# STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF AIR MANAGEMENT

- 1. Legal Firm Name: The Metropolitan District
- 2. Address: P.O. Box 800, Hartford, CT 06142-0800
- 3. Equipment Location: Rocky Hill Water Pollution Control Facility, 80 Goff Brook Lane, Rocky Hill, CT; Hartford Water Pollution Control Facility, 240 Brainard Road, Hartford, CT; Poquonock Water Pollution Control Facility, 1222 Poquonock Avenue, Windsor, CT

4. Equipment Description (Model, I.D. #): Caterpillar XQ350 Generator Set, Serial Number 4JK00628

PERMIT TO:

□ Construct ⊠ Operate □ Modify

FEDERAL REQUIREMENTS:

NSPS (40 CFR Part 60) Subpart:
 NESHAPS (40 CFR Part 61) Subpart:
 MACT (40 CFR Part 63) Subpart:

OZONE NON-ATTAINMENT STATUS:

severe (Major source if VOC or NOx > 25 TPY) Serious (Major source if VOC or NOx > 50 TPY)

INTERNAL COMBUSTION ENGINES ONLY:

Emergency use only
Non-emergency use, including self generation

TYPE OF POLLUTANT FOR WHICH THIS PREMISE IS A "MAJOR SOURCE":

EPA SOURCE (	LASS:	TSP			PM-10	LEAD	OTHER
New Source Major Mod Minor Mod							

/s/ARTHUR J. ROCQUE, JR. ARTHUR J. ROCQUE, JR. COMMISSIONER, DEPARTMENT OF ENVIRONMENTAL PROTECTION OR DESIGNATED AGENT

\*Construction Permit Fee: Rocky Hill Facility = \$125.00; Hartford Facility = \$1,000.00; Windsor Facility = \$125.00

Date Issued	Exp. Date			
2/21/02				
Town No.	Premise No.			
See page 2	See page 2			
Permit No.	Stack No.			
See page 2	See page 2			
*Permit Fee				
*Permit Fee				

## STATE OF CONNECTICUT, DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF AIR MANAGEMENT

The conditions on all pages of this permit and attached appendices shall be verified at all times except those noted as design specifications. Design specifications need not be verified on a continuous basis; however, if requested by the Commissioner, demonstration of compliance shall be shown.

# PART I. EQUIPMENT LOCATION

- This portable generator set is allowed to operate at the locations listed below. Addition of locations to this permit is considered a modification.
- 2. This permit must accompany the equipment at all the locations listed below.
- 3. The permittee is required to notify the Commissioner in writing within fifteen (15) days after relocation.

Location	Town No.	Permit No.	Stack No.	Premises No.
Rocky Hill Water Pollution Control Facility 80 Goff Brook Lane Rocky Hill, CT	155	76	1	74
Hartford Water Pollution Control Facility 240 Brainard Road Hartford, CT	75	343	12	505
Poquonock Water Pollution Control Facility 1222 Poquonock Avenue Windsor, CT	212	129	1	65

FIRM NAME: The Metropolitan District

EQUIPMENT LOCATION: Rocky Hill Water Pollution Control Facility, 80 Goff Brook Lane, Rocky Hill, CT; Hartford Water Pollution Control

Facility, 240 Brainard Road, Hartford, CT; Poquonock Water Pollution Control Facility, 1222 Poquonock Avenue, Windsor, CT

EQUIPMENT DESCRIPTION (MODEL, I.D. #): Caterpillar, Model XQ350 Generator Set, Serial Number 4JK00628

## STATE OF CONNECTICUT, DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF AIR MANAGEMENT

The conditions on all pages of this permit and attached appendices shall be verified at all times except those noted as design specifications. Design specifications need not be verified on a continuous basis; however, if requested by the Commissioner, demonstration of compliance shall be shown.

