12 calendar month(s).

Condition 24: Compliance Demonstration

Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 60.487, NSPS Subpart VV

Item 24.1:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 24.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Sec. 60.487 Reporting requirements.



(a) Each owner or operator subject to the provisions of this subpart shall submit semiannual reports to the Administrator beginning six months after the initial startup date.

(b) The initial semiannual report to the Administrator shall include the following information:

(1) Process unit identification.

(2) Number of valves subject to the requirements of Sec. 60.482-7, excluding those valves designated for no detectable emissions under the provisions of Sec. 60.482-7(f).

(3) Number of pumps subject to the requirements of Sec. 60.482-2, excluding those pumps designated for no detectable emissions under the provisions of Sec. 60.482-2(e) and those pumps complying with Sec. 60.482-2(f).

(4) Number of compressors subject to the requirements of Sec. 60.482-3, excluding those compressors designated for no detectable emissions under the provisions of Sec. 60.482-3(i) and those compressors complying with Sec. 60.482-3(h).

(c) All semiannual reports to the Administrator shall include the following information, summarized from the information in Sec. 60.486:

(1) Process unit identification.

(2) For each month during the semiannual reporting period,

(i) Number of valves for which leaks were detected as described in Sec. 60.482(7)(b) or Sec. 60.483-2,

(ii) Number of valves for which leaks were not repaired as required in Sec. 60.482-7(d)(1),

(iii) Number of pumps for which leaks were detected as described in Sec. 60.482-2(b) and (d)(6)(i),

(iv) Number of pumps for which leaks were not repaired as required in Sec. 60.482-2(c)(1) and (d)(6)(ii),

(v) Number of compressors for which leaks were detected as described in Sec. 60.482-3(f),

(vi) Number of compressors for which leaks were not repaired as required in Sec. 60.482-3(g)(1), and

(vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.

(3) Dates of process unit shutdowns which occurred within the semiannual reporting period.

(4) Revisions to items reported according to paragraph (b) if changes have occurred since the initial report or subsequent revisions to the initial report.

(d) An owner or operator electing to comply with the provisions of Secs. 60.483-1 or 60.483-2 shall notify the



Administrator of the alternative standard selected 90 days before implementing either of the provisions.

(e) An owner or operator shall report the results of all performance tests in accordance with Sec. 60.8 of the General Provisions. The provisions of Sec. 60.8(d) do not apply to affected facilities subject to the provisions of this subpart except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests.

(f) The requirements of paragraphs (a) through (c) of this section remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of paragraphs (a) through (c) of this section, provided that they comply with the requirements established by the State.

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 12 calendar month(s).

Condition 25: National Emission Standard for Asbestos
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:40CFR 61, NESHAP Subpart M

Item 25.1:

The permittee shall comply with all applicable provisions of 40 CFR Part 61, Subpart M.

**** **Emission Unit Level** ****

Condition 26: Compliance Demonstration
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:40CFR 60.44b, NSPS Subpart Db

Item 26.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-BOILR

Regulated Contaminant(s):

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

Item 26.2:



Compliance Demonstration shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

This emission unit consists of two- 120 mmbtu/hr boilers for steam production. They are natural gas fired units only and are subject to the Nitrogen Oxide limit specified in 40 cfr 60.44ba)(1)(i). Nitrogen Oxide emissions limited to 0.10 lb/mmbtu heat input for a low heat release rate natural gas fired unit. The boilers will be equipped with a continuous Nitrogen Oxide monitor meeting the requirements of 40 cfr 60 .48b(1). Compliance demonstration shall be in accordance with 40 cfr 60.46b(e). Records and reporting requirements are specified in 40 cfr 60.49b(g).

The 6NYCRR part 201-7 cap for NOx requires these boilers to meet 0.04 lb/mmbtu or 30 ppm in order to stay under the permit cap of 100 tpy. This is a more stringent level of emissions. Under the NSPS a violation would occur if emissions exceed 0.10 lb/mmbtu, under the NOx cap a violation would occur if the 95 tpy rolling average is exceeded.

Quarterly reports summarizing CEM down time , Q/A audits, malfunctions and repairs must be submitted to the regional office.

****A quality assurance and quality control (QA/QC) plan for the NOx CEM's is to be submitted to this office for approval prior to construction. The QA/QC plan must follow the departments air guide 34 for continuous emission monitoring.****

Manufacturer Name/Model Number: tbd
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 0.10 pounds per million Btus
Reference Test Method: 40 cfr 60 appd B
Monitoring Frequency: CONTINUOUS
Averaging Method: 30-DAY AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2008.
Subsequent reports are due every 3 calendar month(s).

Condition 27: Compliance and performance requirements.
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:40CFR 60.46b(e)(1), NSPS Subpart Db

Item 27.1:

This Condition applies to Emission Unit: 1-BOILR



Item 27.2: For the initial compliance test, nitrogen oxides from the steam generating unit are monitored for 30 successive steam generating unit operating days and the 30-day average emission rate is used to determine compliance with the nitrogen oxides emission standards under §60.44b. The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period.

Condition 28: Oxides of nitrogen monitoring requirements.
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:40CFR 60.48b(b), NSPS Subpart Db

Item 28.1:

This Condition applies to Emission Unit: 1-BOILR

Item 28.2:

Facilities subject to section 40 CFR 60-Db.44b shall install, calibrate, maintain, operate, and record the output from an oxides of nitrogen CEM.

Condition 29: Continuous Monitoring Systems
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:40CFR 60.48b(e), NSPS Subpart Db

Item 29.1:

This Condition applies to Emission Unit: 1-BOILR

Item 29.2:

The procedures under 40 CFR Part 60.13 shall be followed for installation, evaluation, and operation of the continuous monitoring systems.

Condition 30: Compliance Demonstration
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:40CFR 60.48b(e)(2), NSPS Subpart Db

Item 30.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-BOILR

Regulated Contaminant(s):

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

Item 30.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

When burning coal, oil, or natural gas, the span value of the Continuous Emission Monitoring System used to measure



Nitrogen Oxides (NO_x) emissions shall be:

Fuel	Span Value for Nitrogen Oxides in PPM
Natural Gas	500
Oil	500
Coal	1000
Mixture of above	$500(x+y) + 1000(z)$

Where:

x is the fraction of total heat input derived from natural gas

y is the fraction of total heat input derived from oil, and

z is the fraction of total heat input derived from coal.

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

Subsequent reports are due every 3 calendar month(s).

Condition 31: PM monitoring exemption.

Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:40CFR 60.48b(j), NSPS Subpart Db

Item 31.1:

This Condition applies to Emission Unit: 1-BOILR

Item 31.2: Units that burn only oil that contains no more than 0.3 weight percent sulfur or liquid or gaseous fuels with potential sulfur dioxide emission rates of 140 ng/J (0.32 lb/MMBtu) heat input or less are not required to conduct PM emissions monitoring if they maintain fuel supplier certifications of the sulfur content of the fuels burned.

