

**AIR EMISSION PERMIT NO. 08500002- 001
IS ISSUED TO**

Hutchinson Utilities Commission

Hutchinson Utilities Commission - Plant 1
44 Fourth Avenue Northeast
Hutchinson, McLeod County, Minnesota 55350

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 – Part 70 | June 24, 1998 |

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. 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: Part 70

Issue Date: May 7, 2002

Expiration: May 7, 2007

All Title I Conditions do not expire.

Don Smith for

Ann M. Foss

Major Facilities Section Manager

Majors and Remedation Division

for

Karen A. Studders

Commissioner

Minnesota Pollution Control Agency

MC:lh

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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 | (651) 296-6300 |
| Outside Metro Area | 1-800-657-3864 |
| TTY | (651) 282-5332 |

The rules 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. 7007.1800, 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. Subject to the limitations of Minn. R. 7007.1800 and 7017.0100, subp. 2, notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

FACILITY DESCRIPTION:

This facility is a municipal electric power plant that operates as a backup electric service (if the primary electric provider loses power), peak shaving during peak demand periods, and for routine exercising of equipment. The facility is composed of four dual-fuel reciprocating engine generators, two diesel reciprocating engine generators, a natural gas/oil-fired gas turbine generator, a 30 kilowatts (KW) emergency generator, small heating boiler, six space heaters, a 310,000 gallon fuel oil storage tank, and 5 fuel oil day tanks (total storage capacity for all tanks is 312,881 gallons). Total generating capacity (excluding the emergency generator) is 35,780 kw.

No changes are allowed with this permit.

TABLE A: LIMITS AND OTHER REQUIREMENTS

05/07/02

Facility Name: Hutchinson Utilities Commission -Plant 1

Permit Number: 08500002 - 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 |
|---|-----------------------------|
| Refer to Table B of this permit for Computer Dispersion Modeling Submittal Requirements | hdr |
| <p>Corrective Action To Avoid Violation Of Ambient Air Quality Standard: If the Computer Dispersion Modeling Results submittal required by Table B of this permit predict exceedance of the nitrogen oxides ambient air quality standard, the Permittee shall take appropriate corrective actions within 90 days after MPCA approval of the modeling results.</p> <p>Corrective actions may include but are not limited to restriction of GP 001 emission unit operating levels, stack extensions, emission unit retirement, or the submittal of a permit amendment application for an appropriate corrective action that requires a permit amendment prior to implementing the corrective action. For any action requiring a permit amendment, the Permittee shall follow the requirements of Minn. R. ch. 7007.</p> | Minn. R. 7007.0800, subp. 2 |
| Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted. | Minn. R. 7011.0020 |
| <p>Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3.</p> <p>At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.</p> | Minn. R. 7019.1000, subp. 3 |
| <p>Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2.</p> <p>At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.</p> | Minn. R. 7019.1000, subp. 2 |
| Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment. | Minn. R. 7019.1000, subp. 1 |
| <p>Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description:</p> <ol style="list-style-type: none"> 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation. | Minn. R. 7019.1000, subp. 1 |
| Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate. | Minn. R. 7019.1000, subp. 4 |

TABLE A: LIMITS AND OTHER REQUIREMENTS

05/07/02

Facility Name: Hutchinson Utilities Commission -Plant 1

Permit Number: 08500002 - 001

| | |
|---|---|
| Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150. | Minn. R. 7011.0150 |
| Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed. | Minn. R. 7007.1150 through Minn. R. 7007.1500 |
| Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H). | Minn. R. 7007.1400, subp. 1(H) |
| Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007.1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350 subp. 2), including records of the emissions resulting from those changes. | Minn. R. 7007.0800, subp. 5(B) |
| Recordkeeping: Retain all records at the stationary source for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A). | Minn. R. 7007.0800, subp. 5(C) |
| Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act. | Minn. R. 7030.0010 - 7030.0080 |
| The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16. | Minn. R. 7007.0800, subp. 16 |
| Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A). | Minn. R. 7007.0800, subp. 9(A) |
| Emission Inventory Report: due 91 days after end of each calendar year following permit issuance (April 1). The Report shall be submitted on a form approved by the Commissioner. | Minn. R. 7019.3000 through Minn. R. 7019.3010 |
| Emission Fees: due 60 days after receipt of an MPCA bill. | Minn. R. 7002.0005 through Minn. R. 7002.0095 |

TABLE A: LIMITS AND OTHER REQUIREMENTS

05/07/02

Facility Name: Hutchinson Utilities Commission -Plant 1

Permit Number: 08500002 - 001

Subject Item: GP 001 Internal Combustion Engines**Associated Items:** EU 001 Engine 2 (Dual Fuel)

EU 002 Engine 3 (Dual Fuel)

EU 003 Engine 4 (Dual Fuel)

EU 004 Diesel Engine 5

EU 005 Diesel Engine 6

EU 006 Engine 7 (Dual Fuel)

EU 007 Gas Turbine 8 (combined cycle)

EU 008 Emergency Generator

| What to do | Why to do it |
|--|--|
| Opacity: less than or equal to 20 percent opacity once operating temperatures have been attained. This standard applies individually to each GP 001 emission unit. | Minn. R. 7011.2300, subp. 1 |
| Sulfur Content of Fuel: less than or equal to 0.05 percent by weight for diesel fuel oil. This standard applies individually to each GP 001 emission unit that burns diesel fuel oil. | Minn. R. 7007.0800, subp. 2; meets requirements of Minn. R. 7011.2300, subp. 2 |
| Permitted Fuels: Pipeline Natural Gas - EU 001, EU 002, EU 003, EU 006, EU 007, and EU 008 Diesel Fuel Oil - EU 001, EU 002, EU 003, EU 004, EU 005, EU 006, and EU 007 | Minn. R. 7007.0800, subp. 2 |
| Diesel Fuel Oil Supplier Certification: The Permittee shall obtain a certification from the diesel fuel oil supplier for each fuel delivery, specifying the percent sulfur by weight in the fuel. All certifications shall be maintained for five years from the date of receipt. In lieu of a certification for each delivery, the Permittee may obtain a single certification from the fuel supplier that guarantees a maximum sulfur content in all diesel fuel deliveries thereafter. The single certification shall also state that the supplier will notify the Permittee in writing on the date of delivery of diesel fuel oil with a sulfur content exceeding the guaranteed maximum value, that the diesel fuel oil sulfur content exceeds the guaranteed maximum value. | Minn. R. 7007.0800, subp. 4 and 5 |

