

**New York State Department of Environmental Conservation**

**Permit Review Report**

**Permit ID: 9-0436-00022/00005    Renewal Number: 1**



**05/13/2004**

**Facility Identification Data**

Name: LAIDLAW ENERGY AND ENVIRONMENTAL INC  
Address: 6662 ROUTE 219  
ELLCOTTVILLE, NY 14731-0500

**Owner/Firm**

Name: LAIDLAW ENERGY & ENVIRONMENTAL INC  
Address: 6662 ROUTE 219  
PO BOX 500  
ELLCOTTVILLE, NY 14731-0500, USA  
Owner Classification: Corporation/Partnership

**Permit Contacts**

Division of Environmental Permits:  
Name: JEFFREY E DIETZ  
Address: 270 MICHIGAN AVE  
BUFFALO, NY 14203-2999

Division of Air Resources:  
Name: MICHAEL EMERY  
Address: NYS DEPT OF ENVIRONMENTAL CONSERVATION  
270 MICHAGAN AVENUE  
BUFFALO, NY 14203-2999  
Phone:7168517130

Air Permitting Contact:  
Name: RODNEY GOODE  
Address: LAIDLAW ENERGY AND ENVIRONMENTAL  
PO BOX 500  
ELLCOTTVILLE, NY 14731-0500  
Phone:7166992425

**Permit Description**

**Introduction**

The Title V operating air permit is intended to be a document containing only enforceable terms and conditions as well as any additional information, such as the identification of emission units, emission points, emission sources and processes, that makes the terms meaningful. 40 CFR Part 70.7(a)(5) requires that each Title V permit have an accompanying "...statement that sets forth the legal and factual basis for the draft permit conditions". The purpose for this permit review report is to satisfy the above requirement by providing pertinent details regarding the permit/application data and permit conditions in a more easily understandable format. This report will also include background narrative and explanations of regulatory decisions made by the reviewer. It should be emphasized that this permit review report, while based on information contained in the permit, is a separate document and is not itself an enforceable term and condition of the permit.

**Summary Description of Proposed Project**

Renew the Air Title V facility permit.

**New York State Department of Environmental Conservation**

**Permit Review Report**

**Permit ID: 9-0436-00022/00005    Renewal Number: 1**



**05/13/2004**

**Attainment Status**

LIDLAW ENERGY AND ENVIRONMENTAL INC is located in the town of ELLICOTTVILLE in the county of CATTARAUGUS.

The attainment status for this location is provided below. (Areas classified as attainment are those that meet all ambient air quality standards for a designated criteria air pollutant.)

<b>Criteria Pollutant</b>	<b>Attainment Status</b>
Particulate Matter (PM)	ATTAINMENT
Particulate Matter < 10µ in diameter (PM10)	ATTAINMENT
Sulfur Dioxide (SO2)	ATTAINMENT
Ozone* (NON-ATTAINMENT)	TRANSPORT REGION (NON-ATTAINMENT)
Oxides of Nitrogen (NOx)**	ATTAINMENT
Carbon Monoxide (CO)	ATTAINMENT

\* Ozone is regulated in terms of the emissions of volatile organic compounds (VOC) and/or oxides of nitrogen (NOx) which are ozone precursors.

\*\* NOx has a separate ambient air quality standard in addition to being an ozone precursor

**Facility Description**

Laidlaw operates a 4.2 megawatt co-generation facility. The primary generation unit consists of an Allison 501 KB natural gas fired turbine - generator set (emission unit U-00001, process 001, emission point 00001, emission source 00001), waste heat steam generator (boiler) and steam turbine - generator set. The exhaust gases from the combustion gas turbine, pass through the waste heat steam generator, and then enters the kilns to dry lumber. No other lumber operations are done on the property. The plant can generate about 4.2 megawatts of electricity, excluding house load. They have a 30 year contract to sell up to 3.79 MW of electricity to the Niagara Mohawk Power Company grid.

The other electrical generation system consists of a natural gas fired Caterpillar engine, CAT 4, generator set rated at 450 kW (emission unit U-00002, process 002, emission point 00002 & 00003, emission source 00002). The engine exhaust is split before entering heat exchangers and then is emitted out two emission points. Waste heat from the engine is used to dry wood in a dedicated kiln in a closed loop system. A 4.18 mmBtu/hr natural gas boiler is used to supplement the heat content of this system if necessary. This boiler is exempt from permitting.

The facility also has an emergency generator, another natural gas fired Caterpillar engine, CAT 3,

**New York State Department of Environmental Conservation**

**Permit Review Report**

**Permit ID: 9-0436-00022/00005    Renewal Number: 1**

**05/13/2004**



generator set rated at 450kW. This is exempt from permitting provided it does not operate more than 500 hours per calendar year.

Periodically the turbine and the CAT 4 engine exhausts are tested for emissions of Oxides of Nitrogen (NOx ). The turbine results are used to evaluate compliance with the NOx emission limit in Subpart GG, and results from both are used to calculate annual NOx emissions. Visible emission observations are made to verify compliance with opacity requirements, when necessary.