Condition 32: Compliance Demonstration

Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:40CFR 60.49b(a), NSPS Subpart Db

Item 32.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-BOILR

Item 32.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner or operator of each affected facility shall submit notification of the date of initial startup, as provided by 40 CFR Part 60.7. This notification shall



include:

- (1) The design heat input capacity of the affected facility and identification of the fuels to be combusted in the affected facility,
- (2) If applicable, a copy of any Federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under 40 CFR Part 60.42b(d)(1), 60.43b(a)(2), (a)(3)(iii), (c)(2)(ii), (d)(2)(iii), 60.44b(c), (d), (e), (i), (j), (k), 60.45b(d), (g), 60.46b(h), or 60.48b(i),
- (3) The annual capacity factor at which the owner or operator anticipates operating the facility based on all fuels fired and based on each individual fuel fired, and,
- (4) Notification that an emerging technology will be used for controlling emissions of sulfur dioxide. The Administrator will examine the description of the emerging technology and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of 40 CFR Part 60.42b(a) unless and until this determination is made by the Administrator.

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 33: Compliance Demonstration
Effective between the dates of 05/16/2008 and Permit Expiration Date
Applicable Federal Requirement: 40CFR 60.49b(g), NSPS Subpart Db

Item 33.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: 1-BOILR

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

Item 33.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

The owner or operator shall maintain records of the following information for each steam generating unit



operating day:

- 1) Calendar date.
- 2) The average hourly nitrogen oxides emission rates (expressed as NO₂) (ng/J or lb/million Btu heat input) measured or predicted.
- 3) The 30-day average nitrogen oxides emission rates (ng/J or lb/million Btu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceeding 30 steam generating unit operating days.
- 4) Identification of the steam generating unit operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the nitrogen oxides emission standards under 40CFR60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken.
- 5) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.
- 6) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.
- 7) Identification of the "F" factor used for calculations, method of determination, and type of fuel combusted.
- 8) Identification of the times when the pollutant concentration exceeded the full span of the continuous monitoring system.
- 9) Description of any modifications to the continuous monitoring system that could affect the ability of the system to comply with Performance Specification 2 or 3.
- 10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under 40CFR60 Appendix F, Procedure 1.

Monitoring Frequency: DAILY

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 34: Compliance Demonstration
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:40CFR 60.49b(h), NSPS Subpart Db

Item 34.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-BOILR

Item 34.2:



Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner or operator shall submit semiannual excess emission reports for opacity and/or, oxides of nitrogen, and/or sulfur dioxide any reporting period during which there are excess emissions from the affected facility. If there are no excess emissions during the reporting period, the owner or operator shall submit a report semiannually stating that no excess emissions occurred during that semiannual reporting period.

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

Subsequent reports are due every 6 calendar month(s).

Condition 35: Compliance Demonstration

Effective between the dates of 05/16/2008 and Permit Expiration Date

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

Item 35.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-BOILR

Process: BLR

Item 35.2:

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-six-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
Reference Test Method: Method 9
Monitoring Frequency: DAILY
Averaging Method: 6-MINUTE AVERAGE (METHOD 9)
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2009.
Subsequent reports are due every 12 calendar month(s).

Condition 36: Compliance Demonstration
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 212.4(a)

Item 36.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-MAINP

Regulated Contaminant(s):

CAS No: 000107-02-8 ACROLEIN

Item 36.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

The Anguil regenerative thermal oxidizers shall be stack tested within 180 days of startup and once every 5 years to demonstrate compliance with the acrolein limit of 0.0182 lb/hr and to verify the appropriate operating temperature. The 1600 degree operating temperature listed in this condition can be changed to that established



during the compliance test. The RTO exit temperature for each 3-hour period must be at or above 1600 degrees F. A continuous digital recorder must be used capable of calculating 3 hour averages.

The following records must be maintained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

1. Records of every 15 minute block operating temperature in any 3- hour block period which falls below the compliant operating parameter value with a brief explanation of the cause of the excursion and the corrective action taken.
2. Records of annual RTO inspections.

The temperature monitoring equipment must be calibrated and maintained in accordance with manufacturers specifications and the RTO must be preheated and ready for operation prior to producing ethanol.

Excursions must be reported to the regional office immediately but no later than 3 days from the time of the incident.

Excess emissions/summary reports are due within 30 days after the end of every six month period. Each report must contain the information specified in section 40 cfr 63.10(c). When no deviations of parameters have occurred, the owner or operator must submit a report stating that no excess emissions occurred during the reporting period. An action taken during a start up, shutdown or malfunction which is not consistent with the operations manual as well as deviations of the RTO temperature requirement are to be included in the excess emission report.

*** A copy of the maintenance and operations manual must be submitted to this office prior to start up.***

Manufacturer Name/Model Number: TBD
Parameter Monitored: TEMPERATURE
Lower Permit Limit: 1600 degrees Fahrenheit
Reference Test Method: NYSDEC approved methods
Monitoring Frequency: CONTINUOUS
Averaging Method: 3-HOUR BLOCK AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 37: Compliance Demonstration
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:6NYCRR 212.4(a)



Item 37.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-MAINP

Regulated Contaminant(s):

CAS No: 000107-02-8 ACROLEIN

Item 37.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The facility emissions from all fermenters, yeast propagation tank, beer well, process condensate tanks, whole stillage tank, thin stillage tank, syrup tank, centrifuges, centrate tank, carbon dioxide degasser vents, mol sieve vacuum systems vents, evaporator vacuum systems vents, distillation vents all vent to one of two Anguil regenerative thermal oxidizers (RTO). The Ethanol storage tanks as well as the gasoline storage tank vent to the carbon dioxide degasser which is also controlled by one of the two RTO's.

Emissions of acrolein, acetaldehyde, formaldehyde, furfural, and ethanol were estimated using data from the Minnesota Pollution Control Agency study on dry mill ethanol plants, published in their environmental bulletin August 2006, number 8. Table 1 of this bulletin summarizes statistics of VOC measurements at several ethanol production facilities in Minnesota. Data representing the 95% upper confidence limit was evaluated using air guide 1. Acrolein has the lowest short term guidance concentration (SGC) and lowest annual guidance concentration (AGC) levels of all the contaminants mentioned above and therefore was the driver in the design of control equipment and stack height. To meet the SGC's and AGC's, acrolein emissions are limited to 0.0182 lb/hr and 160 lb/yr from the carbon dioxide/regenerative thermal oxidizer stack which is 180 feet tall. The modeled emissions were below the odor thresholds as well as air guide 1 levels for all contaminants mentioned above.

The Anguil three chamber RTO proposed must meet a minimum design specification of 99.5% destruction efficiency for acrolein and is based on a 2 second residence time and a operating temperature of 1600 degrees. This level of control insures compliance with air guide 1 for all contaminants mentioned above. Also, with the RTO design and operation as described in this permit a cap for individual Hazardous Air Pollutants (HAP's) and total HAP's is not required.



