



Facility Identification Data

Name: SIMSMETAL EAST LLC-QUEENS PLANT
Address: 30-27 GREENPOINT AVE
LONG ISLAND CITY, NY 11101

Owner/Firm

Name: SIMSMETAL EAST LLC
Address: 1 LINDEN AVE
JERSEY CITY, NJ 07305, USA
Owner Classification: Corporation/Partnership

Permit Contacts

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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 serves as renewal for the existing Title V permit for SIMSMetal East LLC - Queens Plant (formerly known as Hugo Neu East-Queens Yard and also as Sims Hugo Neu East-Queens Yard). As per 6 NYCRR 227-2.6 NOx RACT, the facility has conducted stack testing in January 2005 on two of its three engine-generator sets (Emission Sources 00001 and 0005B) in Emission Unit 2-00002. Emission Sources 0005B & 0005C are two identical 300 KW each Cummins Generators (Cummins Generator # 1 & Cummins Generator # 2).



As per 6 NYCRR 227-2.6 NO_x RACT, the facility has performed the latest NO_x RACT emission stack testing on January 18-20, 2005 on two of its three engine-generator sets (Emission Sources 00001 and 0005B) in Emission Unit 2-00002 for the Main Generator (Emission Source 00001 in Emission Unit 2-00002) and the Cummins # 1 Generator (Emission Source 0005B) in order to comply with the conditions of Subpart 227-2.4 & 2.6: applicable NO_x RACT emission limits and source testing to demonstrate compliance, respectively. The results of the testing indicate that equipment continued to meet the NO_x RACT requirements effective at the time (9.0 grams/BHP-hr).

The Main Generator demonstrated average NO_x emissions value of 5.10 grams/bhp-hr. The Cummins Generator # 1 demonstrated average NO_x emissions value of 5.52 grams/BHP-hr. Since both Cummins Engines, one at Emission Point 0005B and the other at Emission Point 0005C (Emission Sources 0005B & 0005C) installed at the facility are identical, therefore; emission profiles of both Cummins engines are expected to be the same and the Department will use its engineering judgement to exempt the facility from performing a stack test on the second Cummins Generator # 2 (Emission Source 0005C) at Emission Point 0005C. These values represent a significant reduction in NO_x emissions from the implementation of the elements of the NO_x RACT Operating and Compliance Plan. A variance from full compliance with NO_x emission limits effective April 1, 2005 (2.3 grams/BHP-hr) is understood to be part of this Title V renewal and is relevant to the Compliance Certification for 6 NYCRR 227-2.4(f)(2)(ii).

On January 17, 2005, SimsMetal East LLC-Queens Plant submitted a NO_x RACT Compliance and Operating Plan to NYSDEC Region II Office. The analysis concluded that no NO_x control technologies were economically feasible for any of the three generators at the facility (Emission Sources 00001, 0005B & 0005C). This report was submitted to comply with a variance request to the NO_x emission limit stated above pursuant to Part 621, Uniform Procedures Act.

Effective April 1, 2005, any owner or operator of a stationary internal combustion engine of 200 horsepower or larger in the severe non-attainment area, which provides primary power or is used for peak shaving generation, must comply with the following emission limit for lean burn engines firing fuels other than natural gas: 2.3 grams per brake horsepower-hour. Compliance with this emission limit shall be determined with one hour average in accordance with section 227-2.6 (a) (7) of this subpart unless the owner/operator opts to utilize CEMS under the provisions of section 227-2.6 (a) (2) of this subpart.

On April 5, 2005, SimsMetal East LLC-Queens Plant submitted an update on implementation of the NO_x RACT Compliance and Operating Plan to NYSDEC Region II Office. The facility has provided the results of the December 2004 testing exercise evaluating the effectiveness of low sulfur fuels control of NO_x emissions. Testing results indicate that the generators have achieved lower than 6.0 grams per brake horsepower-hour, the value used by NYSDEC as the upper threshold of what is economically achievable.

Application for renewal of this Title V Operating permit includes a request for granting a variance from the above mentioned NO_x emission limit of 2.3 grams per brake horsepower-hour for the reasons provided. It also provides for establishing a NO_x emission limit of 6.0 grams per brake horsepower-hour for all of the three generators (Emission Sources 00001, 0005B & 0005C) at the facility as demonstrated in stack testing conducted in 2005. In addition, the NO_x emission limit of 4.0 grams per brake horsepower-hour should be granted for the two new identical Plastics Recycle Generators (Emission Sources 0005D & 0005E) as per the manufacturer's performance specification of 4.0 gm/bhp-hr.

Application for renewal of Air Title V Facility for SimsMetal East LLC-Queens Plant. The equipment and operations at the facility remain unchanged except for the following four items:

1. The Cyclone Separator - Non-ferrous (Emission Source 00004 and associated Emission Point 00004 in Emission Unit 1-00001) have been removed from service along with the exempt storage silo (Emission Point 00006) on 7/31/2004.
2. The entire scrap metal shredding and metals recovery process (Process 001) in Emission Unit 1-00001, its associated Emission Points 00002 (scrap shredder), 00004 (cyclone separator for non-ferrous), 00007 (ferrous



product cyclone separator), 0000A (z-box metal cyclone separator), 0000F (magnetic cyclone separator - air system) & 00003 (water spray), and its associated Emission Sources/Controls 00002, 00004, 00007, 0000A, 0000F & 00003; respectively, have been removed from the facility on 10/31/2006. All of the Emissions, details and applicable requirements associated with these emission sources/controls are proposed to be removed from the Title V permit.

3. SimsMetal East LLC-Queens Plant is proposing to combine the two identical Cummins Generators, Cummins # 1 & Cummins # 2 (Emission Sources 0005B & 0005C; respectively) used for off-shift electrical load support into a group with a combined allowable 8,760 hours of operation allocated. The Cummins # 1 engine (Emission Source 0005B in Emission Unit 2-00002) is currently permitted to operate 4,500 hours/year and the Cummins # 2 engine (Emission Unit 0005C in Emission Unit 2-00002) is currently permitted to operate 3,750 hours/year, a combined 8,250 hours/year. SimsMetal East LLC-Queens Plant proposes to reduce the allowable hours of operation for the Main Generator (Emission Source 00001 in Emission Unit 2-00002) from 3,050 to 2,200 hours per year. The net reduction in NOx emissions (at 9.0 gm/bhp-hr) from the 850 hour/year reduction is approximately 50.55 tons/year, more than enough to offset the 510 hours (8,760 hrs - 8,250 hrs) combined allowable increase in hours for the two identical Cummins generators, approximately 2.03 tons/year. A corresponding net reduction of 31.67 tons/year at 6.0 gm/bhp-hr for this equipment is attainable according to the Potential To Emit Calculations on the offsets.

The Maximum Rated Output from the Main Generator (Emission Source 00001 in Emission Unit 2-00002) is 6,000 bhp, therefore the NOx emissions reduction from the Main Generator is:

$$6,000 \text{ bhp} \times 3,050 \text{ hrs/yr} \times 9.0 \text{ gm/bhp-hr} \times 1 \text{ lb/454 gm} \times 1 \text{ ton/2,000 lbs} = 181.39 \text{ tons/yr}$$

The proposed NOx reduction from the Main Generator (Emission Source 00001 in Emission Unit 2-00002) is

$$6,000 \text{ bhp} \times (3,050 - 2,200) \text{ hrs/yr} \times 9.0 \text{ gm/bhp-hr} \times 1 \text{ lb/454 gm} \times 1 \text{ ton/2,000 lbs} = 50.55 \text{ tons/yr decrease}$$

The Maximum Rated Output from the Cummins # 1 & Cummins # 2 Generators (Emission Sources 0005B & 0005C; respectively in Emission Unit 2-00002) is 402 bhp, therefore the NOx emissions increase from the Cummins # 1 & Cummins # 2 Generators is :

$$402 \text{ bhp} \times (8,760 - 8,250) \text{ hrs/yr} \times 9.0 \text{ gm/bhp-hr} \times 1 \text{ lb/454 gm} \times 1 \text{ ton/2,000 lbs} = 2.03 \text{ tons/yr increase}$$

3. SimsMetal East LLC-Queens Plant is proposing to add another generator set for the Plastics Recycling operations at the facility. The new Generator Set proposed is a two identical 1,000 KW Peak Load Cummins Diesel Generator (Model 750DQFAA) each that meets EPA Tier II (40 CFR 89) emission requirements as recently proposed in the New Source Performance Standards published by USEPA. The combined hours of operation for new generator set (Emission Sources 0005D & 0005E in Emission unit 2-00002) will be to maintain Restricted Potential to Emit (RPTE) NOx emissions below USEPA and NYSDEC significance levels for major source permitting and New Source Review (25 tpy). The clean burning technology provided by this equipment will enable up to 8,760 hours of combined operation/year while limiting NOx RPTE to approximately 51.02 tons/year. This is according to the manufacturer's technical specification information and calculations of potential to emit and restricted potential to emit.

The Maximum Rated Output from the two new identical Plastics Recycle Generators (Emission Sources 0005D & 0005E in Emission Unit 2-00002) is 1,322 HP, therefore the NOx emissions increase are calculated as:

$$1,322 \text{ bhp} \times 4.0 \text{ gm/bhp-hr} \times 8,760 \text{ hrs/yr} \times 1 \text{ lb/454 gm} \times 1 \text{ ton/2000 lbs} = 51.02 \text{ tpy of NOx emissions}$$

4. With a variance to be granted from full compliance with NOx RACT requirements described elsewhere in this permit renewal, existing measures described in the NOx RACT Compliance and Operating Plan for the site have reduced overall NOx emissions from the former allowable 9.0 gm/bhp-hr in 2000 to below 6.0 gm/bhp-hr in 2005. The NOx RACT Compliance and Operating Plan Implementation allows emission factors to be lowered for NOx at all three existing combustion sources and is documented throughout this permit renewal. This will result in an



approximate 52.74 tons/year reduction in PTE at the facility. This reduction more than offsets the proposed increase (51.02 tpy) associated with the two new identical Cummins Plastics Recycle Generators (Emission Sources 0005D & 0005E).

The Maximum Rated Output from the Main Generator (Emission Source 00001 in Emission Unit 2-00002) is 6,000 bhp, therefore the NOx emissions are calculated as:

$$6,000 \text{ bhp} \times 6.0 \text{ gm/bhp-hr} \times 2,200 \text{ hrs/yr} \times 1 \text{ lb/454 gm} \times 1 \text{ ton/2000 lbs} = 87.23 \text{ tpy of NOx emissions}$$

The Maximum Rated Output from the Cummins # 1 (Emission Source 0005B in Emission Unit 2-00002) is 402 bhp, therefore the NOx emissions are calculated as:

$$402 \text{ bhp} \times 4,500 \text{ hrs/yr} \times 9.0 \text{ gm/bhp-hr} \times 1 \text{ lb/454 gm} \times 1 \text{ ton/2,000 lbs} = 17.93 \text{ tpy of NOx emissions}$$

The Maximum Rated Output from the Cummins # 2 (Emission Source 0005C in Emission Unit 2-00002) is 402 bhp, therefore the NOx emissions are calculated as:

$$402 \text{ bhp} \times 3,750 \text{ hrs/yr} \times 9.0 \text{ gm/bhp-hr} \times 1 \text{ lb/454 gm} \times 1 \text{ ton/2,000 lbs} = 14.94 \text{ tpy of NOx emissions}$$

The Maximum rated Output from the two combined Cummins # 1 & Cummins # 2 Generators (Emission sources 0005B & 0005C; respectively in Emission Unit 2-00002) is 402 bhp, therefore the NOx emissions are calculated as:

$$402 \text{ bhp} \times 8,760 \text{ hrs/yr} \times 6.0 \text{ gm/bhp-hr} \times 1 \text{ lb/454 gm} \times 1 \text{ ton/2,000 lbs} = 23.27 \text{ tons/yr of NOx emissions}$$

The Maximum Rated Output from the two new combined Plastics Recycle Generators (Emission Sources 0005D & 0005E in Emission Unit 2-00002) is 1,322 bhp, therefore the NOx emissions are calculated as:

$$1,322 \text{ bhp} \times 4.0 \text{ gm/bhp-hr} \times 8,760 \text{ hrs/yr} \times 1 \text{ lb/454 gm} \times 1 \text{ ton/2000 lbs} = 51.02 \text{ tpy of NOx emissions}$$

Proposed (Modified) Total maximum NOx emissions from the five generators = Main + Combined Cummins # 1 & # 2 + Combined Plastics Recycle # 1 & # 2 =

$$87.23 + 23.27 + 51.02 = 161.52 \text{ tpy of NOx emissions}$$

Present (Current) Total maximum NOx emissions from the three generators = Main + Cummins # 1 + Cummins # 2 = 181.39 + 17.93 + 14.94 = 214.26 tpy of NOx

$$\text{Net NOx emission decrease} = 161.52 - 214.26 = - 52.74 \text{ tpy of NOx}$$

Attainment Status

SIMSMETAL EAST LLC-QUEENS PLANT is located in the town of QUEENS in the county of QUEENS. 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 (SO ₂)	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

Facility Description

SimsMetal East LLC-Queens Plant (formerly known as Hugo Neu East-Queens Yard and also as Sims Hugo Neu East-Queens Yard) is a scrap metal processing and recycling facility with all electricity generated on-site using three (3) lean burn diesel internal combustion engine-generator sets. All three units are fueled by # 2 diesel fuel oil and can be controlled individually, depending on power needs. The three units are identified as:

1. Main Generator - 9630 HP (6.5 megawatts) diesel (Emission Source 00001 in Emission Unit 2-00002), Emission Point 00001 and the facility is proposing to reduce the allowable hours of operation from 3,050 to 2,200 hours/year. The average fuel consumption is 301.5 gallons/hour. The annual fuel consumption is 663,300 gallons.

