

**New York State Department of Environmental Conservation**

**Permit Review Report**

**Permit ID: 9-0412-00042/00011    Renewal Number: 1**



**09/14/2007**

**Facility Identification Data**

Name: INDECK OLEAN ENERGY CENTER  
Address: 140 MOORE AVE  
OLEAN, NY 14760

**Owner/Firm**

Name: INDECK-OLEAN LIMITED PARTNERSHIP  
Address: 600 N. BUFFALO GROVE ROAD  
BUFFALO GROVE, IL 60089, USA  
Owner Classification: Corporation/Partnership

**Permit Contacts**

Division of Environmental Permits:  
Name: DAVID S DENK  
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BUFFALO, NY 14203-2999

Division of Air Resources:  
Name: MICHAEL EMERY  
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Air Permitting Contact:  
Name: JOHN E HARE  
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140 MOORE AVE  
OLEAN, NY 14760  
Phone:7163734705

**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**

The permittee is renewing the New York State issued Title V Operating Air Permit. The permittee added

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the process of burning natural gas and fuel oil simultaneously which did not change the emission limits. The permit now includes the New York State Acid Deposition Reduction requirements for nitrogen oxides and sulfur dioxide that became effective since the previous permits were issued.

**Attainment Status**

INDECK OLEAN ENERGY CENTER is located in the town of OLEAN 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* ATTAINMENT)	TRANSPORT REGION (NON-
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**

This permittee is a co-generation plant furnishing steam to Dresser Rand and electricity to the National Grid, formerly Niagara Mohawk. The facility is a combined-cycle combustion gas turbine utilizing a GE Frame 6 combustion gas turbine (CGT), a heat recovery steam generator (HRSG) with duct burners (DB), a selective catalytic reducer (SCR) for NOx control, and a Dresser Rand steam turbine. The CGT and steam turbine each turn a electric generator to produce electricity. The plant is operated from a centralized control room through a Westinghouse Distributed Control System (WDCS). Circulating water is cooled through a three-cell wet cooling tower. Natural gas is the primary fuel for both the CGT and DB. Number 2 distillate oil is the backup fuel for both units. Oil firing is limited to 1440 hours annually for both the CGT and DB. A 395,000 gallon storage tank is provided for fuel oil. The CGT operates between 80% and 100% load, but may also operate at peak-load (108%) for a limited time. Total operating hours are not limited. The CGT is equipped with steam injection for NOx control. The DB utilizes low-nox burners. SCR controls facility NOx emissions to 9/18 ppmv for gas/oil firing, respectively. This constitutes BACT.

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### Permit Structure and Description of Operations

The Title V permit for INDECK OLEAN ENERGY CENTER 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.

INDECK OLEAN ENERGY CENTER is defined by the following emission unit(s):

Emission unit O00001 - This emission unit consists of a combustion gas turbine (CGT) and associated electric generator, duct burner, heat recovery steam generator (HRSG), steam turbine and associated electric generator, and a selective catalytic reduction system venting into one stack. The gas turbine and duct burner only fire natural gas and/or #2 fuel oil.

Emission unit O00001 is associated with the following emission points (EP):  
00001

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

Process: 100 is located at Building 1 - GE Frame 6 combustion gas turbine firing on natural gas, no duct burner firing.

Process: 200 is located at Building 1 - GE Frame 6 combustion gas turbine firing on distillate oil, no duct burner firing.

Process: 500 is located at Building 1 - GE Frame 6 combustion gas turbine and duct burner both firing natural gas.

Process: 600 is located at Building 1 - GE Frame 6 combustion gas turbine firing distillate oil and the duct burner firing either natural gas or distillate oil.

Process: 700 is located at Building 1 - GE Frame 6 combustion gas turbine firing natural gas and fuel oil simultaneously.

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**Title V/Major Source Status**

INDECK OLEAN ENERGY CENTER is subject to Title V requirements. This determination is based on the following information:

The Indeck Olean Energy Center is a major source as defined by the Clean Air Act because it has the potential to emit more than 100 tons per year of each nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO) and sulfur dioxide (SO<sub>2</sub>). Emissions of more than 100 tpy of the above pollutants defines a source a major.

**Program Applicability**

The following chart summarizes the applicability of INDECK OLEAN ENERGY CENTER with regards to the principal air pollution regulatory programs:

<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	YES
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.