This condition limits acrolein emissions to 0.0182 lb/hr and is based on the facility maximum design production rate of 110 million gallons of ethanol per year. A stack test to demonstrate compliance with this limit must be performed within 180 days of startup and once every 5 years thereafter. The test procedure will follow that developed by USEPA specifically for ethanol plants titled "Midwest scaling protocol" and shall sample and analyze for all contaminants of concern as listed in the bulletin referenced above. Stack testing for Nitrogen oxide and Carbon Monoxide emissions is also required to establish appropriate emission factors to use in calculating compliance with the annual caps listed elsewhere in this permit.

A stack test protocol must be submitted for approval within 45 days of the proposed test date and department staff given an opportunity to witness the test. A report of results is due within 45 days after the test.

Operation of the RTO at the design temperature as demonstrated during the stack test and specified as a limit elsewhere in this permit and proper maintenance of equipment will assure compliance. The RTO's must be in use all times ethanol is being produced.

Parameter Monitored: ACROLEIN

Upper Permit Limit: 0.0182 pounds per hour

Reference Test Method: EPA approved methods

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 3-HOUR BLOCK AVERAGE

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 12 calendar month(s).

Condition 38: Compliance Demonstration
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 212.4(a)

Item 38.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-MAINP

Regulated Contaminant(s):

CAS No: 007803-51-2 PHOSPHINE



Item 38.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

Phosphine is a pesticide used to prevent insect infestation in grain storage and handling. Air dispersion modeling of phosphine emissions, a moderately toxic contaminant, has resulted in the limit of short and long term emission rates in this condition. Facility wide emissions of Phosphine are limited to 1.48 lb/hr. In addition emissions are limited to less than 349 lbs/yr on a 12 month rolling basis. Pesticide application rates will be limited by the amount of phosphine emitted. It must be assumed that all of the phosphine contained in the pesticide is released during application. The application rate, emission factor, hourly emissions during application and total annual emissions of Phosphine shall be recorded and log maintained on site.

Manufacturer Name/Model Number: TBD

Parameter Monitored: PHOSPHINE

Upper Permit Limit: 1.48 pounds per hour

Reference Test Method: EPA approved methods

Monitoring Frequency: PER BATCH OF PRODUCT/RAW MATERIAL
CHANGE

Averaging Method: 1 HOUR MAXIMUM - NOT TO BE EXCEEDED AT
ANY TIME

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 12 calendar month(s).

Condition 39: Compliance Demonstration

Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 212.4(a)

Item 39.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-MAINP

Regulated Contaminant(s):

CAS No: 007803-51-2 PHOSPHINE

Item 39.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:



and passed air guide 1. A stack test will be performed on the RTO's for formaldehyde emissions to demonstrate compliance with this annual limit. Process rates and stack test data will be used to estimate monthly and annual emissions. Process and control equipment parameters established during the stack test will insure ongoing compliance with this limit.

Manufacturer Name/Model Number: TBD
Parameter Monitored: FORMALDEHYDE
Upper Permit Limit: 627 pounds per year
Reference Test Method: EPA approved methods
Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL TOTAL ROLLED MONTHLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2009.
Subsequent reports are due every 12 calendar month(s).

Condition 41: Compliance Demonstration
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 212.4(a)

Item 41.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-MAINP

Regulated Contaminant(s):

CAS No: 000107-02-8 ACROLEIN

Item 41.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

Acrolein along with other toxic contaminants is an emission generated in the ethanol manufacturing process. Modeled emissions showed that this highly toxic contaminant needed additional control in order to meet New York States Air guide 1 allowable guidance concentrations. The applicant will be installing 2 Anguil Environmental Systems Regenerative Thermal Oxidizers (RTO's). These units are guaranteed to perform at 99.5% VOC destruction efficiency using a 3 chamber design with a 2 second residence time in the destruction zone. Many of the other toxics of concern such as formaldehyde, acetaldehyde and furfural were evaluated with acrolein being the most significant. Based on modeling the emissions of Acrolein are limited to less that 0.0182 lbs/hr and 160 lbs/yr.



Emissions testing of the RTO's will be performed upon startup to demonstrate compliance as detailed elsewhere in this permit. The emission factors from stack testing as well as production records will be used to calculate hourly and annual emissions compliance.

This condition limits the annual emission rate.

Manufacturer Name/Model Number: TBD
Parameter Monitored: ACROLEIN
Upper Permit Limit: 160 pounds per year
Reference Test Method: EPA approved methods
Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL TOTAL ROLLED MONTHLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2009.
Subsequent reports are due every 12 calendar month(s).

Condition 42: Compliance Demonstration
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 212.6(a)

Item 42.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: 1-MAINP

Item 42.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

Opacity shall not exceed 20 percent for a 6-minute average, except for one 6-minute period per hour of not more than 27 percent. Compliance shall be determined by visual observations of all emission points daily. A log book of observations must be kept on site and made available for inspection.
0 % opacity is the expected norm of the sources under this emission unit. Any deviation from this should be addressed immediately. If opacity greater than 0% continues a certified observer must perform a method 9 and results submitted to the regional office.
An annual certification of compliance is due at the end of each year.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.



The initial report is due 1/30/2009.

Subsequent reports are due every 12 calendar month(s).

Condition 43: Standards for volatile organic compounds (VOC)
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:40CFR 60.112b(a)(3), NSPS Subpart Kb

Item 43.1:

This Condition applies to Emission Unit: 1-MAINP
Process: ESL

Item 43.2: The owner or operator of each storage vessel either with a design capacity ≥ 151 m³ containing a VOL that, as stored, has a maximum true vapor pressure ≥ 5.2 kPa but < 76.6 kPa or with a design capacity ≥ 75 m³ but < 151 m³ containing a VOL that, as stored, has a maximum true vapor pressure ≥ 27.6 kPa but less than 76.7 kPa, shall equip each storage vessel with a closed vent system and control device meeting the following specification: The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspection, as determined in Part 60 Subpart VV, section 60.485(b).

Condition 44: Compliance Demonstration
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:40CFR 60.112b(a)(3)(ii), NSPS Subpart Kb

Item 44.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-MAINP
Process: ESL

Regulated Contaminant(s):
CAS No: 0NY998-00-0 VOC

Item 44.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

The emissions from process ESL, working and breathing losses from the 3- 750,000 gallon ethanol storage tanks, 2-150,000 gallon day tanks and the 100,000 gallon gasoline storage tank, will be vented to the carbon dioxide scrubber. All emissions from the scrubber are vented to one of two Regenerative thermal Oxidizers (RTO). The RTO temperature established during the stack test will insure proper combustion and compliance with the 95% control efficiency requirement of this rule. Monitoring and continuous recording of RTO temperature will insure compliance. Records must be maintained on site of any malfunctions and repairs. Summary reports of any



deviations must be submitted annually.

A combustion efficiency test ,inlet/outlet sampling for VOC's is required to be performed for both RTO's within 180 days of startup. A stack test protocol must be submitted for approval within 45 days of the proposed test date. A report of results is due within 45 days after the stack test.

Instead of venting breathing losses from the tanks mentioned above to a 95% or better control device, Riverwright may install fixed roof tanks with internal floating roofs meeting the specifications of 40 cfr 60.112b(a)(1). Calculations submitted reflect that the additional VOC emissions will not exceed the 45 tons per year facility cap. Design of tanks with internal floating roof must be submitted to this office for approval prior to construction.