The Maximum Rated Output from the Main Generator (Emission Source 00001 in Emission Unit 2-00002) is 6,000 bhp, therefore the NO_x emissions are calculated as:

EMISSIONS PER HOUR (Based on Stack Test Data) x TOTAL HOURS OPERATED (Based on operations log)

$$6,000 \text{ bhp} \times 6.0 \text{ gm/bhp-hr} \times 2,200 \text{ hrs/yr} \times 1 \text{ lb}/454 \text{ gm} \times 1 \text{ ton}/2000 \text{ lbs} = 87.23 \text{ tpy of NO}_x \text{ emissions}$$

Annual Fuel Consumption of # 2 fuel oil from the Main Generator:

$$2,200 \text{ hours/year} \times 301.5 \text{ gallons/hour} = 663,300 \text{ gallons/year}$$

2. Cummins Generator # 1 - 300 KW diesel (Emission Source 0005B in Emission Unit 2-00002) , Emission Point 0005B, used as backup. The facility is proposing to combine the hours of operation for the two identical Cummins Generators (Cummins # 1 & Cummins # 2) to be up to 8,760 hours/year instead of 4,500 hours/year for Cummins # 1 and 3,750 hours/year for Cummins # 2 (previous combined of 8,250 hours/year). The average fuel consumption for Cummins # 1 is 11.4 gallons/hour, and that for Cummins # 2 is also 11.4 gallons/hour. The annual fuel consumption for the combined Cummins # 1 & Cummins # 2 generators is 99,864 gallons. Cummins # 1 & Cummins # 2 Generators are used as a backup to the Main Generator (Emission Source 00001 in Emission Unit 2-00002).

The Maximum rated Output from each of Cummins # 1 & Cummins # 2 Generators (Emission sources 0005B & 0005C; respectively in Emission Unit 2-00002) is 402 bhp, therefore the combined NO_x emissions are calculated as

$$402 \text{ bhp} \times 8,760 \text{ hrs/yr} \times 6.0 \text{ gm/bhp-hr} \times 1 \text{ lb}/454 \text{ gm} \times 1 \text{ ton}/2,000 \text{ lbs} = 23.27 \text{ tons/yr of NO}_x \text{ emissions}$$

Annual Fuel Consumption of # 2 fuel oil for the combined Cummins # 1 & Cummins # 2:

$$8,760 \text{ hours/year} \times 11.4 \text{ gallons/hour} = 99,864 \text{ gallons/year}$$



3. Cummins Generator # 2 - 300 KW diesel (Emission Source 0005C in Emission Unit 2-00002), Emission Point 0005C used as backup. The facility is proposing to combine the hours of operation for the two identical Cummins Generators (Cummins # 1 & Cummins # 2) to be up to 8,760 hours/year instead of 4,500 hours/year for Cummins # 1 and 3,750 hours/year for Cummins # 2 (previous combined of 8,250 hours/year). The average fuel consumption for Cummins # 1 is 11.4 gallons/hour, and that for Cummins # 2 is also 11.4 gallons/hour. Cummins # 2 has replaced the 600 KW diesel Caterpillar Generator (Emission Source 0005A in Emission Unit 2-00002) on 1/31/2003, and the Caterpillar Generator was removed from the facility on 12/9/2002. The annual fuel consumption for the combined Cummins # 1 & Cummins # 2 generators is 99,864 gallons. Cummins # 1 & Cummins # 2 Generators are used as a backup to the Main Generator (Emission Source 00001 in Emission Unit 2-00002).

The Maximum rated Output from each of the Cummins # 1 & Cummins # 2 Generators (Emission sources 0005B & 0005C; respectively in Emission Unit 2-00002) is 402 bhp, therefore the combined NOx emissions are calculated as

$402 \text{ bhp} \times 8,760 \text{ hrs/yr} \times 6.0 \text{ gm/bhp-hr} \times 1 \text{ lb}/454 \text{ gm} \times 1 \text{ ton}/2,000 \text{ lbs} = 23.27 \text{ tons/yr}$ of NOx emissions

Annual Fuel Consumption of # 2 fuel oil for the Combined Cummins # 1 & Cummins # 2:

$8,760 \text{ hours/year} \times 11.4 \text{ gallons/hour} = 99,864 \text{ gallons/year}$

4. In addition to the three generators listed above, SimsMetal East LLC-Queens Plant is proposing to add two new identical 1,000 KW each Cummins Plastics Recycle # 1 & # 2 Diesel Generators (Emission Sources 0005D & 0005E in Emission Unit 2-00002) for the Plastics Recycling operations at the facility. These two new identical generators meet EPA Tier II (40 CFR 89) emission requirements as recently proposed in the New Source Performance Standards published by USEPA. The hours of operation for these two Plastics Recycling generators will be to maintain Restricted Potential to Emit (RPTE) NOx emissions below USEPA and NYSDEC significance levels for major source permitting and New Source Review (25 tpy). The clean burning technology provided by this equipment will enable up to 8,760 hours of operation/year while limiting NOx RPTE to approximately 51.02 tons/year. This is according to the manufacturer's technical specification information and calculations of potential to emit and restricted potential to emit. The Maximum Rated Output from each of the Plastics Recycle Generators is 1,322 bhp, and it is expected to emit 4.0 gm/bhp-hr of NOx emissions. The combined hours of operation for the two new identical Cummins Plastics Recycle # 1 & # 2 (Emission Sources 0005D & 0005E) will be up to 8,760 hours/year. The average fuel consumption is 47.9 gallons/hour. The annual fuel consumption will be up to 419,604 gallons of diesel fuel.

The Maximum Rated Output from the each of the two combined Plastics Recycle Generators (Emission Sources 0005D & 0005E in Emission Unit 2-00002) is 1,322 bhp, therefore the combined NOx emissions are calculated as:

$1,322 \text{ bhp} \times 4.0 \text{ gm/bhp-hr} \times 8,760 \text{ hrs/yr} \times 1 \text{ lb}/454 \text{ gm} \times 1 \text{ ton}/2,000 \text{ lbs} = 51.02 \text{ tpy}$ of NOx emissions

Annual Fuel Consumption of # 2 fuel oil for the two combined Plastics Recycle Generators:

$8,760 \text{ hours/year} \times 47.9 \text{ gallons/hour} = 419,604 \text{ gallons/year}$

Proposed total fuel consumption of # 2 fuel oil from the five generators = $663,300 + 99,864 + 419,604 = 1,182,768$ gallons/year

Proposed (Modified) Total maximum NOx emissions from the five generators = Main + Combined Cummins # 1 & # 2 + Combined Plastics Recycle = $87.23 + 23.27 + 51.02 = 161.52$ tpy of NOx emissions

Present (Current) Total maximum NOx emissions from the three generators = Main + Cummins # 1 + Cummins # 2 = $181.39 + 17.93 + 14.94 = 214.26$ tpy of NOx



Net NO_x emission decrease = 161.52 - 214.26 = - 52.74 tpy of NO_x decrease

All five engines are fired with # 2 fuel oil and the total annual fuel usage is approximately 1,182,768 gallons. All five units are installed in the Generator Building and each of the units has a separate stack and operates at separate times, depending on the requirements for electricity. The Main Generator at the facility is the primary source of power for all operations. As such, the load is based on facility demand, and there is no way to control the plant's demand or to predict its constant fluctuations. Both Cummins # 1 & # 2 Generators provide only off-peak load at the facility. As such, these engines, cannot be operating at a maximum load condition. For the stack testing, it is proposed to conduct three (3) one-hour test runs on each of these engines at typical load that is approximately one-half to three-quarters of the maximum rated capacity of each engine during the term of the permit. The # 2 fuel oil used by each generator set and the hours of operation are recorded and maintained on site.

On January 17, 2005, SimsMetal East LLC-Queens Plant submitted a NO_x RACT Compliance and Operating Plan to NYSDEC Region II Office. The analysis concluded that no NO_x control technologies were economically feasible for any of the three generators at the facility (Main, Cummins # 1 & Cummins # 2). This report was submitted to comply with a variance request to the NO_x emission limit of 2.3 gm/bhp-hr pursuant to Part 621, Uniform Procedures Act.

As per 6 NYCRR 227-2.6 NO_x RACT, the facility has conducted/performed the latest NO_x RACT emission stack testing on January 18-20, 2005 on two of its three engine-generator sets, the Main Generator (Emission Source 00001) and the Cummins # 1 Generator (Emission Source 0005B) in Emission Unit 2-00002 in order to comply with the conditions of Subpart 227-2.4 & 2.6: applicable NO_x RACT emission limits and source testing to demonstrate compliance, respectively. The results of the testing indicate that equipment continued to meet the NO_x RACT requirements effective at the time (9.0 grams/BHP-hr).

On April 5, 2005, SimsMetal East LLC-Queens Plant submitted an update on the implementation of the NO_x RACT Compliance and Operating Plan to NYSDEC Region II Office. The facility has provided the results of the December 2004 testing exercise evaluating the effectiveness of low sulfur fuels control of NO_x emissions. Testing results indicate that the generators have achieved lower than 6.0 grams per brake horsepower-hour, the value used by NYSDEC as the upper threshold of what is economically achievable.

This Title V renewal includes a request for granting a variance from full compliance with the NO_x emission limit of 2.3 grams per brake horsepower-hour for lean burn diesel internal combustion engine-generator effective April 1, 2005 as per 6 NYCRR 227-2.4(f)(2)(ii) for the reasons provided. It also provides for establishing a NO_x emission limit of 6.0 grams per brake horsepower-hour for all of the three generators (Emission Sources 00001, 0005B & 0005C) at the facility as demonstrated in testing conducted in 2005." In addition, the NO_x emission limit of 4.0 grams per brake horsepower-hour should be granted for the two new identical Plastics Recycle Generators (Emission Sources 0005D & 0005E) as per the manufacturer's performance specification of 4.0 gm/bhp-hr.

The NO_x RACT Compliance and Operating Plan Implementation allows emission factors to be lowered for NO_x at all three existing combustion sources and is documented throughout this permit renewal. This will result in an approximate 103.76 (214.26 - 87.23 - 23.27) tons/year reduction in PTE at the facility. This reduction more than offsets the proposed increase associated with the two new identical Plastics Recycling Generators. As a result of the changes mentioned above, the facility will reduce its annual NO_x emissions by about 52.74 tons/year (214.26 - 87.23 - 23.27 - 51.02) or 51.02 - 103.76 = - 52.74 tpy, or

Net NO_x emission decrease = 161.52 - 214.26 = - 52.74 tpy of NO_x

The following is information regarding the two new identical Cummins Plastics Recycle Generators (Emission Sources 0005D & 0005E):

Model year: 2007



Power Output: 1000 KW (1,322 bhp maximum rated output) each

Cylinder Displacement: 2.54 liters/cylinder (30.5 liters total for 12 cylinders) each

Operation: Non-emergency - 8,760 hrs/yr combined

This is not a fire engine.

The two new identical 1,000 KW each Cummins Plastic Recycling Generators (Emission Sources 0005D & 0005E) are subject to 40 CFR 60-III, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines for 40 CFR 60-III.4200, 4204(b), 4206, 4207, 4207(a), (b) & (c), 4208, 4209(b), 4211(d)92) and 4212.

On 10/31/2006, the facility has removed its second emission unit, Emission Unit 1-00001, which included scrap metal shredding and metals recovery process (Process 001). This emission unit consisted of Emission Point 00002 (shredder), which was associated with Emission Source 00002 and Emission Control 00003 (water spray), Emission Point 00004 (cyclone separator for non-ferrous removal) which was associated with Emission Source 00004, Emission Point 00007 (ferrous product cyclone), which was associated with Emission Source 00007, Emission Point 0000A (z-box metal cyclone separator), which was associated with Emission Source 0000A, and Emission Point 0000F (magnetic cyclone separator - air system), which was associated with Emission Source 0000F. All units within Process 001 operated simultaneously. The facility has also removed the exempt storage silo that stored solid materials that exhausted thru an appropriate emission control device in the Metal Separator Building.

The Title V Permit contains a complete listing of the applicable Federal, State and compliance monitoring requirements for the facility, its emission units and emission points.

The facility is required to comply with 6 NYCRR 225-1.2(a)(2), the sulfur in fuel limit of 0.20 % by weight, 6 NYCRR 227-1.3(a), the smoke emission limitations of 20 % opacity limit, 6 NYCRR 227-2, the Reasonably Available Control Technology (RACT) for NO_x and 6 NYCRR 227-2.4(f)(2)(ii), with the 6.0 gm/bhp-hr NO_x emission limitation variance for lean engines firing diesel fuel for the Main Generator, Cummins # 1 & Cummins # 2 Generators, and with the 4.0 gm/bhp-hr NO_x emission limitation variance for lean engines firing diesel fuel for the two new identical Cummins Plastics Recycling Generators. The facility is required to comply with 6 NYCRR 227-2.6(a)(7), testing, monitoring and reporting for internal combustion engines and 6 NYCRR 227-2.6(c), stack test requirements by conducting a stack test on each of the five diesel generators (6.5 MW Main Generator, 300 KW Cummins # 1, 300 KW Cummins # 2 Generator, and the two new identical 1,000 KW each Cummins Plastic Recycling Generators) once during the term of this permit. The facility can be exempt from stack testing of the two new identical 1,000 KW each Cummins Plastic Recycling Generators (Emission Sources 0005D & 0005E) if they meet EPA Tier II (40 CFR 89) emission requirements as recently proposed in the New Source Performance Standards published by USEPA.

The facility operates other sources which are considered exempt from permitting in accordance with 6 NYCRR 201-3.2(c), including one fuel oil storage tank with storage capacities <300,000 bbls in the main fuel tank.

Permit Structure and Description of Operations

The Title V permit for SIMSMETAL EAST LLC-QUEENS 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.