TABLE B: SUBMITTALS

05/07/02

Facility Name: Hutchinson Utilities Commission -Plant 1
Permit Number: 08500002 - 001

Table B lists most of the submittals required by this permit. Please note that some submittal requirements may appear in Table A or, if applicable, within a compliance schedule located in Table C. Table B is divided into two sections in order to separately list one-time only and recurrent submittal requirements.

Each submittal must be postmarked or received by the date specified in the applicable Table. Those submittals required by parts 7007.0100 to 7007.1850 must be certified by a responsible official, defined in Minn. R. 7007.0100, subp. 21. Other submittals shall be certified as appropriate if certification is required by an applicable rule or permit condition.

Send any application for a permit or permit amendment to:

Permit Technical Advisor
Permit Section
Air Quality Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Also, where required by an applicable rule or permit condition, send to the Permit Technical Advisor notices of:

- accumulated insignificant activities,
- installation of control equipment,
- replacement of an emissions unit, and
- changes that contravene a permit term.

Unless another person is identified in the applicable Table, send all other submittals to:

Supervisor
Compliance Determination Unit
Air Quality Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Send submittals that are required to be submitted to the U.S. EPA regional office to:

Mr. George Czerniak
Air and Radiation Branch
EPA Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

Send submittals that are required by the Acid Rain Program to:

U.S. Environmental Protection Agency
Clean Air Markets Division
1200 Pennsylvania Avenue NW (6204N)
Washington, D.C. 20460

TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS

05/07/02

Facility Name: Hutchinson Utilities Commission -Plant 1

Permit Number: 08500002 - 001

| What to send | When to send | Portion of Facility Affected |
|---------------------------------------|---|-------------------------------------|
| Computer Dispersion Modeling Protocol | due 30 days after Permit Issuance for nitrogen oxide emissions. This protocol will describe the proposed modeling methodology and input data, in accordance with MPCA modeling guidance for Title V air dispersion modeling analyses. This is a state-only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act. | Total Facility |
| Computer Dispersion Modeling Results | due 180 days after receipt of written MPCA approval of the Modeling Protocol for nitrogen oxide emissions. The Results shall adhere to MPCA modeling guidance for Title V air dispersion modeling analyses. This is a state-only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act. | Total Facility |

TABLE B: RECURRENT SUBMITTALS

05/07/02

Facility Name: Hutchinson Utilities Commission -Plant 1

Permit Number: 08500002 - 001

| What to send | When to send | Portion of Facility Affected |
|------------------------------|---|-------------------------------------|
| Semiannual Deviations Report | due 30 days after end of each calendar half-year following Permit Issuance. The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. If no deviations have occurred, the Permittee shall submit the report stating no deviations. | Total Facility |
| Compliance Certification | due 31 days after end of each calendar year following Permit Issuance. The Certification shall be submitted on a form approved by the Commissioner, both to the Commissioner and to the US EPA regional office in Chicago. This report covers all deviations experienced during the calendar year. | Total Facility |

APPENDIX MATERIAL

Facility Name: Hutchinson Utilities Commission -Plant 1
Permit Number: 08500002-001

INSIGNIFACNT ACTIVITIES REQUIRED TO BE LISTED:

TK 001 - 310,000 gallon fuel oil storage tank plus 5 indoor day tanks for a total capacity of 312,881 gallons (Minn. R. 7007.1300, subp. 4). EPA TANKS 4.09 program predicts VOC emissions of 207 lb/yr.

6 natural gas-fired space heaters total heat input of 1.275 mmBtu/hr and potential NOx emissions of 1,117 lb/yr (Minn. R. 7007.1300, subp. 3.A.). Applicable rules are Minn. R. 7011.0510 and Minn. R. 7011.0515.

1 natural gas-fired boiler with a heat input of 1.438 mmBtu/hr and potential NOx emissions of 1,260 lb/yr (Minn. R. 7007.1300, subp. 3.I.(2)). Applicable Rule is Minn. R. 7011.0515.

TECHNICAL SUPPORT DOCUMENT
For
DRAFT AIR EMISSION PERMIT NO. 08500002-001

This Technical Support Document (TSD) is for all the interested parties of the draft permit. The purpose of this document is to set forth the legal and factual basis for the draft permit conditions, including references to the applicable statutory or regulatory provisions.

1. General Information

1.1. Applicant and Stationary Source Location:

| Owner and Operator Address and Phone Number | Facility Address (SIC Code: 4911) |
|---|---|
| Hutchinson Utilities Commission 225 Michigan Street Hutchinson, Minnesota 55350 (320) 587-4745 | 44 Fourth Avenue Northeast Hutchinson McLeod County |

1.2. Description of the facility

This facility is a municipal electric power plant that operates as a backup electric service (if the primary electric provider loses power), peak shaving during peak demand periods, and for routine exercising of equipment. The facility is composed of four dual-fuel reciprocating engine generators, two diesel reciprocating engine generators, a natural gas/oil-fired gas turbine generator, a 30 kw emergency generator, small heating boiler, six space heaters, a 310,000 gallon fuel oil storage tank, 5 fuel oil day tanks (total storage capacity for all tanks is 312,881 gallons), and a 533 gallon waste lubricating oil storage tank (an insignificant activity not required to be listed under Minn. R. 7007.1300, subp. 2.E.(2)). Total generating capacity (excluding the emergency generator) is 35,780 kilowatts.