Parameter Monitored: COMBUSTION EFFICIENCY

Lower Permit Limit: 95 percent

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 3-hour average

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 12 calendar month(s).

Condition 45: Testing and Procedures

Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:40CFR 60.113b(c), NSPS Subpart Kb

Item 45.1:

This Condition applies to Emission Unit: 1-MAINP

Process: ESL

Item 45.2:

A control device as required in Section 60.112b(a)(3) or (b)(2) (other than a flare) is exempt from Section 60.8 of the General Provisions and shall meet the following requirements:

(1) Submit for approval by the Administrator as an attachment to the notification required by Section 60.7(a)(1) an operating plan containing the information listed below:

(i) Documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions and manufacturer's design specification for the control device. If the control device or the closed vent capture system receives vapors, gases or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases and liquids received by the closed vent capture system and control device. If an enclosed combustion



device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 degrees C is used to meet the 95% requirement, documentation that these conditions will exist is sufficient to meet the requirements of this paragraph.

(ii) A description of the parameter to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter.

(2) Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with paragraph (c)(1) of this section, unless the plan was modified by the Administrator during the review process. In this case, the modified plan applies.

Condition 46: Reporting and Recordkeeping Requirements
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:40CFR 60.115b(c), NSPS Subpart Kb

Item 46.1:

This Condition applies to Emission Unit: 1-MAINP
Process: ESL

Item 46.2:

The owner or operator shall keep the following records

- (1) A copy of the operating plan.
- (2) A record of the measured values of the parameters monitored in accordance with section 60.113b(c)(2).

Condition 47: Compliance Demonstration
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:40CFR 60.116b(a), NSPS Subpart Kb

Item 47.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-MAINP
Process: ESL

Item 47.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner or operator shall keep copies of all records required by this section, except for the record required by paragraph (b) of this section, for at least 2 years. The record required by paragraph (b) of this section will be kept for the life of the source. Note: Title V requires these records to be maintained for five (5) years.

Reporting Requirements: ANNUALLY (CALENDAR)



Reports due 30 days after the reporting period.
The initial report is due 1/30/2009.
Subsequent reports are due every 12 calendar month(s).

Condition 48: Compliance Demonstration
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 212.4(a)

Item 48.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-MAINP
Process: GHM

Regulated Contaminant(s):
CAS No: 0NY075-00-5 PM-10

Item 48.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

The baghouses for ship unloading, rail car unloading, and grain handling will be equipped with polytetrafluorethylene (PTFE) membrane on polyester bags, or equivalent, designed to meet 0.00005 gr/dscf of particulate emission rate. Baghouses shall be equipped with differential pressure gauges to aide in determining bag failure. Pressure readings must be taken daily and records kept in a bound log book. Maintenance and replacement of bags shall follow manufacturers recommendations for proper operation.

The appropriate pressure drop will be specified by the manufacturer and limit modified in this permit if necessary.
Malfunctions shall be reported to the department as soon as possible but no later than 3 days after incident.
Annual certification of compliance is required at the end of each year.

*****Bag specifications and maintenance plan must be submitted to this office prior to construction.*****

Manufacturer Name/Model Number: TBD
Parameter Monitored: PRESSURE DROP
Upper Permit Limit: 5 inches of water
Reference Test Method: EPA or NYSDEC approved methods
Monitoring Frequency: DAILY
Averaging Method: 1 HOUR MAXIMUM - NOT TO BE EXCEEDED AT



ANY TIME

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 12 calendar month(s).

Condition 49: Applicability and designation of affected facility
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:40CFR 60.300, NSPS Subpart DD

Item 49.1:

This Condition applies to Emission Unit: 1-MAINP
Process: GHM

Item 49.2:

(a) The provisions of this subpart apply to each affected facility at any grain terminal elevator, except as provided under Section 60.304(b). The affected facilities are each truck unloading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer and all grain handling operations.

(b) Any facility under paragraph 9a) of this section which commences construction, modification or reconstruction after August 3, 1978 is subject to the requirements of this part.

Condition 50: Compliance Demonstration
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:40CFR 60.302(b)(1), NSPS Subpart DD

Item 50.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-MAINP
Process: GHM

Regulated Contaminant(s):
CAS No: 0NY075-00-0 PARTICULATES

Item 50.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any



affected facility except a grain dryer any process emission which contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).

To ensure compliance with this limit, the facility shall follow manufacturers recommended preventative maintenance protocol and inspection procedures.

Upper Permit Limit: 0.01 grains per dscf
Reference Test Method: EPA method 5
Monitoring Frequency: SINGLE OCCURRENCE
Averaging Method: 3-HOUR BLOCK AVERAGE
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 51: Compliance Demonstration
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:40CFR 60.302(b)(2), NSPS Subpart DD

Item 51.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-MAINP
Process: GHM

Regulated Contaminant(s):
CAS No: 0NY075-00-0 PARTICULATES

Item 51.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility, except a grain dryer, any process emission which exhibits greater than 0 percent opacity.

To verify compliance with this opacity limit, a facility representative must observe particulate emissions from the unloading operations a minimum of one time per day for each grain delivery. The observations shall be documented in a permanently bound logbook, indicating date, time, weather condition, observation, i.e. were any particulate emissions observed, and observer's name. The remaining time, opacity shall be monitored via observation by either the operator or facilities representative. If at any time opacity is observed, corrective action shall be carried



out immediately and recorded in the logbook. If the corrective action required cannot be implemented quickly, immediate action shall be taken to minimize emissions until a permanent solution can be completed. Future grain deliveries shall not be accepted until the opacity problem has been resolved.

At times when a problem occurs and the corrective action cannot be carried out immediately, the facility must contact the NYSDEC Regional office as soon as possible via telephone or e-mail and submit a written report describing the incident and the corrective action taken within 30 days of the violation. Records of opacity observations, corrective actions taken, and performance tests shall be kept on-site for five years and be available for NYSDEC review upon request.

Parameter Monitored: OPACITY

Upper Permit Limit: 0 percent

Reference Test Method: EPA method 9

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 6-MINUTE AVERAGE (METHOD 9)

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 52: Compliance Demonstration

Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 60.302(c)(2), NSPS Subpart DD

Item 52.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-MAINP

Process: GHM

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 52.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

On and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere any fugitive emission from any grain handling operation which exhibits greater than 0 percent opacity.



To verify compliance with this opacity limit, a facility representative must observe particulate emissions from the grain handling operation a minimum of one time per day. The observations shall be documented in a permanently bound logbook, indicating date, time, weather condition, observation, i.e. were any particulate emissions observed, and observer's name. The remaining time, opacity shall be monitored via observation by either the operator or facilities representative. If at any time opacity is observed, corrective action shall be carried out immediately and recorded in the logbook. If the corrective action required cannot be implemented quickly, immediate action shall be taken to minimize emissions until a permanent solution can be completed.

