

Roger Holzmeyer  
Bridon American Corporation – Fabricated Products Division  
P.O.Box 67, Route 3  
Oakland City, Indiana 47660

Dear Roger Holzmeyer:

Re: Exempt Operation Status,  
051-13720-00036

The application from Bridon American Corporation – Fabricated Products Division, received on December 28, 2000, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following steel manufacturing and fitting plant operation, located at Route 3, Oakland City, Indiana 47660, is classified as exempt from air pollution permit requirements:

- (a) One (1) ultrasonic trichloroethylene (reclaimed Detrex Perm-Chlor) open top degreaser, identified as 01, with a daily solvent consumption of 0.824 gallons;
- (b) One (1) ultrasonic trichloroethylene (reclaimed Detrex Perm-Chlor) multiple open top degreaser, identified as 02-A and 02-B, with a daily solvent consumption of 1.64 gallons;
- (c) One (1) spray paint (12 oz. Spray cans) operation for painting wooden reel refurbishing process;
- (d) One (1) rolled and brushed surface coating application process where the reconditioned wooden cable reels are painted;
- (e) One (1) bonding agent (Feather-rite tack free) application process where the bonding agent is used to fill holes in the wooden reel refurbishing process;
- (f) One (1) cadmium coating process where Rapid Cadmium Coatalyte is used to coat 1.49 small rope fittings per hour;
- (g) Two (2) metal inert gas (MIG) welders with a maximum capacity of 0.1 pounds per hour of wire;
- (h) One (1) lubricant (Tenac M) application process;
- (i) Two (2) zinc socketing stations where each melting station includes one crucible for melting zinc;
- (j) Six (6) natural gas fired burners with a combined maximum heat input rate of 0.33 million British thermal units per hour used to fire the two zinc socketing stations; and
- (k) One (1) Rust Veto dip tank where the final rope product is dipped in a solution of Rust Veto coating and mineral spirits.

The following conditions shall be applicable:

- (1) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:
  - (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
  - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

(2) Pursuant to 326 IAC 20-6-1 and 40 CFR Part 63 Subpart T, the following shall be applicable to the ultrasonic trichloroethylene (reclaimed Detrex Perm-a-Chlor) open top degreaser and the ultrasonic trichloroethylene (reclaimed Detrex Perm-a-Chlor) multiple open top degreaser:

(1) Each owner or operator of a cleaning machine which has a solvent/air interface, as defined in § 63.461 shall:

- (i) Maintain a log of solvent additions and deletions for each solvent cleaning machine, and
- (ii) Ensure that the emissions from each solvent cleaning machine are equal or less than a 3 month rolling average monthly emission limit of 150 kilograms per square meter per month.

(2) Test Methods:

- (i) Each owner or operator of a batch vapor cleaning machine complying with § 63.464 shall on the first operating day of every month ensure that the solvent cleaning machine system contains only clean liquid solvent. This includes, but is not limited to, fresh unused solvent, recycled solvent and used solvent that has been cleaned of soils. A fill line must be indicated during the first month the measurements are made. The solvent level within the machine must be returned to the same fill line each month, immediately prior to calculating monthly emission as specified in § 63.465 (c). The solvent cleaning machine does not have to be emptied and filled with fresh unused solvent prior to the calculations.
- (ii) Each owner or operator of a batch vapor cleaning machine complying with § 63.464 shall on the first operating day of the month comply with the requirements specified in paragraphs (c)(1) through (c)(3) of this section. *(copy enclosed)*

(3) Recordkeeping Requirements:

Each owner or operator of a batch vapor cleaning machine complying with the provisions of § 63.464 shall maintain the following records:

- (i) The dates and amounts of solvents that are added to the solvent cleaning machine.
- (ii) The solvent composition of wastes removed from cleaning machines as determined using the procedure described in § 63.465 (c) (2).
- (iii) Calculation sheets showing how monthly emissions and the rolling 3-month average emissions from the solvent cleaning machine were determined, and the results of all calculations.