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**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.

**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

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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.

SIC Code	Description
4911	ELECTRIC SERVICES
4931	ELEC & OTHER SERVICES COMBINED

### 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.

SCC Code	Description
2-02-001-03	INTERNAL COMBUSTION ENGINES - INDUSTRIAL INDUSTRIAL INTERNAL COMBUSTION ENGINE - DISTILLATE OIL (DIESEL) Turbine: Cogeneration
2-02-002-01	INTERNAL COMBUSTION ENGINES - INDUSTRIAL INDUSTRIAL INTERNAL COMBUSTION ENGINE - NATURAL GAS Turbine
2-02-002-03	INTERNAL COMBUSTION ENGINES - INDUSTRIAL INDUSTRIAL INTERNAL COMBUSTION ENGINE - NATURAL GAS Turbine: 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

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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.

Cas No.	Contaminant Name	PTE	
		lbs/yr	Range
007664-41-7	AMMONIA		>= 25 tpy but < 40 tpy
007440-38-2	ARSENIC (HAP)		> 0 but < 10 tpy
007440-43-9	CADMIUM (HAP)		> 0 but < 10 tpy
000630-08-0	CARBON MONOXIDE	313106	
007440-47-3	CHROMIUM (HAP)		> 0 but < 10 tpy
0NY064-29-0	COPPER (CU 064)		> 0 but < 2.5 tpy
000050-00-0	FORMALDEHYDE (HAP)		> 0 but < 10 tpy
0NY100-00-0	HAP		> 0 but < 10 tpy
007439-92-1	LEAD (HAP)		> 0 but < 10 tpy
007439-96-5	MANGANESE (HAP)		> 0 but < 10 tpy
007439-97-6	MERCURY (HAP)		> 0 but < 10 tpy
0NY059-28-0	NICKEL (NI 059) (HAP)		>= 2.5 tpy but < 10 tpy
0NY210-00-0	OXIDES OF NITROGEN	250668	
0NY075-00-0	PARTICULATES		>= 50 tpy but < 100 tpy
0NY075-00-5	PM-10		>= 50 tpy but < 100 tpy
007782-49-2	SELENIUM (HAP)		> 0 but < 10 tpy
007446-09-5	SULFUR DIOXIDE	276013	
007440-62-2	VANADIUM		> 0 but < 2.5 tpy
0NY998-00-0	VOC		>= 40 tpy but < 50 tpy

**NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS**

**Item A:            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

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

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

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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 G:            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 conditions of this permit.

**Item H:            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 I:            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 J:            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 causing or contributing to pollution presenting an imminent and substantial endangerment to public health, welfare or the environment

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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 K:            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 exists.

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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 L:                    Permit Exclusion - ECL 19-0305**

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

**Item M:                    Federally Enforceable Requirements - 40 CFR 70.6(b)**

All terms and conditions in this permit required by the Act or any applicable requirement, including any provisions designed to limit a facility's potential to emit, are enforceable by the Administrator and citizens under the Act. The Department has, in this permit, specifically designated any terms and conditions that are not required under the Act or under any of its applicable requirements as being enforceable under only state regulations.

