



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6105-00263/00008

Renewal Number: 3

07/05/2016

Facility Identification Data

Name: STARRETT CITY POWER PLANT

Address: 165 ELMIRA LOOP

BROOKLYN, NY 11239

Owner/Firm

Name: STARRETT CITY INC

Address: 1230 PENNSYLVANIA AVE

BROOKLYN, NY 11239, USA

Owner Classification: Corporation/Partnership

Permit Contacts

Division of Environmental Permits:

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LONG ISLAND CITY, NY 11101-5401

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Division of Air Resources:

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Air Permitting Contact:

Name: JOHN FRIEL

Address: STARRET CITY POWER PLANT

165 ELMIRA LOOP

BROOKLYN, NY 11239

Phone:7189420433

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 Application for:

1. The renewal of existing Air Title V Facility.



**New York State Department of Environmental Conservation
Permit Review Report**

Permit ID: 2-6105-00263/00008

Renewal Number: 3

07/05/2016

2. Emission Unit 000001:

Facility is in the midst of upgrading its four boilers with new Zecco GB low NO_x(LNB)burners and flue gas recirculation(FGR) and conversion from residual #6 oil to distillate low sulfur #2 oil as the secondary fuel to the primary natural gas fuel. This upgrade project is the implementation of the facility's NO_x RACT compliance plan to meet NO_x RACT standard 0.15 lbs per million Btu heat input for large boilers. The project has been delayed due to the necessity of replacing a significant amount of leaking boiler tubes. The current scheduled milestones for completion of this work are tabulated below.

Boiler	Completion of Equipment Installation	Start-up	Performance Testing
2	Burner/FGR 10/28/2016	10/28/2016	05/5/2017
1 or 3	Burner/FGR 12/09/2016	12/16/2016	05/5/2017
3 or 1	Burner/FGR 01/27/2017	02/03/2017	05/05/2017
4	Burner/FGR 03/17/2017	03/24/2017	05/5/2017
Fuel oil conversion	12/05/2016	12/19/2016	05/05/2017

3. Emission Unit 00002:

a) The facility has added a carbon monoxide (CO) catalyst system including a continuous monitoring systems(CPMS) to each of three engines(OOG1, OODG2 and OODG3) for compliance with EPA's 40 CFR 63 Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

b) The existing permit include Processes 501, 502, 601, 602, 701 & 702 as described in permit condition #32 for the three Nordbers generators OODG1, OODG2 and OODG3. With this renewal, Starrett City is also requesting to remove the three processes 501, 601 and 701, the dual fuel firing (4-6% #2 fuel oil with natural gas) capability in three Nordberg engines from the permit because of the age of the engines and difficulty of achieving operational stability. These engines will be using only #2 oil firing.

Attainment Status

STARRETT CITY POWER PLANT is located in the town of BROOKLYN in the county of KINGS. 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 (NO _x)**	ATTAINMENT
Carbon Monoxide (CO)	ATTAINMENT

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

** NO_x has a separate ambient air quality standard in addition to being an ozone precursor.



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6105-00263/00008

Renewal Number: 3

07/05/2016

Facility Description:

Starrett City is a Housing Development in Brooklyn, New York that produces all of its own electricity, heating and cooling through their power plant. The facility has four identical combustion engineering boilers (140 mmbtu/hr each), which are capable of firing natural gas and residual oil and three identical Nordberg large Bore compression ignition engines (2 MW each) that are capable of firing #2 fuel oil. Steam from the boilers are fed through two steam turbines of 6 MW each. Plant has a total electric generating capacity of 18,000 KW.

The facility has added a carbon monoxide (CO) catalyst system including a continuous monitoring systems(CPMS) to each of three engines(OOG1, OODG2 and OODG3) for compliance with EPA's 40 CFR 63 Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

Facility is in the midst of upgrading its four boilers with new Zecco GB low NOx burners (LNB) and flue gas recirculation(FGR) and conversion from residual #6 oil to distillate low sulfur #2 oil as the secondary fuel to the primary natural gas fuel. This upgrade project is the implementation of the facility's NOx RACT compliance plan to meet NOx RACT standard 0.15 lbs per million Btu heat input for large boilers. The project has been delayed due to the necessity of replacing a significant amount of leaking boiler tubes. This permit has enforceable condition with a NOx RACT compliance schedule.