1.3 Description of any changes allowed with this permit issuance

No changes are allowed with this permit.

1.4 Description of all amendments issued since the issuance of the last total facility permit and to be included in the Part 70 Permit.

| Permit Number and Issuance Date | Action Authorized |
|---------------------------------|-------------------|
| Not Applicable | Not Applicable |

1.5. Facility Emissions:

Table 1. Total Facility Potential to Emit Summary:

| | PM tpy | PM ₁₀ tpy | SO ₂ tpy | NO _x tpy | CO tpy | VOC tpy | Pb tpy | All HAPs tpy |
|---|-----------|-------------------------|------------------------|------------------------|-----------|------------|-----------|--------------------|
| Total Facility Limited Potential Emissions | 61.23 | 50.94 | 45.91 | 2987 | 860 | 129.4 | 0.01 | 4.05 |
| Total Facility Actual Emissions* | 7.43 | 7.18 | 0.95 | 71.57 | 21.6 | 1.77 | 0 | NR |

*1999 Emission inventory NR = not reported

Table 2. Facility and Permit Classification

| Classification (put x in appropriate box) | Major/Affected Source | *Synthetic Minor | *Minor |
|--|------------------------------|-----------------------------|---|
| PSD (list pollutant) | NO _x , CO | | PM, PM ₁₀ , SO ₂ , VOC, Pb |
| Part 70 Permit Program (list pollutant) | NO _x , CO, VOC | | PM ₁₀ , SO ₂ , HAPs, Pb |

* Refers to potential emissions that are less than those specified as major by 40 CFR pt. 52.21, 40 CFR pt. 51 Appendix S, and 40 CFR pt. 70.

2. Regulatory and/or Statutory Basis

Summary Regulatory and/or Statutory Basis of the Emission or operational Limit

Regulatory Overview of Facility

| GP # | Applicable Regulations | Comments: |
|--------|------------------------|--|
| GP 001 | Minn. R. 7011.2300 | Standards of Performance for Internal Combustion Engines |
| | Minn. R. 7007.0800 | Limit on sulfur content in diesel fuel oil |

Permit Action Number: No. 08500002-001

Date: 1/21/2004

3. Technical Information

Ambient Air Modeling Analysis for NOx: The Screen 3 model predicted ambient NOx concentrations about ten-fold the ambient standard. Therefore the draft permit requires additional (more refined) NOx modeling shortly after permit issuance, as well as corrective action if modeling continues to predict exceedance of the NOx ambient standard.

NSPS/Minn. Rules: Gas Turbine No. 8/EU 007 was installed in 1971 and is not subject to 40 CFR pt. 60 subp. GG. Only Minn. R. 7011.2300 applies.

Diesel Fuel Oil Sulfur Limit: The Permittee requested that fuel oil sulfur content be limited to 0.05%, because the Permittee only uses diesel fuel with a maximum sulfur content of 0.05%.

Comments During Public Notice and EPA 45-day review period: None

4. Conclusion

Based on the information provided by the Hutchinson Utilities Commission, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 08500002-001, and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Marshall M. Cole, Dennis Becker, A-Jelil Abdella
Attachment: Emission Calculations



MINNESOTA POLLUTION CONTROL AGENCY
AIR QUALITY
520 LAFAYETTE ROAD
ST. PAUL, MN 55155-4194

PERMIT APPLICATION FORM EC-03
INTERNAL COMBUSTION ENGINE
(SINGLE-FUEL) FORM
PART 1: EMISSION CALCULATIONS

01/03/00

- Fill out Part 1 of this form for each fuel burned in each engine, or attach sheets with equivalent information. If the engine emits Hazardous Air Pollutants (HAPs), fill out and attach form EC-13C.

Fill out Part 2 of this form only if you are installing a generator to be used for other than emergencies.

- 1) AQ Facility ID No.: _____
- 2) Facility Name: Hutchinson Utilities Plant 1
- 3) Emission Unit Identification Number: EU 001 Engine #2
- 4) Stack/Vent Designation Number: SV 001
- 5) Control Equipment Identification Number: _____
- 6) Engine Type: ☒ Reciprocating ☐ Turbine ☐ Other: _____
- 7) Engine is Used For: ☒ Non-Emergency use ☐ Emergency use only
(If you check this box, you must complete Part 2 of this form.)
- 8) Rated Heat Input: 19.0 mmBtu/hr
- 9) Rated Mechanical Output: 2000 KW HP @ _____ RPM
- 10) Fuel Type: Dual Fuel (95% NG/5% diesel) @ 0.05 % Sulfur
- 11) Fuel Consumption Rate: 17190 cf/hr & 6.89 gal/hr in diesel fuel
- 12) Calculations Summary: NG @ 1050 Btu/cf

| 12a) Pollutant | 12b) Emission Factor (lbs/mmBtu) | 12c) Emission Rate (lbs/hr) | 12d) Maximum Uncontrolled Emissions (tons/yr) | 12e) Pollution Control Efficiency (%) | 12f) Maximum Controlled Emissions (tons/yr) | 12g) Limited Controlled Emissions (tons/yr) | 12h) Actual Emissions (tons/yr) |
|-------------------|--|-----------------------------------|---|---|---|---|---------------------------------------|
| PM | 0.0051 | 0.097 | 0.424 | 0 | 0.424 | | |
| PM10 | 0.0051 | 0.097 | 0.424 | 0 | 0.424 | | |
| SO ₂ | 0.003 | 0.057 | 0.25 | 0 | 0.25 | | |
| NO _x | 2.7 | 51.3 | 224.7 | 0 | 224.7 | | |
| VOC | 0.2 | 3.8 | 16.6 | 0 | 16.6 | | |
| CO | 1.16 | 22.04 | 96.5 | 0 | 96.5 | | |
| Lead | | | | 0 | | | |

- 13) Note: factors from AP-42 ch 3.4 (Oct 1996) table 3.4-1 except for PM/PM₁₀ which is a calculated composite based on PM₁₀ from ch. 3.2 (Aug 2000) table 3.2-1 @95% NG, and based on PM for diesel fuel from ch. 3.4 table 3.4-1 @5% diesel fuel. Assume PM = PM₁₀



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- Fill out Part 1 of this form for each fuel burned in each engine, or attach sheets with equivalent information. If the engine emits Hazardous Air Pollutants (HAPs), fill out and attach form EC-13C.