**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.

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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	83
O-00001	40CFR 52-A.21	Prevention of Significant Deterioration	35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46
O-00001/00001	40CFR 52-A.21	Prevention of Significant Deterioration	51, 52, 53, 54
O-00001/00001/100	40CFR 52-A.21	Prevention of Significant Deterioration	55, 56
O-00001/00001/200	40CFR 52-A.21	Prevention of Significant Deterioration	57, 58
O-00001/00001/500	40CFR 52-A.21	Prevention of Significant Deterioration	59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70
O-00001/00001/600	40CFR 52-A.21	Prevention of Significant Deterioration	71, 72, 73, 74, 75, 76, 77, 78
O-00001/00001/700	40CFR 52-A.21	Prevention of Significant Deterioration	79, 80, 81, 82
O-00001	40CFR 60-A	General provisions	47
O-00001	40CFR 60-A.4	General provisions - Address	48
O-00001	40CFR 60-Db.43b(f)	Standard for Particulate Matter Opacity.	49
O-00001	40CFR 60-Db.49b(d)	Reporting and Recordkeeping Requirements.	50
FACILITY	40CFR 68	Chemical accident prevention provisions	21
FACILITY	40CFR 72	Permits regulation	31
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FACILITY	6NYCRR 200.7	Maintenance of equipment.	10
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FACILITY	6NYCRR 201-1.8	Prohibition of reintroduction of collected contaminants to the air	12
FACILITY	6NYCRR 201-3.2(a)	Exempt Activities - Proof of eligibility	13
FACILITY	6NYCRR 201-3.3(a)	Trivial Activities - proof of eligibility	14
FACILITY	6NYCRR 201-6	Title V Permits and the Associated Permit Conditions	23, 32, 33
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FACILITY	6NYCRR 201-6.5(a)(4)	General conditions	15
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Fees 2			
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FACILITY	6NYCRR 201-6.5(c)	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring	3
FACILITY	6NYCRR 201-6.5(c)(2)	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring	4
FACILITY	6NYCRR 201-6.5(c)(3)(ii)	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring	5
FACILITY	6NYCRR 201-6.5(d)(5)	Compliance schedules	17
FACILITY	6NYCRR 201-6.5(e)	Compliance Certification	6
FACILITY	6NYCRR 201-6.5(f)(6)	Off Permit Changes	18
FACILITY	6NYCRR 201-7	Federally Enforceable Emissions Caps	24
O-00001	6NYCRR 201-7	Federally Enforceable Emissions Caps	35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46
O-00001/00001	6NYCRR 201-7	Federally Enforceable Emissions Caps	51, 52, 53, 54
O-00001/00001/100	6NYCRR 201-7	Federally Enforceable Emissions Caps	55, 56
O-00001/00001/200	6NYCRR 201-7	Federally Enforceable Emissions Caps	57, 58
O-00001/00001/500	6NYCRR 201-7	Federally Enforceable Emissions Caps	59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70
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Applicability Discussion:

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

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.

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6NYCRR Part 200-.6

Acceptable ambient air quality - prohibits contravention of ambient air quality standards without mitigating measures

6NYCRR Part 200-.7

Anyone owning or operating an air contamination source which is equipped with an emission control device must operate the control consistent with ordinary and necessary practices, standards and procedures, as per manufacturer's specifications and keep it in a satisfactory state of maintenance and repair so that it operates effectively

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 201-1.7

Requires the recycle and salvage of collected air contaminants where practical

6NYCRR Part 201-1.8

Prohibits the reintroduction of collected air contaminants to the outside air

6NYCRR Part 201-3.2(a)

An owner and/or operator of an exempt emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains exempt emission sources or units, 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.

6NYCRR Part 201-3.3(a)

The owner and/or operator of a trivial emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains trivial 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.

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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 201-6.5(a)(4)

This mandatory requirement applies to all Title V facilities. It requires the permittee to provide information that the Department may request in writing, within a reasonable time, in order to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. The request may include copies of records required to be kept by the permit.

6NYCRR 201-6.5(a)(7)

This is a mandatory condition that requires the owner or operator of a facility subject to Title V requirements to pay all applicable fees associated with the emissions from their facility.

6NYCRR 201-6.5(a)(8)

This is a mandatory condition for all facilities subject to Title V requirements. It allows the Department to inspect the facility to determine compliance with this permit, including copying records, sampling and monitoring, as necessary.

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

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recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

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

This regulation specifies any reporting requirements incorporated into the permit must include provisions 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 201-6.5(d)(5)

This condition applies to every Title V facility subject to a compliance schedule. It requires that reports, detailing the status of progress on achieving compliance with emission standards, be submitted semiannually.

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.

6NYCRR 201-6.5(f)(6)

This condition allows changes to be made at the facility, without modifying the permit, provided the changes do not cause an emission limit contained in this permit to be exceeded. The owner or operator of the facility must notify the Department of the change. It is applicable to all Title V permits which may be subject to an off permit change.

6NYCRR Part 202-1.1

This regulation allows the department the discretion to require an emission test for the purpose of determining compliance. Furthermore, the cost of the test, including the preparation of the report are to be borne by the owner/operator of the source.

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.

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#### 6 NYCRR Part 211.3

This condition requires that the opacity (i.e., the degree to which emissions other than water reduce the transmission of light) of the emissions from any air contamination source be less than 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent.