When the initial Title V permit application was submitted U.S. Carbon Corporation was located on the same property and required to obtain a Title V permit, due to the applicability of 40 CFR Subpart RRR, "Standards of Performance for Volatile Organic Compound Emissions from Synthetic Organic Chemicals Manufacturing Industry Reactor Process." Because the former Ellicottville Energy (now Laidlaw Energy and Environment) was on the same property, it too was required to obtain a Title V permit. U.S. Carbon Corporation ceased operation in 1999 and removed its equipment from the site. Laidlaw Energy's emissions are below the threshold levels for Title V applicability, and since U.S. Carbon is no longer operating Laidlaw Energy is not required to have a Title V permit, but has decided to keep a Title V permit.

**Permit Structure and Description of Operations**

The Title V permit for LAIDLAW ENERGY AND ENVIRONMENTAL INC is structured in terms of the following hierarchy: facility, emission unit, emission point, emission source and process.

A facility is defined as all emission sources located at one or more adjacent or contiguous properties owned or operated by the same person or persons under common control. The facility is subdivided into one or more emission units (EU). Emission units are defined as any part or activity of a stationary facility that emits or has the potential to emit any federal or state regulated air pollutant. An emission unit is represented as a grouping of processes (defined as any activity involving one or more emission sources (ES) that emits or has the potential to emit any federal or state regulated air pollutant). An emission source is defined as any apparatus, contrivance or machine capable of causing emissions of any air contaminant to the outdoor atmosphere, including any appurtenant exhaust system or air cleaning device.

[NOTE: Indirect sources of air contamination as defined in 6 NYCRR Part 203 (i.e. parking lots) are excluded from this definition]. The applicant is required to identify the principal piece of equipment (i.e., emission source) that directly results in or controls the emission of federal or state regulated air pollutants from an activity (i.e., process). Emission sources are categorized by the following types:

- combustion            -            devices which burn fuel to generate heat, steam or power
- incinerator           -            devices which burn waste material for disposal
- control                -            emission control devices
- process                -            any device or contrivance which may emit air contaminants that is not included in the above categories.

LAIDLAW ENERGY AND ENVIRONMENTAL INC is defined by the following emission unit(s):  
Emission unit U00001 - This emission unit includes an Allison 501 KB combustion gas turbine

## New York State Department of Environmental Conservation

### Permit Review Report

Permit ID: 9-0436-00022/00005    Renewal Number: 1

05/13/2004



generator set firing natural gas fuel, and a heat recovery steam generator (HRSG) that supplies steam to a steam turbine generator. After the HRSG the hot exhaust gases are used to dry lumber in kilns. See process 001 for more details.

Emission unit U00001 is associated with the following emission points (EP):  
00001

It is further defined by the following process(es):

Process: 001 is located at MAIN, Building 001 - This includes a natural gas fired Allison 501 KB combined cycle combustion gas turbine generator set. According to the manufacturer's rating, the peak heat input to the turbine is 39.5 million Btu/hr and the corresponding output is 3.05 megawatts. Waste heat from the exhaust is recovered in a heat recovery steam generator (boiler). The steam powers a steam turbine generator set whose output is approximately 1.2 megawatt. Waste heat from the gas turbine exhaust (after the waste heat boiler) is used to dry lumber in the 6 kilns.

Emission unit U00002 - A natural gas fired Caterpillar engine generator G398 (CAT 4) produces electricity for sale to the grid. The waste heat from the cooling jacket and exhaust is recovered and used in the new wood drying kiln. See process 002 for more details.

Emission unit U00002 is associated with the following emission points (EP):  
00002, 00003

It is further defined by the following process(es):

Process: 002 is located at Main Floor, Building 001 - A Caterpillar G398 natural gas fired engine generator set (CAT 4 - 450 kW) with a low compression ratio (LCR) supplements the plant's production of electricity and supplies heat to the new kilns. The engine cooling water jacket passes through two heat exchangers to recover waste heat from the exhaust. If needed, additional heat is added to the cooling water on its way to the kilns by a natural gas fired boiler (4.18 mmBtu/hr, exempt from permitting). The water is circulated through closed loop heat exchangers in the new kiln. The cooler water is then returned to the engine and the cycle repeats. The lumber drying only requires a high level of heat in the early stages of the drying cycle. However, to be conservative the application is based on the engine operating all the time at full load.

### Title V/Major Source Status

LAIDLAW ENERGY AND ENVIRONMENTAL INC is subject to Title V requirements. This determination is based on the following information:

This facility was initially permitted as a major facility in 1998 because U.S. Carbon Corporation was located on the same property and required to obtain a Title V permit, due to the applicability of 40 CFR 63 Subpart RRR, "Standards of Performance for Volatile Organic Compound Emissions from Synthetic Organic Chemicals Manufacturing Industry Reactor Process." Because Laidlaw was on the same property, it too was required to obtain a Title V permit. U.S. Carbon Corporation ceased operation in 1999 and removed its equipment from the site. Laidlaw Energy's emissions are below the threshold levels for Title V applicability, the largest is NO<sub>x</sub>, with a potential to emit of 54 tons per year. Since U.S. Carbon is no longer operating Laidlaw Energy is not required to have a Title V permit, but they decided to keep their Title V permit.

