

Permit ID: 1-2820-00653/00065 02/18/2016

# Facility Identification Data

Name: CEDAR CREEK WPCP Address: 3340 MERRICK RD & CEDAR CREEK PK WANTAGH, NY 11793

# **Owner/Firm**

Name: NASSAU COUNTY Address: 1 WEST ST MINEOLA, NY 11501, USA Owner Classification: Municipal

#### Permit Contacts

Division of Environmental Permits: Name: SUSAN ACKERMAN Address: NYSDEC - REGION 1 SUNY @ STONY BROOK 50 CIRCLE RD STONY BROOK, NY 11790-3409 Phone:6314440365

Division of Air Resources: Name: DEEPAK RAMRAKHIANI Address: NYSDEC - REGION 1 SUNY @ STONY BROOK 50 CIRCLE RD STONY BROOK, NY 11790-3409 Phone:6314440205

Air Permitting Facility Owner Contact: Name: RICHARD COTUGNO Address: NASSAU COUNTY DPW 1194 PROSPECT AVE WESTBURY, NY 11590 Phone:5165716889

#### 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**

This project consist of the renewal of the Title V permit issued to Cedar Creek WPCP. The facility will continue to operate its five engines generators to produce internal power used for the aeration tank blowers and main sewage pumps. The facility is installing a new bio filter odor control system



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to control odors from the Aeration Tank Odor Control System. The biofilter system will consist of four concrete tanks located outside exhausting to the atmosphere. Two existing wet scrubbers will be reconfigured.

The facility has agreed to accept caps on emissions of CO, NOx and VOC to avoid NSR provisions. The facility will track its emissions of CO, NOx and VOC on a rolling 12-month average basis to demonstrate compliance with these requirements.

# **Attainment Status**

CEDAR CREEK WPCP is located in the town of HEMPSTEAD in the county of NASSAU. 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.)

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

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\* 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:**

The facility is a 72 million gallon per day sewage treatment plant which services portions of Nassau County, New York. The plant operates five 3,000 kW engine generators which can burn natural gas, digester gas, and fuel oil. The engines are used to provide power internally to the unit processes and equipment such as aeration tank blowers and main sewage pumps. The plant also operates four boilers rated at 29.95 MMBtu/hr to produce hot water required for the central chillers and space heating. Additionally, the plant is installing a new complete odor control bio filter system (new emission control 00043) to control odors from the Aeration Tank Odor Control System. The bio filter system will consist of four concrete tanks located outside and exhausting to the atmosphere. Two existing wet scrubber (emission controls 00018 and 00019) will be reconfigured as humidifiers for the bio filter. Emission control 00020 is being decommissioned.

The facility will continue to operate the other nine pack-bed wet scrubbers to control odors from the process operations. NaOH and NaOCl are continuously added to neutralize sulfur compounds. The



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engines incorporate Clean-Burn modifications to reduce NOx emissions and catalytic oxidizers to reduce CO emissions. The boilers are designed with low NOx burners and flue recirculation to reduce NOx emissions.

# Permit Structure and Description of Operations

The Title V permit for CEDAR CREEK WPCP

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.

CEDAR CREEK WPCP is defined by the following emission unit(s):

Emission unit UBOILR - This emission unit consists of four identical package boilers to produce hot water for space conditioning and process heating. The four boilers are identical Cleaver Brooks Model-700 units and are each rated at 29.5 MMBtu/hr. The boilers can burn natural gas, digester gas or distillate fuel oil. Flue gas-recirculation (FGR) systems, which reduce the flame temperature and thus NOx emissions, and low NOx burners to further reduce NOx emissions are installed on each boiler. Each boiler is equipped with a dedicated emission point.

Emission unit UBOILR is associated with the following emission points (EP): 00013, 00014, 00015, 00016

Process: B01 is located at Building B - Combustion of natural gas in a Cleaver Brooks boiler rated at 29.5 MMBtu/hr heat input to generate hot water.

Process: B02 is located at Building B - Combustion of distillate fuel oil in a Cleaver Brooks boiler rated at 29.5 MMBtu/hr to generate hot water.

Process: B09 is located at Building B - Combustion of digester gas in a Cleaver Brooks boiler rated at 29.5 MMBtu/hr heat input to generate hot water.

