



**AIR EMISSION PERMIT NO. 00000610- 001  
IS ISSUED TO**

City of Rochester - Rochester Public Utilities

**ROCHESTER PUBLIC UTILITIES - CASCADE CREEK COMBUSTION**

1814 7th Street Northwest  
Rochester, Olmsted County, Minnesota 55906

The emission units, control equipment and emission stacks at the stationary source authorized in this permit are as described in the following permit application(s):

Permit Type	Application Date
Total Facility Operating Permit	09/15/95

This permit authorizes the permittee to operate the stationary source at the address listed above unless otherwise noted in Table A. The permittee must comply with all the conditions of the permit and with all general conditions listed in Minn. R. 7007.0800, subp. 16, and all standard permit requirements listed in 40 CFR 70.6(a) which are incorporated by reference. Any changes or modifications to the stationary source must be performed in compliance with Minn. R. 7007.1150 to 7007.1500. Terms used in the permit as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

**Permit Type:** Federal ; Part 70  
**Issue Date:** January 10, 1997  
**Expiration:** All Title I Conditions do not expire.

  
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Michael J. Sandusky  
Acting Division Manager  
Air Quality Division

for Peder A. Larson  
Acting Commissioner  
Minnesota Pollution Control Agency

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**NOTICE TO THE PERMITTEE:**

Your stationary source may be subject to the requirements of the Minnesota Pollution Control Agency's (MPCA) solid waste, hazardous waste, and water quality programs. If you wish to obtain information on these programs, including information on obtaining any required permits, please contact the MPCA general information number at:

Metro Area	(612)296-6300
Outside Metro Area	1-800-657-3864
TTY	(612)282-5332

The rule governing these programs are contained in Minn. R. chs. 7000-7105. Written questions may be sent to: Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155-4194.

Questions about this air emission permit or about air quality requirements can also be directed to the telephone numbers and address listed above.

**PERMIT SHIELD:**

Subject to the limitations in Minn.R. 70007.1800, compliance with the conditions of this permit shall be deemed compliance with the specific provision of the applicable requirement identified in the permit as the basis of each condition. Any requirements which have been determined not to apply are listed in Table A of this permit.

The permit shield, however does not apply to: Minn. R. ch. 7030 (Noise Pollution Control).

**FACILITY DESCRIPTION:**

The facility is an existing electric generating station, having a nominal generating capacity of approximately 40 megawatts. The generating unit is a stationary, oil-fired simple cycle combustion turbine and generator. The facility also has a diesel engine that is only used for starting the combustion turbine. The turbine is used primarily during periods of peak electric demand. Distillate fuel oil (the only fuel combusted in both units) is stored on site in a 500,000 gallon storage tank. There is no control equipment on either the turbine or the engine.

This permit is a total facility permit which supersedes the previous total facility Permit No. 499C-92-OT-2 issued on March 25, 1992. This facility is located in a nonattainment area for sulfur dioxide and is required to have additional requirements as part of the state implementation plan to achieve attainment status in this area. These requirements are incorporated into the Title V operating permit rather than being issued separately as an Administrative Order.

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

01/08/97

Facility Name: Rochester Public Utilities - Cascade Creek Combusti

Permit Number: 10900020 - 001

Table A contains limits and other requirements with which your facility must comply. The limits are located in the first column of the table (What To do). The limits can be emission limits or operational limits. This column also contains the actions that you must take and the records you must keep to show that you are complying with the limits. The second column of Table A (Why to do it) lists the regulatory basis for these limits. Appendices included as conditions of your permit are listed in Table A under total facility requirements.