### Program Applicability

The following chart summarizes the applicability of LAIDLAW ENERGY AND ENVIRONMENTAL INC with regards to the principal air pollution regulatory programs:

**New York State Department of Environmental Conservation**

**Permit Review Report**

**Permit ID: 9-0436-00022/00005    Renewal Number: 1**



**05/13/2004**

<b>Regulatory Program</b>	<b>Applicability</b>
PSD	NO
NSR (non-attainment)	NO
NESHAP (40 CFR Part 61)	NO
NESHAP (MACT - 40 CFR Part 63)	NO
NSPS	YES
TITLE IV	NO
TITLE V	YES
TITLE VI	NO
RACT	NO
SIP	YES

**NOTES:**

**PSD**            Prevention of Significant Deterioration (40 CFR 52) - requirements which pertain to major stationary sources located in areas which are in attainment of National Ambient Air Quality Standards (NAAQS) for specified pollutants.

**NSR**            New Source Review (6 NYCRR Part 231) - requirements which pertain to major stationary sources located in areas which are in non-attainment of National Ambient Air Quality Standards (NAAQS) for specified pollutants.

**NESHAP**        National Emission Standards for Hazardous Air Pollutants (40 CFR 61) - contaminant and source specific emission standards established prior to the Clean Air Act Amendments of 1990 (CAAA) which were developed for 9 air contaminants (inorganic arsenic, radon, benzene, vinyl chloride, asbestos, mercury, beryllium, radionuclides, and volatile HAP's)

**MACT**            Maximum Achievable Control Technology (40 CFR 63) - contaminant and source specific emission standards established by the 1990 CAAA. Under Section 112 of the CAAA, the US EPA is required to develop and promulgate emissions standards for new and existing sources. The standards are to be based on the best demonstrated control technology and practices in the regulated industry, otherwise known as MACT. The corresponding regulations apply to specific source types and contaminants.



**New York State Department of Environmental Conservation**

**Permit Review Report**

**Permit ID: 9-0436-00022/00005    Renewal Number: 1**

**05/13/2004**

**NSPS**                    New Source Performance Standards (40 CFR 60) - standards of performance for specific stationary source categories developed by the US EPA under Section 111 of the CAAA. The standards apply only to those stationary sources which have been constructed or modified after the regulations have been proposed by publication in the Federal Register and only to the specific contaminant(s) listed in the regulation.

**Title IV**                    Acid Rain Control Program (40 CFR 72 thru 78) - regulations which mandate the implementation of the acid rain control program for large stationary combustion facilities.

**Title VI**                    Stratospheric Ozone Protection (40 CFR 82, Subparts A thru G) - federal requirements that apply to sources which use a minimum quantity of CFC's (chlorofluorocarbons), HCFC's(hydrofluorocarbons)or other ozone depleting substances or regulated substitute substances in equipment such as air conditioners, refrigeration equipment or motor vehicle air conditioners or appliances.

**RACT**                    Reasonably Available Control Technology (6 NYCRR Parts 212.10, 226, 227-2, 228, 229, 230, 232, 233, 234, 235, 236) - the lowest emission limit that a specific source is capable of meeting by application of control technology that is reasonably available, considering technological and economic feasibility. RACT is a control strategy used to limit emissions of VOC's and NOx for the purpose of attaining the air quality standard for ozone. The term as it is used in the above table refers to those state air pollution control regulations which specifically regulate VOC and NOx emissions.

**SIP**                    State Implementation Plan (40 CFR 52, Subpart HH) - as per the CAAA, all states are empowered and required to devise the specific combination of controls that, when implemented, will bring about attainment of ambient air quality standards established by the federal government and the individual state. This specific combination of measures is referred to as the SIP. The term here refers to those state regulations that are approved to be included in the SIP and thus are considered federally enforceable.

**Compliance Status**

Facility is in compliance with all requirements

**SIC Codes**

SIC or Standard Industrial Classification code is an industrial code developed by the federal Office of Management and Budget for use, among other things, in the classification of establishments by the type of activity in which they are engaged. Each operating establishment is assigned an industry code on the basis of its primary activity, which is determined by its principal product or group of products produced or distributed, or services rendered. Larger facilities typically have more than one SIC code.

<b>SIC Code</b>	<b>Description</b>
2421	SAWMILLS & PLANING MILLS GENERAL
4931	ELEC & OTHER SERVICES COMBINED

**New York State Department of Environmental Conservation**

**Permit Review Report**

**Permit ID: 9-0436-00022/00005    Renewal Number: 1**



**05/13/2004**

**SCC Codes**

SCC or Source Classification Code is a code developed and used by the USEPA to categorize processes which result in air emissions for the purpose of assessing emission factor information. Each SCC represents a unique process or function within a source category logically associated with a point of air pollution emissions. Any operation that causes air pollution can be represented by one or more SCC's.