At times when a problem occurs and the corrective action cannot be carried out immediately, the facility must contact the NYSDEC Regional office as soon as possible via telephone or e-mail and submit a written report describing the incident and the corrective action taken within 30 days of the violation. Records of opacity observations, corrective actions taken, and performance tests shall be kept on-site for five years and be available for NYSDEC review upon request.

Parameter Monitored: OPACITY

Upper Permit Limit: 0 percent

Reference Test Method: EPA method 9

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 6-MINUTE AVERAGE (METHOD 9)

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 53: Compliance Demonstration

Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:40CFR 60.302(d), NSPS Subpart DD

Item 53.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-MAINP

Process: GHM

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 53.2:

Compliance Demonstration shall include the following monitoring:

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



Monitoring Description:

The owner or operator of any barge or ship unloading station shall operate as follows:

(1) The unloading leg shall be enclosed from the top (including the receiving hopper) to the center line of the bottom pulley and ventilation to a control device shall be maintained on both sides of the leg and the grain receiving hopper.

(2) The total rate of air ventilated shall be at least 32.1 actual cubic meters per cubic meter of grain handling capacity (ca. 40 ft³ /bu).

The total enclosure and air ventilation rate of the unloading leg must be maintained at all times that the unloading process is in operation to ensure compliance with the 0.01 gr/dscf particulate limit and the 0% opacity limit specified under 40 cfr 60.302(b).

Parameter Monitored: TOTAL RATE OF AIR VENTILATED

Lower Permit Limit: 32.1 actual cubic meters per cubic meter of grain handling capacity

Reference Test Method: EPA method 2

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: MINIMUM - NOT TO FALL BELOW STATED VALUE - SEE MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 54: Test methods and procedures

Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:40CFR 60.303, NSPS Subpart DD

Item 54.1:

This Condition applies to Emission Unit: 1-MAINP
Process: GHM

Item 54.2:

(a) In conducting the performance tests required in Section 60.8, the owner or operator shall use as reference methods in Appendix A of this part or other methods and procedures as specified in this section, except as provided in Section 60.8(b). Acceptable alternative methods and procedures are given in paragraph (c) of this section.

(b) The owner or operator shall determine compliance with the particulate matter standards in Section 60.302 as follows:



(1) Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters; and

(2) Method 2 shall be used to determine the ventilation volumetric flow rate; and

(3) Method 9 and the procedures in Section 60.11 shall be used to determine opacity.

(c) The owner or operator may use Method 5 for Method 17 as alternative reference method for the procedures specified in this section.

Condition 55: Compliance Demonstration
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable Federal Requirement:6NYCRR 212.4(a)

Item 55.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-MAINP
Process: LOD

Regulated Contaminant(s):
CAS No: 000064-17-5 ETHYL ALCOHOL (ETHANOL)

Item 55.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The truck, rail car, or ship ethanol loading rack emissions shall be controlled by an enclosed flare. Enclosed combustion devices shall be designed to reduce the VOC emissions vented to them with an efficiency of 95% or greater, or to an exit concentration of 20 parts per million by volume, on a dry gas basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 degrees Celsius.

This condition specifies a combustion efficiency and a one time stack test to demonstrate compliance. The Department may, at any time, request additional stack tests of the flare to demonstrate compliance. The combustion efficiency test must be conducted within 180 days of startup. A stack test protocol must be submitted for approval within 45



days of the proposed test and NYSDEC staff given an opportunity to witness the test. A stack test results report is due within 45 days after the date of the test.

The Flare shall be operated with a flame present at all times during loadout. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame. Flare design specifications must meet the requirements in the United States Code of Federal register 40 cfr 60.18.

For the 100,000 gallon Denaturant tank (gasoline), compliance with this condition will also satisfy the requirements of 6 NYCRR part 229.3(a), Petroleum and Volatile Organic Liquid Storage and Transfer, for equivalent control in lieu of an internal floating roof.

Annual certification reports must be submitted and include deviations and details of corrective action.

Flare design details meeting the above requirements must be submitted to this office for approval prior to signing a contract for purchase.**

Manufacturer Name/Model Number: TBD
Parameter Monitored: COMBUSTION EFFICIENCY
Lower Permit Limit: 95 percent
Reference Test Method: epa appv methods
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 3-HOUR BLOCK AVERAGE
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2009.
Subsequent reports are due every 12 calendar month(s).



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 - 6NYCRR Part 201-1.10(a)

Where emission source owners and/or operators keep records pursuant to compliance with the operational flexibility requirements of 6 NYCRR Subpart 201-5.4(b)(1), and/or the emission capping requirements of 6 NYCRR Subparts 201-7.2(d), 201-7.3(f), 201-7.3(g), 201-7.3(h)(5), 201-7.3(i) and 201-7.3(j), the Department will make such records available to the public upon request in accordance with 6 NYCRR Part 616 - Public Access to Records. Emission source owners and/or operators must submit the records required to comply with the request within sixty working days of written notification by the Department of receipt of the request.

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 56: Contaminant List
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable State Requirement: ECL 19-0301

Item 56.1:

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

CAS No: 000107-02-8

Name: ACROLEIN

CAS No: 000630-08-0

Name: CARBON MONOXIDE

CAS No: 000064-17-5

Name: ETHYL ALCOHOL (ETHANOL)

CAS No: 000050-00-0

Name: FORMALDEHYDE

CAS No: 0NY210-00-0

Name: OXIDES OF NITROGEN

CAS No: 0NY075-00-0

Name: PARTICULATES

CAS No: 007803-51-2

Name: PHOSPHINE

CAS No: 0NY075-00-5

Name: PM-10

CAS No: 0NY998-00-0

Name: VOC

Condition 57: Unavoidable noncompliance and violations
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable State Requirement: 6NYCRR 201-1.4

Item 57.1:

At the discretion of the commissioner a violation of any applicable emission standard for necessary scheduled equipment maintenance, start-up/shutdown conditions and malfunctions or upsets may be excused if such violations are unavoidable. The following actions and recordkeeping and reporting requirements must be adhered to in such circumstances.

- (a) The facility owner and/or operator shall compile and maintain records of all equipment 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 commissioner's representative when requested to do so in writing or when so required by a condition of a permit issued



for the corresponding air contamination source except where conditions elsewhere in this permit which contain more stringent reporting and notification provisions for an applicable requirement, in which case they supercede those stated here. Such reports shall describe why the violation was unavoidable and shall include the time, frequency and duration of the maintenance and/or start-up/shutdown activities and the identification of air contaminants, and the estimated emission rates. If a facility owner and/or operator is subject to continuous stack monitoring and quarterly reporting requirements, he need not submit reports for equipment maintenance or start-up/shutdown for the facility to the commissioner's representative.

(b) In the event that emissions of air contaminants in excess of any emission standard in 6 NYCRR Chapter III Subchapter A occur due to a malfunction, the facility owner and/or operator shall report such malfunction by telephone to the commissioner's representative as soon as possible during normal working hours, but in any event not later than two working days after becoming aware that the malfunction occurred. Within 30 days thereafter, when requested in writing by the commissioner's representative, the facility owner and/or operator shall submit a written report to the commissioner's representative describing the malfunction, the corrective action taken, identification of air contaminants, and an estimate of the emission rates. These reporting requirements are superceded by conditions elsewhere in this permit which contain reporting and notification provisions for applicable requirements more stringent than those above.

