

**CONSTRUCTION PERMIT  
OFFICE OF AIR MANAGEMENT**

**Lippert Components, Inc.  
1202 Fuller Drive  
Garrett, Indiana 46738**

is hereby authorized to construct

- (a) one (1) paint booth, equipped with one (1) air assisted airless gun, with a maximum steel usage of 3125 pounds per hour or 250 linear feet per hour, overspray controlled by dry filters and exhausted to a stack designated as S1,
- (b) two (2) MIG welders,
- (c) sixteen (16) stick welders,
- (d) four (4) natural gas fired radiant heaters, identified as H1 through H4, with a heat input capacity of 0.15 million BTU per hour each, and
- (e) one (1) natural gas fired air make-up unit, identified as H5, with a heat input capacity of 1.0 million BTU per hour.

This permit is issued to the above mentioned company (herein known as the Permittee) under the provisions of 326 IAC 2-1 and 40 CFR 52.780, with conditions listed on the attached pages.

Construction Permit No.: CP-033-10466-00071	
Issued by:  Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

## Construction Conditions

### General Construction Conditions

1. That the data and information supplied with the application shall be considered part of this permit. Prior to any proposed change in construction which may affect allowable emissions, the change must be approved by the Office of Air Management (OAM).
2. That this permit to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

### Effective Date of the Permit

3. That pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.
4. That pursuant to 326 IAC 2-1-9(b)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. That notwithstanding Construction Condition No. 6, all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

### First Time Operation Permit

6. That this document shall also become a first-time operation permit pursuant to 326 IAC 2-1-4 (Operating Permits) when, prior to start of operation, the following requirements are met:
  - (a) The attached affidavit of construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section, verifying that the facilities were constructed as proposed in the application. The facilities covered in the Construction Permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
  - (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
  - (c) Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.
  - (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1-7.1(Fees).

- (e) Pursuant to 326 IAC 2-1-4, the Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date established in the validation letter. The operation permit issued shall contain as a minimum the conditions in the Operation Conditions section of this permit.
7. That when the facility is constructed and placed into operation the following operation conditions shall be met:

### **Operation Conditions**

#### General Operation Conditions

1. That the data and information supplied in the application shall be considered part of this permit. Prior to any change in the operation which may result in an increase in allowable emissions exceeding those specified in 326 IAC 2-1-1 (Construction and Operating Permit Requirements), the change must be approved by the Office of Air Management (OAM).
2. That the permittee shall comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder.

#### Preventive Maintenance Plan

3. That pursuant to 326 IAC 1-6-3 (Preventive Maintenance Plans), the Permittee shall prepare and maintain a preventive maintenance plan, including the following information:
- (a) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices.
- (b) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions.
- (c) Identification of the replacement parts which will be maintained in inventory for quick replacement.

The preventive maintenance plan shall be submitted to IDEM, OAM upon request and shall be subject to review and approval.

#### Transfer of Permit

4. That pursuant to 326 IAC 2-1-6 (Transfer of Permits):
- (a) In the event that ownership of this operation or process is changed, the Permittee shall notify OAM, Permit Branch, within thirty (30) days of the change. Notification shall include the date or proposed date of said change.
- (b) The written notification shall be sufficient to transfer the permit from the current owner to the new owner.
- (c) The OAM shall reserve the right to issue a new permit.

Permit Revocation

5. That pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:
- (a) Violation of any conditions of this permit.
  - (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
  - (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
  - (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
  - (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of 326 IAC 2-1 (Permit Review Rules).

Availability of Permit

6. That pursuant to 326 IAC 2-1-3(l), the Permittee shall maintain the applicable permit on the premises of this source and shall make this permit available for inspection by the IDEM or other public official having jurisdiction.

Malfunction Condition

7. That pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):
- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) or appointed representative upon request.
  - (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAM, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
  - (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
  - (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

Opacity Limitations

8. That pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), the opacity shall meet the following, unless otherwise stated in this permit:
- (a) Opacity shall not exceed an average of 40% opacity in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
  - (b) Opacity shall not exceed 60% for more than a cumulative total of 15 minutes (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 6-hour period.
9. That pursuant to 326 IAC 6-3 (Process Operations):
- (a) The dry filters for particulate matter overspray control shall be in operation at all times when the paint booth is in operation.
  - (b) The paint booth shall comply with 326 IAC 6-3-2(c) using the following equation:  
$$E = 4.10P^{0.67}$$
 where: E = rate of emission in pounds per hour,  
P = process weight in tons per hour, if  
P is equal to or less than 60,000 lbs/hr (30 tons/hr)  
  