SIMSMETAL EAST LLC-QUEENS PLANT is defined by the following emission unit(s):

Emission unit 200002 - Emission Unit 2-00002 is for the generation of electricity via # 2 fuel oil fired engine generator sets for facility operation. Process 002 consists of # 2 diesel fuel fired in the five engine-generator sets in Emission Unit 2-00002. This emission unit consists of the following five engine-generators:

1. The Main Generator - maximum rated output at 6,000 bhp (9630 HP/6.5 megawatts) diesel is defined as Emission Source 00001 with corresponding Emission Point 00001. The Main Generator will be limited to 2,200 hours of operation per year.
2. The first Cummins Generator # 1 - maximum rated output of 402 bhp (300 KW) diesel as a backup is defined as Emission Source 0005B with corresponding Emission Point 0005B. The combined Cummins # 1 & the Cummins # 2 Generators (Emission Sources 0005B & 0005C; respectively) are limited to a combined 8,760 hours of operation per year.
3. The second Cummins Generator # 2 - maximum rated output of 402 bhp (300 KW) diesel as backup is defined as Emission Source 0005C with corresponding Emission Point 0005C. The combined Cummins # 1 & the Cummins # 2 Generators are limited to a combined 8,760 hours of operation per year.
4. The two new identical Cummins Plastics Recycle Generators - maximum rated output of 1,322 bhp (1000 KW) each diesel as primary for Plastics Recycling (Emission Sources 0005D & 0005E) with corresponding Emission Points 0005D & 0005E; respectively. The two Plastics Recycle Generators are to operate up to 8,760 hours of combined operation per year. The following is information regarding the two new identical Cummins Plastics Recycle Generators (Emission Sources 0005D & 0005E):

Model year: 2007

Power Output: 1000 KW (1,322 bhp maximum rated output) each

Cylinder Displacement: 2.54 liters/cylinder (30.5 liters total for 12 cylinders) each

Operation: Non-emergency - 8,760 hrs/yr

This is not a fire engine.

The fuel oil storage tank is considered to be exempt according to 6 NYCRR 201-3.2(c)(21).

Emission unit 200002 is associated with the following emission points (EP):
00001, 0005B, 0005C, 0005D, 0005E

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



Process: 002 is located at Building GENERATOR - Process 002 consists of the firing of # 2 diesel fuel in five (5) engine-generator sets. A total of three (3) engine-generator units have been installed at the facility, the Main Generator (6.5 MW), the two identical 300 KW diesel Cummins Generators (Cummins # 1 & Cummins # 2) which are used as backups, one at Emission Point 0005B and the other at Emission Point 0005C; respectively. Each engine-generator unit operates at separate times, depending on the requirement for on-site electricity.

SimsMetal East LLC-Queens Plant is proposing to add another generator set for the Plastics Recycling operations at the facility that consists of two new identical generators (Emission Sources 0005D & 0005E). The new Generators Set proposed is a 1000 KW Peak Load Cummins Diesel Generators (Model DQFAD) that meets EPA Tier II (40 CFR 89) emission requirements as recently proposed in the New Source Performance Standards published by USEPA. The hours of operation for the new generators set will be to maintain Restricted Potential to Emit (RPTE) NOx emissions below USEPA and NYSDEC significance levels for major source permitting and New Source Review (25 tpy). The clean burning technology provided by this equipment will enable up to 8,760 hours of combined operation/year while limiting NOx RPTE to approximately 51.02 tons/year. This is according to the manufacturer's technical specification information and calculations of potential to emit and restricted potential to emit. To offset the 2.03 tpy NOx emissions increase from the two Cummins (Cummins # 1 & Cummins # 2), and the 51.02 tpy NOx emissions increase from the two Plastics Recycling generators, the facility is proposing to reduce the allowable hours of operation from 3,050 to 2,200 hours/year for the Main generator, which amounts to 50.55 tpy of NOx emission reduction.

The following is information regarding the two new identical Cummins Plastics Recycle Generators (Emission Sources 0005D & 0005E):

Model year: 2007

Power Output: 1000 KW (1,322 bhp maximum rated output) each

Cylinder Displacement: 2.54 liters/cylinder (30.5 liters total for 12 cylinders) each

Operation: Non-emergency - 8,760 hrs/yr combined

This is not a fire engine.

The facility's total fuel consumption of # 2 fuel oil for the five generators is limited to 1,182,768 gallons/year. The Main Generator - maximum rated output at 6,000 bhp (9,630 HP, 6.5 megawatts) diesel at Emission Point 00001 is limited to operate 2,200 hours/year, its average fuel consumption is 301.5 gallons/hour and its annual fuel consumption is limited to 663,300 gallons. The two Cummins Generators # 1 - maximum rated output at 402 bhp (300 KW diesel) at Emission Point 0005B, and the Cummins Generator # 2 - maximum rated output at 402 bhp (300 KW diesel) at Emission Point 0005C are together limited to a combined hours of operation of up to 8,760 hours/year and their average fuel consumption is 11.4 gallons/hour and their annual fuel consumption is limited to 99,864 gallons. The new Plastics Recycle Generator maximum rated output at 1,322 bhp (750 KW) diesel at Emission Point 0005D is to operate up to 8,760 hours per year, its average fuel consumption is 47.9 gallons per hour and its annual fuel consumption is limited to 419,604 gallons.

As a result of this process change, the facility will reduce its annual NOx emissions by about 49.59 tons.

Main Generator: 2,200 hrs x 301.5 gal/hr = 663,300 gal/yr

Cummins # 1 & # 2 Generators: 8,760 hrs x 11.4 gal/hr = 99,864 gal/yr

Cummins Plastics Generator # 1 & # 2 = 8,760 hrs x 47.9 gal/hr = 419,604 gal/yr

The total annual fuel consumption of # 2 oil = 663,300 + 99,864 + 419,604 = 1,182,768 gal/yr

**Title V/Major Source Status**

SIMSMETAL EAST LLC-QUEENS PLANT is subject to Title V requirements. This determination is based on the following information:

The Sims Hugo Neu Global Trade LLC (formerly named Hugo Neu Schnitzer East-Queens Yard) is a major facility because the potential emissions of carbon monoxide and nitrogen oxides are greater than the major source thresholds (50 tons/year for carbon monoxide and 25 tons per year for nitrogen oxides).

Program Applicability

The following chart summarizes the applicability of SIMSMETAL EAST LLC-QUEENS 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)	NO
NSPS	YES
TITLE IV	NO
TITLE V	YES
TITLE VI	NO
RACT	YES
SIP	YES

NOTES:

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

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

NESHAP National Emission Standards for Hazardous Air Pollutants (40 CFR 61) - contaminant and source specific emission standards established prior to the Clean Air Act Amendments of 1990 (CAAA) which were



developed for 9 air contaminants (inorganic arsenic, radon, benzene, vinyl chloride, asbestos, mercury, beryllium, radionuclides, and volatile HAP's)

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

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

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

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

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

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

Compliance Status

Facility is in compliance with all requirements

SIC Codes

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

SIC Code
5093

Description
SCRAP AND WASTE MATERIALS



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 2-03-001-01	Description INTERNAL COMBUSTION ENGINES - COMMERCIAL/INSTITUTIONAL COMMERCIAL/INSTITUTIONAL IC ENGINE - DISTILLATE OIL (DIESEL) Reciprocating
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Facility Emissions Summary

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

Cas No.	Contaminant Name	PTE	
		lbs/yr	Range
000630-08-0	CARBON MONOXIDE	107300	
0NY100-00-0	HAP	27	
0NY210-00-0	OXIDES OF NITROGEN	404000	
0NY075-00-0	PARTICULATES	63600	
0NY075-00-5	PM-10	7300	
007446-09-5	SULFUR DIOXIDE	12800	
0NY998-00-0	VOC	31650	

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

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

An emergency constitutes an affirmative defense to an action brought



for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

(a) The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- (1) An emergency occurred and that the facility owner and/or operator can identify the cause(s) of the emergency;
- (2) The equipment at the permitted facility causing the emergency was at the time being properly operated;
- (3) During the period of the emergency the facility owner and/or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
- (4) The facility owner and/or operator notified the Department within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

(b) In any enforcement proceeding, the facility owner and/or operator seeking to establish the occurrence of an emergency has the burden of proof.

(c) This provision is in addition to any emergency or upset provision contained in any applicable requirement.

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

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

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

Owners and/or operators of facilities having an issued Title V permit shall submit a complete application at least 180 days, but not more than eighteen months, prior to the date of permit expiration for permit renewal purposes.

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

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

Item E: Requirement to Comply With All Conditions - 6 NYCRR Part



201-6.5(a)(2)

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

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

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 Part 201-6.5(a)(5)

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

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

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

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

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

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

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

- i. The ability of the Department to seek to bring suit on behalf of the State of New York, or the Administrator to seek to bring suit



on behalf of the United States, to immediately restrain any person causing or contributing to pollution presenting an imminent and substantial endangerment to public health, welfare or the environment to stop the emission of air pollutants causing or contributing to such pollution;

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

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

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

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

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

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

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

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

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

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

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
FACILITY		129	Powers and Duties of the Department with respect to air pollution control
2-00002/0005D/002/0005D	40CFR 60-A.12	81	General provisions - Circumvention
2-00002/0005E/002/0005E	40CFR 60-A.12	110	General provisions - Circumvention
2-00002/0005D/002/0005D	40CFR 60-A.13	82	General provisions - Monitoring requirements
2-00002/0005E/002/0005E	40CFR 60-A.13	111	General provisions - Monitoring requirements
2-00002/0005D/002/0005D	40CFR 60-A.14	83	General provisions - Modification
2-00002/0005E/002/0005E	40CFR 60-A.14	112	General provisions - Modification
2-00002/0005D/002/0005D	40CFR 60-A.15	84	General provisions - Reconstruction
2-00002/0005E/002/0005E	40CFR 60-A.15	113	General provisions - Reconstruction
2-00002/0005D/002/0005D	40CFR 60-A.4	79	General provisions - Address
2-00002/0005E/002/0005E	40CFR 60-A.4	108	General provisions - Address
2-00002/0005D/002/0005D	40CFR 60-A.9	80	General provisions - Availability of information
2-00002/0005E/002/0005E	40CFR 60-A.9	109	General provisions - Availability of information
2-00002/0005D/002/0005D	40CFR 60-III.4200	85, 86	Standards of Performance for Stationary Compression Ignition IC Engines
2-00002/0005E/002/0005E	40CFR 60-III.4200	114, 115	Standards of Performance for Stationary Compression Ignition IC Engines
2-00002/0005D/002/0005D	40CFR 60-III.4204 (b)	87, 88	Emission standards - 2007 or later Non-emergency Stationary CI-IC Engines Displacing <30 liters/cylinder
2-00002/0005E/002/0005E	40CFR 60-III.4204 (b)	116, 117	Emission standards - 2007 or later Non-emergency Stationary CI-IC Engines Displacing <30 liters/cylinder
FACILITY	40CFR 60-III.4206	39	Stationary Compression Ignition IC Engines - Duration of Emission Standards
2-00002/0005D/002/0005D	40CFR 60-III.4207	89	Stationary Compression Ignition IC Engines - Fuel Requirements
2-00002/0005E/002/0005E	40CFR 60-III.4207	118	Stationary Compression Ignition IC Engines - Fuel Requirements
2-00002/0005D/002/0005D	40CFR 60-III.4207 (a)	90, 91, 92	Stationary Compression Ignition IC Engine - Fuel requirements beginning October 1, 2007
2-00002/0005E/002/0005E	40CFR 60-III.4207 (a)	119, 120, 121	Stationary Compression Ignition IC Engine - Fuel requirements beginning October 1, 2007
2-00002/0005D/002/0005D	40CFR 60-III.4207 (b)	93, 94, 95	Stationary Compression Ignition IC Engines - Fuel Requirements beginning October 1,



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2-00002/0005E/002/0005E	40CFR 60-IIII.4207 (b)	122, 123, 124	2010 Stationary Compression Ignition IC Engines - Fuel Requirements beginning October 1, 2010
2-00002/0005D/002/0005D	40CFR 60-IIII.4207 (c)	96	Variance for non-compliant fuel - Pre-2011 Model Year Stationary CI-IC engines
2-00002/0005E/002/0005E	40CFR 60-IIII.4207 (c)	125	Variance for non-compliant fuel - Pre-2011 Model Year Stationary CI-IC engines
FACILITY	40CFR 60-IIII.4208	40	Stationary Compression Ignition IC Engines - Deadlines for installing or importing engines produced in previous model year
2-00002/0005D/002/0005D	40CFR 60-IIII.4209 (b)	97	Monitoring requirement - Non-emergency stationary CI-IC engine
2-00002/0005E/002/0005E	40CFR 60-IIII.4209 (b)	126	Monitoring requirement - Non-emergency stationary CI-IC engine
2-00002/0005D/002/0005D	40CFR 60-IIII.4211 (d) (2)	98	Stationary Compression Ignition IC Engines - operating parameter monitoring
2-00002/0005E/002/0005E	40CFR 60-IIII.4211 (d) (2)	127	Stationary Compression Ignition IC Engines - operating parameter monitoring
2-00002/0005D/002/0005D	40CFR 60-IIII.4212	99	Stationary Compression Ignition IC Engines displacing < 30 L/cylinder - performance test methods and procedures
2-00002/0005E/002/0005E	40CFR 60-IIII.4212	128	Stationary Compression Ignition IC Engines displacing < 30 L/cylinder - performance test methods and procedures
FACILITY	40CFR 68	21	Chemical accident prevention provisions
FACILITY	40CFR 82-F	22	Protection of Stratospheric Ozone - recycling and emissions reduction
FACILITY	6NYCRR 200.3	23	
FACILITY	6NYCRR 200.6	1	Acceptable ambient air quality.
FACILITY	6NYCRR 200.7	10	
FACILITY	6NYCRR 201-1.4	130	Unavoidable noncompliance and violations
FACILITY	6NYCRR 201-1.7	11	
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	24, 41, 42	Title V Permits and the Associated Permit Conditions
FACILITY	6NYCRR 201-6.5 (a) (4)	15	
FACILITY	6NYCRR 201-6.5 (a) (7)	2	
FACILITY	6NYCRR 201-6.5 (a) (8)	16	