# PART II. OPERATIONAL CONDITIONS (at each site)

- 1.
- Fuel Type(s): <u>#2 fuel oil</u> Maximum Fuel Consumption over any Consecutive Twelve (12) Month 2. Period: 13,300 gallons/year
- 3. Fuel Sulfur Content (% by weight, dry basis): 0.05%

# Design Specifications

- 1. Maximum Fuel Firing Rate(s): 26.6 gallons/hour
- 2. Maximum Gross Heat Input (MM BTU/hr): 3.6 MMBTU/hr
- 3. Minimum Stack Height (ft): 11.67 ft
- 4. Minimum Exhaust Gas Flow Rate (acfm): 2,765 acfm
- 5. Stack Exit Temperature (<F): 972  $^{\circ}$ F
- 6. Minimum Distance from Stack to Property Line (ft): 0

**PART III. CONTROL EQUIPMENT** (Applicable if -X- Checked) (See Appendix E for Specifications)

A. Type

🗙 None Scrubber Electrostatic Precipitator Cvclone Multi-Cyclone Thermal DeNOx

Selective Non-Catalytic Reduction Selective Catalytic Reduction Low NOx Burner Fabric Filter Particulate Trap Other

- B. Minimum Efficiency
- 1. Capture Efficiency (%):
- 2. Removal Efficiency (%):
- 3. Overall Efficiency (%):

FIRM NAME: The Metropolitan District EQUIPMENT LOCATION: Rocky Hill Water Pollution Control Facility, 80 Goff Brook Lane, Rocky Hill, CT; Hartford Water Pollution Control Facility, 240 Brainard Road, Hartford, CT; Poquonock Water Pollution Control Facility, 1222 Poquonock Avenue, Windsor, CT EQUIPMENT DESCRIPTION (MODEL, I.D. #): Caterpillar, Model XQ350 Generator Set, Serial Number 4JK00628

#### STATE OF CONNECTICUT, DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF AIR MANAGEMENT

#### PART IV. CONTINUOUS EMISSION MONITORING REOUIREMENTS AND **ASSOCIATED EMISSION LIMITS** (Applicable if -X- Checked)

CEM shall be required for the following pollutant/operational parameters and enforced on the following basis:

Pollutant/Operational Parameter	Averaging 	Emission Limit	Units
🗙 None			
Opacity	six minute block		
SOx	3 hour rolling		
NOx NOx	24 hour rolling		
СО	1 hour block		
	1 hour block		
	1 hour block		
Temperature	continuous		

(See Appendix A for General Requirements)

#### PART V. MONITORING, REPORTING AND RECORD KEEPING REQUIREMENTS

- The permittee shall keep records of fuel consumption at each site. Fuel 1. consumption shall be based on any consecutive twelve (12) month time period and shall be determined by adding (for each fuel) the current month's fuel usage to that of the previous eleven (11) months. The Permittee shall make these calculations monthly.
- 2. When more than one fuel supply tank is to service this source or when multiple sources are supplied by one fuel tank, the Permittee shall use a fuel metering device to continuously monitor fuel feed to this permitted source.
- Each oil fuel shipment for this equipment shall include a shipping 3. receipt from the fuel supplier and a certification from the fuel supplier certifying the type of fuel in the shipment and the weight percent of sulfur in the fuel. The shipping receipt and/or certification shall include the name of the oil supplier, the sulfur content of the oil and the method used to determine the sulfur content of the oil. The Permittee shall maintain records of each shipping receipt and certification.
- The Permittee shall keep records on premise indicating continual 4. compliance with all above conditions at all times and shall make them available upon request by the Commissioner for the duration of this permit, or for the previous three (3) years, whichever is less.

FIRM NAME: The Metropolitan District EQUIPMENT LOCATION: Rocky Hill Water Pollution Control Facility, 80 Goff Brook Lane, Rocky Hill, CT; Hartford Water Pollution Control Facility, 240 Brainard Road, Hartford, CT; Poquonock Water Pollution Control Facility, 1222 Poquonock Avenue, Windsor, CT EQUIPMENT DESCRIPTION (MODEL, I.D. #): Caterpillar, Model XQ350 Generator Set, Serial Number 4JK00628

## STATE OF CONNECTICUT, DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF AIR MANAGEMENT

#### PART VI. ALLOWABLE EMISSION LIMITS (at each site)

594

The Permittee shall not exceed the emission limits stated herein at any time.