or  
$$E = 55.0P^{0.11}$$
 where: E = rate of emission in pounds per hour,  
P = process weight in tons per hour, if  
P is greater than 60,000 lbs/hr (30 tons/hr).
  - (c) Daily inspections shall be performed to verify the placement, integrity and particulate loading of the filters.
  - (d) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.
10. That pursuant to 326 IAC 6-3 (Process Operations), the welding operations shall not exceed the allowable particulate matter (PM) emission rate of 5.72 pounds per hour.
- Volatile Organic Compound
11. That pursuant to 326 IAC 2-1-3(i)(8), records of surface coating quantities and organic solvent contents shall be maintained for a minimum period of 36 months and made available upon request of the Office of Air Management (OAM). Any change or modification which may increase potential emissions to 15 pounds per day from the equipment covered in this permit shall obtain approval from OAM before such change may occur.

**MALFUNCTION REPORT**

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
FAX NUMBER - 317 233-5967**

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6  
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE: IT HAS POTENTIAL TO EMIT 25 LBS/HR PARTICULATES ? \_\_\_\_\_, 100 LBS/HR VOC ? \_\_\_\_\_, 100 LBS/HR SULFUR DIOXIDE ? \_\_\_\_\_ OR 2000 LBS/HR OF ANY OTHER POLLUTANT ? \_\_\_\_\_ EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION \_\_\_\_\_.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC \_\_\_\_\_ OR, PERMIT CONDITION # \_\_\_\_\_ AND/OR PERMIT LIMIT OF \_\_\_\_\_

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ?    Y    N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ?    Y    N

COMPANY: \_\_\_\_\_ PHONE NO. (    ) \_\_\_\_\_

LOCATION: (CITY AND COUNTY) \_\_\_\_\_  
PERMIT NO. \_\_\_\_\_ AFS PLANT ID: \_\_\_\_\_ AFS POINT ID: \_\_\_\_\_ INSP: \_\_\_\_\_  
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: \_\_\_\_\_

DATE/TIME MALFUNCTION STARTED: \_\_\_\_/\_\_\_\_/19\_\_\_\_    \_\_\_\_\_ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: \_\_\_\_\_

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE \_\_\_\_/\_\_\_\_/19\_\_\_\_    \_\_\_\_\_ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER: \_\_\_\_\_

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: \_\_\_\_\_

MEASURES TAKEN TO MINIMIZE EMISSIONS: \_\_\_\_\_

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL\* SERVICES: \_\_\_\_\_  
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: \_\_\_\_\_  
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: \_\_\_\_\_  
INTERIM CONTROL MEASURES: (IF APPLICABLE) \_\_\_\_\_

MALFUNCTION REPORTED BY:

TITLE: \_\_\_\_\_  
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: \_\_\_\_\_ DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

**Please note - This form should only be used to report malfunctions  
applicable to Rule 326 IAC 1-6 and to qualify for  
the exemption under 326 IAC 1-6-4.**

**326 IAC 1-6-1                    Applicability of rule**

Sec. 1. The requirements of this rule (326 IAC 1-6) shall apply to the owner or operator of any facility which has the potential to emit twenty-five (25) pounds per hour of particulates, one hundred (100) pounds per hour of volatile organic compounds or SO<sub>2</sub>, or two thousand (2,000) pounds per hour of any other pollutant; or to the owner or operator of any facility with emission control equipment which suffers a malfunction that causes emissions in excess of the applicable limitation.

**326 IAC 1-2-39                    “Malfunction” definition**

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. (Air Pollution Control Board; 326 IAC 1-2-39; filed Mar 10, 1988, 1:20 p.m. : 11 IR 2373)

**\*Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

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**Indiana Department of Environmental Management (IDEM)  
Office of Air Management**

Technical Support Document (TSD) for New Construction and Operation

**Source Background and Description**

Source Name: Lippert Components, Inc.  
Source Location: 1202 Fuller Drive, Garrett, Indiana  
County: Dekalb  
Construction Permit No.: CP-033-10466-00071  
SIC Code: 3440  
Permit Reviewer: Donald R. Poole

The Office of Air Management (OAM) has reviewed an application from Lippert Components, Inc. relating to the construction and operation of the following:

- (a) one (1) paint booth, equipped with one (1) air assisted airless gun, with a maximum steel usage of 3125 pounds per hour, overspray controlled by dry filters and exhausted to a stack designated as S1.
- (b) two (2) MIG welders
- (c) sixteen (16) stick welders,
- (d) four (4) natural gas fired radiant heaters, identified as H1 through H4, with a heat input capacity of 0.15 million BTU per hour each, and
- (e) one (1) natural gas fired air make-up unit, identified as H5, with a heat input capacity of 1.0 million BTU per hour each.

The total heat input capacity for the proposed source is 1.6 million BTU per hour.

