

AIR EMISSION PERMIT NO. 00300156- 003

IS ISSUED TO

ALLIANT TECHSYSTEMS

FEDERAL CARTRIDGE COMPANY

900 Ehlen Drive

Anoka, Anoka County, MN 55303

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 Application Type | Action No. | Application Date (s) | Issuance Date(s) |
|---|-------------------|-----------------------------|-------------------------|
| Total Facility Operating Permit (Title V) | 001 | December 7, 1995 | Not Issued |
| Registration Permit | 002 | October 30, 2002 | Not Issued |
| Total Facility Operating Permit (State) | 003 | November 28, 2005 | See Below |

This permit authorizes the Permittee to operate and modify the stationary sources 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, and any additions or changes to conditions incorporated into Minnesota's State Implementation Plan (SIP) under 40 CFR § 52.1220, designated "Title I: SIP for Sulfur (SO₂)" must go through the federal SIP approval process before becoming effective. Terms used in the permit are as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

Unless otherwise indicated, all the Minnesota rules cited as the origin of the permit terms are incorporated into the SIP under 40 CFR § 52.1220 and as such as are enforceable by U.S. Environmental Protection Agency (EPA) Administrator or citizens under the Clean Air Act.

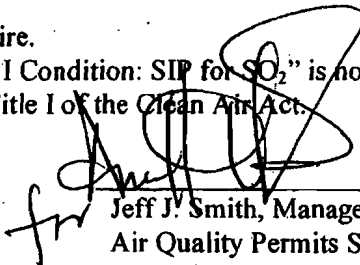
Permit Type: State; Limits to avoid Part 70/Limits to avoid NSR; Title I SIP Conditions (SO₂)

Issue Date: December 28, 2007

Expiration: Non-expiring

All Title I Conditions do not expire.

Each new or revised condition designated "Title I Condition: SIP for SO₂" is not effective or enforceable until approved by EPA as a SIP revision under Title I of the Clean Air Act.



Jeff J. Smith, Manager
Air Quality Permits Section
Industrial Division

for Brad Moore
Commissioner
Minnesota Pollution Control Agency

TDD (for hearing and speech impaired only): (651) 282-5332

Printed on recycled paper containing at least 10% fibers from paper recycled by consumers

TABLE OF CONTENTS

Notice to the Permittee

Permit Shield

Facility Description

Table A: Limits and Other Requirements

Table B: Submittals

Table C: Compliance Schedule (*Not Applicable*)

Appendices:

Appendix A: Operator's Summary

Appendix B: Title I Condition: State Implementation Plan (SIP) for SO₂ NAAQS

Appendix C: Insignificant Activities Required to be Listed

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 permit is a Joint Title I SIP/ Federally Enforceable State Operating Permit, as it includes non-expiring Title I Conditions to implement the SIP, Pursuant to 40 CFR pt. 50, 40 CFR pt. 51, 40 CFR § 52.1220, Minn. R. 7007.0100, subp. 25B, and Minn. R. 7007.1050, subp. 4.

Federal Cartridge Company-Anoka is a manufacturer of small arms, shotgun, rimfire and centerfire ammunitions.

The main emissions from the facility are nitrogen oxides (NO_x). The permit limits the NO_x and Hazardous Air Pollutants (HAPs) emissions of the facility such that the facility is classified as a non-major source under federal New Source Review (NSR, 40 CFR § 52.21), under federal Operating Program (40 CFR pt. 70) and an area source under the National Emissions Standards for Hazardous Air Pollutants (NESHAPs, 40 CFR pt. 63). The facility is part of the SIP to reach attainment of SO₂ Ambient Air Quality Standards in the Anoka County area. This permit will be submitted to U.S. Environmental Protection Agency (EPA) for inclusion into the SIP, and will replace the Administrative Order upon EPA approval.

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Federal Cartridge Co - Anoka
 Permit Number: 00300156 - 003