<b>SCC Code</b>	<b>Description</b>
2-01-002-01	INTERNAL COMBUSTION ENGINES - ELECTRIC GENERATION ELECTRIC UTILITY INTERNAL COMBUSTION ENGINE - NATURAL GAS Turbine
2-02-002-04	INTERNAL COMBUSTION ENGINES - INDUSTRIAL INDUSTRIAL INTERNAL COMBUSTION ENGINE - NATURAL GAS Reciprocating: Cogeneration

**Facility Emissions Summary**

In the following table, the CAS No. or Chemical Abstract Series code is an identifier assigned to every chemical compound. [NOTE: Certain CAS No.'s contain a 'NY' designation within them. These are not true CAS No.'s but rather an identification which has been developed by the department to identify groups of contaminants which ordinary CAS No.'s do not do. As an example, volatile organic compounds or VOC's are identified collectively by the NY CAS No. 0NY998-00-0.] The PTE refers to the Potential to Emit. This is defined as the maximum capacity of a facility or air contaminant source to emit any air contaminant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or air contamination source to emit any air contaminant, including air pollution control equipment and/or restrictions on the hours of operation, or on the type or amount or material combusted, stored, or processed, shall be treated as part of the design only if the limitation is contained in federally enforceable permit conditions. The PTE Range represents an emission range for a contaminant. Any PTE quantity that is displayed represents a facility-wide emission cap or limitation for that contaminant. If no PTE quantity is displayed, the PTE Range is provided to indicate the approximate magnitude of facility-wide emissions for the specified contaminant in terms of tons per year (tpy). The term 'HAP' refers to any of the hazardous air pollutants listed in section 112(b) of the Clean Air Act Amendments of 1990. Total emissions of all hazardous air pollutants are listed under the special NY CAS No. 0NY100-00-0. In addition, each individual hazardous air pollutant is also listed under its own specific CAS No. and is identified in the list below by the (HAP) designation.

<b>Cas No.</b>	<b>Contaminant Name</b>	<b>PTE</b>	
		<b>lbs/yr</b>	<b>Range</b>
000630-08-0	CARBON MONOXIDE		>= 2.5 tpy but < 10 tpy
0NY210-00-0	OXIDES OF NITROGEN		>= 50 tpy but < 100 tpy
0NY075-00-0	PARTICULATES		>= 2.5 tpy but < 10 tpy
007446-09-5	SULFUR DIOXIDE		> 0 but < 2.5 tpy

**NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS**

**New York State Department of Environmental Conservation**

**Permit Review Report**

**Permit ID: 9-0436-00022/00005    Renewal Number: 1**



**05/13/2004**

**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

**New York State Department of Environmental Conservation**

**Permit Review Report**

**Permit ID: 9-0436-00022/00005    Renewal Number: 1**



**05/13/2004**

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.

**New York State Department of Environmental Conservation**

**Permit Review Report**

**Permit ID: 9-0436-00022/00005    Renewal Number: 1**

**05/13/2004**



**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:            Public Access to Recordkeeping for Title V Facilities - 6NYCRR Part 201-1.10(b)**

The Department will make available to the public any permit application, compliance plan, permit, and monitoring and compliance certification report pursuant to Section 503(e) of the Act, except for information entitled to confidential treatment pursuant to 6NYCRR Part 616 - Public Access to records and Section 114(c) of the Act.

**Item I:            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 J:            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 K:            Timely Application for the Renewal of Title V Permits - 6 NYCRR Part 201-6.3(a)(4)**

Owners and/or operators of facilities having an issued Title V permit shall submit a complete application at least 180 days, but not more

**New York State Department of Environmental Conservation**

**Permit Review Report**

**Permit ID: 9-0436-00022/00005    Renewal Number: 1**



**05/13/2004**

than eighteen months, prior to the date of permit expiration for permit renewal purposes.

**Item L:                    Certification by a Responsible Official - 6 NYCRR Part 201-6.3(d)(12)**

Any application, form, report or compliance certification required to be submitted pursuant to the federally enforceable portions of this permit shall contain a certification of truth, accuracy and completeness by a responsible official. This certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

**Item M:                    Requirement to Comply With All Conditions - 6 NYCRR Part 201-6.5(a)(2)**

The permittee must comply with all conditions of the Title V facility permit. Any permit non-compliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

**Item N:                    Permit Revocation, Modification, Reopening, Reissuance or Termination, and Associated Information Submission Requirements - 6 NYCRR Part 201-6.5(a)(3)**

This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

**Item O:                    Providing Information Upon Request - 6 NYCRR Part 201-6.5(a)(4)**

The permittee shall furnish to the Department, within a reasonable time, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. The permittee shall also, on request, furnish the Department with copies of records required to be kept by the permit. Where information is claimed to be confidential, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

**Item P:                    Cessation or Reduction of Permitted Activity Not a Defense - 6NYCRR Part 201-6.5(a)(5)**

It shall not be a defense for a permittee in an enforcement action to claim that a cessation or reduction in the permitted activity would have been necessary in order to maintain compliance with the

**New York State Department of Environmental Conservation**

**Permit Review Report**

**Permit ID: 9-0436-00022/00005    Renewal Number: 1**



**05/13/2004**

conditions of this permit.