Permit Structure and Description of Operations

The Title V permit for STARRETT CITY POWER PLANT

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.

STARRETT CITY POWER PLANT is defined by the following emission unit(s):

Emission unit 000001 - Four identical Combustion Engineering type 28-VP-12Ww boilers (each with maximum heat input capacity 140 mmbtu/hr) that are capable of firing either natural gas or low sulfur #6 fuel oil. Each boiler emits exhaust flue gas through its own separate stacks.

The boilers are being upgraded per the NOx RACT compliance Plan with new Zecco GB low NOx burners (LNB), flue gas re circulation(FGR) and conversion from #6 oil to #2 oil as the back up fuel to the primary fuel, natural gas. The upgrade project is scheduled for completion in the summer season of 2016.



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6105-00263/00008

Renewal Number: 3

07/05/2016

Emission unit 000001 is associated with the following emission points (EP):

000B1, 000B2, 000B3, 000B4

Process: 009 is located at Building 1 - Boilers 1, 2, 3 and 4 burning #2 oil to generate steam and electricity for the apartment.

Process: 101 is located at POWER PLANT, Building 1 - Combustion Engineering Boiler #1 firing natural gas to generate steam for the apartment building & electricity.

Process: 102 is located at POWER PLANT, Building 1 - Combustion Engineering Boiler #1 firing # 6 fuel oil to generate steam for the apartment building & electricity.

Process: 201 is located at POWER PLANT, Building 1 - Combustion Engineering Boiler # 2 firing natural gas to generate steam for the apartment building & electricity

Process: 202 is located at POWER PLANT, Building 1 - Combustion Engineering Boiler # 2 firing #6 fuel oil to generate steam for the apartment building & electricity.

Process: 301 is located at POWER PLANT, Building 1 - Combustion Engineering Boiler # 3 firing natural gas to generate steam for the apartment building & electricity

Process: 302 is located at POWER PLANT, Building 1 - Combustion Engineering Boiler # 3 firing # 6 fuel oil to generate steam for the apartment building & electricity.

Process: 401 is located at POWER PLANT, Building 1 - Combustion Engineering Boiler # 4 firing natural gas to generate steam for the apartment building & electricity

Process: 402 is located at POWER PLANT, Building 1 - Combustion Engineering Boiler # 4 firing # 6 fuel oil to generate steam for the apartment building & electricity.

Emission unit 01TANK - One (1) 400,000 gallon #6 fuel oil storage tank. This is a vertical fixed roof tank.

Emission unit 01TANK is associated with the following emission points (EP):

TANK1

Process: 6FO is located at OUTSIDE POWER PLANT - ONE (1) 400,000 GALLON #6 FUEL OIL STORAGE TANK WITH A VERTICAL FIXED ROOF.

Emission unit 000002 - Emission Unit 0-00002 consists of three identical Nordberg large bore compression ignition engines that are capable of firing low sulfur #2 fuel oil. Each engine has its own stack to exhaust to the atmosphere. Each engine is equipped with a Johnson Mathhey carbon monoxide(CO) catalyst system to reduce CO emissions for compliance with EPA's 40 CFR 63 Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. The newly installed CO catalyst system on each engine guarantee CO emission below 23ppm or a The engines have been deemed incapable of firing dual fuel (natural gas with 4-6% #2 oil) due to their age and current operational capability



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6105-00263/00008

Renewal Number: 3

07/05/2016

Emission unit 000002 is associated with the following emission points (EP):

00DG1, 00DG2, 00DG3

Process: 502 is located at POWER PLANT, Building 1 - Nordberg generator rated at 18.13 MMBtu/hr used to generate electricity for the apartment buildings. #2 fuel oil is used to fuel the generator.