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 |
|---|---|
| A. STATE IMPLEMENTATION PLAN (SIP) REQUIREMENTS | hdr |
| <p>ACTIVITIES NOT REQUIRING A MODIFICATION TO THE SIP: The Permittee is authorized to make changes to the facility in compliance with Minnesota Rules and without obtaining a modification to the SIP as long as the change does not increase from any emission point, the SO2 emission rates (in lb/hr) or overall SO2 emissions or alter equipment or parameters described in Appendix B, which forms the basis for the SO2 modeling.</p> | <p>Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS; 40 CFR pt. 50; 40 CFR pt. 51; 40 CFR pt. 52, subp. Y; 40 CFR Section 52.1220; MN SIP</p> |
| <p>Remodeling for Attainment Demonstrate: Before making any physical changes or changes to the method of operation which may affect parameters listed in Appendix B, the Permittee shall demonstrate to the MPCA that the SO2 plume dispersion characteristics following the physical change or change in method of operation will be equivalent to or better than the SO2 dispersion characteristics modeled using the parameters in Appendix B. The information submitted must include, at a minimum, the locations, heights, and the diameters of the stacks, locations and dimensions of nearby buildings, the velocity and temperature of the gasses emitted, and the SO2 emission rates.</p> | <p>Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS; 40 CFR pt. 50; 40 CFR pt. 51; 40 CFR pt. 52, subp. Y; 40 CFR Section 52.1220; MN SIP</p> |
| <p>ACTIVITIES REQUIRING A MODIFICATION TO THE SIP: Activities requiring a modification of the SIP prior to the Permittee commencing the activity include, but are not limited to, the following: 1. Any decrease in the design stack gas volumetric flow rate below that contained in Appendix B; 2. Any decrease in the design stack gas exit temperature below that contained in Appendix B 3. Any reduction in stack height below that contained in Appendix B; 4. Any increase in stack exit diameter above that contained in Appendix B; 5. Any construction or modification of structures that increases the effective structural dimensions as they are used in the building wake effects algorithm in the ISC Air Dispersion Model, or its successor.</p> | <p>Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS; 40 CFR pt. 50; 40 CFR pt. 51; 40 CFR pt. 52, subp. Y; 40 CFR Section 52.1220; MN SIP</p> |
| <p>General Operating and Maintenance Requirements for the SIP: The Permittee shall operate and maintain the process equipment described in Appendix B according to the parameters set forth in Appendix B. The parameters were used in the computer modeling performed to demonstrate that Twin Cities maintenance area will attain compliance with the SO2 NAAQS</p> | <p>Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS; 40 CFR pt. 50; 40 CFR pt. 51; 40 CFR pt. 52, subp. Y; 40 CFR Section 52.1220; MN SIP</p> |
| <p>Notification of Process or Control Equipment Shutdown or Breakdown: In an event of a shutdown or breakdown of process or control equipment, the Permittee shall follow the shutdown and breakdown procedures found in Minn. R. 7019.1000.</p> | <p>Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS; 40 CFR pt. 50; 40 CFR pt. 51; 40 CFR pt. 52, subp. Y; 40 CFR Section 52.1220; MN SIP</p> |
| <p>Permanent Records for SIP: The Permittee shall permanently maintain the following information together with all amendments, revisions, and modifications to this information: 1. The Permittee shall maintain a file or files of the information on the design, construction and operation of each emission facility, emission source, stack, structures pertinent to modeling for downwash, and any other information required to conduct SO2 ambient air quality modeling of emissions from the facility. 2. The Permittee shall maintain a file at the facility which includes all SO2 emission compliance demonstration plans which upon approval by the MPCA or EPA become integral and enforceable parts of the SIP.</p> | <p>Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS; 40 CFR pt. 50; 40 CFR pt. 51; 40 CFR pt. 52, subp. Y; 40 CFR Section 52.1220; MN SIP</p> |
| <p>Construction and Operation of SIP Emission Units: The Permittee may begin actual construction of new emission units or modification to existing emission units upon permit issuance. However, the Permittee shall not operate any new emission unit or modified emission unit until the required SIP amendment is approved by EPA.</p> | <p>Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS; 40 CFR pt. 50; 40 CFR pt. 51; 40 CFR pt. 52, subp. Y; 40 CFR Section 52.1220; MN SIP</p> |
| <p>Notification of Activities Changes: The Permittee may undertake certain changes to the facility without obtaining a modification to the SIP. However, if the Permittee does make a change, and if the change in any way affects maximum allowable SO2 emissions (reduces the amount or changes the concentration, size, character, velocity, direction, or location of SO2 emissions), the Permittee shall notify the Commissioner in writing at least 30 days prior to undertaking the change. The notification shall describe the change and why it does not require a modification of the SIP.</p> | <p>Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS; 40 CFR pt. 50; 40 CFR pt. 51; 40 CFR pt. 52, subp. Y; 40 CFR Section 52.1220; MN SIP</p> |

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Federal Cartridge Co - Anoka