(c) The Department may also require the owner and/or operator to include in reports described under (a) and (b) above an estimate of the maximum ground level concentration of each air contaminant emitted and the effect of such emissions depending on the deviation of the malfunction and the air contaminants emitted.

(d) In the event of maintenance, start-up/shutdown or malfunction conditions which result in emissions exceeding any applicable emission standard, the facility owner and/or operator shall take appropriate action to prevent emissions which will result in contravention of any applicable ambient air quality standard. Reasonably available control technology, as determined by the commissioner, shall be applied during any maintenance, start-up/shutdown or malfunction condition subject to this paragraph.

(e) In order to have a violation of a federal regulation (such as a new source performance standard or national emissions standard for hazardous air pollutants) excused, the specific federal regulation must provide for an affirmative defense during start-up, shutdowns, malfunctions or upsets.

Condition 58: Emission Unit Definition
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable State Requirement: 6NYCRR 201-5

Item 58.1:

The facility is authorized to perform regulated processes under this permit for:

Emission Unit: 1-BOILR

Emission Unit Description:

This emission unit consists of two-120 mmbtu/hr boilers firing natural gas only, for steam production.

Building(s): PROCESS

Item 58.2:

The facility is authorized to perform regulated processes under this permit for:



Emission Unit: 1-MAINP

Emission Unit Description:

This emission unit consists of the main process operations at the facility. The operations including mash preparation, fermentation, separation, evaporation, dehydration, distillation, drying operations, distillers grain storage and loadout and ethanol loadout operations.

Building(s): OUTSIDE
PROCESS

Condition 59: Air pollution prohibited
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable State Requirement:6NYCRR 211.2

Item 59.1:

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.

****** Emission Unit Level ******

Condition 60: Emission Point Definition By Emission Unit
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable State Requirement:6NYCRR 201-5

Item 60.1:

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

Emission Unit: 1-BOILR

Emission Point: 00001

Height (ft.): 80 Diameter (in.): 72
NYTMN (km.): 4752.7 NYTME (km.): 184.4 Building: PROCESS

Emission Point: 00002

Height (ft.): 80 Diameter (in.): 72
NYTMN (km.): 4752.7 NYTME (km.): 184.4 Building: PROCESS

Item 60.2:

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

Emission Unit: 1-MAINP



Emission Point: 00003	Height (ft.): 35	Diameter (in.): 30	
	NYTMN (km.): 4752.7	NYTME (km.): 184.4	Building: OUTSIDE
Emission Point: 00004	Height (ft.): 35	Diameter (in.): 30	
	NYTMN (km.): 4752.7	NYTME (km.): 184.4	Building: OUTSIDE
Emission Point: 00005	Height (ft.): 35	Diameter (in.): 30	
	NYTMN (km.): 4752.7	NYTME (km.): 184.4	Building: OUTSIDE
Emission Point: 00006	Height (ft.): 35	Diameter (in.): 30	
	NYTMN (km.): 4752.7	NYTME (km.): 184.4	Building: OUTSIDE
Emission Point: 00007	Height (ft.): 35	Diameter (in.): 30	
	NYTMN (km.): 4752.7	NYTME (km.): 184.4	Building: OUTSIDE
Emission Point: 00010	Height (ft.): 50	Diameter (in.): 6	
	NYTMN (km.): 4752.7	NYTME (km.): 184.4	Building: OUTSIDE
Emission Point: 00011	Height (ft.): 35	Diameter (in.): 30	
	NYTMN (km.): 4752.7	NYTME (km.): 184.4	Building: OUTSIDE
Emission Point: 00013	Height (ft.): 180	Diameter (in.): 108	
			Building: OUTSIDE

Condition 61: Process Definition By Emission Unit
Effective between the dates of 05/16/2008 and Permit Expiration Date

Applicable State Requirement: 6NYCRR 201-5

Item 61.1:

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

Emission Unit: 1-BOILR
 Process: BLR Source Classification Code: 1-02-006-01
 Process Description:
 This process consists of two-120 mmbtu/hr boilers firing natural gas.

Emission Source/Control: BLR01 - Combustion
 Design Capacity: 120 million BTUs per hour

Emission Source/Control: BLR02 - Combustion
 Design Capacity: 120 million BTUs per hour

Item 61.2:



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

Emission Unit: 1-MAINP

Process: CIP

Source Classification Code: 3-02-009-20

Process Description: This is the clean in place system at the facility.

Emission Source/Control: CIPTK - Process

Emission Source/Control: CTANK - Process

Design Capacity: 100,000 gallons

Item 61.3:

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

Emission Unit: 1-MAINP

Process: CSL

Source Classification Code: 3-01-120-12

Process Description:

The mash preparation process is carried out in two production lines of 50 mmgpy each. The process begins by blending the corn meal from the milling area with warm process condensate, steam, alpha amylase, ammonium hydroxide and various recycled process liquids (thin stillage) in a ribbon mixer. The mixture is then sent to the slurry mix tank. The warm mash slurry is pumped through an autoflush basket strainer. The solids are sent to the whole stillage tank and the rest of the slurry is sent through a two stage liquefaction process. The liquefied mash is then pumped through a beer/mash exchanger, used not only to cool the liquefied mash, but also to recapture hydrolysis area energy and preheat the beer feed prior to distillation. The liquefied mash is then sent through a mash cooler, which serves to further cool the liquefied mash. Emissions are ultimately controlled by the two RTO's (see process dry).

Emission Source/Control: 1RMXA - Process

Emission Source/Control: AATNK - Process

Design Capacity: 10,500 gallons

Emission Source/Control: ABS1A - Process

Emission Source/Control: ABS1B - Process

Emission Source/Control: AHTNK - Process

Design Capacity: 21,000 gallons

Emission Source/Control: BMH1A - Process

Emission Source/Control: BMH1B - Process

Emission Source/Control: BMH2A - Process



Emission Source/Control: BMH2B - Process

Emission Source/Control: EPCTK - Process

Emission Source/Control: GATNK - Process
Design Capacity: 10,500 gallons

Emission Source/Control: LFS1A - Process

Emission Source/Control: LFS1B - Process

Emission Source/Control: LFS2A - Process

Emission Source/Control: LFS2B - Process

Emission Source/Control: MCR1A - Process

Emission Source/Control: MCR1B - Process

Emission Source/Control: MCR2A - Process

Emission Source/Control: MCR2B - Process

Emission Source/Control: PCH1A - Process

Emission Source/Control: PCH1B - Process

Emission Source/Control: RMX1B - Process

Emission Source/Control: SMT1A - Process

Emission Source/Control: SMT1B - Process

Emission Source/Control: WMH1A - Process

Emission Source/Control: WMH1B - Process

Item 61.4:

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

Emission Unit: 1-MAINP

Process: DHD

Source Classification Code: 3-01-120-12

Process Description:

In this process, a portion of the 190 proof vapor from each distillation process line is sent through a superheater and a sieve bed. A portion of the stream exiting the sieve bed goes to the regen preheater. The other portion goes through a second sieve bed, a regen condenser, a regen vacuum system and finally the regen preheater. The product stream is then sent through another preheater and the finished CO₂ extractor. The bottoms from the CO₂ extractor (i.e. stripper) are cooled and sent to the 200 proof storage tank. The reflux is cooled and sent



back to the extractor.