Emission unit UENGIN - The Cedar Creek plant operates five 3,000 KW (4076 bhp) engine generators to produce electric power. The engines are manufactured by Cooper-Bessemer (model LSVB-12-GDT)



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and were installed in 1989. The engines incorporate Cleanburn (TM) modifications to reduce NOx emissions and catalytic oxidizers to reduce VOC and CO emissions.

# Emission unit UENGIN is associated with the following emission points (EP): 00001, 00002, 00003, 00004, 00005

Process: E01 is located at GRADE FLOOR, Building BB - Combustion of digester gas in a Cooper Bessemer (Model LSVB-12-GDT) engine generator (S0001) rated at 3,000 KW. Distillate fuel oil is used as a pilot fuel at a ratio of 1.5 %. Due to the variability of digester gas production, during this fuel mode natural gas is also burned to ensure ininterruptable supply of fuel to minimize the frequency of fuel switches. When operating in this fuel mode, catalytic oxidizers can not be used because the control equipment experiences fouling from siloxane which is a component of the digester gas.

Process: E02 is located at GRADE FLOOR, Building BB - Combustion of natural gas in a Cooper Bessemer (Model LSVB-12-GDT) engine generator (S0001) rated at 3,000 KW. Distillate fuel oil is used as a pilot fuel of approximate 1.5%.

Process: E03 is located at GRADE FLOOR, Building BB - Combustion of fuel oil in a Cooper Bessemer (Model LSVB-12-GDT) engine generator (S0001) rated at 3,000 KW. This fuel mode is only utilized during fuel switches, testing, preventive maintenance, and emergencies.

Emission unit USCRUB -

This emission unit consists of 12 scrubber to control odors from processes operations at the facility. The scrubbers are all vertical packed type. NaOH and NaOCl are continuously added to neutralize and oxidize sulfur compounds. Three of the scrubbers for the Aeration Tank Odor Control Building are being replaced by a new complete biofilter system (new emission control 00043). Emission controls 0018 and 00019 are being reconfigured as humidifiers for the biofilter. Emission control 00020 is being decommissioned.

Emission unit USCRUB is associated with the following emission points (EP): 00006, 00007, 00008, 00009, 00010, 00011, 00012, 00017, 00021, 00022 Process: P01 is located at Building S - The belt filter presses are utilized in the sludge dewatering process. There are two scrubbers (EP 00006 and EP 00021) utilized to control odors from this process.

Process: P02 is located at Building H - The gravity belt thickeners are utilized in the sludge thickening process. There are two odor control scrubbers at this process. EP 00007 and EP 00012.

Process: P03 is located at Building E  $\,$  - The influent screening channels and the influent wet well are parts of the screening process. There is one scrubber (EP 00008) utilized to control odors from this process.

Process: P04 is located at Building T - The East and West Settled Channels feed the aeration tanks and are part of the aeration process. There is one odor control scrubber at this process, EP 00009.

Process: P05 is located at Building F - The grit tanks are utilized in the grit removal process. There is one odor control scrubber at this location, EP 00010.

tanks influent channel and the primary settling tanks. There are two scrubbers (EP 00011 and EP 00017) utilized to control odors from the process.



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Process: P07 is located at Building T - Miscellaneous Channels include the aeration tank effluent channel and the final effluent screening channel. Three scrubbers (EP's 00018, 00019, 00020) were utilized to control odors from this process and are now being replaced by a new complete bio filter (emission control 00043). Emission controls 00018 and 00019 are being reconfigured as humidifiers for the bio filter. Emission control 00020 is being decommissioned.

Process: P08 is located at Building U - Aeration tank # 1 is part of the aeration process. Three scrubbers (EP 00018, EP 00019, EP 00020) were utilized to control odors from this process and are now being replaced by a new complete biofilter (emission control 00043). Emission controls 00018 and 00019 are being reconfigured as humidifiers for the biofilter. Emission control 00020 is being decommissioned.

Process: P20 is located at NA - Final sedimentation tank # 1 is part of the secondary sedimentation process and is an open source.