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FACILITY	6NYCRR 201-6.5 (c)	3	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring
FACILITY	6NYCRR 201-6.5 (c) (2)	4	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring
FACILITY	6NYCRR 201-6.5 (c) (3) (ii)	5	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring
FACILITY	6NYCRR 201-6.5 (d) (5)	17	
FACILITY	6NYCRR 201-6.5 (e)	6	
FACILITY	6NYCRR 201-6.5 (f) (6)	18	
FACILITY	6NYCRR 201-6.5 (g)	25	
FACILITY using	6NYCRR 201-7.2	26, 27, 28, 29, 30, 31, 32	Emissions capping
2-00002/00001/002/00001	6NYCRR 201-7.2	43, 44, 45	synthetic minor permits Emissions capping using synthetic minor permits
FACILITY	6NYCRR 202-1.1	19	
FACILITY	6NYCRR 202-2.1	7	Emission Statements - Applicability
FACILITY	6NYCRR 202-2.5	8	Emission Statements - record keeping requirements.
FACILITY	6NYCRR 211.2	131	General Prohibitions - air pollution prohibited.
FACILITY	6NYCRR 211.3	20	General Prohibitions - visible emissions limited
FACILITY	6NYCRR 212.10 (a) (1)	33	NOx and VOC RACT required at major facilities
FACILITY	6NYCRR 215	9	
FACILITY	6NYCRR 225.1 (a) (3)	34	Sulfur in Fuel Limitations (SIP)
2-00002/00001/002/00001	6NYCRR 227.2 (b) (1)	54	
2-00002/0005B/002/0005B	6NYCRR 227.2 (b) (1)	62	
2-00002/0005C/002/0005C	6NYCRR 227.2 (b) (1)	70	
2-00002/0005D/002/0005D	6NYCRR 227.2 (b) (1)	78	
2-00002/0005E/002/0005E	6NYCRR 227.2 (b) (1)	107	
2-00002/0005B/002/0005B	6NYCRR 227-1.3 (a)	55	Smoke Emission Limitations.
2-00002/0005C/002/0005C	6NYCRR 227-1.3 (a)	63	Smoke Emission Limitations.
2-00002/0005D/002/0005D	6NYCRR 227-1.3 (a)	71	Smoke Emission Limitations.
2-00002/0005E/002/0005E	6NYCRR 227-1.3 (a)	100	Smoke Emission Limitations.
FACILITY	6NYCRR 227-2	28, 30, 31, 35, 36	Reasonably available control technology for NOx
2-00002/00001/002/00001	6NYCRR 227-2	44, 45, 46	Reasonably available control technology for NOx
2-00002/00001/002/00001	6NYCRR 227-2.4 (f) (2)	47	Emission limits for lean burn engines.
2-00002/0005B/002/0005B	6NYCRR 227-2.4 (f) (2)	56	Emission limits for lean burn engines.
2-00002/0005C/002/0005C	6NYCRR 227-2.4 (f) (2)	64	Emission limits for lean burn engines.
2-00002/0005D/002/0005D	6NYCRR 227-2.4 (f) (2)	72	Emission limits for lean burn engines.
2-00002/0005E/002/0005E	6NYCRR 227-2.4 (f) (2)	101	Emission limits for lean burn engines.
2-00002/00001/002/00001	6NYCRR 227-2.4 (f) (2) (ii)	48	Emission limitation for NOx for lean burn internal combustion engines with compression ignition sources
2-00002/0005B/002/0005B	6NYCRR 227-2.4 (f) (2) (ii)	57	Emission limitation for



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2-00002/0005C/002/0005C	6NYCRR	227-2.4 (f) (2) (ii)	65	NOx for lean burn internal combustion engines with compression ignition sources Emission limitation for NOx for lean burn internal combustion engines with compression ignition sources
2-00002/0005D/002/0005D	6NYCRR	227-2.4 (f) (2) (ii)	73	Emission limitation for NOx for lean burn internal combustion engines with compression ignition sources
2-00002/0005E/002/0005E	6NYCRR	227-2.4 (f) (2) (ii)	102	Emission limitation for NOx for lean burn internal combustion engines with compression ignition sources
2-00002/00001/002/00001	6NYCRR	227-2.5 (c)	49	Alterative emission limits
2-00002/0005B/002/0005B	6NYCRR	227-2.5 (c)	58	Alterative emission limits
2-00002/0005C/002/0005C	6NYCRR	227-2.5 (c)	66	Alterative emission limits
2-00002/0005D/002/0005D	6NYCRR	227-2.5 (c)	74	Alterative emission limits
2-00002/0005E/002/0005E	6NYCRR	227-2.5 (c)	103	Alterative emission limits
2-00002/00001/002/00001	6NYCRR	227-2.6	50	Testing, monitoring, and reporting requirements
2-00002/0005B/002/0005B	6NYCRR	227-2.6	59	Testing, monitoring, and reporting requirements
2-00002/0005C/002/0005C	6NYCRR	227-2.6	67	Testing, monitoring, and reporting requirements
2-00002/0005D/002/0005D	6NYCRR	227-2.6	75	Testing, monitoring, and reporting requirements
2-00002/0005E/002/0005E	6NYCRR	227-2.6	104	Testing, monitoring, and reporting requirements
2-00002/00001/002/00001	6NYCRR	227-2.6 (a) (2)	51	Optional CEMS testing, monitoring, and reporting requirements for non very large boilers and smaller combined cycle turbines.
2-00002/0005B/002/0005B	6NYCRR	227-2.6 (a) (2)	60	Optional CEMS testing, monitoring, and reporting requirements for non very large boilers and smaller combined cycle turbines.
2-00002/0005C/002/0005C	6NYCRR	227-2.6 (a) (2)	68	Optional CEMS testing, monitoring, and reporting requirements for non very large boilers and smaller combined cycle turbines.
2-00002/0005D/002/0005D	6NYCRR	227-2.6 (a) (2)	76	Optional CEMS testing, monitoring, and reporting requirements for non very large boilers and smaller combined cycle turbines.
2-00002/0005E/002/0005E	6NYCRR	227-2.6 (a) (2)	105	Optional CEMS testing, monitoring, and reporting requirements for non very large boilers and smaller combined cycle turbines.
FACILITY	6NYCRR	227-2.6 (a) (7)	37, 38	Testing, monitoring and reporting for internal combustion engines.
2-00002/00001/002/00001	6NYCRR	227-2.6 (a) (7)	52	Testing, monitoring and



			reporting for internal combustion engines.
2-00002/00001/002/00001	6NYCRR 227-2.6 (c)	53	
2-00002/0005B/002/0005B	6NYCRR 227-2.6 (c)	61	
2-00002/0005C/002/0005C	6NYCRR 227-2.6 (c)	69	
2-00002/0005D/002/0005D	6NYCRR 227-2.6 (c)	77	
2-00002/0005E/002/0005E	6NYCRR 227-2.6 (c)	106	
FACILITY	6NYCRR 231-2	27, 29, 32	New Source Review in Nonattainment Areas and Ozone Transport Region
2-00002/00001/002/00001	6NYCRR 231-2	43, 44, 45	New Source Review in Nonattainment Areas and Ozone Transport Region

Applicability Discussion:

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

ECL 19-301.

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

6NYCRR Part 200-.6

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

6NYCRR Part 200-.7

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

6NYCRR Part 201-1.4

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

6NYCRR Part 201-1.7

Requires the recycle and salvage of collected air contaminants where practical

6NYCRR Part 201-1.8

Prohibits the reintroduction of collected air contaminants to the outside air

6NYCRR Part 201-3.2(a)

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



requirements, regulations, or law.

6NYCRR Part 201-3.3(a)

The owner and/or operator of a trivial emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains trivial emission sources or units subject to this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

6NYCRR Part 201-6

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

6NYCRR 201-6.5(a)(4)

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

6NYCRR 201-6.5(a)(7)

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

6NYCRR 201-6.5(a)(8)

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

6NYCRR Part 201-6.5(c)

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

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



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

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

This regulation specifies any reporting requirements incorporated into the permit must include provisions regarding the notification and reporting of permit deviations and incidences of noncompliance stating the probable cause of such deviations, and any corrective actions or preventive measures taken.

6NYCRR 201-6.5(d)(5)

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

6NYCRR Part 201-6.5(e)

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

6NYCRR 201-6.5(f)(6)

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

6NYCRR Part 201-6.5(g)

Permit Exclusion Provisions - specifies those actions, such as administrative orders, suits, claims for natural resource damages, etc that are not affected by the federally enforceable portion of the permit, unless they are specifically addressed by it.

6NYCRR Part 202-1.1

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

6NYCRR Part 202-2.1

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

6NYCRR Part 202-2.5

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

6NYCRR Part 211-2



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

6 NYCRR Part 211.3

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

6 NYCRR Part 215

Prohibits open fires at industrial and commercial sites.

40 CFR Part 68.

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

40 CFR Part 82, Subpart F

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

Facility Specific Requirements

In addition to Title V, SIMSMETAL EAST LLC-QUEENS PLANT has been determined to be subject to the following regulations:

40CFR 60-A.12

This regulation prohibits an owner or operator from concealing emissions in violation of applicable standards by any means.

40CFR 60-A.13

This regulation specifies how monitoring shall be performed and which methods and appendices are used to determine if the monitoring is adequate and in compliance with the regulated standards.

40CFR 60-A.14

This regulation defines the term modification and what is and is not considered to be a modification, for the purpose of rule applicability.

40CFR 60-A.15

This regulation defines the term reconstruction and what is and is not considered to be a reconstruction project, for the purpose of rule applicability.



40CFR 60-A.4

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

40CFR 60-A.9

This rule citation allows the public access to any information submitted to the EPA Administrator (or state contact), in conjunction with a project subject to this section of the regulation.

40CFR 60-III.4200

This regulation is the Standards of Performance Compression Ignition IC Engines and it lists its applicability for equipment operation that began on or after April 1, 2006 and less than or equal to 3,000 horsepower (electric).

40CFR 60-III.4204 (b)

This regulation requires owners and/or operators of 2007 model year or later non-emergency stationary compression ignition internal combustion engines displacing less than 30 liters per cylinder to purchase engines that meet the emission standards referenced in 40 CFR 60.4201 and maintain those engines according to manufacturer's specifications.

40CFR 60-III.4206

This requirement mandates that owners or operators of stationary compression ignition IC engines that achieve the emission standards as required in 40 CFR 60.4204 and 4205 maintain the engines according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.

40CFR 60-III.4207

Beginning October 1, 2007, owners and operators of stationary compression ignition internal combustion engines must use diesel fuel that meets the requirements of 40 CFR 80.510(a).

40CFR 60-III.4207 (a)

Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).

40CFR 60-III.4207 (b)

Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

40CFR 60-III.4207 (c)

This requirement applies to owners and/or operators of pre-2011 model year stationary compression ignition internal combustion engines who wish to use fuel which does not comply with the fuel requirements in 60.4207(a) or 60.4207(b). It allows the owner and/or operator of an applicable engine to petition the Administrator for approval to use remaining non-compliant fuel for the purpose of using up existing fuel inventories. If approved, any variances can be valid for a period of up to six months.

40CFR 60-III.4208

This requirement establishes deadlines dates beyond which owners and/or operators of affected stationary compression ignition IC engines are prohibited from importing or installing engines manufactured in a previous model year.

40CFR 60-III.4209 (b)

The owner and/or operator of a stationary compression ignition internal combustion engine subject to this subpart which is equipped with a diesel particulate filter must install a back pressure monitor to notify the owner and/or



operator when the back pressure limit of the engine is approached.

40CFR 60-III.4211 (d) (2)

This citation prescribes the emission standards and demonstration compliance requirements for stationary compression ignition internal combustion engines for owners and operators.

40CFR 60-III.4212

This citation prescribes the performance test methods and procedures requirements for stationary compression ignition internal combustion engines displacing less than 30 liters/cylinder for owners and operators.

6NYCRR 200 .3

No person shall make a false statement in connection with applications, plans, specifications and/or reports submitted pursuant to this Subchapter.

6NYCRR 201-7.2

This section of Part 201-7 specifies the criteria that need to be met in order to restrict emissions to avoid Title V or other applicable requirements using federally enforceable permit conditions permit.

6NYCRR 212 .10 (a) (1)

This regulation requires owners and operators of facilities, located in lower Orange County and the New York City metropolitan areas, that have emissions of volatile organic compounds or oxides of nitrogen in excess of 25 tons per year, to comply with the Reasonably Available Control Technology requirements of 6 NYCRR Part 212.10.

6NYCRR 225 .1 (a) (3)

This regulation limits the amount of sulfur that can be in fuel burned at a stationary source. It references Table 1 of the 1979 version of the sulfur in fuel limitations expressed in terms of percent by weight for fuel oil and pounds per million Btu gross heat content for solid fuel. **NOTE: This citation has been replaced by requirements cited under 225-1.2(a)(2) and is no longer part of current State regulations, however, it remains part of New York State's approved State Implementation Plan (SIP).**

6NYCRR 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.

6NYCRR 227-1.3 (a)

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

6NYCRR 227-2

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

6NYCRR 227-2.4 (f) (2)

This citation sets emission limits of oxides of nitrogen for lean burn engines.

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

This regulation sets the NOx emission limit for lean burn engines that provide electrical generation for peak shaving. The limit, which applies to engines listed at 225 horsepower for those in the severe ozone non-attainment area and 400 horsepower for the rest of the state, is 2.3 grams of NOx per brake horsepower-hour, effective April 1, 2005.