#### 6 NYCRR Part 215

Prohibits open fires at industrial and commercial sites.

#### 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, INDECK OLEAN ENERGY CENTER has been determined to be subject to the following regulations:

#### 40CFR 52-A.21

The facility has limited its NO<sub>x</sub>, CO, SO<sub>2</sub>, particulates, particulates less than 10 microns (PM-10), volatile organic compounds, and ammonia to avoid the permitting requirements of the prevention of significant deterioration (PSD) program, 40 CFR Part 52.21. All permit conditions capping emissions to avoid PSD use 6NYCRR Part 201-7 as the applicable requirement.

#### 40CFR 60-A

This regulation contains the General Provisions of 40 CFR 60. The facility owner is responsible for reviewing these general provisions in detail and complying with all applicable technical, administrative and reporting requirements

#### 40CFR 60-A.4

This condition lists the USEPA Region 2 address for the submittal of all communications to the

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"Administrator". In addition, all such communications must be copied to NYSDEC Bureau of Quality Assurance (BQA).

#### 40CFR 60-Db.43b (f)

This regulation specifies the maximum allowable opacity for affected sources. The opacity emission may not exceed 20%, except for one six minute period when the maximum opacity may not exceed 27% while firing fuel oil. This opacity limit is the same as the state rule 6NYCRR Part 227-1. The opacity permit condition lists 40 CFR Part 60 subpart Db as the applicable requirement because subpart Db requires a continuous opacity monitor

#### 40CFR 60-Db.49b (d)

This regulation requires the amount of fuel combusted each day be recorded and used to calculate the annual opacity factor for each fuel.

#### 40CFR 72

In order to reduce acid rain the the U.S. and Canada, Title IV of the Clean Air Act Amendments of 1990 requires the establishment of a program to reduce emissions of SO<sub>2</sub> and NO<sub>x</sub> (sulfur dioxide and oxides of nitrogen). Fossil fuel burning electric utility companies are a major source of these contaminants in the US. These sources were regulated in a phased approach. Phase I, which began in 1995, requires 110 of the higher-emitting utility plants in the eastern and Midwest states to meet intermediate SO<sub>2</sub> emission limitations. Phase II, which began in 2000, tightens the emission limitations and expands the coverage to most fossil fuel burning utilities. The utilities are given "allowances" which is a limited authorization to emit one ton of SO<sub>2</sub>. The utilities are required to limit SO<sub>2</sub> emissions to the number of allowances they hold. Some can benefit however by reducing their emissions and selling their excess allowances. Part 72 contains the means of implementing this portion of Title IV of the Clean Air Act.

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

This regulation specifies any reporting requirements incorporated into the permit must include provisions 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 201-7

This regulation sets forth emission limits (caps) that cannot be exceeded by the facility. When this facility was constructed the following emissions were capped to avoid the requirements of the Prevention of Significant Deterioration (PSD, 40 CFR 52.21) of sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), and carbon monoxide (CO). SO<sub>2</sub> is limited by restricting the sulfur content of the fuel oil, the gallons of fuel oil and the hours fuel oil can be fired. NO<sub>x</sub> and CO have part per million, pound per million Btu and annual limits. Particulated, particulates less than 10 microns in diameter (PM-10), volatile organic compounds, and ammonia emission are also limited with pound per hour, part per million and/or pounds per million Btu emission limits.

#### 6NYCRR 204-1.6

This condition requires the designated representative of the permittee to make submissions for the NO<sub>x</sub> Budget Program. The Program is designed to mitigate the interstate transport of ground level ozone and nitrogen oxides, a ground level ozone precursor.

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6NYCRR 204-2.1

This condition states the submission requirements for the NOx Budget Trading Program. The Program is designed to mitigate the interstate transport of ground level ozone and nitrogen oxides, a ground level ozone precursor.

6NYCRR 204-4.1

This condition covers the compliance certification report requirements for the NOx Budget Program.

6NYCRR 204-8.1

This condition lists the general requirements for the NOx Budget trading program. They include, but are not limited to monitoring requirements, certification, record keeping and reporting.

6NYCRR 204-8.4

This condition lists the addresses where monitoring plans and their modifications, compliance certifications, recertifications, quarterly QA/QC reports and petitions for alternative monitoring shall be sent.