Permit Number: 00300156 - 003

| | |
|--|---|
| <p>State Implementation Plan Recordkeeping: Retain all records at the stationary source for a period of six (6) years from the date of the required monitoring, sample, measurement, or report that corresponds with a "Title I Condition: State Implementation Plan (SIP) for SO2".</p> | <p>Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS; 40 CFR pt. 50; 40 CFR pt. 51; 40 CFR pt. 52, subp. Y; 40 CFR Section 52.1220; MN SIP</p> |
| <p>Annual Report for the SIP: due 30 days after end of each calendar year following Effective Date of Permit to the Commissioner. The report shall contain the following information: a record of data used in calculating and calculations of the annual SO2 emissions, a record of each startup, shutdown, and breakdown of process and a summary record of excess SO2 emissions, and sulfur content exceedances (or the Permittee shall state if no exceedances, and noncompliance conditions occurred in the calendar year).</p> | <p>Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS; 40 CFR pt. 50; 40 CFR pt. 51; 40 CFR pt. 52, subp. Y; 40 CFR Section 52.1220; MN SIP</p> |
| <p>B. FACILITY WIDE LIMITS REQUIREMENTS</p> | <p>hdr</p> |
| | |
| | |
| | |
| | |
| | |
| <p>C. OPERATIONAL REQUIREMENTS</p> | <p>hdr</p> |
| | |
| | |
| | |

TABLE A: LIMITS AND OTHER REQUIREMENTS

A-17

12/28/07

Facility Name: Federal Cartridge Co - Anoka

Permit Number: 00300156 - 003

Subject Item: EU 031 Emergency Diesel Generator**Associated Items:** SV 027 Emergency Diesel Generator

| What to do | Why to do it |
|---|---|
| A. POLLUTANT LIMITS | hdr |
| Sulfur Dioxide: less than or equal to 0.5 lbs/million Btu heat input using 3-hour Rolling Average. The PTE for the unit is 0.29 lb/mmBtu heat input at maximum capacity. Compliance with the fuel restriction requirements constitutes compliance with this limit. | Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50; 40 CFR pt. 52, subp. Y; MN SIP; Minn. R. 7011.2300, subp. 2 |
| | |
| B. OTHER LIMITS AND REQUIREMENTS | hdr |
| Fuel Type: The Permittee shall burn only No. 2 diesel fuel in the diesel generator. | Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50; 40 CFR pt. 52, subp. Y; MN SIP |
| Sulfur Content of Fuel: less than or equal to 0.5 percent by weight of diesel fuel. | Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50; 40 CFR pt. 52, subp. Y; MN SIP |
| Diesel Fuel Certification: The Permittee shall retain written documentation of each shipment of diesel fuel oil received for the diesel generator on site. The written documentation shall include the following information: the sulfur content of the diesel fuel, certifying that the sulfur content did not exceed 0.5 percent by weight and the method used to determine the sulfur content. | Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50; 40 CFR pt. 52, subp. Y; MN SIP |
| C. RECORDKEEPING REQUIREMENT | hdr |
| Recordkeeping: The Permittee shall record and maintain the fuel type for the generator by the 15th day of each month. | Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50; 40 CFR pt. 52, subp. Y; MN SIP; Minn. R. 7007.0800, subps. 4 and 5 |

TABLE A: LIMITS AND OTHER REQUIREMENTS

A-18

12/28/07

Facility Name: Federal Cartridge Co - Anoka

Permit Number: 00300156 - 003

Subject Item: EU 032 Steam Boiler**Associated Items:** SV 028 Steam Boiler

| What to do | Why to do it |
|---|---|
| A. POLLUTANT LIMITS | hdr |
| Sulfur Dioxide: less than or equal to 2.0 lbs/million Btu heat input using 3-hour Rolling Average . The PTE for this boiler is 0.00063 lb/mmBtu heat input at maximum capacity. Compliance with the fuel restriction requirements constitutes compliance with this limit. | Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50; 40 CFR CFR pt. 52, subp. Y; MN SIP; Minn. R. 7011.0510, subp. 1 |
| | |
| B. OTHER LIMITS AND REQUIREMENT | hdr |
| Fuel Type: The Permittee shall burn natural gas or propane fuel only. | Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50; 40 CFR CFR pt. 52, subp. Y; MN SIP; Minn. R. 7007.0800, subp. 2 |
| C. RECORDKEEPING REQUIREMENT | hdr |
| Recordkeeping: The Permittee shall record and maintain the fuel type for the boiler by the 15th day of each month. | Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50; 40 CFR CFR pt. 52, subp. Y; MN SIP; Minn. R. 7007.0800, subps. 4 and 5 |