6NYCRR 227-2.5 (c)

For sources for which the owner or operator demonstrates that the applicable presumptive RACT emission limit in



section 227-2.4 of this Subpart is not economically or technically feasible, the owner or operator can request the Department to set a higher source specific emission limit. Economic or technical feasibility must include, but is not limited to, the evaluation of fuel switching, selective catalytic reduction or system averaging as compliance options. This alternative RACT emission limit must be approved by the Department and by the Administrator as a revision to the State Implementation Plan.

6NYCRR 227-2.6

This regulation establishes the compliance testing, monitoring, and reporting requirements for NO_x RACT affected stationary combustion installations.

6NYCRR 227-2.6 (a) (2)

This citation is for CEMs monitoring for those facilities which opt to use CEMs. The owner/operator shall measure NO_x emissions with a continuous emissions monitoring system (CEMS) as described in 6 NYCRR 227-2.6(b). This citation is also for optional CEMS testing, monitoring and reporting requirements for non very large boilers and smaller combined cycle turbines.

6NYCRR 227-2.6 (a) (7)

This citation is for testing, monitoring and reporting for internal combustion engines. The owner/operator of this internal combustion engine shall perform an initial compliance stack test as described in 6 NYCRR 227-2.6(c). If the internal combustion engine qualifies for the control exemption listed in 6 NYCRR 227-2.4(f)(3), do not need to perform the stack test. A test protocol shall be submitted for approval at least 60 days prior to testing. Testing procedures shall be those set for in 40 CFR 60 Appendix A, or any other methods acceptable to the Department and the USEPA for determining compliance with the appropriate NO_x limit set forth in section 227-2.4. Testing procedures shall also comply with subpart 202-1.

6NYCRR 227-2.6 (c)

This citation is for stack test requirements. The owner or operator of the facility is required to test for NO_x emission and follow monitoring and reporting requirements. The stack testing for NO_x emission requires the facility to:

- (1) Submit a compliance test protocol to the department for approval at least 90 days prior to emission testing. The condition of the testing and the locations of the sampling devices must be acceptable to the department; and
- (2) Utilize procedures set forth in 40 CFR Part 60, Appendix A or any other method acceptable to the department and EPA for determining compliance with the appropriate NO_x limit in section 227-2.4 of this Subpart, and shall follow the procedures set forth in Part 202 of this Title.
 - (i) For large and mid-size boilers, utilize Method 7, 7E, or 19 from 40 CFR Part 60, Appendix A or another reference method approved by the department.
 - (ii) For simple cycle combustion turbines, utilize Method 20 from 40 CFR Part 60, Appendix A or another reference method approved by the department.
 - (iii) For combined cycle combustion turbines, utilize Method 7, 7E, 19 or 20 from 40 CFR Part 60, Appendix A or another reference method approved by the department.
 - (iv) For internal combustion engines, utilize Method 7, 7E or 19 from 40 CFR Part 60, Appendix A or another reference method approved by the department.

6NYCRR 231-2

The provisions of Subpart 231-2 apply to new or modified major facilities. The contaminants of concern state-wide



are nitrogen oxides and volatile organic compounds since New York State is located in the ozone transport region and because there are ozone non-attainment areas within the state. In addition, particulate matter less than 10 microns in size (PM-10) is a non-attainment contaminant in Manhattan County.

Non Applicability Analysis

List of non-applicable rules and regulations:

Location Facility/EU/EP/Process/ES	Regulation	Short Description
FACILITY	6NYCRR 231-2	New Source Review in Nonattainment Areas and Ozone Transport Region

Reason: MINOR PERMIT MODIFICATION: A minor permit modification is defined in 6 NYCRR 201-6.7(c) as one that does not result in a net emissions increase. A net emissions increase is the project emission potential and every credible emission increase. The project emission potential is the difference between prior actual annual emissions or prior allowable annual emissions, whichever is less, and the subsequent maximum annual potential of each such emission unit. A credible emission increase is any increase from a physical change in, or a change in the method of operation and is qualified as the difference between prior actual annual emissions, or prior allowable annual emissions, whichever is less and the subsequent maximum annual potential.

The following is the present NOx RACT emissions (9 gm/bhp-hr), the proposed NOx RACT emissions (6 gm/bhp-hr) and the NOx emissions reduction for the minor modifications to the permit renewal.

NOx Emissions in tons per year

Equipment	9 gm/bhp-hr	6 gm/bhp-hr	Reduction
Main Generator	181.39	87.23	94.16
Cummins # 1	17.93	11.63	6.30
Cummins # 2	14.94	11.63	3.31
Total	214.26	110.49	103.77

The two Plastics Recycling Addition: NOx Emissions in tons/year

Equipment	4 gm/bhp-hr
Two Plastics Recycle 1,000 each	51.02

Overall Impact on NOx Emissions in tons per year:

Reductions from Impact of RACT	- 103.77
Increase for two Plastics Recycling	51.02
Net Change	- 52.74

Modified (proposed) Hours of Operation for Main and Cummins # 1 & 2 Generators at 9.gm/bhp-hr and at 6 gm/bhp-hr:

9 gm/bhp-hr 6 gm/bhp-hr

Main Generator at 2,200 hrs/yr @t 2,200 from 3,050 hrs/yr	2.93	1.67
Combined Cummins # 1 & # 2 at @t 8,760 from 8,250 hrs/yr	2.03	1.35



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Net Change - 0.90 - 0.32

Proposed (Modified) Total maximum NOx emissions from the four generators = Main + Combined Cummins # 1 & # 2 + Combined Plastic Recycle # 1 & # 2 =

87.23 + 23.27 + 51.02 = 161.52 tpy of NOx emissions

Present (Current) Total maximum NOx emissions from the three generators = Main + Cummins # 1 + Cummins # 2 = 181.39 + 17.93 + 14.94 = 214.26 tpy of NOx

Net NOx emission decrease = 161.52 - 214.26 = - 52.74 tpy of NOx

This is a decrease (not an increase) of almost 52.74 tons/yr of NOx emissions and there would be no net emissions increase and the modification qualifies as a "minor modification". Therefore, the proposed modification at SimsMetal East LLC-Queens Plant (formerly known as Hugo Neu East-Queens Yard and as Sims Hugo Neu East-Queens Yard) meets the criteria for use of a minor permit modification as defined in 6 NYCRR 201-6.7(c) and its procedure in accordance with 6 NYCRR 201-6.7(c)(3). In addition, New Source Review, 6 NYCRR 231-2 is not applicable to this facility as a result of this minor modification.

NOTE: Non-applicability determinations are cited as a permit condition under 6 NYCRR Part 201-6.5(g). This information is optional and provided only if the applicant is seeking to obtain formal confirmation, within an issued Title V permit, that specified activities are not subject to the listed federal applicable or state only requirement. The applicant is seeking to obtain verification that a requirement does not apply for the stated reason(s) and the Department has agreed to include the non-applicability determination in the issued Title V permit which in turn provides a shield against any potential enforcement action.

Compliance Certification

Summary of monitoring activities at SIMSMETAL EAST LLC-QUEENS PLANT:

Location Facility/EU/EP/Process/ES	Cond No.	Type of Monitoring
2-00002/0005D/002/0005D	85	intermittent emission testing
2-00002/0005D/002/0005D	86	intermittent emission testing
2-00002/0005E/002/0005E	114	intermittent emission testing
2-00002/0005E/002/0005E	115	intermittent emission testing
2-00002/0005D/002/0005D	87	record keeping/maintenance procedures
2-00002/0005D/002/0005D	88	record keeping/maintenance procedures
2-00002/0005E/002/0005E	116	record keeping/maintenance procedures
2-00002/0005E/002/0005E	117	record keeping/maintenance procedures
2-00002/0005D/002/0005D	89	monitoring of process or control device parameters as surrogate
2-00002/0005E/002/0005E	118	monitoring of process or control device parameters as surrogate
2-00002/0005D/002/0005D	90	work practice involving specific operations
2-00002/0005D/002/0005D	91	work practice involving specific operations
2-00002/0005D/002/0005D	92	work practice involving specific operations
2-00002/0005E/002/0005E	119	work practice involving specific operations
2-00002/0005E/002/0005E	120	work practice involving specific operations
2-00002/0005E/002/0005E	121	work practice involving specific operations
2-00002/0005D/002/0005D	93	work practice involving specific operations
2-00002/0005D/002/0005D	94	work practice involving specific operations



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2-00002/0005D/002/0005D	95	work practice involving specific operations
2-00002/0005E/002/0005E	122	work practice involving specific operations
2-00002/0005E/002/0005E	123	work practice involving specific operations
2-00002/0005E/002/0005E	124	work practice involving specific operations
2-00002/0005D/002/0005D	96	record keeping/maintenance procedures
2-00002/0005E/002/0005E	125	record keeping/maintenance procedures
2-00002/0005D/002/0005D	97	record keeping/maintenance procedures
2-00002/0005E/002/0005E	126	record keeping/maintenance procedures
2-00002/0005D/002/0005D	98	record keeping/maintenance procedures
2-00002/0005E/002/0005E	127	record keeping/maintenance procedures
2-00002/0005D/002/0005D	99	record keeping/maintenance procedures
2-00002/0005E/002/0005E	128	record keeping/maintenance procedures
FACILITY	5	record keeping/maintenance procedures
FACILITY	6	record keeping/maintenance procedures
FACILITY	27	work practice involving specific operations
FACILITY	28	work practice involving specific operations
FACILITY	29	work practice involving specific operations
FACILITY	30	work practice involving specific operations
FACILITY	31	work practice involving specific operations
FACILITY	32	work practice involving specific operations
2-00002/00001/002/00001	43	work practice involving specific operations
2-00002/00001/002/00001	44	work practice involving specific operations
2-00002/00001/002/00001	45	work practice involving specific operations
FACILITY	7	record keeping/maintenance procedures
FACILITY	34	work practice involving specific operations
2-00002/00001/002/00001	54	intermittent emission testing
2-00002/0005B/002/0005B	62	intermittent emission testing
2-00002/0005C/002/0005C	70	intermittent emission testing
2-00002/0005D/002/0005D	78	intermittent emission testing
2-00002/0005E/002/0005E	107	intermittent emission testing
2-00002/0005B/002/0005B	55	monitoring of process or control device parameters as surrogate
2-00002/0005C/002/0005C	63	monitoring of process or control device parameters as surrogate
2-00002/0005D/002/0005D	71	monitoring of process or control device parameters as surrogate
2-00002/0005E/002/0005E	100	monitoring of process or control device parameters as surrogate
FACILITY	35	work practice involving specific operations
FACILITY	36	work practice involving specific operations
2-00002/00001/002/00001	46	record keeping/maintenance procedures



Permit Review Report

Permit ID: 2-6304-00268/00015

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2-00002/00001/002/00001	47	record keeping/maintenance procedures
2-00002/0005B/002/0005B	56	record keeping/maintenance procedures
2-00002/0005C/002/0005C	64	record keeping/maintenance procedures
2-00002/0005D/002/0005D	72	record keeping/maintenance procedures
2-00002/0005E/002/0005E	101	record keeping/maintenance procedures
2-00002/00001/002/00001	48	intermittent emission testing
2-00002/0005B/002/0005B	57	intermittent emission testing
2-00002/0005C/002/0005C	65	intermittent emission testing
2-00002/0005D/002/0005D	73	intermittent emission testing
2-00002/0005E/002/0005E	102	intermittent emission testing
2-00002/00001/002/00001	49	monitoring of process or control device parameters as surrogate
2-00002/0005B/002/0005B	58	monitoring of process or control device parameters as surrogate
2-00002/0005C/002/0005C	66	monitoring of process or control device parameters as surrogate
2-00002/0005D/002/0005D	74	monitoring of process or control device parameters as surrogate
2-00002/0005E/002/0005E	103	monitoring of process or control device parameters as surrogate
2-00002/00001/002/00001	50	monitoring of process or control device parameters as surrogate
2-00002/0005B/002/0005B	59	monitoring of process or control device parameters as surrogate
2-00002/0005C/002/0005C	67	monitoring of process or control device parameters as surrogate
2-00002/0005D/002/0005D	75	monitoring of process or control device parameters as surrogate
2-00002/0005E/002/0005E	104	monitoring of process or control device parameters as surrogate
2-00002/00001/002/00001	51	monitoring of process or control device parameters as surrogate
2-00002/0005B/002/0005B	60	monitoring of process or control device parameters as surrogate
2-00002/0005C/002/0005C	68	monitoring of process or control device parameters as surrogate
2-00002/0005D/002/0005D	76	monitoring of process or control device parameters as surrogate
2-00002/0005E/002/0005E	105	monitoring of process or control device parameters as surrogate
FACILITY	37	monitoring of process or control device parameters as surrogate
FACILITY	38	monitoring of process or control device parameters as surrogate
2-00002/00001/002/00001	52	monitoring of process or control device parameters as surrogate
2-00002/00001/002/00001	53	intermittent emission testing
2-00002/0005B/002/0005B	61	intermittent emission testing
2-00002/0005C/002/0005C	69	intermittent emission testing
2-00002/0005D/002/0005D	77	intermittent emission testing



2-00002/0005E/002/0005E

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intermittent emission testing

Basis for Monitoring**Basis for Monitoring**

This facility has NO_x emissions and is subject to 6 NYCRR 227. This facility has to submit quarterly and semiannual compliance reports and an annual Compliance Certification. In addition, the facility has to comply with the following monitoring conditions:

redo from Mod 2

This is a **Title V renewal** minor Title V modification to the Mod 1 Title V Permit that was issued on 9/5/2002. This modification involves replacing the existing Caterpillar Generator (Emission Point 0005A) with a second Cummins Generator # 2 (Emission Point 0005C). As a result, both Cummins Generators installed at the facility will be identical, that at Emission Point 0005B and that at Emission Point 0005C. Therefore, emission profiles of both Cummins generators are expected to be the same.

Condition # 1-3 for 6NYCRR 201-6.5(c)(3)(ii): This is a facility-wide condition. This condition is for Record Keeping/Maintenance Procedures. This condition 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.