**Item Q:            Property Rights - 6 NYCRR Part 201-6.5(a)(6)**

This permit does not convey any property rights of any sort or any exclusive privilege.

**Item R:            Fees - 6 NYCRR Part 201-6.5(a)(7)**

The owner and/or operator of a stationary source shall pay fees to the department consistent with the fee schedule authorized by 6 NYCRR Subpart 482-2.

**Item S:            Right to Inspect - 6 NYCRR Part 201-6.5(a)(8)**

Upon presentation of credentials and other documents, as may be required by law, the permittee shall allow the Department or an authorized representative to perform the following:

- i.            Enter upon the permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
- ii.          Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- iii.         Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- iv.         As authorized by the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

**Item T:            Severability - 6 NYCRR Part 201-6.5(a)(9)**

If any provisions, parts or conditions of this permit are found to be invalid or are the subject of a challenge, the remainder of this permit shall continue to be valid.

**Item U:            Progress Reports and Compliance Schedules - 6 NYCRR Part 201-6.5(d)(5)**

Progress reports consistent with an applicable schedule of compliance must be submitted at least semiannually on a calendar year basis, or at a more frequent period if specified in the applicable requirement or by the Department elsewhere in this permit. These reports shall be submitted to the Department within 30 days after the end of a

**New York State Department of Environmental Conservation**

**Permit Review Report**

**Permit ID: 9-0436-00022/00005    Renewal Number: 1**



**05/13/2004**

reporting period. Such progress reports shall contain the following:

- i. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
- ii. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

**Item V:                    Off Permit Changes - 6 NYCRR Part 201-6.5(f)(6)**

No permit revision will be required for operating changes that contravene an express permit term, provided that such changes would not violate applicable requirements as defined under this Part or contravene federally enforceable monitoring (including test methods), recordkeeping, reporting, or compliance certification permit terms and conditions. Such changes may be made without requiring a permit revision, if the changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions) provided that the facility provides the Administrator and the Department with written notification in advance of the proposed changes within a minimum of 7 days as required by 6 NYCRR §201-6.5(f)(6).

**Item W:                    Permit Shield - 6 NYCRR Part 201-6.5(g)**

All permittees granted a Title V facility permit shall be covered under the protection of a permit shield, except as provided under 6 NYCRR Subpart 201-6. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that such applicable requirements are included and are specifically identified in the permit, or the Department, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the major stationary source, and the permit includes the determination or a concise summary thereof. Nothing herein shall preclude the Department from revising or revoking the permit pursuant to 6 NYCRR Part 621 or from exercising its summary abatement authority. Nothing in this permit shall alter or affect the following:

- i. The ability of the Department to seek to bring suit on behalf of the State of New York, or the Administrator to seek to bring suit on behalf of the United States, to immediately restrain any person

**New York State Department of Environmental Conservation**

**Permit Review Report**

**Permit ID: 9-0436-00022/00005    Renewal Number: 1**



**05/13/2004**

causing or contributing to pollution presenting an imminent and substantial endangerment to public health, welfare or the environment to stop the emission of air pollutants causing or contributing to such pollution;

ii. The liability of a permittee of the Title V facility for any violation of applicable requirements prior to or at the time of permit issuance;

iii. The applicable requirements of Title IV of the Act;

iv. The ability of the Department or the Administrator to obtain information from the permittee concerning the ability to enter, inspect and monitor the facility.

**Item X:                    Reopening for Cause - 6 NYCRR Part 201-6.5(i)**

This Title V permit shall be reopened and revised under any of the following circumstances:

i. If additional applicable requirements under the Act become applicable where this permit's remaining term is three or more years, a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the original permit or any of its terms and conditions has been extended by the Department pursuant to the provisions of Part 201-6.7 and Part 621.

ii. The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

iii. The Department or the Administrator determines that the Title V permit must be revised or reopened to assure compliance with applicable requirements.

iv. If the permitted facility is an "affected source" subject to the requirements of Title IV of the Act, and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

Proceedings to reopen and issue Title V facility permits shall follow the same procedures as apply to initial permit issuance but shall affect only those parts of the permit for which cause to reopen

**New York State Department of Environmental Conservation**

**Permit Review Report**

**Permit ID: 9-0436-00022/00005    Renewal Number: 1**



**05/13/2004**

exists.

Reopenings shall not be initiated before a notice of such intent is provided to the facility by the Department at least thirty days in advance of the date that the permit is to be reopened, except that the Department may provide a shorter time period in the case of an emergency.

**Item Y:                    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 Z:                    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 AA:                 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 BB:                 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.