Process: 602 is located at POWER PLANT, Building 1 - Nordberg generator used to generate electricity for the apartment buildings. #2 fuel oil is used to fuel the generator.

Process: 702 is located at POWER PLANT, Building 1 - Nordberg generator used to generate electricity for the apartment buildings. #2 fuel oil is used to fuel the generator.

Title V/Major Source Status

STARRETT CITY POWER PLANT is subject to Title V requirements. This determination is based on the following information:

Starrett City Power Plant is a major facility since the potential emissions of sulfur dioxide, particulate matter and nitrogen oxides are greater than the major source thresholds (100 tons/year for sulfur dioxide and particulate matter and 25 tons per year for nitrogen oxides)

Program Applicability

The following chart summarizes the applicability of STARRETT CITY POWER PLANT with regards to the principal air pollution regulatory programs:

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



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6105-00263/00008

Renewal Number: 3

07/05/2016

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 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.



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6105-00263/00008
Renewal Number: 3
07/05/2016

SIC Code	Description
6514	DWELLING OPERATORS, EXC. APART

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
1-01-005-01	EXTERNAL COMBUSTION BOILERS - ELECTRIC GENERATION
1-03-004-01	ELECTRIC UTILITY BOILER - DISTILLATE OIL Grades 1 and 2 Oil EXTERNAL COMBUSTION BOILERS - COMMERCIAL/INDUSTRIAL COMMERCIAL/INSTITUTIONAL BOILER - RESIDUAL OIL Grade 6 Oil
1-03-006-01	EXTERNAL COMBUSTION BOILERS - COMMERCIAL/INDUSTRIAL COMMERCIAL/INSTITUTIONAL BOILER - NATURAL GAS Over 100 MMBtu/Hr
2-02-004-01	INTERNAL COMBUSTION ENGINES - INDUSTRIAL INDUSTRIAL INTERNAL COMBUSTION LARGE BORE ENGINE Diesel
4-04-001-60	BULK TERMINALS/PLANTS BULK TERMINALS INTERNAL FLOAT ROOF W/ PRIMARY SEAL-SPECIFY LIQUID:STANDING LOSS

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 of 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



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6105-00263/00008

Renewal Number: 3

07/05/2016

specific CAS No. and is identified in the list below by the (HAP) designation.

Cas No.	Contaminant Name	PTE	
		lbs/yr	Range
000630-08-0	CARBON MONOXIDE		>= 50 tpy but < 100 tpy
007439-92-1	LEAD		> 0 but < 10 tpy
0NY210-00-0	OXIDES OF NITROGEN		>= 250 tpy but < 75,000 tpy
0NY075-00-0	PARTICULATES		>= 50 tpy but < 100 tpy
0NY075-00-5	PM-10		>= 25 tpy but < 40 tpy
007446-09-5	SULFUR DIOXIDE		>= 40 tpy but < 50 tpy
0NY100-00-0	TOTAL HAP		>= 2.5 tpy but < 10 tpy
0NY998-00-0	VOC		>= 25 tpy but < 40 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.



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6105-00263/00008

Renewal Number: 3

07/05/2016

- 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 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 201-6.4(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 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.



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6105-00263/00008

Renewal Number: 3

07/05/2016

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 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 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.



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6105-00263/00008

Renewal Number: 3

07/05/2016

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.

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

Location Facility/EU/EP/Process/ES	Regulation	Condition	Short Description
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New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6105-00263/00008

Renewal Number: 3

07/05/2016

FACILITY	ECL 19-0301	45	Powers and Duties of the Department with respect to air
FACILITY	40CFR 63-JJJJJJ	33, 34	pollution control National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers
FACILITY	40CFR 63-ZZZZ	35, 36	Area Sources 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	46	Unavoidable noncompliance and violations
FACILITY	6NYCRR 201-1.7	11	Recycling and Salvage
FACILITY	6NYCRR 201-1.8	12	Prohibition of reintroduction of collected contaminants to the air
FACILITY	6NYCRR 201-3.2(a)	13	Exempt Activities - Proof of eligibility
FACILITY	6NYCRR 201-3.3(a)	14	Trivial Activities - proof of eligibility
FACILITY	6NYCRR 201-6	21, 37, 38	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 202-1.1	18	Required emissions