Subject Item: Total Facility

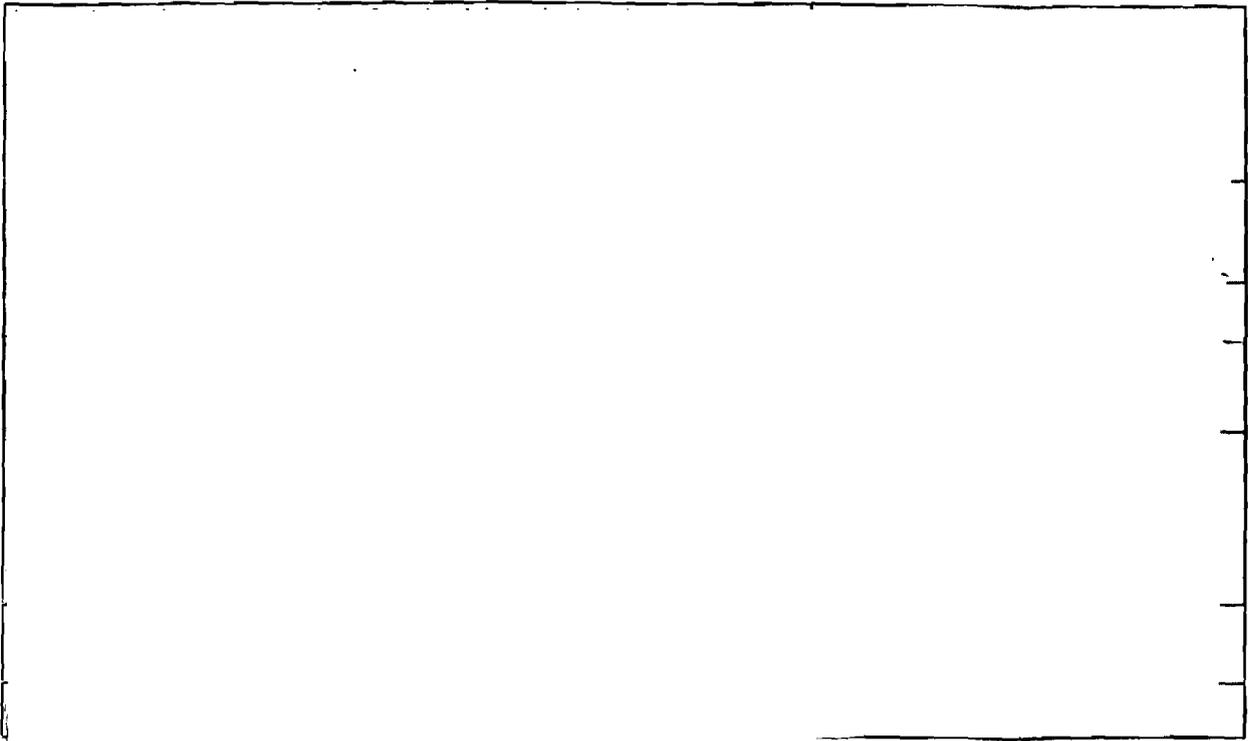
What to do	Why to do it
Deviations from requirements cited as "Title I Condition: State Implementation Plan for SO2" shall be reported semiannually with the Semiannual Deviations Report required by this permit. Reporting for these conditions shall occur even if there were no deviations for the reporting period.	Title I Condition: State Implementation Plan for SO2
State Implementation Plan Recordkeeping: Retain all records at the stationary source or at the RPU Service Facility at 4000 E. River Road for a period of five (5) years from the date of the required monitoring, sample, measurement, or report that corresponds with a "Title I condition: State Implementation Plan for SO2" requirement.	Title I Condition: State Implementation Plan for SO2