Fill out Part 2 of this form only if you are installing a generator to be used for other than emergencies.

- 1) AQ Facility ID No.: _____
- 2) Facility Name: Hutchinson Utilities Plant 1
- 3) Emission Unit Identification Number: EU 001 Engine #2
- 4) Stack/Vent Designation Number: SV 001
- 5) Control Equipment Identification Number: _____
- 6) Engine Type: ☒ Reciprocating ☐ Turbine ☐ Other: _____
- 7) Engine is Used For: ☒ Non-Emergency use ☐ Emergency use only
(If you check this box, you must complete Part 2 of this form.)
- 8) Rated Heat Input: 19.0 mmBtu/hr
- 9) Rated Mechanical Output: 2000 KW HP @ _____ RPM
- 10) Fuel Type: Diesel Fuel @ 0.05 % Sulfur
- 11) Fuel Consumption Rate: 137.7 (gal/hr)

12) Calculations Summary:

| 12a) Pollutant | 12b) Emission Factor (lbs/mmmbtu) | 12c) Emission Rate (lbs/hr) | 12d) Maximum Uncontrolled Emissions (tons/yr) | 12e) Pollution Control Efficiency (%) | 12f) Maximum Controlled Emissions (tons/yr) | 12g) Limited Controlled Emissions (tons/yr) | 12h) Actual Emissions (tons/yr) |
|-------------------|--|--------------------------------------|---|---|---|---|--|
| PM | 0.0697 | 1.32 | 5.80 | 0 | 5.80 | | |
| PM10 | 0.0573 | 1.09 | 4.77 | 0 | 4.77 | | |
| SO ₂ | 0.051 | 0.97 | 4.24 | 0 | 4.24 | | |
| NO _x | 3.2 | 60.8 | 266.3 | 0 | 266.3 | | |
| VOC | 0.09 | 1.71 | 7.49 | 0 | 7.49 | | |
| CO | 0.85 | 16.15 | 70.34 | 0 | 70.34 | | |
| Lead | | | | 0 | | | |

13) Note: factors from AP-42 ch. 3.4 (Oct 1996) tables 3.4-1 and 3.4-2



MINNESOTA POLLUTION CONTROL AGENCY
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PERMIT APPLICATION FORM EC-03
INTERNAL COMBUSTION ENGINE
(SINGLE-FUEL) FORM
PART 1: EMISSION CALCULATIONS

01/03/00

Permit Action Number: No. 08500002-001

Date: 1/21/2004

- Fill out Part 1 of this form for each fuel burned in each engine, or attach sheets with equivalent information. If the engine emits Hazardous Air Pollutants (HAPs), fill out and attach form EC-13C.

Fill out Part 2 of this form only if you are installing a generator to be used for other than emergencies.

- 1) AQ Facility ID No.: _____
- 2) Facility Name: Hutchinson Utilities Plant 1
- 3) Emission Unit Identification Number: EU 002 Engine #3
- 4) Stack/Vent Designation Number: SV 002
- 5) Control Equipment Identification Number: _____
- 6) Engine Type: ☒ Reciprocating ☐ Turbine ☐ Other: _____
- 7) Engine is Used For: ☒ Non-Emergency use ☐ Emergency use only
(If you check this box, you must complete Part 2 of this form.)
- 8) Rated Heat Input: 35.0 mmBtu/hr
- 9) Rated Mechanical Output: 4000 KW HP @ _____ RPM
- 10) Fuel Type: Dual Fuel (95% NG/5% diesel) @ 0.05 % Sulfur
- 11) Fuel Consumption Rate: 31,667 cf/hr & 12.7 gal/hr in diesel fuel
- 12) Calculations Summary: NG @ 1050 Btu/cf

| 12a) Pollutant | 12b) Emission Factor (lbs/mmBtu) | 12c) Emission Rate (lbs/hr) | 12d) Maximum Uncontrolled Emissions (tons/yr) | 12e) Pollution Control Efficiency (%) | 12f) Maximum Controlled Emissions (tons/yr) | 12g) Limited Controlled Emissions (tons/yr) | 12h) Actual Emissions (tons/yr) |
|-------------------|--|-----------------------------------|---|--|---|---|---------------------------------------|
| PM | 0.0051 | 0.18 | 0.78 | 0 | 0.78 | | |
| PM ₁₀ | 0.0051 | 0.18 | 0.78 | 0 | 0.78 | | |
| SO ₂ | 0.003 | 0.11 | 0.46 | 0 | 0.46 | | |
| NO _x | 2.7 | 94.5 | 413.9 | 0 | 413.9 | | |
| VOC | 0.2 | 7.0 | 30.7 | 0 | 30.7 | | |
| CO | 1.16 | 40.6 | 177.8 | 0 | 177.8 | | |
| Lead | | | | 0 | | | |

- 13) Note: factors from AP-42 ch 3.4 (Oct 1996) table 3.4-1 except for PM/PM₁₀ which is a calculated composite based on PM₁₀ from ch. 3.2 (Aug 2000) table 3.2-1 @95% NG, and based on PM for diesel fuel from ch. 3.4 table 3.4-1 @5% diesel fuel. Assume PM = PM₁₀



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01/03/00

Permit Action Number: No. 08500002-001
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- Fill out Part 1 of this form for each fuel burned in each engine, or attach sheets with equivalent information. If the engine emits Hazardous Air Pollutants (HAPs), fill out and attach form EC-13C.