# Title V/Major Source Status

CEDAR CREEK WPCP is subject to Title V requirements. This determination is based on the following information:

Cedar Creek WPCP is subject to Title V requirements. This determination is based on the following information:

- Facility is a major source for carbon monoxide (CO), oxides of nitrogen (NOx) and volatile organic compounds (VOCs)

# Program Applicability

The following chart summarizes the applicability of CEDAR CREEK WPCP with regards to the principal air pollution regulatory programs:

<b>Regulatory Program</b>	Applicability

PSD	NO
NSR (non-attainment)	NO
NESHAP (40 CFR Part 61)	NO
NESHAP (MACT - 40 CFR Part 63)	YES
NSPS	YES
TITLE IV	NO
TITLE V	YES



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TITLE VI	NO
RACT	YES
SIP	YES

# NOTES:

PSD Prevention of Significant Deterioration (40 CFR 52, 6 NYCRR 231-7, 231-8) - 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 231-5, 231-6) - 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, 6 NYCRR 200.10) - 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, 6 NYCRR 200.10) - 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.

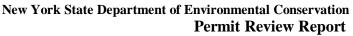
NSPS New Source Performance Standards (40 CFR 60, 6 NYCRR 200.10) - standards of performance for specific stationary source categories developed by the US EPA under Section 111 of the CAAA. The standards apply only to those stationary sources which have been constructed or modified after the regulations 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, 6 NYCRR 201-6) - regulations which mandate the implementation of the acid rain control program for large stationary combustion facilities.

Title VI Stratospheric Ozone Protection (40 CFR 82, Subpart A thru G, 6 NYCRR 200.10) - 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, 6 NYCRR 200.10) - 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





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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.

#### SIC Code

#### Description

Description

WASTEWATER TREATMENT

4952

SEWERAGE SYSTEMS

#### 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

#### 1-02-005-02 EXTERNAL COMBUSTION BOILERS - INDUSTRIAL INDUSTRIAL BOILER - DISTILLATE OIL 10-100MMBTU/HR \*\* 1-02-006-02 EXTERNAL COMBUSTION BOILERS - INDUSTRIAL INDUSTRIAL BOILER - NATURAL GAS 10-100 MMBtu/Hr 1-03-012-02 EXTERNAL COMBUSTION BOILERS -COMMERCIAL/INDUSTRIAL COMMERCIAL/INSTITUTIONAL BOILER - SOLID WASTE Refuse Derived Fuel 2-01-001-02 INTERNAL COMBUSTION ENGINES - ELECTRIC GENERATION ELECTRIC UTILITY INTERNAL COMBUSTION ENGINE - DISTILLATE OIL (DIESEL) Reciprocating 2 - 01 - 002 - 02INTERNAL COMBUSTION ENGINES - ELECTRIC GENERATION ELECTRIC UTILITY INTERNAL COMBUSTION ENGINE - NATURAL GAS Reciprocating 2-03-007-02 INTERNAL COMBUSTION ENGINES -COMMERCIAL/INSTITUTIONAL COMMERCIAL/INSTITUTIONAL IC ENGINE -DIGESTER GAS RECIPROCATING IC ENGINE: POTW DIGESTER GAS 3-01-820-02 CHEMICAL MANUFACTURING CHEMICAL MANUFACTURING - WASTEWATER AGGREGATE



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#### **Facility Emissions Summary**

In the following table, the CAS No. or Chemical Abstract Service 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.