Emission Source/Control: ECL1A - Process

Emission Source/Control: ECL1B - Process

Emission Source/Control: ECL2A - Process

Emission Source/Control: ECL2B - Process

Emission Source/Control: ECL3A - Process

Emission Source/Control: ECL3B - Process

Emission Source/Control: ECP1A - Process

Emission Source/Control: ECP1B - Process

Emission Source/Control: EXT1A - Process

Emission Source/Control: EXT1B - Process

Emission Source/Control: RBS1A - Process

Emission Source/Control: RBS1B - Process

Emission Source/Control: RCR1A - Process

Emission Source/Control: RCR1B - Process

Emission Source/Control: RPH1A - Process

Emission Source/Control: SB01A - Process

Emission Source/Control: SB01B - Process

Emission Source/Control: SB02A - Process

Emission Source/Control: SB02B - Process

Emission Source/Control: SHT1A - Process

Emission Source/Control: SHT1B - Process

Item 61.5:

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

Emission Unit: 1-MAINP

Process: DIS

Source Classification Code: 3-01-120-12

Process Description:

The beer formed in the fermentation process is split into two lines and each line is preheated using a beer/mash exchanger, a beer booster, a beer column feed heater and



finally a beer feed preheater. Each line is sent through a CO₂ degasser (exhaust sent to the CO₂ scrubber). Following preheating and degassing, each beer feed line is fed to a beer column, where it is concentrated to 190 proof. The beer column bottoms, or whole stillage, is sent to the separation process. A portion of the beer column reboiler is sent back to the beer column for reprocessing and the bottoms are sent to the condensate pot and to the evaporator process. A portion of each beer column overhead is then sent to two dehydration/deacidification process lines and a portion to the wet distiller grain (wdg) and evaporation process. The reflux is then recycled back to the beer column. The reflux receiver vent is sent to the CO₂ scrubber. The CO₂ scrubber overhead is then sent to the RTO's (see process dry). In addition, the fuels oils drawn off the column in liquid form are sent to the dehydration/deacidification process.

Emission Source/Control: BCF1A - Process

Emission Source/Control: BCF1B - Process

Emission Source/Control: BCF2A - Process

Emission Source/Control: BCF2B - Process

Emission Source/Control: BCR1A - Process

Emission Source/Control: BCR1B - Process

Emission Source/Control: BFP1A - Process

Emission Source/Control: BFP1B - Process

Emission Source/Control: CPT1A - Process

Emission Source/Control: CPT1B - Process

Emission Source/Control: DC01A - Process

Emission Source/Control: DC01B - Process

Emission Source/Control: DG01A - Process

Emission Source/Control: DG01B - Process

Emission Source/Control: DVC1A - Process

Emission Source/Control: DVC1B - Process

Emission Source/Control: RCR1A - Process



Emission Source/Control: RCR1B - Process

Emission Source/Control: RRR1A - Process

Emission Source/Control: RRR1B - Process

Emission Source/Control: RVC1A - Process

Emission Source/Control: RVC1B - Process

Item 61.6:

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

Emission Unit: 1-MAINP

Process: DRY

Source Classification Code: 3-01-120-12

Process Description:

The solids, or wet cake, from the centrifuges is conveyed to the drying process. The wet cake from the centrifuges and the syrup from the syrup storage tank are conveyed to two drying systems. A portion of the dryer exhaust gases are recycled back to each dryer. The outlet from the dryers goes through two cyclones. The exiting vapors are controlled by two regenerative thermal oxidizers. The dried ddgs from the cyclones are conveyed to two fluidized bed coolers. The material is directed to the pneumatic conveying system that takes the discharge from the cooler and transfers it to receiving vessel which is controlled by a baghouse and finally to the ddgs storage facility. The ddgs will later be conveyed for loading.

Emission Source/Control: DRY1A - Combustion

Emission Source/Control: DRY1B - Combustion

Emission Source/Control: HTR1B - Combustion

Emission Source/Control: CYC1A - Process

Emission Source/Control: CYC1B - Process

Emission Source/Control: CYC2A - Process

Emission Source/Control: CYC2B - Process

Emission Source/Control: FBC1A - Process

Emission Source/Control: FBC1B - Process

Emission Source/Control: FSW1A - Process

Emission Source/Control: FSW1B - Process

Emission Source/Control: HTR1A - Process



Emission Source/Control: MXR1A - Process

Emission Source/Control: MXR1B - Process

Emission Source/Control: PMS1A - Process

Emission Source/Control: PMS1B - Process

Emission Source/Control: RCY1A - Process

Emission Source/Control: RCY1B - Process

Emission Source/Control: SYR1A - Process

Emission Source/Control: SYR1B - Process

Item 61.7:

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

Emission Unit: 1-MAINP

Process: ESL

Source Classification Code: 3-01-120-12

Process Description:

200 proof ethanol is pumped from one of two 150,000 gallon day tanks to one of three 750,000 gallon denatured ethanol storage tanks, where it is mixed with gasoline from the 100,000 gallon denaturant tank. Emissions from the day tanks, storage tanks, denaturant tanks and ethanol load out are controlled by the ethanol carbon dioxide degasser and one of two regenerative thermal oxidizers. The tanks are fixed roof design. Ethanol loading rack emissions, identified as process LOD, will be controlled by a flare.

Emission Source/Control: FLARE - Control
Control Type: FLARING

Emission Source/Control: CIPTK - Process

Emission Source/Control: CTANK - Process
Design Capacity: 100,000 gallons

Emission Source/Control: DENAT - Process

Emission Source/Control: DETK1 - Process

Emission Source/Control: DETK2 - Process

Emission Source/Control: DETK3 - Process

Emission Source/Control: DTNK1 - Process

Emission Source/Control: DTNK2 - Process



Item 61.8:

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

Emission Unit: 1-MAINP

Process: GHM

Source Classification Code: 3-01-120-12

Process Description:

Number 2 yellow corn used as the feedstock for ethanol production will be delivered by rail and/or lake freighter to the storage area. The plan is for 80% lake freighter and 20% rail delivery. The storage area consists of 4 grain elevators with a maximum storage capacity of 11.6 million bushels of corn. Lake freighters will provide self-unloading capabilities into a feed leg and into existing storage. Rail unloading will be accomplished through railcar unloading pits. The corn from the storage area will be scalped and then conveyed to the plant in order to feed three hammer mills. The milled corn, or corn meal, is conveyed to two receiving vessels where it can then be fed into the mash preparation process.