Fill out Part 2 of this form only if you are installing a generator to be used for other than emergencies.

- 1) AQ Facility ID No.: _____
- 2) Facility Name: Hutchinson Utilities Plant 1
- 3) Emission Unit Identification Number: EU 002 Engine #3
- 4) Stack/Vent Designation Number: SV 002
- 5) Control Equipment Identification Number: _____
- 6) Engine Type: ☒ Reciprocating ☐ Turbine ☐ Other: _____
- 7) Engine is Used For: ☒ Non-Emergency use ☐ Emergency use only
(If you check this box, you must complete Part 2 of this form.)
- 8) Rated Heat Input: 35.0 mmBtu/hr
- 9) Rated Mechanical Output: 4000 KW HP @ _____ RPM
- 10) Fuel Type: Diesel Fuel @ 0.05 % Sulfur
- 11) Fuel Consumption Rate: 253.6 (gal/hr)
- 12) Calculations Summary:

| 12a) Pollutant | 12b) Emission Factor (lbs/mmBtu) | 12c) Emission Rate (lbs/hr) | 12d) Maximum Uncontrolled Emissions (tons/yr) | 12e) Pollution Control Efficiency (%) | 12f) Maximum Controlled Emissions (tons/yr) | 12g) Limited Controlled Emissions (tons/yr) | 12h) Actual Emissions (tons/yr) |
|-------------------|--|-----------------------------------|---|---|---|---|---------------------------------------|
| PM | 0.0697 | 2.44 | 10.69 | 0 | 10.69 | | |
| PM10 | 0.0573 | 2.01 | 8.78 | 0 | 8.78 | | |
| SO ₂ | 0.051 | 1.79 | 7.82 | 0 | 7.82 | | |
| NO _x | 3.2 | 112 | 490.6 | 0 | 490.6 | | |
| VOC | 0.09 | 3.15 | 13.8 | 0 | 13.8 | | |
| CO | 0.85 | 29.8 | 130.4 | 0 | 130.4 | | |
| Lead | | | | 0 | | | |

- 13) Note: factors from AP-42 ch. 3.4 (Oct 1996) tables 3.4-1 and 3.4-2



MINNESOTA POLLUTION CONTROL AGENCY
 AIR QUALITY
 520 LAFAYETTE ROAD
 ST. PAUL, MN 55155-4194

**PERMIT APPLICATION FORM EC-03
 INTERNAL COMBUSTION ENGINE
 (SINGLE-FUEL) FORM
 PART 1: EMISSION CALCULATIONS**

01/03/00

- Fill out Part 1 of this form for each fuel burned in each engine, or attach sheets with equivalent information. If the engine emits Hazardous Air Pollutants (HAPs), fill out and attach form EC-13C.

Fill out Part 2 of this form only if you are installing a generator to be used for other than emergencies.

- 1) AQ Facility ID No.: _____

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- 2) Facility Name: Hutchinson Utilities Plant 1
- 3) Emission Unit Identification Number: EU 003 Engine #4
- 4) Stack/Vent Designation Number: SV 003
- 5) Control Equipment Identification Number: _____
- 6) Engine Type: ☒ Reciprocating ☐ Turbine ☐ Other: _____
- 7) Engine is Used For: ☒ Non-Emergency use ☐ Emergency use only
(If you check this box, you must complete Part 2 of this form.)
- 8) Rated Heat Input: 35.0 mmBtu/hr
- 9) Rated Mechanical Output: 4000 KW HP @ _____ RPM
- 10) Fuel Type: Dual Fuel (95% NG/5% diesel) @ 0.05 % Sulfur
- 11) Fuel Consumption Rate: 31,667 cf/hr & 12.7 gal/hr in diesel fuel
- 12) Calculations Summary: NG @ 1050 Btu/cf

| 12a) Pollutant | 12b) Emission Factor (lbs/mmBtu) | 12c) Emission Rate (lbs/hr) | 12d) Maximum Uncontrolled Emissions (tons/yr) | 12e) Pollution Control Efficiency (%) | 12f) Maximum Controlled Emissions (tons/yr) | 12g) Limited Controlled Emissions (tons/yr) | 12h) Actual Emissions (tons/yr) |
|-------------------|--|-----------------------------------|---|---|---|---|---------------------------------------|
| PM | 0.0051 | 0.18 | 0.78 | 0 | 0.78 | | |
| PM10 | 0.0051 | 0.18 | 0.78 | 0 | 0.78 | | |
| SO ₂ | 0.003 | 0.11 | 0.46 | 0 | 0.46 | | |
| NO _x | 2.7 | 94.5 | 413.9 | 0 | 413.9 | | |
| VOC | 0.2 | 7.0 | 30.7 | 0 | 30.7 | | |
| CO | 1.16 | 40.6 | 177.8 | 0 | 177.8 | | |
| Lead | | | | 0 | | | |

- 13) Note: factors from AP-42 ch 3.4 (Oct 1996) table 3.4-1 except for PM/PM₁₀ which is a calculated composite based on PM₁₀ from ch. 3.2 (Aug 2000) table 3.2-1 @95% NG, and based on PM for diesel fuel from ch. 3.4 table 3.4-1 @5% diesel fuel. Assume PM = PM₁₀



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PERMIT APPLICATION FORM EC-03
INTERNAL COMBUSTION ENGINE
(SINGLE-FUEL) FORM
PART 1: EMISSION CALCULATIONS

01/03/00

- Fill out Part 1 of this form for each fuel burned in each engine, or attach sheets with equivalent information. If the engine emits Hazardous Air Pollutants (HAPs), fill out and attach form EC-13C.
 Fill out Part 2 of this form only if you are installing a generator to be used for other than emergencies.