Cas No.	<b>Contaminant Name</b>	РТЕ		
		lbs/yr		Range
000076-13-1	1,1,2-TRICHLORO- 1,2,2-TRIFLUORO ETHANE		> 0	but < 2.5 tpy
000120-82-1	1,2,4- TRICHLOROBENZENE		> 0	but < 10 tpy
000075-07-0	ACETALDEHYDE		> 0	but < 10 tpy
000075-05-8	ACETONITRILE		> 0	but < 10 tpy
000107-02-8	ACROLEIN		> 0	but < 10 tpy
025014-41-9	ACRYLONITRILE POLYME		> 0	but < 2.5 tpy
000071-43-2	BENZENE		> 0	but < 10 tpy
000098-82-8	BENZENE, (1- METHYLETHYL)		> 0	but < 10 tpy
000095-63-6	BENZENE, 1,2,4- TRIMETHYL-		> 0	but < 2.5 tpy
000108-67-8	BENZENE, 1,3,5- TRIMETHYL-		> 0	but < 2.5 tpy
000106-46-7	BENZENE, 1,4- DICHLORO-		> 0	but < 10 tpy
000095-50-1	BENZENE, 1, 2-DICHLORO		> 0	but < 2.5 tpy
000541-73-1	BENZENE, 1, 3-DICHLORO		> 0	but < 2.5 tpy
000075-15-0	CARBON DISULFIDE		> 0	but < 10 tpy
000630-08-0	CARBON MONOXIDE	442000		
000108-90-7	CHLOROBENZENE		> 0	but < 10 tpy
000067-66-3	CHLOROFORM		> 0	but < 10 tpy
000075-09-2	DICHLOROMETHANE		> 0	but < 10 tpy
000071-55-6	ETHANE, 1,1,1- TRICHLORO		> 0	but < 10 tpy
000075-34-3	ETHANE, 1,1-DICHLORO-		> 0	but < 10 tpy
000156-59-2	ETHENE, 1,2-DICHLORO-		> 0	but < 2.5 tpy
000100-41-4	ETHYLBENZENE		> 0	but < 10 tpy
000050-00-0	FORMALDEHYDE		> 0	but < 10 tpy
000087-68-3	HEXACHLOROBUTADIENE		> 0	but < 10 tpy
000110-54-3	HEXANE		> 0	but < 10 tpy
007439-92-1	LEAD		> 0	but < 10 tpy
000074-87-3	METHYL CHLORIDE		> 0	but < 10 tpy



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000078-93-3 000091-20-3 0NY210-00-0	METHYL ETHYL KETONE NAPHTHALENE OXIDES OF NITROGEN	582000	> 0 but < 10 tpy > 0 but < 10 tpy
0NY075-00-0	PARTICULATES		>= 10 tpy but < 25 tpy
000127-18-4	PERCHLOROETHYLENE		> 0 but < 10 tpy
0NY075-00-5	PM-10		>= 2.5 tpy but < 10 tpy
007446-09-5	SULFUR DIOXIDE		>= 10 tpy but < 25 tpy
000108-88-3	TOLUENE		> 0 but < 10 tpy
0NY100-00-0	TOTAL HAP		>= 10 tpy but < 25 tpy
000079-01-6	TRICHLOROETHYLENE		> 0 but < 10 tpy
0NY998-00-0	VOC	248000	
001330-20-7	XYLENE, M, O & P MIXT.		> 0 but < 10 tpy

# NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

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

- An emergency, as defined by subpart 201-2, constitutes an affirmative defense to penalties sought in an enforcement action brought by the Department 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 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 and maintained;
(3) During the period of the emergency the facility owner 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 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 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 - 6 NYCRR 201-1.10(b) The Department will make available to the public any permit application, compliance



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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 6 NYCRR 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 201-6.2(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 201-6.2(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 201-6.4(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 201-6.4(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 G:Cessation or Reduction of Permitted Activity Not a Defense 6 NYCRR<br/>201-6.4(a)(5)It shall not be a defense for a permittee in an enforcement action to claim that a cessation<br/>or reduction in the permitted activity would have been necessary in order to maintain<br/>compliance with the conditions of this permit.

Item H: Property Rights - 6 NYCRR 201-6.4(a)(6) This permit does not convey any property rights of any sort or any exclusive privilege.

Item I: Severability - 6 NYCRR Part 201-6.4(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 201-6.4(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



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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 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 201-6.4(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 2 01-6.7 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.

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.



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# 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.

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.

Location Facility/EU/EP/Pi	Regulation rocess/ES	Condition	Short Description
 FACILITY	ECL 19-0301	40	Powers and Duties of the Department with respect to air
U-BOILR	40CFR 60-Dc.40c	35	pollution control Steam generators 10- 100 million Btu per