6NYCRR 204-8.5

This regulation requires the facility to submit a quarterly compliance certification report for the NOx Budget Trading Program. This report shall included the all the data and information required by Subpart G and H of 40 CFR Part 75.

6NYCRR 237-1.6 (c)

This subdivision outlines the standard requirements of the Acid Deposition Reduction NOx Budget Trading Program for oxides of nitrogen.

6NYCRR 237-1.6 (e)

This requires the owners and operators of the NOx budget source and each NOx budget unit at the source to keep pertinent documents at the site for a period of 5 years; and lists which documents are pertinent.

6NYCRR 237-2

This condition requires the permittee to select and authorize one person to manage, and represent the owners of any NOx budget unit; and specifies the responsibilities of this NOx authorized account representative

6NYCRR 237-4.1

This item specifies the requirments of the compliance certification report.

6NYCRR 237-7.1

This item specifies what information and actions are necessary in order to record the transfer of NOx allowances.

6NYCRR 237-8

This item requires the owners and operators of a NOx budget unit to comply with the monitoring and reporting requirements of NYCRR 237-8 and Subpart H of 40 CFR part 75; and allows NOx budget



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units which are also NOx budget units under NYCRR Part 204 to be summarily referenced in order to demonstrate compliance with the requirements of this item.

6NYCRR 238-1.6 (c)

This Item requires the owners and operators of each SO2 budget source and each SO2 budget unit to hold SO2 allowances available for compliance deductions under NYCRR 238-6.5; and how such allowances will be managed.

6NYCRR 238-1.6 (e)

This item requires the owners and operators of the SO2 budget source to keep on site at the source pertinent documents for a period of 5 years from the date the document is created.

6NYCRR 238-2.1

This section outlines the authorization and responsibilities of the SO2 authorized account representative.

6NYCRR 238-4.1

This section lists all of the requirements for the submission of the compliance certification report.

6NYCRR 238-7.1

This section outlines the requirements for the submission of SO2 allowance transfers.

6NYCRR 238-8

This condition requires the owner or operator of the facility to comply with the reporting and record keeping requirements of 40 CFR Part 75.

**Compliance Certification**

Summary of monitoring activities at INDECK OLEAN ENERGY CENTER:

<b>Location Facility/EU/EP/Process/ES</b>	<b>Type of Monitoring</b>	<b>Cond No.</b>
O-00001	monitoring of process or control device parameters as surrogate	49
O-00001	record keeping/maintenance procedures	50
O-00001	record keeping/maintenance procedures	34
FACILITY	record keeping/maintenance procedures	5
FACILITY	record keeping/maintenance procedures	6
O-00001	record keeping/maintenance procedures	35
O-00001	monitoring of process or control device parameters as surrogate	36
O-00001	work practice involving specific operations	37
O-00001	work practice involving specific operations	38
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### Basis for Monitoring

Basis of Monitoring at Indeck Olean (Ren 1):

1. When Indeck Olean was constructed it obtained a Prevention of Significant Deterioration (PSD) capping permit to avoid the PSD permitting requirements. The capping conditions are listed under citation 6NYCRR Part 201-7 and list 40 CFR Part 52.21 subpart A, PSD, as the citation capped. The permit caps the sulfur dioxide (SO<sub>2</sub>), oxides of nitrogen (NO<sub>x</sub>), carbon monoxide (CO), particulates (PM), particulates less than 10 microns (PM-10), and volatile organic compounds (VOC) that can be emitted from the facility. Most of the PSD capping limits are more restrictive than other applicable requirements, so pollutants that have different limits from different regulations are usually addressed with

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the PSD capping conditions.