- 1) AQ Facility ID No.: _____
- 2) Facility Name: Hutchinson Utilities Plant 1
- 3) Emission Unit Identification Number: EU 003 Engine #4

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- 4) Stack/Vent Designation Number: SV 003
- 5) Control Equipment Identification Number: _____
- 6) Engine Type: X Reciprocating ☐ Turbine ☐ Other: _____
- 7) Engine is Used For: X Non-Emergency use ☐ Emergency use only
(If you check this box, you must complete Part 2 of this form.)
- 8) Rated Heat Input: 35.0 mmBtu/hr
- 9) Rated Mechanical Output: 4000 KW HP @ _____ RPM
- 10) Fuel Type: Diesel Fuel @ 0.05 % Sulfur
- 11) Fuel Consumption Rate: 253.6 (gal/hr)
- 12) Calculations Summary:

| 12a) Pollutant | 12b) Emission Factor (lbs/mmBtu) | 12c) Emission Rate (lbs/hr) | 12d) Maximum Uncontrolled Emissions (tons/yr) | 12e) Pollution Control Efficiency (%) | 12f) Maximum Controlled Emissions (tons/yr) | 12g) Limited Controlled Emissions (tons/yr) | 12h) Actual Emissions (tons/yr) |
|-------------------|---|--------------------------------------|---|---|---|---|--|
| PM | 0.0697 | 2.44 | 10.69 | 0 | 10.69 | | |
| PM10 | 0.0573 | 2.01 | 8.78 | 0 | 8.78 | | |
| SO ₂ | 0.051 | 1.79 | 7.82 | 0 | 7.82 | | |
| NO _x | 3.2 | 112 | 490.6 | 0 | 490.6 | | |
| VOC | 0.09 | 3.15 | 13.8 | 0 | 13.8 | | |
| CO | 0.85 | 29.8 | 130.4 | 0 | 130.4 | | |
| Lead | | | | 0 | | | |

- 13) Note: factors from AP-42 ch. 3.4 (Oct 1996) tables 3.4-1 and 3.4-2



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PERMIT APPLICATION FORM EC-03
INTERNAL COMBUSTION ENGINE
(SINGLE-FUEL) FORM
PART 1: EMISSION CALCULATIONS

01/03/00

- Fill out Part 1 of this form for each fuel burned in each engine, or attach sheets with equivalent information. If the engine emits Hazardous Air Pollutants (HAPs), fill out and attach form EC-13C.

Fill out Part 2 of this form only if you are installing a generator to be used for other than emergencies.

- 1) AQ Facility ID No.: _____
- 2) Facility Name: Hutchinson Utilities Plant 1
- 3) Emission Unit Identification Number: EU 004 Engine #5
- 4) Stack/Vent Designation Number: SV 004
- 5) Control Equipment Identification Number: _____
- 6) Engine Type: ☒ Reciprocating ☐ Turbine ☐ Other: _____
- 7) Engine is Used For: ☒ Non-Emergency use ☐ Emergency use only
(If you check this box, you must complete Part 2 of this form.)
- 8) Rated Heat Input: 21.0 mmBtu/hr
- 9) Rated Mechanical Output: 2140 KW HP @ _____ RPM
- 10) Fuel Type: Diesel Fuel @ 0.05 % Sulfur
- 11) Fuel Consumption Rate: 152.2 (gal/hr)
- 12) Calculations Summary:

| 12a) Pollutant | 12b) Emission Factor (lbs/mmBtu) | 12c) Emission Rate (lbs/hr) | 12d) Maximum Uncontrolled Emissions (tons/yr) | 12e) Pollution Control Efficiency (%) | 12f) Maximum Controlled Emissions (tons/yr) | 12g) Limited Controlled Emissions (tons/yr) | 12h) Actual Emissions (tons/yr) |
|-------------------|---|--------------------------------------|---|---|---|---|--|
| PM | 0.0697 | 1.46 | 6.41 | 0 | 6.41 | | |
| PM10 | 0.0573 | 1.20 | 5.27 | 0 | 5.27 | | |
| SO ₂ | 0.051 | 1.07 | 4.69 | 0 | 4.69 | | |
| NO _x | 3.2 | 67.2 | 294.3 | 0 | 294.3 | | |
| VOC | 0.09 | 1.89 | 8.28 | 0 | 8.28 | | |
| CO | 0.85 | 17.85 | 78.2 | 0 | 78.2 | | |
| Lead | | | | 0 | | | |

- 13) Note: factors from AP-42 ch. 3.4 (Oct 1996) tables 3.4-1 and 3.4-2



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INTERNAL COMBUSTION ENGINE
(SINGLE-FUEL) FORM
PART 1: EMISSION CALCULATIONS

01/03/00

- Fill out Part 1 of this form for each fuel burned in each engine, or attach sheets with equivalent information. If the engine emits Hazardous Air Pollutants (HAPs), fill out and attach form EC-13C.

Fill out Part 2 of this form only if you are installing a generator to be used for other than emergencies.

- 1) AQ Facility ID No.: _____
- 2) Facility Name: Hutchinson Utilities Plant 1
- 3) Emission Unit Identification Number: EU 005 Engine #6
- 4) Stack/Vent Designation Number: SV 005
- 5) Control Equipment Identification Number: _____
- 6) Engine Type: ☒ Reciprocating ☐ Turbine ☐ Other: _____
- 7) Engine is Used For: ☒ Non-Emergency use ☐ Emergency use only
(If you check this box, you must complete Part 2 of this form.)
- 8) Rated Heat Input: 21.0 mmBtu/hr
- 9) Rated Mechanical Output: 2140 KW HP @ _____ RPM
- 10) Fuel Type: Diesel Fuel @ 0.05 % Sulfur
- 11) Fuel Consumption Rate: 152.2 (gal/hr)