**New York State Department of Environmental Conservation**

**Permit Review Report**

**Permit ID: 9-0436-00022/00005    Renewal Number: 1**



**05/13/2004**

**Item CC:            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.

**NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS**

**Item A:            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.

**Regulatory Analysis**

<b>Location Facility/EU/EP/Process/ES</b>	<b>Regulation</b>	<b>Short Description</b>	<b>Condition</b>
FACILITY	ECL 19-0301	Powers and Duties of the Department with respect to air pollution control	27
FACILITY	40CFR 60-A.4	General provisions - Address	8
U-00001	40CFR 60-A.4	General provisions - Address	14
U-00001	40CFR 60-A.7 (b)	Notification and Recordkeeping	15

New York State Department of Environmental Conservation



Permit Review Report

Permit ID: 9-0436-00022/00005 Renewal Number: 1

05/13/2004

U-00001/-/001	40CFR 60-GG.332(a)(2)	NOx Standard units >=10 and <=100 (mmBtu/hr) or with a base load <= 30 MW and 100 mmBtu/hr.	17, 16
U-00001/-/001	40CFR 60-GG.333(b)	Standard for Sulfur Dioxide	18
U-00001/-/001	40CFR 60-GG.334(b)(2)	Non-bulk Storage Sulfur Monitoring Requirements	19
U-00001/-/001	40CFR 60-GG.334(c)(2)	Excess Emission Reports	20
U-00001/-/001	40CFR 60-GG.335(c)(1)	Test Methods and Procedures	21
U-00001/-/001	40CFR 60-GG.335(c)(3)	Test Methods and Procedures	22
U-00001/-/001	40CFR 60-GG.335(d)	Test Methods and Procedures	23
U-00001/-/001	40CFR 60-GG.335(e)	Test Methods and Procedures	24
FACILITY	40CFR 68	Chemical accident prevention provisions	9
FACILITY	40CFR 82-F	Protection of Stratospheric Ozone - recycling and emissions reduction	10
FACILITY	6NYCRR 201-1.4	Unavoidable noncompliance and violations	28
FACILITY	6NYCRR 201-6	Title V Permits and the Associated Permit Conditions	1, 11, 12
FACILITY	6NYCRR 201-6.5(c)	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring	2
FACILITY	6NYCRR 201-6.5(c)(2)	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring	3
FACILITY	6NYCRR 201-6.5(c)(3)(ii)	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring	4
FACILITY	6NYCRR 201-6.5(e)	Compliance Certification	5
FACILITY	6NYCRR 202-2.1	Emission Statements - Applicability	6
U-00002	6NYCRR 202-2.4(a)	Emission Statement - methods and procedures	25
FACILITY	6NYCRR 202-2.5	Emission Statements - record keeping requirements.	7
FACILITY	6NYCRR 211.2	General Prohibitions - air pollution prohibited.	29
U-00001	6NYCRR 227-1.3(a)	Smoke Emission Limitations.	13
U-00002	6NYCRR 227-1.3(a)	Smoke Emission Limitations.	26

**Applicability Discussion:**

Mandatory Requirements: The following facility-wide regulations are included in all Title V permits:

**New York State Department of Environmental Conservation**

**Permit Review Report**

**Permit ID: 9-0436-00022/00005    Renewal Number: 1**



**05/13/2004**

ECL 19-301.

This section of the Environmental Conservation Law establishes the powers and duties assigned to the Department with regard to administering the air pollution control program for New York State.

6NYCRR Part 201-1.4

This regulation specifies the actions and recordkeeping and reporting requirements for any violation of an applicable state enforceable emission standard that results from a necessary scheduled equipment maintenance, start-up, shutdown, malfunction or upset in the event that these are unavoidable.

6NYCRR Part 201-6

This regulation applies to those terms and conditions which are subject to Title V permitting. It establishes the applicability criteria for Title V permits, the information to be included in all Title V permit applications as well as the permit content and terms of permit issuance. This rule also specifies the compliance, monitoring, recordkeeping, reporting, fee, and procedural requirements that need to be met to obtain a Title V permit, modify the permit and demonstrate conformity with applicable requirements as listed in the Title V permit. For permitting purposes, this rule specifies the need to identify and describe all emission units, processes and products in the permit application as well as providing the Department the authority to include this and any other information that it deems necessary to determine the compliance status of the facility.

6NYCRR Part 201-6.5(c)

This requirement specifies, in general terms, what information must be contained in any required compliance monitoring records and reports. This includes the date, time and place of any sampling, measurements and analyses; who performed the analyses; analytical techniques and methods used as well as any required QA/QC procedures; results of the analyses; the operating conditions at the time of sampling or measurement and the identification of any permit deviations. All such reports must also be certified by the designated responsible official of the facility.

6NYCRR Part 201-6.5(c)(2)

This requirement specifies that all compliance monitoring and recordkeeping is to be conducted according to the terms and conditions of the permit and follow all QA requirements found in applicable regulations. It also requires monitoring records and supporting information to be retained for at least 5 years from the time of sampling, measurement, report or application. Support information is defined as including all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

6NYCRR Part 201-6.5(e)

Sets forth the general requirements for compliance certification content; specifies an annual submittal frequency; and identifies the EPA and appropriate regional office address where the reports are to be sent.