#### **Regulatory Analysis**



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FACILITY	40CFR 63-JJJJJJ.11212	31	hour ICI Boiler Area Source NESHAP - Stack Test and Procedures
FACILITY	40CFR 63- JJJJJJ.11223(a	32	for Performance Tests ICI Boiler Area Source NESHAP - Tune- up procedures
U-ENGIN	40CFR 63-ZZZZ	39	up procedures Reciprocating Internal Combustion Engine (RICE) NESHAP
FACILITY	40CFR 68	19	Chemical accident prevention provisions
FACILITY	40CFR 82-F	20	Protection of Stratospheric Ozone - recycling and emissions reduction
FACILITY	6NYCRR 200.6	1	Acceptable ambient air quality.
FACILITY	6NYCRR 200.7	10	Maintenance of equipment.
FACILITY	6NYCRR 201-1.4	41	Unavoidable noncompliance and violations
FACILITY FACILITY	6NYCRR 201-1.7 6NYCRR 201-1.8	11 12	Recycling and Salvage Prohibition of reintroduction of collected contaminants to the
FACILITY	6NYCRR 201-3.2(a)	13	air Exempt Activities - Proof of eliqibility
FACILITY	6NYCRR 201-3.3(a)	14	Trivial Activities - proof of eligibility
FACILITY	6NYCRR 201-6	21, 33, 34	Title V Permits and the Associated Permit Conditions
FACILITY	6NYCRR 201-6.4(a)(4)	15	General Conditions - Requirement to Provide Information
FACILITY	6NYCRR 201-6.4(a)(7)	2	General Conditions - Fees
FACILITY	6NYCRR 201-6.4(a)(8)	16	General Conditions - Right to Inspect
FACILITY	6NYCRR 201-6.4(c)	3	Recordkeeping and Reporting of Compliance Monitoring
FACILITY	6NYCRR 201-6.4(c)(2)	4	Records of Monitoring, Sampling and Measurement
FACILITY	6NYCRR 201- 6.4(c)(3)(ii	5	Reporting Requirements - Deviations and Noncompliance
FACILITY	6NYCRR 201-6.4(d)(4)	22	Compliance Schedules - Progress Reports
FACILITY	6NYCRR 201-6.4(e)	6	Compliance Certification
FACILITY	6NYCRR 201-6.4(f)(6)	17	Off Permit Changes
FACILITY	6NYCRR 201-7.1(a)	23	Ability to Cap
FACILITY	6NYCRR 202-1.1	18	Required emissions
FACILITY	6NYCRR 202-2.1	7	tests. Emission Statements - Applicability
FACILITY	6NYCRR 202-2.5	8	Emission Statements -



record keeping

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			requirements.
FACILITY	6NYCRR 211.1	27	General Prohibitions - air pollution
			prohibited
FACILITY	6NYCRR 215.2	9	Open Fires -
			Prohibitions
FACILITY	6NYCRR 225-1.2(f)	28	Sulfur-in-Fuel
			Limitations
FACILITY	6NYCRR 227-1.3(a)	29	Smoke Emission
			Limitations.
FACILITY	6NYCRR 227-2.3(b)	30	Application
			requirements.
U-BOILR/-/B01/W0013	6NYCRR 227-	36	2010 NOx RACT
	2.4(c)(1)(ii		presumptive limit.
U-ENGIN	6NYCRR 227-2.4(f)(1)	37	Emission limit for
			natural gas fired
			engines.
U-ENGIN	6NYCRR 227-2.4(f)(2)	38	Emission limit for
			engines running on
			landfill gas.

#### **Applicability Discussion:**

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

#### ECL 19-0301

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.

#### 6 NYCRR 200.6

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

#### 6 NYCRR 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

#### 6 NYCRR 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.

#### 6 NYCRR 201-1.7

Requires the recycle and salvage of collected air contaminants where practical

#### 6 NYCRR 201-1.8

Prohibits the reintroduction of collected air contaminants to the outside air

#### 6 NYCRR 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



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other state and federal air pollution control requirements, regulations, or law.

# 6 NYCRR 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.

# 6 NYCRR Subpart 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.

#### 6 NYCRR 201-6.4 (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.

#### 6 NYCRR 201-6.4 (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.

#### 6 NYCRR 201-6.4 (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.

#### 6 NYCRR 201-6.4 (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.

# 6 NYCRR 201-6.4 (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.



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#### 6 NYCRR 201-6.4 (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.

#### 6 NYCRR 201-6.4 (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.

#### 6 NYCRR 201-6.4 (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.

#### 6 NYCRR 201-6.4 (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.

#### 6 NYCRR 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.

# 6 NYCRR 202-2.1

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

#### 6 NYCRR 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.

#### 6 NYCRR 215.2

Except as allowed by section 215.3 of 6 NYCRR Part 215, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.

#### 40 CFR Part 68

This Part lists the regulated substances and there 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.