12) Calculations Summary:

| 12a) Pollutant | 12b) Emission Factor (lbs/mmBtu) | 12c) Emission Rate (lbs/hr) | 12d) Maximum Uncontrolled Emissions (tons/yr) | 12e) Pollution Control Efficiency (%) | 12f) Maximum Controlled Emissions (tons/yr) | 12g) Limited Controlled Emissions (tons/yr) | 12h) Actual Emissions (tons/yr) |
|-------------------|---|--------------------------------------|---|---|---|---|--|
| PM | 0.0697 | 1.46 | 6.41 | 0 | 6.41 | | |
| PM10 | 0.0573 | 1.20 | 5.27 | 0 | 5.27 | | |
| SO ₂ | 0.051 | 1.07 | 4.69 | 0 | 4.69 | | |
| NO _x | 3.2 | 67.2 | 294.3 | 0 | 294.3 | | |
| VOC | 0.09 | 1.89 | 8.28 | 0 | 8.28 | | |
| CO | 0.85 | 17.85 | 78.2 | 0 | 78.2 | | |
| Lead | | | | 0 | | | |

13) Note: factors from AP-42 ch. 3.4 (Oct 1996) tables 3.4-1 and 3.4-2



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(SINGLE-FUEL) FORM
PART 1: EMISSION CALCULATIONS

01/03/00

- Fill out Part 1 of this form for each fuel burned in each engine, or attach sheets with equivalent information. If the engine emits Hazardous Air Pollutants (HAPs), fill out and attach form EC-13C.

Fill out Part 2 of this form only if you are installing a generator to be used for other than emergencies.

- 1) AQ Facility ID No.: _____
- 2) Facility Name: Hutchinson Utilities Plant 1
- 3) Emission Unit Identification Number: EU 006 Engine #7
- 4) Stack/Vent Designation Number: SV 006
- 5) Control Equipment Identification Number: _____
- 6) Engine Type: ☒ Reciprocating ☐ Turbine ☐ Other: _____
- 7) Engine is Used For: ☒ Non-Emergency use ☐ Emergency use only
(If you check this box, you must complete Part 2 of this form.)
- 8) Rated Heat Input: 38.0 mmBtu/hr
- 9) Rated Mechanical Output: 5000 KW HP @ _____ RPM
- 10) Fuel Type: Dual Fuel (95% NG/5% diesel) @ 0.05 % Sulfur
- 11) Fuel Consumption Rate: 34,381 cf/hr & 13.77 gal/hr in diesel fuel
- 12) Calculations Summary: NG @ 1050 Btu/cf

| 12a) Pollutant | 12b) Emission Factor (lbs/mmmbtu) | 12c) Emission Rate (lbs/hr) | 12d) Maximum Uncontrolled Emissions (tons/yr) | 12e) Pollution Control Efficiency (%) | 12f) Maximum Controlled Emissions (tons/yr) | 12g) Limited Controlled Emissions (tons/yr) | 12h) Actual Emissions (tons/yr) |
|-------------------|--|--------------------------------------|---|---|---|---|--|
| PM | 0.0051 | 0.19 | 0.85 | 0 | 0.85 | | |
| PM10 | 0.0051 | 0.19 | 0.85 | 0 | 0.85 | | |
| SO ₂ | 0.003 | 0.11 | 0.50 | 0 | 0.50 | | |
| NO _x | 2.7 | 102.6 | 449.4 | 0 | 449.4 | | |
| VOC | 0.2 | 7.6 | 33.3 | 0 | 33.3 | | |
| CO | 1.16 | 44.1 | 193.1 | 0 | 193.1 | | |
| Lead | | | | 0 | | | |

- 13) Note: factors from AP-42 ch 3.4 (Oct 1996) table 3.4-1 except for PM/PM₁₀ which is a calculated composite based on PM₁₀ from ch. 3.2 (Aug 2000) table 3.2-1 @95% NG, and based on PM for diesel fuel from ch. 3.4 table 3.4-1 @5% diesel fuel. Assume PM = PM₁₀



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PERMIT APPLICATION FORM EC-03
INTERNAL COMBUSTION ENGINE
(SINGLE-FUEL) FORM
PART 1: EMISSION CALCULATIONS

01/03/00

- Fill out Part 1 of this form for each fuel burned in each engine, or attach sheets with equivalent information. If the engine emits Hazardous Air Pollutants (HAPs), fill out and attach form EC-13C.

Fill out Part 2 of this form only if you are installing a generator to be used for other than emergencies.

- 1) AQ Facility ID No.: _____
- 2) Facility Name: Hutchinson Utilities Plant 1
- 3) Emission Unit Identification Number: EU 006 Engine #7
- 4) Stack/Vent Designation Number: SV 006
- 5) Control Equipment Identification Number: _____
- 6) Engine Type: ☒ Reciprocating ☐ Turbine ☐ Other: _____
- 7) Engine is Used For: ☒ Non-Emergency use ☐ Emergency use only
(If you check this box, you must complete Part 2 of this form.)
- 8) Rated Heat Input: 38.0 mmBtu/hr
- 9) Rated Mechanical Output: 5000 KW HP @ _____ RPM
- 10) Fuel Type: Diesel Fuel @ 0.05 % Sulfur
- 11) Fuel Consumption Rate: 275.4 (gal/hr)

12) Calculations Summary:

| 12a) Pollutant | 12b) Emission Factor (lbs/mmBtu) | 12c) Emission Rate (lbs/hr) | 12d) Maximum Uncontrolled Emissions (tons/yr) | 12e) Pollution Control Efficiency (%) | 12f) Maximum Controlled Emissions (tons/yr) | 12g) Limited Controlled Emissions (tons/yr) | 12h) Actual Emissions (tons/yr) |
|-------------------|---|--------------------------------------|---|---|---|---|--|
| PM | 0.0697 | 2.65 | 12.7 | 0 | 12.7 | | |
| PM10 | 0.0573 | 2.18 | 9.54 | 0 | 9.54 | | |
| SO ₂ | 0.051 | 1.94 | 8.49 | 0 | 8.49 | | |
| NO _x | 3.2 | 121.6 | 532.6 | 0 | 532.6 | | |
| VOC | 0.09 | 3.42 | 14.98 | 0 | 14.98 | | |
| CO | 0.85 | 32.3 | 141.5 | 0 | 141.5 | | |
| Lead | | | | 0 | | | |

13) Note: factors from AP-42 ch. 3.4 (Oct 1996) tables 3.4-1 and 3.4-2



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(SINGLE-FUEL) FORM
PART 1: EMISSION CALCULATIONS

01/03/00

- Fill out Part 1 of this form for each fuel burned in each engine, or attach sheets with equivalent information. If the engine emits Hazardous Air Pollutants (HAPs), fill out and attach form EC-13C.