**New York State Department of Environmental Conservation**

**Permit Review Report**

**Permit ID: 9-0436-00022/00005    Renewal Number: 1**



**05/13/2004**

6NYCRR Part 202-2.1

Requires that emission statements shall be submitted on or before April 15th each year for emissions of the previous calendar year.

6NYCRR Part 202-2.5

This rule specifies that each facility required to submit an emission statement must retain a copy of the statement and supporting documentation for at least 5 years and must make the information available to department representatives.

6NYCRR Part 211-.2

This regulation prohibits any emissions of air contaminants to the outdoor atmosphere which may be detrimental to human, plant or animal life or to property, or which unreasonably interferes with the comfortable enjoyment of life or property regardless of the existence of any specific air quality standard or emission limit.

40 CFR Part 68.

This Part lists the regulated substances and their applicability thresholds and sets the requirements for stationary sources concerning the prevention of accidental releases of these substances.

40 CFR Part 82, Subpart F

Subpart F requires the reduction of emissions of class I and class II refrigerants to the lowest achievable level during the service, maintenance, repair, and disposal of appliances in accordance with section 608 of the Clean Air Act Amendments of 1990. This subpart applies to any person servicing, maintaining, or repairing appliances except for motor vehicle air conditioners. It also applies to persons disposing of appliances, including motor vehicle air conditioners, refrigerant reclaimers, appliance owners, and manufacturers of appliances and recycling and recovery equipment. Those individuals, operations, or activities affected by this rule, may be required to comply with specified disposal, recycling, or recovery practices, leak repair practices, recordkeeping and/or technician certification requirements.

**Facility Specific Requirements**

In addition to Title V, LAIDLAW ENERGY AND ENVIRONMENTAL INC has been determined to be subject to the following regulations:

40CFR 60-A.4

This condition lists the USEPA Region 2 address for the submittal of all communications to the "Administrator". In addition, all such communications must be copied to NYSDEC Bureau of Quality Assurance (BQA).

40CFR 60-A.7 (b)

This regulation requires the owner or operator to maintain records of the occurrence and duration of any startup, shutdown, or malfunction of the source or control equipment or continuous monitoring system.

**New York State Department of Environmental Conservation**

**Permit Review Report**

**Permit ID: 9-0436-00022/00005    Renewal Number: 1**



**05/13/2004**

40CFR 60-GG.332 (a) (2)

This regulation provides the equation used to determine the allowable emissions of oxides of nitrogen (NO<sub>x</sub>) from a combustion gas turbine (CGT) with a heat input greater than 10 million BTU per hour and less than 100 million BTU per hour. Also under this citation, are two NO<sub>x</sub> monitoring requirements for the CGT, one requires weekly monitoring, and the other requires a formal stack test once per permit term. The CGT is not required to have a continuous emission monitoring system.

40CFR 60-GG.333 (b)

This regulation limits the amount of sulfur in the fuel burned in a combustion gas turbine to 0.8% by weight.

40CFR 60-GG.334 (b) (2)

This regulation requires the owner or operator of a gas turbine which is supplied its fuel without intermediate bulk storage to determine and record the sulfur content and nitrogen content of fuel being fired in the turbine daily. The owners, operators or fuel vendors may develop custom schedules for determination of these values. These custom schedules must be approved by the Administrator before they can be used to determine compliance with this requirement

The facility requested a variance for monitoring the sulfur content and nitrogen content of their fuel, and EPA granted a variance on October 20, 1999. The EPA custom fuel monitoring schedule reduces the frequency of fuel monitoring. See the Basis of Monitoring section for more information.

40CFR 60-GG.334 (c) (2)

This regulation requires the owner or operator of the gas turbine to report any excess emissions of sulfur dioxide on a quarterly basis.

40CFR 60-GG.335 (c) (1)

This regulation provides the equation to be used to determine the emission rate of oxides of nitrogen from the combustion gas turbine.

40CFR 60-GG.335 (c) (3)

This regulation requires that Method 20 be used for determining the nitrogen oxide, sulfur dioxide, and oxygen concentrations in the emissions from the combustion gas turbine.

40CFR 60-GG.335 (d)

This regulation lists what analytical methods shall be used to determine the sulfur content of the fuel fired in the combustion gas turbine, to determine compliance with the sulfur content standard in 40 CFR 60.335(b).

40CFR 60-GG.335 (e)

This regulation requires the owner or operator of a combustion gas turbine to use the methods specified in 40 CFR 335(a) and (d) to determine the nitrogen and sulfur content of fuels being burned. The analysis may be performed by the owner or operator, a service contractor, the fuel vendor, or any qualified agency

6NYCRR 201-6.5 (c) (3) (ii)

This regulation specifies any reporting requirements incorporated into the permit must include provisions

**New York State Department of Environmental Conservation**



**Permit Review Report**

**Permit ID: 9-0436-00022/00005    Renewal Number: 1**

**05/13/2004**

regarding the notification and reporting of permit deviations and incidences of noncompliance stating the probable cause of such deviations, and any corrective actions or preventive measures taken.