Condition # 1-4 for 6NYCRR 201-6.5(e): This is a facility-wide condition. This condition is for Record Keeping/Maintenance Procedures. This condition specifies the overall permit requirements for compliance certification, including emission limitations, standards or work practices.

Condition # 31 for 6NYCRR 202-2.1: This is a facility-wide condition. This condition is for Record Keeping/Maintenance Procedures. This condition sets forth the applicability criteria for submitting an annual statement of emissions. The criteria is based on annual emission threshold quantities and ozone attainment designation. This condition is a requirements for all Title V facilities. These facilities must submit an annual emission statement by April 15th of each year for emissions of the previous calendar year.

Condition # 2-2 for 6NYCRR 212.6(a): This is a facility-wide condition. This condition is for Monitoring of Process or Control Device Parameters as Surrogate for Particulates. This condition specifies an opacity limitation of less than 20% for any six consecutive minute period for all process emission sources.

Condition # 2-3 for 6NYCRR 225.1(a)(3): This is a facility-wide condition. This condition is for Work Practice Involving Specific Operations. This condition limits the amount of sulfur that can be in fuel burned at a stationary source. It references Table 1 of the 1979 version of the sulfur in fuel limitations expressed in terms of percent by weight for fuel oil and pounds per million Btu gross heat content for solid fuel. The sulfur limit is 0.20 percent by weight for distillates - number 1 and number 2 fuel oil for the New York City area. NOTE: This citation has been replaced by requirements cited under 225-1.2(a)(2) and is no longer part of current State regulations, however, it remains part of New York State's approved State Implementation Plan (SIP).

Condition # 2-4 for 6NYCRR 227-2.4(f)(2): This is a facility-wide condition. This condition is for Monitoring of Process or Control Device Parameters as Surrogate for Oxides of Nitrogen. This condition sets emission limits on oxides of nitrogen for lean burn internal combustion engines firing natural gas or distillate oils. The NO_x emission limit is 9.0 gm/bhp-hr for the lean burn diesel internal combustion engines firing distillate oil. The facility is limited to 200 tons per hour (averaged quarterly) of scrap processed.



To comply with the NO_x emission limit of 9.0 gram/bhphr for internal combustion engines stated in 6NYCRR 227-2.4(f)(2), the facility will maintain daily records which shall include:

1. Hours of operation per day by each engine-generator
2. Gallons of number 2 diesel fuel burned by each engine-generator
3. Amount of scrap materials processed in tons
4. Hours of shredder operation
5. Gallons of water used for dust suppression in the shredder

Condition # 42 for 6NYCRR 212.4(c): This condition is for Intermittent Emission Testing of Particulates for EU: 1-00001, EP: 00002, Proc: 001 & ES: 00002. This condition requires existing sources (in operation after July 1, 1973) of solid particulates with environmental rating of B or C which are not subject to Table 5 "Processes for which Permissible Emission Rate is Based on Process Weight, to be limited to an particulate emission rate not to exceed 0.05 grains per dry standard cubic foot.

Condition # 43 for 6NYCRR 212.4(c): This condition is for Intermittent Emission Testing of Particulates for EU: 1-00001, EP: 00004, Proc: 001 & ES: 00004. This condition requires existing sources (in operation after July 1, 1973) of solid particulates with environmental rating of B or C which are not subject to Table 5 "Processes for which permissible Emission Rate is Based on Process Weight, to be limited to any particulate emission rate not to exceed 0.05 grains per dry standard cubic foot.

Condition # 44 for 6NYCRR 212.4(c): This condition is for Intermittent Emission Testing of Particulates for EU: 1-00001, EP: 00007, Proc: 001 & ES: 00007. This condition requires existing sources (in operation after July 1, 1973) of solid particulates with environmental rating of B or C which are not subject to Table 5 "Processes for which permissible Emission Rate is Based on Process Weight, to be limited to any particulate emission rate not to exceed 0.05 grains per dry standard cubic foot.

Condition # 45 for 6NYCRR 212.4(c): This condition is for Intermittent Emission Testing of Particulates for EU: 1-00001, EP: 0000A, Proc: 001 & ES: 0000A. This condition requires existing sources (in operation after July 1, 1973) of solid particulates with environmental rating of B or C which are not subject to Table 5 "Processes for which permissible Emission Rate is Based on Process Weight, to be limited to any particulate emission rate not to exceed 0.05 grains per dry standard cubic foot.

Condition # 46 for 6NYCRR 212.4(c): This condition is for Intermittent Emission Testing of Particulates for EU: 1-00001, EP: 0000F, Proc: 001 & ES: 0000F. This condition requires existing sources (in operation after July 1, 1973) of solid particulates with environmental rating of B or C which are not subject to Table 5 "Processes for which permissible Emission Rate is Based on Process Weight, to be limited to any particulate emission rate not to exceed 0.05 grains per dry standard cubic foot.

Condition # 2-5 for 6NYCRR 227-1.3(a): This condition is for Monitoring of Process or Control Device Parameters as Surrogate for Particulates for EU: 2-00002 & EP: 00001. This condition is for the Main Generator - 9630 HP ((6.5 megawatts) Diesel Engine Generator. This condition 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.

Condition # 1-11 for 6NYCRR 227-2(b)(1): This condition is for Intermittent Emission Testing for Particulates for EU: 2-00002, EP: 00001 & Proc: 002 for the Main Generator - 9630 HP (6.5 megawatts) Diesel Engine Generator. This regulation is from the 1972 version of Part 227 and still remains as part of New



York's SIP. This condition establishes a particulate limit of 0.10 lbs/mmBtu based on a 2 hour average emission for the oil fired stationary combustion installation (Main Generator) and is required once during the term of the permit.

Condition # 2-6 for 6 NYCRR 227-2: This condition is for Recordkeeping/Maintenance Procedures for Oxides of Nitrogen for EU: 2-00002, EP: 00001, Proc: 002 & ES: 00001 for the Main Generator - 9630 HP (6.5 megawatts) Diesel Engine Generator. This condition limits the emission of oxides of nitrogen (NOx) from internal combustion engines, the Main Generator, in order to establish compliance with the NOx RACT rules and emission limit of 9.0 gm/bhp-hr for lean burn engines firing distillate oil. On October 20, 2000, an emission compliance evaluation or stack testing was conducted on the Main Generator and it established compliance with the 9.0 gm/bhp-hr NOx emission limit.

Condition # 2-7 for 6 NYCRR 227-2: This condition is for Recordkeeping/Maintenance Procedures for Oxides of Nitrogen for EU: 2-00002, EP: 00001, Proc: 002 & ES: 00001 for the Main Generator - 9630 HP (6.5 megawatts) Diesel Engine Generator. This condition limits the emission of oxides of nitrogen (NOx) from internal combustion engines, the Main Generator, in order to establish compliance with the NOx RACT rules and emission limit of 9.0 gm/bhp-hr for lean burn engines firing distillate oil. On October 20, 2000, an emission compliance evaluation or stack testing was conducted on the Main Generator and it established compliance with the 9.0 gm/bhp-hr NOx emission limit.

As a surrogate for the 9.0 gm/bhp-hr NOx RACT emission limit, daily fuel use and daily hours of operation are recorded for each of the three engines. From these data, the average fuel usage in gallons per hour is determined each calendar quarter. The acceptable gallons per hour fuel usage for each generator is determined by taking the average gallons per hour fuel usage during the stack test for the generator, multiplying that value by 9.0 gm/bhp-hr, and dividing the product by the gm/bhp-hr for that generator as determined from the stack test. No generator shall have an average gallons per hour fuel usage during any calendar quarter that exceeds the acceptable gallons per hour fuel usage.

Using the previous stack test data for the facility, the calculations of acceptable gallons per hour fuel usage is detailed below for each generator.

Main Generator, Emission Point 00001:

$$(301.5 \text{ gal/hr (stack test)} \times 9 \text{ gm/bhp-hr}) / 7.5 \text{ gm/bhp-hr} = 362 \text{ gal/hr}$$

Cummins Generator # 1, Emission Point 0005B:

$$(10.5 \text{ gal/hr (stack test)} \times 9 \text{ gm/bhp-hr}) / 8.0 \text{ gm/bhp-hr} = 12 \text{ gal/hr}$$

Cummins Generator # 2, Emission Point 0005C:

$$(12.3 \text{ gal/hr (stack test)} \times 9 \text{ gm/bhp-hr}) / 8.0 \text{ gm/bhp-hr} = 14 \text{ gal/hr}$$

The NOx emissions is then calculated as:

EMISSIONS PER HOUR (Based on Stack Test Data) x TOTAL HOURS OPERATED (Based on Operations Log)

Condition # 2-8 for 6 NYCRR 227-2.4(f)(2): This condition is for Intermittent Emission Testing for Oxides of Nitrogen for EU: 2-00002, EP: 00001, Proc: 002 & ES: 00001 for the Main Generator - 9630 HP (6.5 megawatts) Diesel Engine Generator. This condition sets emission limits of 9.0 gm/bhp-hr on oxides of nitrogen for lean burn internal combustion engines firing distillate oil. Stack testing is required for the Main



Generator, once during the term of the permit, in order to demonstrate compliance with the 9.0 gm/bhp-hr for lean burn engines firing distillate oil.

Condition # 2-9 for 6 NYCRR 227-2.4(f)(2): This condition is for Recordkeeping/Maintenance Procedures for Oxides of Nitrogen for EU: 2-00002, EP: 00001, Proc: 002 & ES: 00001 for the Main Generator - 9630 HP (6.5 megawatts) Diesel Engine Generator. This condition sets emission limits on oxides of nitrogen for lean burn internal combustion engines firing distillate oil. To ensure that the Main Generator runs at optimum conditions and stays in compliance with the NOx RACT emission limit, periodic maintenance will be performed in accordance with the manufacturer's specification manual for the Main Generator.

Condition # 53 for 6 NYCRR 227-2.4(f)(2)(ii): This condition is for Intermittent Emission Testing for Oxides of Nitrogen for EU: 2-00002, EP: 00001, Proc: 002 & ES: 00001. This condition is for the Main Generator - 9630 HP (6.5 megawatts) Diesel Engine Generator. This condition limits the NOx emission for lean burn engines firing other fuels by themselves or in combination with gas to 9.0 grams per brake horsepower-hour. This NOx emission limit applies to stationary internal combustion engine of 225 horsepower or larger in the severe nonattainment area, and 400 horsepower in the rest of the State, which provides primary power or is used for peak shaving generation. Compliance with the emission limit is determined on a one hour average if a stack test is utilized in accordance with 6 NYCRR 227-2.6(a)(7) or a 24 hour average if CEMS are utilized under 6 NYCRR 227-2.6(a)(2). If CEMS are utilized, the requirements of 6 NYCRR 227-2.6(b) apply, including the use of a 24 hour averaging period. Emergency power generating units and units that operate during emergency situations which operate less than 500 hours per year, are exempt from this emission limitation.

Condition # 2-10 for 6 NYCRR 227-2.6(a)(2): This condition is for Monitoring of Process or Control Device Parameters as Surrogate for Oxides of Nitrogen for EU: 2-00002, EP: 00001, Proc: 002 & ES: 00001. This condition is for the Main Generator - 9630 HP (6.5 megawatts) Diesel Engine Generator. This condition is for internal combustion engines which opt to employ a continuous emissions monitoring system (CEMS), or equivalent, in lieu of the monitoring requirements to perform initial compliance stack tests as described in subdivision (c) of this section. Those internal combustion engines which opt to monitor emissions with a CEMS or equivalent shall follow the requirements of 6 NYCRR 227-2.6(b) to demonstrate compliance, including a 24 hour daily arithmetic average NOx emission rate.

Condition # 2-11 for 6 NYCRR 227-2.6(a)(7): This condition is for Monitoring of Process or Control Device Parameters as Surrogate for Oxides of Nitrogen for EU: 2-00002, EP 00001, Proc: 002 & ES: 00001. This condition is for testing, monitoring and reporting for internal combustion engines. This condition is for the Main Generator - 9630 HP (6.5 megawatts) Diesel Engine Generator. The facility is limiting the number 2 oil usage for the Main Generator - 9630 hp diesel to 919,600 gallons/year (annual maximum rolled daily).

On a daily basis, the facility will keep records of :

1. The number 2 fuel usage for each generator in gallons per day and
2. The hours of operation for each generator in hours per day.

Records will be maintained for five years at the facility.

The owner/operator of this internal combustion engine shall perform an initial compliance stack test as described in 6 NYCRR 227-2.6(c). If the internal combustion engine qualifies for the control exemption listed in 6 NYCRR 227-2.4(f)(3), do not need to perform the stack test. A test protocol shall be submitted for approval at least 60 days prior to testing. Testing procedures shall be those set for in 40 CFR 60 Appendix A, or any other methods acceptable to the Department and the USEPA for determining compliance with the appropriate NOx limit set forth in section 227-2.4. Testing procedures shall also comply with subpart 202-1.



Condition # 2-12 for 6NYCRR 227-2.6(a)(7): This condition is for Intermittent Emission testing for Oxides of Nitrogen for EU: 2-00002, EP 00001, Proc: 002 & ES: 00001. This condition is for testing, monitoring and reporting for internal combustion engines. This condition is for the Main Generator - 9630 HP (6.5 megawatts) Diesel Engine Generator. This condition limits the NO_x emission for lean burn engines firing other fuels by themselves or in combination with gas to 9.0 grams per brake horsepower-hour. This NO_x emission limit applies to stationary internal combustion engine of 225 horsepower or larger (the Main Generator) in the severe nonattainment area, and 400 horsepower in the rest of the State, which provides primary power or is used for peak shaving generation. Compliance with the emission limit is determined on a one hour average if a stack test is utilized in accordance with 6 NYCRR 227-2.6(a)(7) or a 24 hour average if CEMS are utilized under 6 NYCRR 227-2.6(a)(2). The owner/operator of this internal combustion engine shall perform an initial compliance stack test as described in 6 NYCRR 227-2.6(c). If the internal combustion engine qualifies for the control exemption listed in 6 NYCRR 227-2.4(f)(3), do not need to perform the stack test. A test protocol shall be submitted for approval at least 60 days prior to testing. Testing procedures shall be those set for in 40 CFR 60 Appendix A, or any other methods acceptable to the Department and the USEPA for determining compliance with the appropriate NO_x limit set forth in section 227-2.4. Testing procedures shall also comply with subpart 202-1.