TABLE A: LIMITS AND OTHER REQUIREMENTS

A-19

12/28/07

Facility Name: Federal Cartridge Co - Anoka

Permit Number: 00300156 - 003

Subject Item: EU 033 Steam Boiler**Associated Items:** SV 029 Steam Boiler

| What to do | Why to do it |
|---|--|
| A. POLLUTANT LIMITS | hdr |
| Sulfur Dioxide: less than or equal to 2.0 lbs/million Btu heat input using 3-hour Rolling Average . The PTE this boiler is 0.00063 lb/mmBtu heat input at maximum capacity. Compliance with the fuel restriction requirements constitutes compliance with this limit. | Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50; 40 CFR pt. 52, subp. Y; MN SIP; Minn. R. 7011.0510, subp. 1 |
| | |
| B. OTHER LIMITS AND REQUIREMENT | hdr |
| Fuel Type: The Permittee shall burn natural gas or propane fuel only. | Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50; 40 CFR pt. 52, subp. Y; MN SIP; Minn. R. 7007.0800, subp. 2 |
| C. RECORDKEEPING REQUIREMENT | hdr |
| Recordkeeping: The Permittee shall record and maintain the fuel type for the boiler by the 15th day of each month. | Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50; 40 CFR pt. 52, subp. Y; MN SIP; Minn. R. 7007.0800, subp. 4 and 4 |

TABLE A: LIMITS AND OTHER REQUIREMENTS

A-23

12/28/07

Facility Name: Federal Cartridge Co - Anoka

Permit Number: 00300156 - 003

Subject Item: EU 058 Emergency Diesel Fire Pump**Associated Items:** SV 045 Emergency Diesel Fire Pump

| What to do | Why to do it |
|---|--|
| A. POLLUTANT LIMITS | hdr |
| Sulfur Dioxide: less than or equal to 0.5 lbs/million Btu heat input using 3-hour Rolling Average . The PTE for the unit is 0.29 lb/mmBtu heat input at maximum capacity. Compliance with the fuel restriction requirements constitutes compliance with this limit. | Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50; 40 CFR pt. 52, subp. Y; MN SIP; Minn. R. 7011.2300, subp. 2 |
| | |
| B. OTHER LIMITS AND REQUIREMENTS | hdr |
| Fuel Type: The Permittee shall burn only No. 2 diesel fuel in the diesel generator. | Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50; 40 CFR pt. 52, subp. Y; MN SIP |
| Sulfur Content of Fuel: less than or equal to 0.5 percent by weight of diesel fuel. | Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50; 40 CFR pt. 52, subp. Y; MN SIP |
| Diesel Fuel Certification: The Permittee shall retain written documentation of each shipment of diesel fuel oil received for the diesel generator on site. The written documentation shall include the following information: the sulfur content of the diesel fuel, certifying that the sulfur content did not exceed 0.5 percent by weight and the method used to determine the sulfur content. | Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50; 40 CFR pt. 52, subp. Y; MN SIP |
| C. RECORDKEEPING REQUIREMENT | hdr |
| Recordkeeping: The Permittee shall record and maintain the fuel type for the generator by the 15th day of each month. | Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50; 40 CFR pt. 52, subp. Y; MN SIP |

Appendix B: Title I Condition: State Implementation Plan (SIP) for SO₂ NAAQS

Facility Name: Federal Cartridge Co - Anoka
 Permit Number: 00300156-003

Sulfur Dioxide (SO₂) Stack Parameters Relied Upon in Modeling to Demonstrate Compliance with National Ambient Air Quality Standards (NAAQS) for SO₂

| Source Name | Emission Unit Number EU ID | Stack/Vent SV ID | Stack Height (feet) | Stack Dia. (feet) | Flow Rate (acfm) | Exit Temp (F) | Modeled and Maximum Heat Input (MM Btu/hr) | Control Monitoring Equipment | Allowable Fuels |
|----------------------------|-------------------------------|------------------|---------------------|-------------------|------------------|---------------|--|------------------------------|-------------------------|
| Emergency Diesel Generator | 031 | 027 | 8 | 0.4 | | | 1.2 (155 KW) | None | No. 2 Diesel Oil |
| Steam Boiler | 032 | 028 | 54 | 3.5 | 24,943 | 500 | 28.27 | None | Natural Gas and Propane |
| Steam Boiler | 033 | 029 | 54 | 3.5 | 23,100 | 500 | 26.45 | None | Natural Gas and Propane |
| Emergency Diesel Generator | 058 | 045 | 12 | 0.4 | | | 1.4 (255 KW) | None | No. 2 Diesel Oil |