6NYCRR 202-2.4 (a)

This rule specifies that emission statements must be submitted to the Department on or before April 15 each year for emissions of the previous calendar year. Additionally, it also describes the emission estimation methods that are to be used to represent actual emissions emitted during the calendar year.

The associated permit condition requires the weekly measuring of nitrogen oxide emissions from the natural gas fired Caterpillar engine (CAT 4), to develop an accurate annual emission rate.

6NYCRR 227-1.3 (a)

This regulation prohibits any person from operating a stationary combustion installation which emits smoke equal to or greater than 20% opacity, except for one six-minute period per hour of not more than 27% opacity.

**Compliance Certification**

Summary of monitoring activities at LAIDLAW ENERGY AND ENVIRONMENTAL INC:

<b>Location Facility/EU/EP/Process/ES</b>	<b>Type of Monitoring</b>	<b>Cond No.</b>
U-00001/-/001	intermittent emission testing	16
U-00001/-/001	intermittent emission testing	17
U-00001/-/001	monitoring of process or control device parameters as surrogate	18
U-00001/-/001	monitoring of process or control device parameters as surrogate	19
U-00001/-/001	monitoring of process or control device parameters as surrogate	20
FACILITY	record keeping/maintenance procedures	4
FACILITY	record keeping/maintenance procedures	5
FACILITY	record keeping/maintenance procedures	6
U-00002	record keeping/maintenance procedures	25
U-00001	monitoring of process or control device parameters as surrogate	13
U-00002	monitoring of process or control device parameters as surrogate	26

**Basis for Monitoring**

Most of the monitoring requirements contained in this permit are based on specific monitoring methods and observations as prescribed in the applicable rules. Facility specific monitoring conditions were written to assure that reliable information is obtained representing the facility's compliance status for the following issues:

1. The majority of the permit conditions at the facility level are based on citations from 6 NYCRR Parts 200, 201, 202, 211, 215, ECL 19-0305, and 40 CFR 70.6(b) which are conditions that are in every Title V (five) permit. These conditions generally reiterate rules that apply to most facilities more so than require the facility to monitor or take actions.

**New York State Department of Environmental Conservation**

**Permit Review Report**

**Permit ID: 9-0436-00022/00005    Renewal Number: 1**



**05/13/2004**

2. Permit conditions that list 40 CFR 60 subpart A (General Provisions for New Source Performance Standards - NSPS) as the applicable requirement address the operation, maintenance, quality control, quality assurance and reporting requirements associated with the applicable requirements of 40 CFR 60 subpart GG (NSPS for Stationary Gas Turbines).

3. Permit conditions that list 40 CFR 60 subpart GG (NSPS for Stationary Gas Turbines) as the applicable requirement address NSPS requirements for the combustion turbine. This NSPS limits the emission of oxides of nitrogen and sulfur. It requires a daily analysis of the natural gas, however, the facility requested a variance for monitoring the nitrogen content and sulfur content of their fuel, and EPA granted a variance on October 20, 1999. The EPA custom fuel monitoring schedule does not require the nitrogen content of the natural gas to be measured anymore, and reduced the sulfur in fuel monitoring from daily to twice a month. Since twice a month monitoring showed little variability and compliance, monitoring was reduced to quarterly. Since quarterly monitoring shows little variability and compliance, then monitoring can be reduced to semi-annually. The facility has had no problems complying with the sulfur in fuel limit of 0.8 percent by weight, and monitors the sulfur content quarterly even though they can do it semi-annually now.

The turbine exhaust is measured weekly with a calibrated portable meter to evaluate compliance with the NOx emission limit from Subpart GG of 157 ppmv, dry @ 15% oxygen. Once a permit term (every 5 years) the facility must conduct a stack test on the turbine to determine compliance with the Subpart GG NOx limit.

4. Permit conditions that list 6 NYCRR Part 227-1 (Stationary Combustion Installations) as the applicable requirement limit the opacity (smoke) from the gas turbine stack, and the natural gas fired Caterpillar genset (CAT 4) as required by the citation. This is the only emission limit applicable to the natural gas fired Caterpillar genset (CAT 4).

5. Permit conditions that list 6 NYCRR Part 202-2. (Emission Statements) as the applicable requirement require the facility to accurately report their emissions to the environment annually for fee billing purposes. This citation was used to require weekly evaluations of NOx emissions from the natural gas fired Caterpillar generator (CAT 4), so that a method was available to determine the annual NOx emissions from the engine.

6. This facility contains two emission sources that are exempt from permitting. One is the natural gas fired emergency Caterpillar generator set (CAT 3), that is exempt from permitting provided it operates less than 500 hours annually, per 6NYCRR Part 201-3.2(c)(6). The facility must be able to demonstrate to the Department that it operated less the 500 hours upon request.

The second exempt emission source is the 4.18 mmBtu/hr natural gas fired boiler that supplements the heat content of the cooling system from CAT 4, if necessary, on its way to the kilns. This is exempt because its rated heat input is less than 10 million Btu per hour, per 6NYCRR Part 201-3.2(c)(1).