Condition # 2-13 for 6NYCRR 227-2.6(c): This condition is for Intermittent Emission Testing for Oxides of Nitrogen for EU: 2-00002, EP: 00001, Proc: 002 & ES: 00001. This condition is for the Main Generator - 9630 HP (6.5 megawatts) Diesel Engine Generator. This condition is for stack test requirements. The owner or operator of the facility is required to test for NO_x emission and follow monitoring and reporting requirements. The stack testing for NO_x emission requires the facility to:

- (1) Submit a compliance test protocol to the department for approval at least 90 days prior to emission testing. The condition of the testing and the locations of the sampling devices must be acceptable to the department; and
- (2) Utilize procedures set forth in 40 CFR Part 60, Appendix A or any other method acceptable to the department and EPA for determining compliance with the appropriate NO_x limit in section 227-2.4 of this Subpart, and shall follow the procedures set forth in Part 202 of this Title.
- (iv) For internal combustion engines, utilize Method 7, 7E or 19 from 40 CFR Part 60, Appendix A or another reference method approved by the department.

This condition limits the NO_x emission for lean burn engines firing other fuels by themselves or in combination with gas to 9.0 grams per brake horsepower-hour. This NO_x emission limit applies to stationary internal combustion engine of 225 horsepower or larger (the Main Generator) in the severe nonattainment area, and 400 horsepower in the rest of the State, which provides primary power or is used for peak shaving generation. Compliance with the emission limit is determined on a one hour average if a stack test is utilized in accordance with 6 NYCRR 227-2.6(a)(7) or a 24 hour average if CEMS are utilized under 6 NYCRR 227-2.6(a)(2).

Condition # 2-14 for 6NYCRR 227-1.3(a): This condition is for Monitoring of Process or Control Device Parameters as Surrogate for Particulates for EU:2-00002 & EP: 0005B. This condition is for the Cummins Generator # 1 - 300 kw diesel (backup). This condition 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.

Condition # 1-18 for 6NYCRR 227-2(b)(1): This condition is for Intermittent Emission Testing for Particulates for EU: 2-00002, EP: 0005B & Proc: 002. This condition is for the Cummins Generator # 1 - 300 kw diesel (backup). This regulation is from the 1972 version of Part 227 and still remains as part of New



York's SIP. This condition establishes a particulate limit of 0.10 lbs/mmBtu based on a 2 hour average emission for the oil fired stationary combustion installation (Cummins Generator # 1) and is required once during the term of the permit.

Condition # 2-15 for 6NYCRR 227-2: This condition is for Record Keeping/Maintenance Procedures for Oxides of Nitrogen for EU:2-00002, EP: 0005B, Proc: 002 & ES: 0005B. This condition is for the Cummins Generator # 1 - 300 kw diesel (backup). This condition limits the emission of oxides of nitrogen (NOx) from internal combustion engines, the Cummins Generator # 1, in order to establish compliance with the NOx RACT rules and emission limit of 9.0 gm/bhp-hr for lean burn engines firing distillate oil. On May 23, 2000, an emission compliance evaluation or stack testing was conducted on the Cummins Generator # 1 and it established compliance with the 9.0 gm/bhp-hr NOx emission limit.

As a surrogate for the 9.0 gm/bhp-hr NOx RACT emission limit, daily fuel use and daily hours of operation are recorded for each of the three engines. From these data, the average fuel usage in gallons per hour is determined each calendar quarter. The acceptable gallons per hour fuel usage for each generator is determined by taking the average gallons per hour fuel usage during the stack test for the generator, multiplying that value by 9.0 gm/bhp-hr, and dividing the product by the gm/bhp-hr for that generator as determined from the stack test. No generator shall have an average gallons per hour fuel usage during any calendar quarter that exceeds the acceptable gallons per hour fuel usage.

Using the previous stack test data for the facility, the calculations of acceptable gallons per hour fuel usage is detailed below for each generator.

Main Generator, Emission Point 00001:

$$(301.5 \text{ gal/hr (stack test)} \times 9 \text{ gm/bhp-hr}) / 7.5 \text{ gm/bhp-hr} = 362 \text{ gal/hr}$$

Cummins Generator # 1, Emission Point 0005B:

$$(10.5 \text{ gal/hr (stack test)} \times 9 \text{ gm/bhp-hr}) / 8.0 \text{ gm/bhp-hr} = 12 \text{ gal/hr}$$

Cummins Generator # 2, Emission Point 0005C:

$$(12.3 \text{ gal/hr (stack test)} \times 9 \text{ gm/bhp-hr}) / 8.0 \text{ gm/bhp-hr} = 14 \text{ gal/hr}$$

The NOx emissions is then calculated as:

EMISSIONS PER HOUR (Based on Stack Test Data) x TOTAL HOURS OPERATED (Based on Operations Log)

Condition # 2-16 for 6 NYCRR 227-2: This condition is for Recordkeeping/Maintenance Procedures for Oxides of Nitrogen for EU: 2-00002, EP: 0005B, Proc: 002 & ES: 0005B for the Cummins Generator # 1 - 300 kw diesel (backup). This condition limits the emission of oxides of nitrogen (NOx) from internal combustion engines, the Cummins Generator # 1, in order to establish compliance with the NOx RACT rules and emission limit of 9.0 gm/bhp-hr for lean burn engines firing distillate oil. On May 23, 2000, an emission compliance evaluation or stack testing was conducted on the Cummins Generator # 1 and it established compliance with the 9.0 gm/bhp-hr NOx emission limit.

Condition # 2-17 for 6NYCRR 227-2.4(f)(2): This condition is for Intermittent Emission Testing for Oxides of Nitrogen for EU:2-00002, EP: 0005B, Proc: 002, ES: 0005B. This condition is for the Cummins Generator # 1 - 300 kw diesel (backup). This condition sets emission limits of 9.0 gm/bhp-hr on oxides of nitrogen for lean burn internal combustion engines firing distillate oil. Stack testing is required for the Cummins Generator



1, once during the term of the permit, in order to demonstrate compliance with the 9.0 gm/bhp-hr for lean burn engines firing distillate oil.

Condition # 2-18 for 6NYCRR 227-2.4(f)(2): This condition is for Recorder/Maintenance Procedures for Oxides of Nitrogen for EU:2-00002, EP: 0005B, Proc: 002, ES: 0005B. This condition is for the Cummins Generator # 1 - 300 kw diesel (backup). This condition sets emission limits on oxides of nitrogen for lean burn internal combustion engines firing distillate oil. To ensure that the Cummins Generator # 1 runs at optimum conditions and stays in compliance with the NOx RACT emission limit, periodic maintenance will be performed in accordance with the manufacturer's specification manual for the Cummins Generator.

Condition # 73 for 6NYCRR 227-2.4(f)(2)(ii): This condition is for Intermittent Emission Testing for Oxides of Nitrogen for EU:2-00002, EP: 0005B, Proc: 002 & ES: 0005B. This condition is for the Cummins Generator # 1 - 300 kw diesel (backup). This condition limits the NOx emission for lean burn engines firing other fuels by themselves or in combination with gas to 9.0 grams per brake horsepower-hour. This NOx emission limit applies to stationary internal combustion engine of 225 horsepower or larger in the severe nonattainment area, and 400 horsepower in the rest of the State, which provides primary power or is used for peak shaving generation. Compliance with the emission limit is determined on a one hour average if a stack test is utilized in accordance with 6 NYCRR 227-2.6(a)(7) or a 24 hour average if CEMS are utilized under 6 NYCRR 227-2.6(a)(2). If CEMS are utilized, the requirements of 6 NYCRR 227-2.6(b) apply, including the use of a 24 hour averaging period. Emergency power generating units and units that operate during emergency situations which operate less than 500 hours per year, are exempt from this emission limitation.

Condition # 2-19 for 6NYCRR 227-2.6(a)(2): This condition is for Monitoring of Process or Control Device Parameters as Surrogate for Oxides of Nitrogen for EU:2-00002, EP: 0005B, Proc: 002 & ES: 0005B. This condition is for the Cummins Generator # 1 - 300 kw diesel (backup). This condition is for the Cummins Generator # 1. This condition is for internal combustion engines which opt to employ a continuous emissions monitoring system (CEMS), or equivalent, in lieu of the monitoring requirements to perform initial compliance stack tests as described in subdivision (c) of this section. Those internal combustion engines which opt to monitor emissions with a CEMS or equivalent shall follow the requirements of 6 NYCRR 227-2.6(b) to demonstrate compliance, including a 24 hour daily arithmetic average NOx emission rate.

Condition # 2-20 for 6NYCRR 227-2.6(a)(7): This condition is for Intermittent Emission Testing for Oxides of Nitrogen for EU: 2-00002, EP: 0005B, Proc: 002 & ES: 0005B. This condition is for the Cummins Generator # 1 - 300 kw diesel (backup). This condition is for testing, monitoring and reporting for internal combustion engines. This condition limits the NOx emission for lean burn engines firing other fuels by themselves or in combination with gas to 9.0 grams per brake horsepower-hour. This NOx emission limit applies to stationary internal combustion engine of 225 horsepower or larger in the severe nonattainment area, and 400 horsepower in the rest of the State, which provides primary power or is used for peak shaving generation. Compliance with the emission limit is determined on a one hour average if a stack test is utilized in accordance with 6 NYCRR 227-2.6(a)(7) or a 24 hour average if CEMS are utilized under 6 NYCRR 227-2.6(a)(2). This condition is for testing, monitoring and reporting for internal combustion engines. The owner/operator of this internal combustion engine shall perform an initial compliance stack test as described in 6 NYCRR 227-2.6(c). If the internal combustion engine qualifies for the control exemption listed in 6 NYCRR 227-2.4(f)(3), do not need to perform the stack test. A test protocol shall be submitted for approval at least 60 days prior to testing. Testing procedures shall be those set for in 40 CFR 60 Appendix A, or any other methods acceptable to the Department and the USEPA for determining compliance with the appropriate NOx limit set forth in section 227-2.4. Testing procedures shall also comply with subpart 202-1.

Condition # 2-21 for 6 NYCRR 227-2.6(a)(7): This condition is for Monitoring of Process or Control Device Parameters as Surrogate for Oxides of Nitrogen for EU: 2-00002, EP 0005B, Proc: 002 & ES: 0005B. This



condition is for the Cummins Generator # 1 - 300 kw diesel (backup). This condition is for testing, monitoring and reporting for internal combustion engines. The facility is limiting the number 2 oil usage for the Cummins Generator # 1 to 47,300 gallons/year (annual maximum rolled daily).

On a daily basis, the facility will keep records of :

1. The number 2 fuel usage for each generator in gallons per day and
2. The hours of operation for each generator in hours per day.

Records will be maintained for five years at the facility.

The owner/operator of this internal combustion engine shall perform an initial compliance stack test as described in 6 NYCRR 227-2.6(c). If the internal combustion engine qualifies for the control exemption listed in 6 NYCRR 227-2.4(f)(3), do not need to perform the stack test. A test protocol shall be submitted for approval at least 60 days prior to testing. Testing procedures shall be those set for in 40 CFR 60 Appendix A, or any other methods acceptable to the Department and the USEPA for determining compliance with the appropriate NOx limit set forth in section 227-2.4. Testing procedures shall also comply with subpart 202-1.

Condition # 2-22 for 6NYCRR 227-2.6(c): This condition is for Intermittent Emission Testing for Oxides of Nitrogen for EU: 2-00002, EP: 0005B, Proc: 002 & ES: 0005B. This condition is for the Cummins Generator # 1 - 300 kw diesel (backup). This condition is for stack test requirements. The owner or operator of the facility is required to test for NOx emission and follow monitoring and reporting requirements. The stack testing for NOx emission requires the facility to:

- (1) Submit a compliance test protocol to the department for approval at least 90 days prior to emission testing. The condition of the testing and the locations of the sampling devices must be acceptable to the department; and
 - (2) Utilize procedures set forth in 40 CFR Part 60, Appendix A or any other method acceptable to the department and EPA for determining compliance with the appropriate NOx limit in section 227-2.4 of this Subpart, and shall follow the procedures set forth in Part 202 of this Title.
- (iv) For internal combustion engines, utilize Method 7, 7E or 19 from 40 CFR Part 60, Appendix A or another reference method approved by the department.

This condition limits the NOx emission for lean burn engines firing other fuels by themselves or in combination with gas to 9.0 grams per brake horsepower-hour. This NOx emission limit applies to stationary internal combustion engine of 225 horsepower or larger (the Main Generator) in the severe nonattainment area, and 400 horsepower in the rest of the State, which provides primary power or is used for peak shaving generation. Compliance with the emission limit is determined on a one hour average if a stack test is utilized in accordance with 6 NYCRR 227-2.6(a)(7) or a 24 hour average if CEMS are utilized under 6 NYCRR 227-2.6(a)(2).

Condition # 2-23 for 6 NYCRR 227-1.3(a): This condition is for Monitoring of Process or Control Device Parameters as Surrogate for Particulates for EU:2-00002 & EP: 0005C. This condition is for the Cummins Generator # 2 - 300 kw diesel (backup). This condition 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.

Condition # 2-24 for 6 NYCRR 227.2(b)(1): This condition is for Intermittent Emission Testing for Particulates for EU: 2-00002, EP: 0005C & Proc: 002. This condition is for the Cummins Generator # 2 - 300 kw diesel (backup). This regulation is from the 1972 version of Part 227 and still remains as part of New



York's SIP. This condition establishes a particulate limit of 0.10 lbs/mmBtu based on a 2 hour average emission for the oil fired stationary combustion installation (Cummins Generator # 2) and is required once during the term of the permit.