**New York State Department of Environmental Conservation
Permit Review Report**

Permit ID: 2-6105-00263/00008

Renewal Number: 3

07/05/2016

FACILITY	6NYCRR 202-1.2	23	tests.
FACILITY	6NYCRR 202-1.3(a)	24	Notification. Acceptable procedures - reference methods
FACILITY	6NYCRR 202-2.1	7	Emission Statements - Applicability
FACILITY	6NYCRR 202-2.5	8	Emission Statements - record keeping requirements.
FACILITY	6NYCRR 211.1	25	General Prohibitions - air pollution prohibited
FACILITY	6NYCRR 211.2	47	General Prohibitions - visible emissions limited.
FACILITY	6NYCRR 215.2	9	Open Fires - Prohibitions
FACILITY	6NYCRR 225-1.2(d)	26	Sulfur-in-Fuel Limitations
FACILITY	6NYCRR 225-1.2(g)	27	Sulfur-in-Fuel Limitations
FACILITY	6NYCRR 225-1.2(h)	28	Sulfur-in-Fuel Limitations
FACILITY	6NYCRR 225-1.6(f)	29	Excess Emission Reports
0-00001	6NYCRR 227.2(b)(1)	40	Particulate emissions.
0-00002	6NYCRR 227.2(b)(1)	44	Particulate emissions.
FACILITY	6NYCRR 227-1.3(a)	30, 31, 32	Smoke Emission Limitations.
0-00002	6NYCRR 227-2	41, 42	Reasonably available control technology for NOx
0-00001	6NYCRR 227- 2.4(b)(1)(ii)	39	2010 NOx RACT presumptive limits.
0-00002	6NYCRR 227-2.5(c)	43	Alternative RACT option.

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



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6105-00263/00008

Renewal Number: 3

07/05/2016

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 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)



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6105-00263/00008

Renewal Number: 3

07/05/2016

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.

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 211.2

This regulation limits opacity from sources to less than or equal to 20 percent (six minute average) except



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6105-00263/00008

Renewal Number: 3

07/05/2016

for one continuous six-minute period per hour of not more than 57 percent opacity.

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 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, STARRETT CITY POWER PLANT has been determined to be subject to the following regulations:

40 CFR Part 63, Subpart JJJJJ

This regulation covers facilities that own or operate an industrial, commercial, or institutional boiler as defined in §63.11237 that is located at, or is part of, an area source of hazardous air pollutants (HAP), as defined in §63.2, except as specified in §63.11195.

40 CFR Part 63, Subpart ZZZZ

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

6 NYCRR 202-1.2

This regulation specifies that the department is to be notified at least 30 days in advance of any required stack test. The notification is to include a list of the procedures to be used that are acceptable to the department. Finally, free access to observe the stack test is to be provided to the department's representative.



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6105-00263/00008

Renewal Number: 3

07/05/2016

6 NYCRR 202-1.3 (a)

This regulation requires that any emission testing, sampling and analytical determination used to determine compliance must use methods acceptable to the department. Acceptable test methods may include but are not limited to the reference methods found in 40 CFR Part 60 appendix A and Part 61, appendix B. In addition, unless otherwise specified, all emission test reports must be submitted within 60 days after completion of testing.

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.

6 NYCRR 225-1.2 (d)

Sulfur-in-fuel limitations that fire residual oil in the downstate after July 1, 2014.

6 NYCRR 225-1.2 (g)

Sulfur-in-fuel limitations for the purchase of distillate oil on or after July 1, 2014.

6 NYCRR 225-1.2 (h)

Sulfur-in-fuel limitation for the firing of distillate oil on or after July 1, 2016.

6 NYCRR 225-1.6 (f)

This citation requires subject facilities to submit excess emissions reports to the Department.