Criteria Pollutants	#/hr	TPY
TSP	0.460	0.114
PM-10	0.460	0.114
SOx	0.190	0.048
NOx	7.890	1.974
VOC	1.140	0.286
CO	9.730	2.431

<u>18116tites</u>ia <u>(18963)\*</u>

Sulfuric Acid

Mone at this time

\* Maximum allowable stack concentration, 8 hour Hazardous Limiting Value

Demonstration of compliance with the above emission limits shall be met by calculating the emission rates using emission factors from the following sources:

- 1. TSP, PM10, NOx, VOC, CO: Caterpillar Manufacturer's information.
- 2. SOx: BAM Memo. SOx Emission Factors For All Fuel-Oil Burning Sources. May 23, 1991.
- 3. Sulfuric acid: BAM Memo. Emission Factor Calculation for Sulfuric Acid formation, Fuel Burning Sources. November 27, 1987 (Revision).

The above statement shall not preclude the Commissioner from requiring other means (e.g. stack testing) to demonstrate compliance with the above emission limits, as allowed by state or federal statute, law or regulation.

**PART VII. STACK EMISSION TEST REQUIREMENTS** (Applicable if -X-Checked)

Stack emission testing shall be required for the following pollutant(s):

TSP	SOx	🗌 NOx	СО		
VOC	□ PM-10	🗌 Pb			
Other (HA	APS):(See Ap	pendix B for	r General Requirements)		
FIRM NAME: <u>5</u> EQUIPMENT LO Goff Brool	The Metropoli OCATION: Rock k Lane, Rocky	tan District y Hill Water Hill, CT; H			
Control Facility, 1222 Poquonock Avenue, Windsor, CT					
EQUIPMENT DESCRIPTION (MODEL, I.D. #): Caterpillar, Model XQ350 Generator					
Set, Seria	al Number 4JK	00628			

## STATE OF CONNECTICUT, DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF AIR MANAGEMENT

#### PART VII. STACK EMISSION TEST REQUIREMENTS, continued:

- (\*) The engine shall comply with the requirements of Section 22a-174-22 for the Hartford facility.
- **PART VIII. APPLICABLE REGULATORY REFERENCES** (The Regulations of Connecticut State Agencies, hereinafter referred to as the Regulations)

22a-174-3(a), (b), (f); 22a-174-18; 22a-174-19; 22a-174-29(b); 22a-174-22

These references are not intended to be all inclusive - other sections of the Regulations may apply.

## PART IX. SPECIAL REQUIREMENTS

- 1. The Permittee shall operate and maintain this equipment in accordance with the manufacturer s specifications and written recommendations.
- 2. Noise (for non-emergency use)

The Permittee shall operate this generator at all times in a manner so as not to violate or contribute significantly to the violation of any applicable state noise control regulations, as set forth in Sections 22a-69-1 through 22a-69-7.4 of the Regulations.

 The Permittee shall comply with all applicable sections of the following New Source Performance Standard(s) at all times. (Applicable if -Xchecked)

40 CFR Part 60, Subpart \_\_\_ Db \_\_\_ Dc \_\_\_ GG \_\_\_ A

🛛 None

(See Appendix C for Detailed Requirements)

## PART X. ADDITIONAL TERMS AND CONDITIONS

- 1. This permit does not relieve the permittee of the responsibility to conduct, maintain and operate the regulated activity in compliance with all applicable requirements of any federal, municipal or other state agency. Nothing in this permit shall relieve the permittee of other obligations under applicable federal, state and local law.
- 2. Any representative of the DEP may enter the permittee's site in accordance with constitutional limitations at all reasonable times without prior notice, for the purposes of inspecting, monitoring and enforcing the terms and conditions of this permit and applicable state law.