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

01/08/97

Facility Name: Rochester Public Utilities - Cascade Creek Combusti

Permit Number: 10900020 - 001



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

01/08/97

Facility Name: Rochester Public Utilities - Cascade Creek Combusti

Permit Number: 10900020 - 001

Subject Item: EU 001 oil-fired combustion turbine

Associated Items: SV 001

What to do	Why to do it
Sulfur Content of Fuel: less than or equal to 0.42 percent by weight . The Permittee shall burn only distillate fuel oil.	Title I Condition: State Implementation Plan for SO2 (ensures compliance with Minn. R. 7011.2300, subp. 2)
Fuel Usage is limited to the rated heat input of the turbine engine (448 MMBtu/hr per 1976 field performance acceptance test by Westinghouse).	Title I Condition: State Implementation Plan for SO2
Fuel Oil Sulfur Content. The Permittee shall analyze the content using either method 1 or 2: Method 1. The Permittee shall obtain and maintain a fuel supplier receipt from the fuel supplier for each shipment of distillate fuel oil delivered certifying that the shipment complies with the American Society of Testing and Materials (ASTM) specifications for distillate fuel oil and that the sulfur content is less than or equal to 0.42 percent by weight; OR (continued on next requirement)	Title I Condition: State Implementation Plan for SO2
Method 2. The Permittee may also analyze the distillate fuel oil in the following manner: a) The Permittee shall sample the fuel oil from the tank(s) after each delivery but not more than once each calendar week when multiple deliveries are made in a calendar week. Sampling shall be conducted within 48 hours after each delivery, or within 48 hours after the last of multiple deliveries in a calendar week. Samples shall be collected from the sample tap located on the main oil filter. Record the date and time of delivery, time of fuel sampling, initials of person recording the information, and the results of the fuel analysis. b) The Permittee shall analyze the oil sample to determine the sulfur content of the fuel oil in percent by weight, in accordance with ASTM Method D-1552 or the current ASTM method; c) The Permittee shall analyze the oil sample to determine the heating value of the oil in Btu/gal, in accordance with ASTM Method D-240 or the current ASTM method.	Title I Condition: State Implementation Plan for SO2

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

01/08/97

Facility Name: Rochester Public Utilities - Cascade Creek Combustion

Permit Number: 10900020 - 001

Subject Item: EU 002 diesel starting engine

Associated Items: SV 002

SV 003

What to do	Why to do it
Sulfur Content of Fuel: less than or equal to 0.5 percent by weight The Permittee shall burn only distillate fuel oil.	Title I Condition: State Implementation Plan for SO2
Operate diesel starting engine only during turbine start-up operation.	Title I Condition: State Implementation Plan for SO2
<p>Fuel Oil Sulfur Content. The Permittee shall analyze the content using either method 1 or 2 (Note: The diesel engine fuel comes from the same tank that feeds the turbine. Therefore, separate sampling and analysis of the diesel engine fuel is not necessary):</p> <p>Method 1. The Permittee shall obtain and maintain a fuel supplier receipt from the fuel supplier for each shipment of distillate fuel oil delivered certifying that the shipment complies with the American Society of Testing and Materials (ASTM) specifications for distillate fuel oil; OR (continued on next citation)</p>	Title I Condition: State Implementation Plan for SO2
<p>Method 2. The Permittee may also analyze the distillate fuel oil in the following manner:</p> <p>a) The Permittee shall sample the fuel oil from the tank(s) after each delivery but not more than once each calendar week when multiple deliveries are made in a calendar week. Sampling shall be conducted within 48 hours after each delivery, or within 48 hours after the last of multiple deliveries in a calendar week. Samples shall be collected from the sample tap located on the main oil filter. Record the date and time of delivery, time of fuel sampling, initials of person recording the information, and the results of the fuel analysis.</p> <p>b) The Permittee shall analyze the oil sample to determine the sulfur content of the fuel oil in percent by weight, in accordance with ASTM Method D-1552 or the current ASTM method;</p> <p>c) The Permittee shall analyze the oil sample to determine the heating value of the oil in Btu/gal, in accordance with ASTM Method D-240 or the current ASTM method.</p>	Title I Condition: State Implementation Plan for SO2

**TABLE B: SUBMITTALS**

1/8/97

**TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS**

01/08/97

Facility Name: Rochester Public Utilities - Cascade Creek Combusti

Permit Number: 10900020 - 001

What to send	When to send	Portion of Facility Affected

**TABLE B: RECURRENT SUBMITTALS**

01/08/97

Facility Name: Rochester Public Utilities - Cascade Creek Comousti

Permit Number: 10900020 - 001

What to send	When to send	Portion of Facility Affected