Condition # 2-25 for 6 NYCRR 227-2: This condition is for Recordkeeping/Maintenance Procedures for Oxides of Nitrogen for EU: 2-00002, EP: 0005C, Proc: 002 & ES: 0005C for the Cummins Generator # 2 - 300 kw diesel (backup). This condition limits the emission of oxides of nitrogen (NOx) from internal combustion engines, the Cummins Generator # 2, in order to establish compliance with the NOx RACT rules and emission limit of 9.0 gm/bhp-hr for lean burn engines firing distillate oil.

The minor permit modification involves the removal and the deletion of all references to the Caterpillar Generator (Emission Point 0005A) and replacing it with the second Cummins Generator # 2 (Emission Point 0005C), Serial Number 23196803. The hours of operation and fuel use of the second Cummins Generator # 2 will remain the same as the Caterpillar Generator, at 3,750 hours/year and the average fuel consumption will remain at 12.3 gallons/hour. The existing original Cummins Generator # 1 at Emission Point 0005B was manufactured in November, 1986, its Model Number is NTTA 855 GS2 and its Serial No. is 11374117. While, the second replacement Cummins Generator # 2 at Emission Point 0005C was manufactured in June, 1986, its Model Number is NTTA 855 GS2 and its Serial No. is 23196803. The replacement second Cummins Generator # 2 at Emission Point 0005C will have identical specifications in all respects to the existing original Cummins Generator # 1 at emission Point 0005B and the emission profiles of both Cummins generators are expected to be the same. Since this is the case, the Department will use its engineering judgement to exempt Hugo Neu Schnitzer - Queens Yard from performing a stack test on the proposed second Cummins Generator # 2 (SN 23196803) at Emission Point 0005C.

The Caterpillar Generator at Emission Point 0005A had measured NOx emissions of 12.6 lbs/hr (as per the 4/10/2001 stack test). The replacement second Cummins Generator # 2 is expected to have NOx emissions of 2.0 lbs/hr based on the May 23, 2000 stack test conducted on the identical Cummins Generator # 1 (Emission Point 0005B). Therefore, actual NOx emissions are expected to decrease by 10.6 lbs/hr (12.6 lbs/hr minus 2.0 lbs/hr). Annual NOx emissions are expected to decrease as follows:

$$(2.0 \text{ lbs/hr} - 12.6 \text{ lbs/hr}) \times 3,750 \text{ hrs} = - 10.6 \text{ lbs/hr} \times 3,750 \text{ hrs} = - 39,750 \text{ lbs/yr} \times 2000 \text{ lbs/ton} = - 19.875 \text{ tons/yr}$$

This is a decrease of about 20 tons/yr in NOx emissions.

On May 23, 2000, an emission compliance evaluation or stack testing was conducted on the Cummins Generator # 1 and it established compliance with the 9.0 gm/bhp-hr NOx emission limit.

Condition # 2-26 for 6 NYCRR 227-2: This condition is for Recordkeeping/Maintenance Procedures for Oxides of Nitrogen for EU:2-00002, EP: 0005C, Proc: 002, ES: 0005C. This condition is for the Cummins Generator # 2 - 300 kw diesel (backup). This condition limits the emission of oxides of nitrogen (NOx) from internal combustion engines, the Cummins Generator # 2, in order to establish compliance with the NOx RACT rules and emission limit of 9.0 gm/bhp-hr for lean burn engines firing distillate oil. On May 23, 2000, an emission compliance evaluation or stack testing was conducted on the Cummins Generator # 1 and it established compliance with the 9.0 gm/bhp-hr NOx emission limit.

The minor permit modification involves the removal and the deletion of all references to the Caterpillar Generator (Emission Point 0005A) and replacing it with the second Cummins Generator # 2 (Emission Point 0005C), Serial Number 23196803. The hours of operation and fuel use of the second Cummins Generator # 2 will remain the same as the Caterpillar Generator, at 3,750 hours/year and the average fuel consumption will



remain at 12.3 gallons/hour. The existing original Cummins Generator # 1 at Emission Point 0005B was manufactured in November, 1986, its Model Number is NTTA 855 GS2 and its Serial No. is 11374117. While, the second replacement Cummins Generator # 2 at Emission Point 0005C was manufactured in June, 1986, its Model Number is NTTA 855 GS2 and its Serial No. is 23196803. The replacement second Cummins Generator # 2 at Emission Point 0005C will have identical specifications in all respects to the existing original Cummins Generator # 1 at emission Point 0005B and the emission profiles of both Cummins generators are expected to be the same. Since this is the case, the Department will use its engineering judgement to exempt Hugo Neu Schnitzer - Queens Yard from performing a stack test on the proposed second Cummins Generator # 2 (SN 23196803) at Emission Point 0005C.

As a surrogate for the 9.0 gm/bhp-hr NO_x RACT emission limit, daily fuel use and daily hours of operation are recorded for each of the three engines. From these data, the average fuel usage in gallons per hour is determined each calendar quarter. The acceptable gallons per hour fuel usage for each generator is determined by taking the average gallons per hour fuel usage during the stack test for the generator, multiplying that value by 9.0 gm/bhp-hr, and dividing the product by the gm/bhp-hr for that generator as determined from the stack test. No generator shall have an average gallons per hour fuel usage during any calendar quarter that exceeds the acceptable gallons per hour fuel usage.

Using the previous stack test data for the facility, the calculations of acceptable gallons per hour fuel usage is detailed below for each generator.

Main Generator, Emission Point 00001:

$$(301.5 \text{ gal/hr (stack test)} \times 9 \text{ gm/bhp-hr}) / 7.5 \text{ gm/bhp-hr} = 362 \text{ gal/hr}$$

Cummins Generator # 1, Emission Point 0005B:

$$(10.5 \text{ gal/hr (stack test)} \times 9 \text{ gm/bhp-hr}) / 8.0 \text{ gm/bhp-hr} = 12 \text{ gal/hr}$$

Cummins Generator # 2, Emission Point 0005C:

$$(12.3 \text{ gal/hr (stack test)} \times 9 \text{ gm/bhp-hr}) / 8.0 \text{ gm/bhp-hr} = 14 \text{ gal/hr}$$

The NO_x emissions is then calculated as:

EMISSIONS PER HOUR (Based on Stack Test Data) x TOTAL HOURS OPERATED (Based on Operations Log)

Condition # 2-27 for 6 NYCRR 227-2.4(f)(2): This condition is for Recordkeeping/Maintenance Procedures for Oxides of Nitrogen for EU:2-00002, EP: 0005C, Proc: 002, ES: 0005C. This condition is for the Cummins Generator # 2 - 300 kw diesel (backup). This condition sets emission limits on oxides of nitrogen for lean burn internal combustion engines firing distillate oil. To ensure that the Cummins Generator # 2 runs at optimum conditions and stays in compliance with the NO_x RACT emission limit, periodic maintenance will be performed in accordance with the manufacturer's specification manual for the Cummins Generator.

Condition # 2-28 for 6 NYCRR 227-2.4(f)(2): This condition is for Intermittent Emission Testing for Oxides of Nitrogen for EU:2-00002, EP: 0005C, Proc: 002, ES: 0005C. This condition is for the Cummins Generator # 2 - 300 kw diesel (backup). This condition sets emission limits of 9.0 gm/bhp-hr on oxides of nitrogen for lean burn internal combustion engines firing distillate oil. Stack testing is required for the Cummins Generator # 2, once during the term of the permit, in order to demonstrate compliance with the 9.0 gm/bhp-hr for lean burn engines firing distillate oil.



Condition # 2-29 for 6 NYCRR 227-2.4(f)(2)(ii): This condition is for Intermittent Emission Testing for Oxides of Nitrogen for EU:2-00002, EP: 0005C, Proc: 002 & ES: 0005C. This condition is for the Cummins Generator # 2 - 300 kw diesel (backup). This condition limits the NOx emission for lean burn engines firing other fuels by themselves or in combination with gas to 9.0 grams per brake horsepower-hour. This NOx emission limit applies to stationary internal combustion engine of 225 horsepower or larger in the severe nonattainment area, and 400 horsepower in the rest of the State, which provides primary power or is used for peak shaving generation. Compliance with the emission limit is determined on a one hour average if a stack test is utilized in accordance with 6 NYCRR 227-2.6(a)(7) or a 24 hour average if CEMS are utilized under 6 NYCRR 227-2.6(a)(2). If CEMS are utilized, the requirements of 6 NYCRR 227-2.6(b) apply, including the use of a 24 hour averaging period. Emergency power generating units and units that operate during emergency situations which operate less than 500 hours per year, are exempt from this emission limitation.

Condition # 2-30 for 6 NYCRR 227-2.6(a)(2): This condition is for Monitoring of Process or Control Device Parameters as Surrogate for Oxides of Nitrogen for EU:2-00002, EP: 0005C, Proc: 002 & ES: 0005C. This condition is for the Cummins Generator # 2 - 300 kw diesel (backup). This condition is for the Cummins Generator # 2. This condition is for internal combustion engines which opt to employ a continuous emissions monitoring system (CEMS), or equivalent, in lieu of the monitoring requirements to perform initial compliance stack tests as described in subdivision (c) of this section. Those internal combustion engines which opt to monitor emissions with a CEMS or equivalent shall follow the requirements of 6 NYCRR 227-2.6(b) to demonstrate compliance, including a 24 hour daily arithmetic average NOx emission rate.

Condition # 2-31 for 6 NYCRR 227-2.6(a)(7): This condition is for Intermittent Emission Testing for Oxides of Nitrogen for EU: 2-00002, EP: 0005C, Proc: 002 & ES: 0005C. This condition is for the Cummins Generator # 2 - 300 kw diesel (backup). This condition is for testing, monitoring and reporting for internal combustion engines. This condition limits the NOx emission for lean burn engines firing other fuels by themselves or in combination with gas to 9.0 grams per brake horsepower-hour. This NOx emission limit applies to stationary internal combustion engine of 225 horsepower or larger in the severe nonattainment area, and 400 horsepower in the rest of the State, which provides primary power or is used for peak shaving generation. Compliance with the emission limit is determined on a one hour average if a stack test is utilized in accordance with 6 NYCRR 227-2.6(a)(7) or a 24 hour average if CEMS are utilized under 6 NYCRR 227-2.6(a)(2). This condition is for testing, monitoring and reporting for internal combustion engines. The owner/operator of this internal combustion engine shall perform an initial compliance stack test as described in 6 NYCRR 227-2.6(c). If the internal combustion engine qualifies for the control exemption listed in 6 NYCRR 227-2.4(f)(3), do not need to perform the stack test. A test protocol shall be submitted for approval at least 60 days prior to testing. Testing procedures shall be those set for in 40 CFR 60 Appendix A, or any other methods acceptable to the Department and the USEPA for determining compliance with the appropriate NOx limit set forth in section 227-2.4. Testing procedures shall also comply with subpart 202-1.

Condition # 2-32 for 6 NYCRR 227-2.6(a)(7): This condition is for Monitoring of Process or Control Device Parameters as Surrogate for Oxides of Nitrogen for EU: 2-00002, EP 0005C, Proc: 002 & ES: 0005C. This condition is for the Cummins Generator # 2 - 300 kw diesel (backup). This condition is for testing, monitoring and reporting for internal combustion engines. The facility is limiting the number 2 oil usage for the Cummins Generator # 2 to 46,125 gallons/year (annual maximum rolled daily).

On a daily basis, the facility will keep records of :

1. The number 2 fuel usage for each generator in gallons per day and
2. The hours of operation for each generator in hours per day.

Records will be maintained for five years at the facility.

The owner/operator of this internal combustion engine shall perform an initial compliance stack test as



described in 6 NYCRR 227-2.6(c). If the internal combustion engine qualifies for the control exemption listed in 6 NYCRR 227-2.4(f)(3), do not need to perform the stack test. A test protocol shall be submitted for approval at least 60 days prior to testing. Testing procedures shall be those set for in 40 CFR 60 Appendix A, or any other methods acceptable to the Department and the USEPA for determining compliance with the appropriate NO_x limit set forth in section 227-2.4. Testing procedures shall also comply with subpart 202-1.

Condition # 2-33 for 6 NYCRR 227-2.6(c): This condition is for Intermittent Emission Testing for Oxides of Nitrogen for EU: 2-00002, EP: 0005C, Proc: 002 & ES: 0005C. This condition is for the Cummins Generator # 2 - 300 kw diesel (backup). This condition is for stack test requirements. The owner or operator of the facility is required to test for NO_x emission and follow monitoring and reporting requirements. The stack testing for NO_x emission requires the facility to:

- (1) Submit a compliance test protocol to the department for approval at least 90 days prior to emission testing. The condition of the testing and the locations of the sampling devices must be acceptable to the department; and
 - (2) Utilize procedures set forth in 40 CFR Part 60, Appendix A or any other method acceptable to the department and EPA for determining compliance with the appropriate NO_x limit in section 227-2.4 of this Subpart, and shall follow the procedures set forth in Part 202 of this Title.
- (iv) For internal combustion engines, utilize Method 7, 7E or 19 from 40 CFR Part 60, Appendix A or another reference method approved by the department.

This condition limits the NO_x emission for lean burn engines firing other fuels by themselves or in combination with gas to 9.0 grams per brake horsepower-hour. This NO_x emission limit applies to stationary internal combustion engine of 225 horsepower or larger in the severe nonattainment area, and 400 horsepower in the rest of the State, which provides primary power or is used for peak shaving generation. Compliance with the emission limit is determined on a one hour average if a stack test is utilized in accordance with 6 NYCRR 227-2.6(a)(7) or a 24 hour average if CEMS are utilized under 6 NYCRR 227-2.6(a)(2).

New York State Department of Environmental Conservation



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