Fill out Part 2 of this form only if you are installing a generator to be used for other than emergencies.

- 1) AQ Facility ID No.: _____
- 2) Facility Name: Hutchinson Utilities Plant 1
- 3) Emission Unit Identification Number: EU 007 Gas Turbine #8
- 4) Stack/Vent Designation Number: SV 007
- 5) Control Equipment Identification Number: _____
- 6) Engine Type: Reciprocating ☒ Turbine ☐ Other: _____
- 7) Engine is Used For: ☒ Non-Emergency use ☐ Emergency use only
(If you check this box, you must complete Part 2 of this form.)
- 8) Rated Heat Input: 160.0 mmBtu/hr
- 9) Rated Mechanical Output: 16,500 KW HP @ _____ RPM
- 10) Fuel Type: Natural Gas @ _____ % Sulfur
- 11) Fuel Consumption Rate: 152,381 (cf/hr)
- 12) Calculations Summary: NG @ 1050 Btu/cf

| 12a) Pollutant | 12b) Emission Factor (lbs/mmBtu) | 12c) Emission Rate (lbs/hr) | 12d) Maximum Uncontrolled Emissions (tons/yr) | 12e) Pollution Control Efficiency (%) | 12f) Maximum Controlled Emissions (tons/yr) | 12g) Limited Controlled Emissions (tons/yr) | 12h) Actual Emissions (tons/yr) |
|-------------------|---|--------------------------------------|---|---|---|---|--|
| PM | 0.0066 | 1.06 | 4.63 | 0 | 4.63 | | |
| PM10 | 0.0066 | 1.06 | 4.63 | 0 | 4.63 | | |
| SO ₂ | 0.0006 | 0.1 | 0.42 | 0 | 0.42 | | |
| NO _x | 0.32 | 51.2 | 224.3 | 0 | 224.3 | | |
| VOC | 0.0021 | 0.34 | 1.47 | 0 | 1.47 | | |
| CO | 0.082 | 13.1 | 57.5 | 0 | 57.5 | | |
| Lead | | | | 0 | | | |

- 13) Note: factors from AP-42 ch. 3.1 (April 2000) tables 3.1-1 and 3.1-2 (assume PM = PM₁₀) except for SO₂ which is from part 75 appendix D section 2.3.2.1

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MINNESOTA POLLUTION CONTROL AGENCY
AIR QUALITY
520 LAFAYETTE ROAD
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PERMIT APPLICATION FORM EC-03
INTERNAL COMBUSTION ENGINE
(SINGLE-FUEL) FORM
PART 1: EMISSION CALCULATIONS

01/03/00

- Fill out Part 1 of this form for each fuel burned in each engine, or attach sheets with equivalent information. If the engine emits Hazardous Air Pollutants (HAPs), fill out and attach form EC-13C.

Fill out Part 2 of this form only if you are installing a generator to be used for other than emergencies.

- 1) AQ Facility ID No.: _____
- 2) Facility Name: Hutchinson Utilities Plant 1
- 3) Emission Unit Identification Number: EU 007 Gas Turbine #8
- 4) Stack/Vent Designation Number: SV 007
- 5) Control Equipment Identification Number: _____
- 6) Engine Type: Reciprocating ☒ Turbine ☐ Other: _____
- 7) Engine is Used For: ☒ Non-Emergency use ☐ Emergency use only
(If you check this box, you must complete Part 2 of this form.)
- 8) Rated Heat Input: 160.0 mmBtu/hr
- 9) Rated Mechanical Output: 16,500 KW HP @ _____ RPM
- 10) Fuel Type: Diesel Fuel @ 0.05 % Sulfur
- 11) Fuel Consumption Rate: 1,159.4 (gal/hr)

12) Calculations Summary:

| 12a) Pollutant | 12b) Emission Factor (lbs/mmBtu) | 12c) Emission Rate (lbs/hr) | 12d) Maximum Uncontrolled Emissions (tons/yr) | 12e) Pollution Control Efficiency (%) | 12f) Maximum Controlled Emissions (tons/yr) | 12g) Limited Controlled Emissions (tons/yr) | 12h) Actual Emissions (tons/yr) |
|-------------------|---|--------------------------------------|---|---|---|---|--|
| PM | 0.012 | 1.92 | 8.41 | 0 | 8.41 | | |
| PM10 | 0.012 | 1.92 | 8.41 | 0 | 8.41 | | |
| SO ₂ | 0.051 | 8.16 | 35.74 | 0 | 35.74 | | |
| NO _x | 0.88 | 140.8 | 616.7 | 0 | 616.7 | | |
| VOC | 0.00041 | 0.07 | 0.29 | 0 | 0.29 | | |
| CO | 0.0033 | 0.53 | 2.31 | 0 | 2.31 | | |
| Lead | 1.45 E-05 | 0.002 | 0.01 | 0 | 0.01 | | |

13) Note: factors from AP-42 ch. 3.1 (April 2000) tables 3.1-1 and 3.1-2 (assume PM = PM₁₀)