2. The majority of the permit conditions at the facility level are based on citations from 6 NYCRR Parts 200, 201, 202, 211, 215 and 217 and are conditions that are in every Title V (five) operating permit. These conditions generally reiterate rules that apply to most facilities and some require the permittee to monitor or take actions.
3. Permit conditions that list 6NYCRR Part 204 (NOx Budget Trading Program) or one of its subparts as the applicable requirement, limit emissions of oxides of nitrogen (NOx) from the gas turbine emission unit, EU O-00001, during the ozone season, which is between May 1 and September 30. A NOx continuous emission monitoring system (CEMS) that is certified according to 40 CFR Part 75 (Acid Rain Emission Monitoring) is used to monitor and calculate emissions. The monitoring procedures are prescribed by the regulation.
4. Permit conditions that list 6NYCRR Part 227-2 (NOx Reasonably Available Control Technology) as the applicable requirement specifies what information must be recorded and submitted by the regulation. The NOx RACT emission limits for the gas turbine and duct burner are less restrictive than the PSD capping limits so they are not included in the permit.
5. Permit conditions that list 6NYCRR 237 (Acid Deposition Reduction NOx Budget Trading Program) as the applicable requirement, limit the emissions of Oxides of Nitrogen (NOx) from the gas turbine emission unit, EU O-00001, during the non-ozone season (October 1 to April 30). The emissions are monitored with a NOx CEMS in the stack. The record keeping and monitoring requirements are prescribed by the regulation.
6. Permit conditions that list 6NYCRR 238 (Acid Deposition Reduction SO2 Budget Trading Program) as the applicable requirement, limit the emissions of Sulfur Dioxide (SO2) in tons per year from the gas turbine emission unit, EU O-00001. The emissions are monitored through fuel use and fuel analysis for sulfur content. The record keeping and monitoring requirements are prescribed by the regulation.
7. Permit conditions that list 40CFR60 subpart A (New Source Performance Standards (NSPS) - General Provisions) as the applicable requirement, requires the facility to comply with notification, monitoring, record keeping, and reporting requirements that all NSPS sources are subject to.
8. The duct burner is subject to permit conditions that list 40CFR60 subpart Db (New Source Performance Standards for Industrial-Commercial-Institutional Steam Generating Units, 100 to 250 million Btu per hour) as the applicable requirement, and limit the emissions of Sulfur Dioxide (SO2), Nitrogen Oxide (NOx), particulates, and opacity. The PSD avoidance SO2, NOx, and PM limits at the stack are more restrictive than the subpart Db limits, so the subpart Db emission limits were not included in this permit. The subpart Db opacity limit is still in the permit.
9. The combustion gas turbine is subject to 40CFR60 subpart GG (New Source Performance Standards for Stationary Gas Turbines) which limits the emissions of Sulfur Dioxide (SO2), Nitrogen Oxide (NOx), and opacity. The record keeping and monitoring requirements are prescribed by the regulation. However the SO2, NOx and particulate capping conditions contain the most stringent requirements from all the applicable requirements to reduce duplication.

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10. Ammonia emission limits from the PSD capping permit were included in this permit. They were omitted from the original Title V permit. A CEMS is used to monitor ammonia emissions as NO. Permit conditions were added that require an annual ammonia stack test for compliance and to test the accuracy of the ammonia monitoring system. The permittee will comply with the more restrictive 7.3 lb NH<sub>3</sub>/hr limit while burning both gas and oil. The permittee requested to replace the 7.7 lb NH<sub>3</sub>/hr limit when firing fuel oil, because the emissions are easily below 7.3 lb/hr and to consolidate the permit.

11. The permittee is exempt from the requirements of Continuous Assurance Monitoring (CAM), 40CFR Part 64, because this permit requires CEMS which provide continuous compliance determinations for NO<sub>x</sub> emissions. The potential to emit NO<sub>x</sub> is over 100 tons per year and control devices are used to reduce emissions.

12. Duplicate or overlapping permit conditions were either removed or consolidated into one condition for this permit. This primarily affects sulfur in fuel and NO<sub>x</sub> ppm and lb/hr conditions that came from different regulations. Now the most stringent requirements from all applicable conditions are incorporated in one condition where possible.

Most previous 40 CFR Part 60 subpart Db and subpart GG permit conditions were removed from the permit as part of this consolidation, because the PSD capping conditions are more restrictive. All of the duct burner specific emission limits, NO<sub>x</sub>, CO, PM, PM-10 and VOC, were removed because there was no technical way to measure emissions from just the duct burner. The duct burner can only operate when the turbine is operating. The existing stack emission limits, process 500 and 600 still apply.

The PM, PM-10 and VOC emission limits for the GT alone, processes 100 and 200, were moved the gas turbine and duct burner operating scenarios, processes 500 and 600. The move was made because the highest impacts from initial project emission modeling occurred when the gas turbine and duct burner were both operating. Likewise, the 1994 initial compliance testing was conducted when the gas turbine and duct burners were operating. All the pollutants were in compliance during the initial testing.