6 NYCRR 227.2 (b) (1)

This regulation is from the 1972 version of Part 227 and still remains as part of New York's SIP. The rule establishes a particulate limit of 0.10 lbs/mmBtu based on a 2 hour average emission for any oil fired stationary combustion installation.

6 NYCRR 227-1.3 (a)

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

6 NYCRR 227-2.4 (b) (1) (ii)



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6105-00263/00008

Renewal Number: 3

07/05/2016

Future NOx RACT presumptive limits effective 7/1/14.

6 NYCRR 227-2.5 (c)

This provision allows the owner or operator to demonstrate that the applicable presumptive RACT emission limit in section 227-2.4 of this Subpart is not economically or technically feasible. Based on this determination the Department is allowed to set a higher emission source specific emission limit.

6 NYCRR Subpart 227-2

This regulation limits the emission of oxides of nitrogen (NOx) from stationary combustion installations (boilers, combustion turbines and internal combustion engines).

Compliance Certification

Summary of monitoring activities at STARRETT CITY POWER PLANT:

Location Facility/EU/EP/Process/ES	Cond No.	Type of Monitoring
FACILITY	5	record keeping/maintenance procedures
FACILITY	6	record keeping/maintenance procedures
FACILITY	7	record keeping/maintenance procedures
FACILITY	26	work practice involving specific operations
FACILITY	27	work practice involving specific operations
FACILITY	28	work practice involving specific operations
FACILITY	29	record keeping/maintenance procedures
0-00001	40	intermittent emission testing
0-00002	44	intermittent emission testing
FACILITY	30	monitoring of process or control device parameters as surrogate
FACILITY	31	monitoring of process or control device parameters as surrogate
FACILITY	32	monitoring of process or control device parameters as surrogate
0-00002	41	record keeping/maintenance procedures
0-00002	42	record keeping/maintenance procedures
0-00001	39	intermittent emission testing
0-00002	43	intermittent emission testing

Basis for Monitoring

6 NYCRR Part 201-6.4 (c)(3)(ii): This condition serves several purposes:



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6105-00263/00008

Renewal Number: 3

07/05/2016

-to clarify that all reports required by federally enforceable monitoring conditions are to be submitted at least every 6 months on a calendar year basis in order to comply with Title V requirements. The reporting requirement supersedes any of the reporting requirement that may be listed for an individual permit monitoring condition which may have incorrectly listed a reporting period exceeding 6 months. Any monitoring conditions that may have more frequent reporting requirements will remain in effect as displayed in the condition. This condition corrects a deficiency noted by the USEPA for previously issued Title V permits;

- to clearly specify both the obligation and procedures the facility must meet and follow in reporting permit deviations or exceedances;

- to clearly state that no violations of federal rules may be excused during start-up, shutdown, malfunctions or upsets unless allowed by the specific requirement.

Part 201-6.4(e): Condition has been added in order to comply with the Title V annual compliance certification requirements and specify the mailing addresses for submitting the compliance reports. It further specifies what constitutes compliance certification with the terms and conditions of the permit. This is a required monitoring condition for all Title V permitted facilities.

Also, the facility demonstrates compliance with the NOx RACT limits via periodic stack tests. However conditions 33 & 38 have been added to assure proper operation during the interim period between tests. Previous experience with similar units has shown that if properly maintained NOx RACT limits will not be exceeded.

Part 202-2.1: This condition requires that the emission statements shall be submitted on or before April 15th each year for emissions of the previous calendar year.

Part 211.2: This condition is a facility wide condition that restricts the opacity of visible emissions from any air contamination source, which is not regulated by another rule. Since most sources will not emit visible emissions, the condition maximizes regulatory resources by focusing only on those sources with a potential opacity problem.

6 NYCRR Part 225-1.2(d): This condition limits the percent by weight of sulfur in residual oil burned at the facility to 0.3% by weight.

6 NYCRR Part 225-1.2(g): Condition states that the owners and/or operators of a stationary combustion installation that fires distillate oil are limited to the purchase of distillate oil with 0.0015 percent sulfur by weight or less on or after July1, 2014 .