(4) Reporting Requirements:

Each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the provisions of § 63.464 shall submit a solvent emission report each year. This solvent emission report shall contain the following information:

- (i) The size and type of each unit subject to this subpart (solvent / air interface area or cleaning capacity).
- (ii) The average monthly solvent consumption for the solvent cleaning machine in kilograms per month.
- (iii) The 3-month monthly rolling average solvent emission estimates calculated each month using the method as described in § 63.465 (c).

- (3) The surface coating operations at this source are not subject to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), because the actual emissions of volatile organic compounds before controls are less than 15 pounds per day. Daily records for the volatile organic compound material being used and the solvent content of each shall be kept for a minimum period of thirty-six (36) months and shall be made available upon request of the Office of Air Quality. Any change or modification which result in actual emissions above this threshold will require a review under this rule.
- (4) Pursuant to 326 IAC 8-3-3 (Organic solvent degreasing operations: open top vapor degreaser operation), the owner or operator of an open top vapor degreaser shall:
- (1) equip the vapor degreaser with a cover that can be opened and closed easily without disturbing the vapor zone;
  - (2) keep the cover closed at all times except when processing work loads through the degreaser;
  - (3) minimize solvent carryout by:
    - (A) racking parts to allow complete drainage;
    - (B) moving parts in and out of the degreaser at less than 3.3 meters per minute (eleven (11) feet per minute);
    - (C) degreasing the workload in the vapor zone at least thirty (30) seconds or until condensation ceases;
    - (D) tipping out any pools of solvent on the cleaned parts before removal; and
    - (E) allowing parts to dry within the degreaser for at least fifteen (15) seconds or until visually dry;
  - (4) not degrease porous or absorbent materials, such as cloth, leather, wood or rope;
  - (5) not occupy more than half of the degreaser's open top area with the workload;
  - (6) not load the degreaser such that the vapor level drops more than fifty percent (50%) of the vapor depth when the workload is removed;
  - (7) never spray above the vapor level;
  - (8) repair solvent leaks immediately, or shut down the degreaser;
  - (9) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, such that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere;
  - (10) not use workplace fans near the degreaser opening;
  - (11) not allow visually detectable water in the solvent exiting the water separator; and
  - (12) provide a permanent, conspicuous label summarizing the operating requirements.

This exemption is the second air approval issued to this source.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

GS

cc: File – Gibson County  
Gibson County Health Department  
Air Compliance – Gene Kelso  
Southwestern Regional Office  
Permit Tracking - Janet Mobley  
Technical Support and Modeling - Michele Boner  
Compliance Data Section - Karen Nowak

## Indiana Department of Environmental Management Office of Air Quality

### Technical Support Document (TSD) for an Exemption

#### Source Background and Description

**Source Name:** Bridon American Corporation – Fabricated Products Division  
**Source Location:** Route 3, Oakland City, Indiana 47660  
**County:** Gibson  
**SIC Code:** 3496, 3399  
**Operation Permit No.:** 051-13720-00036  
**Permit Reviewer:** Gurinder Saini

The Office of Air Quality (OAQ) has reviewed an application from Bridon American Corporation – Fabricated Products Division relating to the construction and operation of steel manufacturing and fitting plant.

#### Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) ultrasonic trichloroethylene (reclaimed Detrex Perm-Chlor) open top degreaser, identified as 01, with a daily solvent consumption of 0.824 gallons;
- (b) One (1) ultrasonic trichloroethylene (reclaimed Detrex Perm-Chlor) multiple open top degreaser, identified as 02-A and 02-B, with a daily solvent consumption of 1.64 gallons;
- (c) One (1) spray paint (12 oz. Spray cans) operation for painting wooden reel refurbishing process;
- (d) One (1) rolled and brushed surface coating application process where the reconditioned wooden cable reels are painted;
- (e) One (1) bonding agent (Feather-rite tack free) application process where the bonding agent is used to fill holes in the wooden reel refurbishing process;
- (f) One (1) cadmium coating process where Rapid Cadmium Coatolyte is used to coat 1.49 small rope fittings per hour;
- (g) Two (2) metal inert gas (MIG) welders with a maximum capacity of 0.1 pounds per hour of wire;
- (h) One (1) lubricant (Tenac M) application process;
- (i) Two (2) zinc socketing stations where each melting station includes one crucible for melting zinc;
- (j) Six (6) natural gas fired burners with a combined maximum heat input rate of 0.33 million British thermal units per hour used to fire the two zinc socketing stations; and
- (k) One (1) Rust Veto dip tank where the final rope product is dipped in a solution of Rust Veto coating and mineral spirits.

## Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

## Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) Registration 051-7961-00036, issued on February 9, 1998

The TSD for this Registration states, "Allowable emissions (as defined in the Indiana Rule) of VOC are less than 25 tons per year, but greater than 15 pounds per day. Therefore, pursuant to 326 IAC 2-1, a registration is required". The OAQ is no longer basing permit level on allowable emissions. Therefore, an exemption letter will be issued to this source.

## Enforcement Issue

There are no enforcement actions pending.

## Recommendation

The staff recommends to the Commissioner that this operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on December 28, 2000.

## Emission Calculations

See Appendix A page 1 and 2 of this document for detailed emissions calculations.

1. Degreaser ID: 1  
Solvent used: Trichloroethylene  
Solvent Consumption: 0.824 gallons per day  
Solvent Density: 12.212 pounds per gallon  
Emission Factor: 2000 pounds per ton  
From AP-42, Table 4.6-2

Potential VOC emissions =  
 $0.824 \text{ gal/day} * 12.212 \text{ lb/gal} * 1 \text{ ton} / 2000 \text{ pounds} * 365 \text{ days} / \text{year} = 1.84 \text{ tons} / \text{year}$

2. Degreaser ID: 02-A and 02-B  
Solvent used: Trichloroethylene  
Solvent Consumption: 1.64 gallons per day  
Solvent Density: 12.212 pounds per gallon  
Emission Factor: 2000 pounds per ton  
From AP-42, Table 4.6-2

Potential VOC emissions =  
 $1.64 \text{ gal/day} * 12.212 \text{ lb/gal} * 1 \text{ ton} / 2000 \text{ pounds} * 365 \text{ days} / \text{year} = 3.66 \text{ tons} / \text{year}$

Total PTE of VOC from degreasing operation = 5.5 tons / year

**Potential To Emit of Source Before Controls**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.

Pollutant	Potential To Emit (tons/year)
PM	-
PM-10	-
SO <sub>2</sub>	-
VOC	5.5
CO	0.1
NO <sub>x</sub>	0.1

HAP-s	Potential To Emit (tons/year)
Single HAP	<b>less than 10</b>
Combination of HAPs	Less than 25

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of pollutants are less than the levels listed in 326 IAC 2-1.1-3(d)(1). Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3.
- (c) Fugitive Emissions  
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

**County Attainment Status**

The source is located in Gibson County.

Pollutant	Status (attainment, maintenance attainment, or unclassifiable; severe, moderate, or marginal nonattainment)
PM-10	Attainment
SO <sub>2</sub>	Attainment
NO <sub>2</sub>	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule

applicability relating to the ozone standards. Gibson County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

- (b) Gibson County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

### Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	-
PM10	-
SO <sub>2</sub>	-
VOC	5.5
CO	0.1
NO <sub>x</sub>	0.1

- (a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.

### Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This status is based on all the air approvals issued to the source.

### Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) The ultrasonic trichloroethylene (reclaimed Detrex Perm-a-Chlor) open top degreaser and the ultrasonic trichloroethylene (reclaimed Detrex Perm-a-Chlor) multiple open top degreaser at this source are subject to the National Emission Standards for Hazardous Air Pollutants, 326 IAC 14, (40 CFR 63 Subpart T). This is because these degreasers use a solvent containing 1,1,1 – trichloroethane (>85% by weight) with a total concentration greater than 5% by weight. Therefore, pursuant to 40 CFR § 63.464 (alternative standards) following shall be applicable.

- (1) Each owner or operator of a cleaning machine which has a solvent/air interface, as defined in § 63.461 shall:
    - (i) Maintain a log of solvent additions and deletions for each solvent cleaning machine, and
    - (ii) Ensure that the emissions from each solvent cleaning machine are equal or less than a 3 month rolling average monthly emission limit of 150 kilograms per square meter per month.
  
  - (2) Test Methods:
    - (i) Each owner or operator of a batch vapor cleaning machine complying with § 63.464 shall on the first operating day of every month ensure that the solvent cleaning machine system contains only clean liquid solvent. This includes, but is not limited to, fresh unused solvent, recycled solvent and used solvent that has been cleaned of soils. A fill line must be indicated during the first month the measurements are made. The solvent level within the machine must be returned to the same fill line each month, immediately prior to calculating monthly emission as specified in § 63.465 (c). The solvent cleaning machine does not have to be emptied and filled with fresh unused solvent prior to the calculations.
    - (ii) Each owner or operator of a batch vapor cleaning machine complying with § 63.464 shall on the first operating day of the month comply with the requirements specified in paragraphs (c)(1) through (c)(3) of this section. *(copy enclosed)*
  
  - (3) Recordkeeping Requirements:

Each owner or operator of a batch vapor cleaning machine complying with the provisions of § 63.464 shall maintain the following records:

    - (i) The dates and amounts of solvents that are added to the solvent cleaning machine.
    - (ii) The solvent composition of wastes removed from cleaning machines as determined using the procedure described in § 63.465 (c) (2).
    - (iii) Calculation sheets showing how monthly emissions and the rolling 3-month average emissions from the solvent cleaning machine were determined, and the results of all calculations.
  
  - (4) Reporting Requirements:

Each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the provisions of § 63.464 shall submit a solvent emission report each year. This solvent emission report shall contain the following information:

    - (i) The size and type of each unit subject to this subpart (solvent / air interface area or cleaning capacity).
    - (ii) The average monthly solvent consumption for the solvent cleaning machine in kilograms per month.
    - (iii) The 3-month monthly rolling average solvent emission estimates calculated each month using the method as described in § 63.465 (c).
- (b) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.



### **State Rule Applicability - Entire Source**

#### 326 IAC 2-6 (Emission Reporting)

This source is located in Gibson County and the potential to emit of any criteria pollutant is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

#### 326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

### **State Rule Applicability - Individual Facilities**

#### 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of degreasers will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply. Any change or modification which will increase potential to emit of single HAP or combination of HAPs above these threshold will require prior approval of maximum available control technology.

#### 326 IAC 8-2-9 (Miscellaneous Metal Coating)

The surface coating operations at this source are not subject to this rule because the actual emissions of volatile organic compounds before controls are less than 15 pounds per day. Daily records for the volatile organic compound material being used and the solvent content of each shall be kept for a minimum period of thirty-six (36) months and shall be made available upon request of the Office of Air Quality. Any change or modification which result in actual emissions above this threshold will require a review under this rule.

#### 326 IAC 8-3-3 (Organic solvent degreasing operations: open top vapor degreaser operation)

This rule applies to ultrasonic trichloroethylene (reclaimed Detrex Perm-Chlor) open top degreaser identified as 01 and ultrasonic trichloroethylene (reclaimed Detrex Perm-Chlor) multiple open top degreaser, identified as 02-A and 02-B. Pursuant to 326 IAC 8-3-3 (Organic solvent degreasing operations: open top vapor degreaser operation), the owner or operator of an open top vapor degreaser shall:

- (1) equip the vapor degreaser with a cover that can be opened and closed easily without disturbing the vapor zone;
- (2) keep the cover closed at all times except when processing work loads through the degreaser;
- (3) minimize solvent carryout by:
  - (A) racking parts to allow complete drainage;
  - (B) moving parts in and out of the degreaser at less than 3.3 meters per minute (eleven (11) feet per minute);
  - (C) degreasing the workload in the vapor zone at least thirty (30) seconds or until condensation ceases;
  - (D) tipping out any pools of solvent on the cleaned parts before removal; and
  - (E) allowing parts to dry within the degreaser for at least fifteen (15) seconds or until visually dry;
- (4) not degrease porous or absorbent materials, such as cloth, leather, wood or rope;
- (5) not occupy more than half of the degreaser's open top area with the workload;

- (6) not load the degreaser such that the vapor level drops more than fifty percent (50%) of the vapor depth when the workload is removed;
- (7) never spray above the vapor level;
- (8) repair solvent leaks immediately, or shut down the degreaser;
- (9) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, such that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere;
- (10) not use workplace fans near the degreaser opening;
- (11) not allow visually detectable water in the solvent exiting the water separator; and
- (12) provide a permanent, conspicuous label summarizing the operating requirements.

326 IAC 8-3-6 (Organic solvent degreasing operations: open top vapor degreaser operation and control requirements)

The open top degreasing operations are not subject to 326 IAC 8-3-6 (Organic solvent degreasing operations: open top vapor degreaser operation and control requirements) because the degreaser were constructed in 1980 and 1986. This rule applies to facilities that were constructed after July 1, 1990.

**Conclusion**

The operation of this steel manufacturing and fitting plant shall be subject to the conditions of the attached proposed exemption 051-13720-00036.

**Appendix A: Emission Calculations  
HAP Emission Calculations**

**Company Name: Bridon American Corporation - Fabricated Products Division**  
**Address City IN Zip: Oakland City, Indiana**  
**CP#: 051-13720**  
**Pit ID: 051-00036**  
**Permit Reviewer: GS**  
**Date: 01/17/2001**

Material	Density (Lb/Gal)	Daily Solvent used (Gal)	Weight % Methylene Chloride	Weight % Trichloroethylene	Weight % 1,1,1-Trichloroethane	Weight % Tetrachloroethylene	Weight % 1,1,1 Trichloro 1,2,2 Trifluoroethane	Weight % Propylene Oxide	Methylene Chloride (ton/yr)	Trichloroethylene (ton/yr)	1,1,1-Trichloroethane (ton/yr)	Tetrachloroethylene (ton/yr)	1,1,1 Trichloro 1,2,2 Trifluoroethane (ton/yr)	Propylene Oxide (ton/yr)
Trichloroethylene - degreaser 1	12.212	0.824	3.00%	85.00%	3.00%	3.00%	1.00%	2.00%	0.06	1.56	0.06	0.06	0.02	0.04
Trichloroethylene - degreaser 2A and 2B	12.212	1.64	3.00%	85.00%	3.00%	3.00%	1.00%	2.00%	0.11	3.11	0.11	0.11	0.04	0.07

Total State Potential Emissions

**0.16      4.67      0.16      0.16      0.05      0.11**

**METHODOLOGY**

HAPS emission rate (tons/yr) = Density (lb/gal) \* Gal of Material (gal/day) \* Weight % HAP \* 365 days/yr \* 1 ton/2000 lbs

**Appendix A: Emissions Calculations**

**Natural Gas Combustion Only**

**MM BTU/HR <100**

**Small Industrial Boiler**

**Company Name: Bridon American Corporation - Fabricated Products Division**

**Address City IN Zip: Oakland City, Indiana**

**CP: 051-13720**

**Pit ID: 051-00036**

**Reviewer: GS**

**Date: 01/17/2001**

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

0.3

2.9

Pollutant

	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.0	0.0	0.0	0.1	0.0	0.1

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).