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#### Facility Specific Requirements

In addition to Title V, CEDAR CREEK WPCP has been determined to be subject to the following regulations:

# 40 CFR 60.40c

This regulation requires the source owner or operator to comply with the applicable General Provisions of 40 CFR 60 Subpart Dc. The facility owner is responsible for reviewing these general provisions in detail and complying with all applicable technical, administrative and reporting requirements.

# 40 CFR 63.11212

This condition sets forth the stack test and procedures to be used for performance tests for affected facilities.

<u>40 CFR 63.11223 (a)</u> This condition states the procedures for conducting a tune-up.

#### 40 CFR Part 63, Subpart ZZZZ

This conditions sets forth the carbon monixide (CO) emission limits for a Reciprocating Internal Combustion Engine (RICE)

# <u>6 NYCRR 201-7.1 (a)</u>

This condition sets forth emission caps for the purpose of limiting emissions from the facility.

# 6 NYCRR 211.1

This regulation requires that no person shall cause or allow emissions of air contaminants to the outdoor atmosphere of such quantity, characteristic or duration which are injurious to human, plant or animal life or to property, or which unreasonably interfere with the comfortable enjoyment of life or property.

 $\frac{6 \text{ NYCRR } 225-1.2 \text{ (f)}}{\text{Sulfur-in-fuel limitations for the purchase of #2 heating oil on or after July 1, 2012.}$ 

# <u>6 NYCRR 227-1.3 (a)</u>

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.



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# <u>6 NYCRR 227-2.3 (b)</u>

The facility must submit a RACT analysis to demonstrate compliance with the limits set forth in 6 NYCRR 227-2.4(c)(1)(ii) and 6 NYCRR 227-2.4(f).

<u>6 NYCRR 227-2.4 (c) (1) (ii)</u> Future NOx RACT presumptive limit effective 7/1/14.

<u>6 NYCRR 227-2.4 (f) (1)</u>

Presumptive NOx RACT emission limit for natural gas fired stationary internal combustion engines.

# 6 NYCRR 227-2.4 (f) (2)

This regulation sets the limit for emissions of oxides of nitrogen from internal combustion engines running on landfill gas at 2.0 grams per brake horsepower-hour. The owner/operaator of the engine must test the emissions one during the term of the permit.

#### Compliance Certification Summary of monitoring activities at CEDAR CREEK WPCP:

Location Facility/EU/EP/Process/ES	Cond No	D. Type of Monitoring
FACILITY	31	record keeping/maintenance procedures
FACILITY	32	record keeping/maintenance procedures
U-ENGIN	39	record keeping/maintenance procedures
FACILITY	5	record keeping/maintenance procedures
FACILITY	6	record keeping/maintenance procedures
FACILITY	24	monitoring of process or control device parameters as surrogate
FACILITY	25	monitoring of process or control device parameters as surrogate
FACILITY	26	monitoring of process or control device parameters as surrogate
FACILITY	7	record keeping/maintenance procedures
FACILITY	28	work practice involving specific operations
FACILITY	29	monitoring of process or control device parameters as surrogate
FACILITY	30	record keeping/maintenance procedures
U-BOILR/-/B01/W0013	36	intermittent emission testing



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U-ENGIN37intermittent emission testingU-ENGIN38intermittent emission testing

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#### **Basis for Monitoring**

# Condition 5 - 6 NYCRR 201-6.4 (c) (3) (ii)

The facility must notify the department of any permit deviations and incidences of noncompliance as required by this Part. Compliance is determined by the accurate and timely submission of these notifications. Reports of any required monitoring must be submitted at the frequency of every 6 month, based on a calendar year reporting schedule.

# Condition 6 - 6 NYCRR 201-6.4 (e)

Compliance certifications must be submitted annually in accordance with the provisions of this Part in order to demonstrate compliance with this requirement.

#### Condition 7 - 6 NYCRR 202-2.5

The facility must submit emission statements annually as described in this Part to demonstrate compliance with this requirement. The emission statements for the previous calendar year must be submitted on or before April 15<sup>th</sup> each year.

# **Condition 24 - 6 NYCRR 201-7.1(a)**

The facility is limited to 221 tons per year of carbon monoxide (CO) emissions. The facility avoids being subject to 6 NYCRR 231-8 by agreeing to this cap. The CO emissions will be calculated on a monthly basis, using stack test data and monthly fuel and power usage and determined on a 12-month rolling average basis. Reports must be submitted to the Department semiannually.