FIRM NAME: The Metropolitan District

EQUIPMENT LOCATION: Rocky Hill Water Pollution Control Facility, 80 Goff Brook Lane, Rocky Hill, CT; Hartford Water Pollution Control Facility, 240 Brainard Road, Hartford, CT; Poquonock Water Pollution Control Facility, 1222 Poquonock Avenue, Windsor, CT EQUIPMENT DESCRIPTION (MODEL, I.D. #): Caterpillar, Model XQ350 Generator Set, Serial Number 4JK00628

## STATE OF CONNECTICUT, DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF AIR MANAGEMENT

#### PART X. ADDITIONAL TERMS AND CONDITIONS, continued:

- 3. This permit may be revoked, suspended, modified or transferred in accordance with applicable law.
- 4. This permit is subject to and in no way derogates from any present or future property rights or other rights or powers of the State of Connecticut and conveys no property rights in real estate or material, nor any exclusive privileges, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the facility or regulated activity affected thereby. This permit shall neither create nor affect any rights of persons or municipalities who are not parties to this permit.
- Any document, including any notice, which is required to be submitted to 5. the Commissioner under this permit shall be signed by a duly authorized representative of the permittee and by the person who is responsible for actually preparing such document, each of whom shall certify in writing as follows: "I have personally examined and am familiar with the information submitted in the documents and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement made in this document or its attachments may be punishable as a criminal offense." Any false statement in any information submitted pursuant to this permit may be punishable as a criminal offense in accordance with Connecticut General Statutes 322a-6, under 353a-157 of the Connecticut General Statutes.
- 6. Nothing in this permit shall affect the Commissioner's authority to institute any proceeding or take any other action to prevent or abate violations of law, prevent or abate pollution, recover costs and natural resource damages, and to impose penalties for violations of law, including but not limited to violations of this or any other permit issued to the permittee by the Commissioner.
- 7. Within fifteen days of the date the permittee becomes aware of a change in any information submitted to the Commissioner under this permit, or that any such information was inaccurate or misleading or that any relevant information was omitted, the permittee shall submit the correct or omitted information to the Commissioner.
- 8. The date of submission to the Commissioner of any document required by this permit shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this permit, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is personally delivered or the date three days after it is mailed by the

FIRM NAME: The Metropolitan District EQUIPMENT LOCATION: Rocky Hill Water Pollution Control Facility, 80 Goff Brook Lane, Rocky Hill, CT; Hartford Water Pollution Control Facility, 240 Brainard Road, Hartford, CT; Poquonock Water Pollution Control Facility, 1222 Poquonock Avenue, Windsor, CT EQUIPMENT DESCRIPTION (MODEL, I.D. #): Caterpillar, Model XQ350 Generator Set, Serial Number 4JK00628

## STATE OF CONNECTICUT, DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF AIR MANAGEMENT

#### PART X. ADDITIONAL TERMS AND CONDITIONS, continued:

Commissioner, whichever is earlier. Except as otherwise specified in this permit, the word "day" means calendar day. Any document or action which is required by this permit to be submitted or performed by a date which falls on a Saturday, Sunday or legal holiday shall be submitted or performed by the next business day thereafter.

8. Any document required to be submitted to the Commissioner under this permit shall, unless otherwise specified in writing by the Commissioner, be directed to: Office of Assistant Director; Compliance & Field Operations Division; Bureau of Air Management; Department of Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.

FIRM NAME: The Metropolitan District

EQUIPMENT LOCATION: Rocky Hill Water Pollution Control Facility, 80 Goff Brook Lane, Rocky Hill, CT; Hartford Water Pollution Control Facility, 240 Brainard Road, Hartford, CT; Poquonock Water Pollution Control Facility, 1222 Poquonock Avenue, Windsor, CT EQUIPMENT DESCRIPTION (MODEL, I.D. #): Caterpillar, Model XQ350 Generator Set, Serial Number 4JK00628