Emission Source/Control: FHBH1 - Control

Control Type: FABRIC FILTER

Emission Source/Control: FHBH2 - Control

Control Type: FABRIC FILTER

Emission Source/Control: FHBH3 - Control

Control Type: FABRIC FILTER

Emission Source/Control: FHBH4 - Control

Control Type: FABRIC FILTER

Emission Source/Control: HMBH1 - Control

Control Type: FABRIC FILTER

Emission Source/Control: CBFC1 - Process

Emission Source/Control: CBFC2 - Process

Emission Source/Control: CBFE1 - Process

Emission Source/Control: CBFE2 - Process

Emission Source/Control: CDBN1 - Process

Emission Source/Control: CDBN2 - Process

Emission Source/Control: CRCR1 - Process

Emission Source/Control: CRCR2 - Process

Emission Source/Control: CSTRG - Process



- Emission Source/Control: DHPR1 - Process
- Emission Source/Control: DHPR2 - Process
- Emission Source/Control: DHPR3 - Process
- Emission Source/Control: DHPR4 - Process
- Emission Source/Control: FRCR1 - Process
- Emission Source/Control: FRCR2 - Process
- Emission Source/Control: HM001 - Process
- Emission Source/Control: HM002 - Process
- Emission Source/Control: HM003 - Process
- Emission Source/Control: HMCV1 - Process
- Emission Source/Control: HMCV2 - Process
- Emission Source/Control: MIXR1 - Process
- Emission Source/Control: MIXR2 - Process
- Emission Source/Control: SCLPR - Process
- Emission Source/Control: TRSHB - Process
- Emission Source/Control: WBPF1 - Process
- Emission Source/Control: WBPF2 - Process

Item 61.9:

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

Emission Unit: 1-MAINP

Process: LOD

Source Classification Code: 4-04-002-50

Process Description:

This process identifies the truck, rail car, or ship ethanol load out rack. Emissions from loading ethanol are controlled by an enclosed flare.

Emission Source/Control: FLARE - Control
Control Type: FLARING

Emission Source/Control: DETK1 - Process

Emission Source/Control: DETK2 - Process

Emission Source/Control: DETK3 - Process



Item 61.10:

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

Emission Unit: 1-MAINP

Process: WGE

Source Classification Code: 3-01-120-12

Process Description:

A portion of the 190 proof vapors from each process line are sent to a dedicated set of evaporators in series. A portion of the liquid coming off the first evaporator in each process line is sent back to the distillation process for further processing. Remaining material is processed through the remaining 2 evaporators to produce a syrup that is sent to storage. The beer column bottoms, or whole stillage, from each beer column that is sent to the whole stillage tank in the distillation process is also pumped through a series of 4 centrifuges. The centrifuges remove the thin stillage from the solids prior to the drying step. The liquid is sent and stored in the thin stillage tank and the solids are sent to the dryer via a WDG screw conveyor or progressive cavity pump. The thin stillage is used as feed for the above-mentioned evaporators to produce a syrup for storage.

Emission Source/Control: CEN1A - Process

Emission Source/Control: CEN1B - Process

Emission Source/Control: CEN2A - Process

Emission Source/Control: CEN2B - Process

Emission Source/Control: CEN3A - Process

Emission Source/Control: CEN3B - Process

Emission Source/Control: CEN4A - Process

Emission Source/Control: CEN4B - Process

Emission Source/Control: CSR1A - Process

Emission Source/Control: CSR1B - Process

Emission Source/Control: CSR2A - Process

Emission Source/Control: CSR2B - Process

Emission Source/Control: E1AV1 - Process

Emission Source/Control: E1BV1 - Process

Emission Source/Control: E2AV1 - Process



Emission Source/Control: E2BV1 - Process
Emission Source/Control: E3AV1 - Process
Emission Source/Control: E3AV2 - Process
Emission Source/Control: E3BV1 - Process
Emission Source/Control: E3BV2 - Process
Emission Source/Control: ECN1A - Process
Emission Source/Control: ECN1B - Process
Emission Source/Control: ECR1A - Process
Emission Source/Control: ECR1B - Process
Emission Source/Control: EJ01A - Process
Emission Source/Control: EJ01B - Process
Emission Source/Control: EVP1A - Process
Emission Source/Control: EVP1B - Process
Emission Source/Control: EVP2A - Process
Emission Source/Control: EVP2B - Process
Emission Source/Control: EVP3A - Process
Emission Source/Control: EVP3B - Process
Emission Source/Control: SCR1A - Process
Emission Source/Control: SCR1B - Process
Emission Source/Control: SCR2A - Process
Emission Source/Control: SCR2B - Process
Emission Source/Control: SCR3A - Process
Emission Source/Control: SCR3B - Process
Emission Source/Control: TSTKA - Process
Emission Source/Control: TSTKB - Process
Emission Source/Control: WSTKA - Process



Emission Source/Control: WSTKB - Process

Item 61.11:

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

Emission Unit: 1-MAINP

Process: YPF

Source Classification Code: 3-01-120-12

Process Description:

The fermentation process will consist of a continuous yeast propagator and 8 batch fermenters. The cooled liquefied mash, from the mash coolers in the final step of the mash preparation process, is combined into one common fermentation feed line. A portion of the feed line goes to the yeast propagators and the majority of the feed line is routed to the batch fermenters. There is a yeast mix tank that can provide vitamins, minerals and other additives to the yeast propagation tank, if necessary, to strengthen the fermentation. In addition, a continuous supply of air is critical to the fermentation process. Therefore, purified air is provided by the plant air system. Since temperature is vital to the proper operation of the fermentation lines, the temperature of each batch fermenter is maintained by a fermentation cooler. The yeast from the yeast propagator is combined with the liquefied mash slurry going to the batch fermenters. The batch fermenters are pumped to the beer well prior to entering the distillation process. The vapors from the yeast propagation tank, beer well and the CO₂ evolved during the fermentation process are collected from the batch fermenters and routed to a common header system and routed to the CO₂ scrubber. The overhead from the CO₂ scrubber is routed to one of two RTO's (see process dry) to control residual VOC in the gas stream.

Emission Source/Control: SCRBA - Control

Control Type: SPRAY TOWER, VENTURI SCRUBBER

Emission Source/Control: BWLL1 - Process

Emission Source/Control: FCR01 - Process

Emission Source/Control: FCR02 - Process

Emission Source/Control: FCR03 - Process

Emission Source/Control: FCR04 - Process

Emission Source/Control: FCR05 - Process

Emission Source/Control: FCR06 - Process

Emission Source/Control: FCR07 - Process



Emission Source/Control: FCR08 - Process

Emission Source/Control: FTK01 - Process

Emission Source/Control: FTK02 - Process

Emission Source/Control: FTK03 - Process

Emission Source/Control: FTK04 - Process

Emission Source/Control: FTK05 - Process

Emission Source/Control: FTK06 - Process

Emission Source/Control: FTK07 - Process

Emission Source/Control: FTK08 - Process

Emission Source/Control: SATNK - Process
Design Capacity: 20,000 gallons

Emission Source/Control: TWCR1 - Process

Emission Source/Control: YMT1A - Process

Emission Source/Control: YPRP1 - Process

New York State Department of Environmental Conservation

Permit ID: 9-1402-00200/00048

Facility DEC ID: 9140200200