# Condition 25 - 6 NYCRR 201-7.1(a)

The facility is limited to 124 tons per year of volatile organic compound (VOC) emissions. The facility avoids being subject to 6 NYCRR 231-6 by agreeing to this cap. The VOC emissions will be calculated on a monthly basis, using stack test data and monthly fuel and power usage and determined on a 12-month rolling average basis. Reports must be submitted to the Department semiannually.

# Condition 26 - 6 NYCRR 201-7.1(a)

The facility is limited to 291 tons per year of oxides of nitrogen (NOx) emissions. The facility avoids being subject to 6 NYCRR 231-8 by agreeing to this cap. The NOx emissions will be calculated on a monthly basis, using stack test data and monthly fuel and power usage and determined on a 12-month rolling average basis. Reports must be submitted to the Department semiannually.

# Condition 28 - 6 NYCRR 225-1.2(f)

The facility will monitor sulfur dioxide emissions by limiting the sulfur content in distillate fuel oil to a maximum of 0.0015% by weight. Compliance shall be demonstrated through a certification submitted by the fuel supplier with each delivery. A written record of the type of fuel, amount of fuel and weight percent sulfur in the fuel burned in each combustion source shall be kept on a daily basis.



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# Condition 29 - 6NYCRR 227-1.3(a)

Daily observations of the stack outlet while the rubber production process is operating must be made to demonstrate compliance with this requirement. These observations must be recorded in a bound log book and be made available to the Department upon request. Opacity is not to exceed 20% during any consecutive 6 minute period. If visible emissions exceeding the standard are observed for two consecutive days, an EPA Method 9 visible emissions test must be performed by a certified observer. Semiannual and annual compliance reports must include a summary of these observations.

# Condition 30 - 40CFR 63.11212 Subpart JJJJJJ

The owner or operator must conduct each stack test following the procedures outlined in this subpart. Reports must be submitted to the Department semi-annually.

# Condition 31 - 40CFR 63.11223(a) Subpart JJJJJJ

Tune ups must be performed according to 40 CFR 63.11223(b) and records must be kept as required in 40 CFR 63.11225(c) to demonstrate continuous compliance with this subpart. The tune up must be conducted while burning the type of fuel(s) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up.

# Condition 35 6NYCRR 227 - 2.4(c) (1)(ii)

Compliance is demonstrated by stack testing the stack outlets of the four boilers while they are operating to demonstrate that the NOx emissions do not exceed 0.08 pounds per million Btus. Testing must be performed once per permit term in accordance to EPA Reference Method 7, 7E or 19. Records must be submitted to the Department semi-annually.

# Condition 36 - 6 NYCRR 227-2.4 (f) (l)

Compliance is demonstrated by stack testing the stack outlets of the five engines while they are firing natural gas to demonstrate that the NOx emissions do not exceed 1.5 grams per break horsepower-hour. Testing must be performed once per permit term in accordance to EPA Reference Method 7, 7E or 19. Records must be submitted to the Department semi-annually.

# Condition 37 - 6NYCRR 227-2.4(f)(2)

Compliance is demonstrated by stack testing the stack outlets of the five engines while they are firing landfill gas or digester gas (solely or in combination with natural gas) to demonstrate that the NOx emissions do not exceed 2.0 grams per break horsepower-hour. Testing must be performed once per



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permit term in accordance to EPA Reference Method 7, 7E or 19. Records must be submitted to the Department semi-annually.

# Condition 38 - 6 NYCRR 227-2.4(f)(3)

Compliance is demonstrated by stack testing the stack outlets of the five engines while they are firing distillate oil to demonstrate that the NOx emissions do not exceed 2.3 grams per break horsepower-hour. Testing must be performed once per permit term in accordance to EPA Reference Method 7, 7E or 19. Records must be submitted to the Department semi-annually.

# Condition 39 - 40 CFR Subpart ZZZZ

Compliance is demonstrated by operating a Reciprocating Internal Combustion Engine (RICE) below the applicable carbon monoxide (CO) limits in Table 1b and Table 2b, and reporting in Table 7 of this subpart. Reports must be submitted monthly.