6 NYCRR Part 225-1.2(g): Condition states that the owners and/or operators of a stationary combustion installation that fires distillate oil are limited to the use of distillate oil with 0.0015 percent sulfur by weight or less on or after July1, 2016.

6 NYCRR Part 225 conditions requires that the compliance with fuel limit shall be based on vendor certifications per delivery. Conditions also requires that all the data collected must be tabulated and summarized in a form acceptable to the Department, and must be retained for at least five years. And the reports shall be submitted to the Department on a semiannual calendar basis.

Part 227.2(b)(1): This condition establish a particulate limit of 0.10 lbs/mm Btu for all combustion units when burning oil. Compliance is demonstrated via a periodic stack test as required under the regulation. The regulation is from the 1972 version of Part 227 which still remains as part of New York's SIP.



**New York State Department of Environmental Conservation
Permit Review Report**

Permit ID: 2-6105-00263/00008

Renewal Number: 3

07/05/2016

NYCRR 227-1.3(a): This condition requires the facility to comply with the specified opacity limits. “No person shall operate a stationary combustion installation which exhibits greater than 20 percent opacity (six minute average), except for one-six-minute period per hour of not more than 27 percent opacity”.

Condition requires facility to monitor the stacks for visible emissions on a daily basis when oil is being burned in the boilers or engines. If no plume is observed from a stack, it can be assumed that the opacity limit is being met. However, if a plume is observed, it is possible that the opacity limit is being exceeded. If a visible plume is observed two consecutive days of firing oil, then the facility must conduct a Method 9 analysis to measure the opacity. While Part 227 provides that Method 9 analyses are acceptable methods for determining compliance with the opacity standards for the combustion units, the circumstances under which Method 9 analyses are required are not defined. The Department has developed a standard method that results in a consistent approach to determining compliance with the opacity requirements of Part 227 as well as other rules which contain an opacity limit.

This method is more structured and routine than past treatment of opacity requirements in which problems may have occurred for some time before the Department became aware of them and sent a certified observer to document the violation. The approach in this permit allows the smoke condition to exist for only two days before a Method 9 analysis is necessary. It should be noted that the presence of visible emissions is not necessarily an indication that the opacity limit is being exceeded, only that it may need to be assessed by Method 9 if it persists for two days. Since the use of a continuous emissions monitor is not a requirement for this facility, and federal regulations do not contain any further opacity monitoring requirements for units such as those at this facility, this has become the standard approach to monitoring opacity for operations such as this.

The placement of this requirement in this permit does not preclude the Department or the EPA from conducting a Method 9 observation when deemed to be necessary. Finally, it should be noted that this approach has been used in many permits and has been found by the EPA under the Title V program to be an acceptable method for opacity monitoring for these situations.

Part 227-2.4(b)(1)(ii).

Until June 30 2014 the NOX RACT limit for large boilers burning gas and oil was 0.3 lb/mmbtu. From July1, 2014 the NOX RACT limit for large boilers burning gas and oil is 0.15 lb/mmbtu): This condition requires facility to demonstrate compliance by means of a stack test once during the permit term.

Facility is in the midst of upgrading its four boilers with new Zecco GB low NOx(LNB)burners and flue gas recirculation(FGR) and conversion from residual #6 oil to distillate low sulfur #2 oil as the secondary fuel to the primary natural gas fuel. This upgrade project is the implementation of the facility's NOx RACT compliance plan to meet NOx RACT standard 0.15 lbs per million Btu heat input for large boilers. The project has been delayed due to the necessity of replacing a significant amount of leaking boiler tubes. The current scheduled milestones for completion of this work are tabulated below.

Boiler	Completion of Equipment Installation	Start-up	Performance Testing
2	Burner/FGR 10/28/2016	10/28/2016	05/5/2017
1 or 3	Burner/FGR 12/09/2016	12/16/2016	05/5/2017
3 or 1	Burner/FGR 01/27/2017	02/03/2017	05/05/2017
4	Burner/FGR 03/17/2017	03/24/2017	05/5/2017