**Stack Summary**

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
S1	Paint Booth	19.5	3	10,000	70

There is no stack associated with the welding operation and natural gas fired radiant heaters and air make-up unit.

**Recommendation**

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

Information, unless otherwise stated, 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 11, 1998.

### Emissions Calculations

See Appendix A (Emissions Calculation Spreadsheets) for detailed calculations (3 pages).

### Total Potential and Allowable Emissions

Pollutant	Allowable	Emissions	Potential	Emissions
	(lb/day)	(ton/yr)	(lb/day)	(ton/yr)
PM	-	-	292.6	53.4
SO <sub>2</sub>	-	-	Negligible	Negligible
VOC	-	-	11.5	2.1
CO	-	-	3.3	0.6
NOx	-	-	3.8	0.7
Single HAP	-	-	Negligible	Negligible
Combination of HAPs	-	-	Negligible	Negligible

- (a) The potential emissions before controls are used for making the permitting determination. The potential emissions are greater than 25 tons per year. Therefore, pursuant to 326 IAC 2-1, Sections 1 and 3, a construction permit is required.

### County Attainment Status

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Dekalb County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Dekalb County has been classified as attainment or unclassifiable for all other regulated air 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

New Source PSD Definition (emissions after controls, based on 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions
	(Tons/yr)
PM	2.9
PM-10	2.9
SO2	neg.
VOC	2.1
CO	0.6
NOx	0.7

- (a) This new source is not a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2 and 40 CFR 52.21, the PSD requirements do not apply.

### Part 70 Permit Determination

#### 326 IAC 2-7 (Part 70 Permit Program)

This new 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 is the first air approval issued to this source.

### Federal Rule Applicability

There are no New Source Performance Standards (326 IAC 12 and 40 CFR Part 60) and no National Emission Standards for Hazardous Air Pollutants (326 IAC 14 and 20 and 40 CFR Part 61 and 63) applicable to this facility.

### State Rule Applicability

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

This source is not subject to 326 IAC 2-6 (Emission Reporting), because it is not in one of the listed source categories, and does not emit more than 100 tons per year of any regulated pollutants.

#### 326 IAC 5-1-2 (Opacity Limitations)

Opacity shall not exceed an average of 40% in any one 6 minute averaging period. Opacity shall not exceed 60% for more than a cumulative total of fifteen minutes.

326 IAC 6-3 (Process Operations):

- (a) The dry filters for the particulate matter overspray control shall be in operation at all times when the paint booth is in operation.
- (b) The painting operation shall comply with 326 IAC 6-3-2(c) using the following equation:

$$E = 4.10P^{0.67} \quad \text{where: } E = \text{rate of emission in pounds per hour,}$$

P = process weight in tons per hour, if  
P is equal to or less than 60,000 lbs/hr (30 tons/hr)

The welding operations shall be limited to 5.72 pounds of particulate matter per hour. The welding operations will meet this limit.

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

This source does not have the potential to emit fifteen (15) pounds or more of VOC per day. Therefore, this rule does not apply to this source.

326 IAC 8-1-6 (New Facilities; General Reduction Requirements)

This rule does not apply to the paint booth because the potential VOC emissions are less than 25 tons per year.

**Air Toxic Emissions**

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

- (a) This new source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Amendments to Clean Air Act.
- (b) See attached spreadsheets for detailed air toxic calculations.

**Conclusion**

The construction of this one (1) paint booth with one (1) air assisted airless gun, two (2) MIG welders, sixteen (16) stick welders, four (4) natural gas fired radiant heaters, and one (1) natural gas fired air make-up unit will be subject to the conditions of the attached proposed **Construction Permit No. CP-033-10466-00071**.

# Indiana Department of Environmental Management Office of Air Management

## Addendum to the Technical Support Document for New Construction and Operation

Source Name: Lippert Components, Inc.  
Source Location: 1202 Fuller Drive, Garrett, Indiana  
County: Dekalb  
Construction Permit No.: CP-033-10466-00071  
SIC Code: 3440  
Permit Reviewer: Donald R. Poole

On February 17, 1999, the Office of Air Management (OAM) had a notice published in the Auburn Evening Star in Auburn, Indiana, stating that Lippert Components, Inc. had applied for a construction permit to construct and operate one paint booth, two welders, sixteen stick welders, four heaters, and one make-up unit. The notice also stated that OAM proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On March 2, 1999, Lippert Components, Inc. submitted comments on the proposed construction permit. The summary of the comments and corresponding responses is as follows:

### Comment #1

Page 1 of 7 Item (a) lists the paint booth capacity as a maximum "steel usage of 3425 pounds per hour". Although this was the weight of steel identified on Form E, it does not represent a unit that is commonly tracked by Lippert Components. Form W-1 lists the capacity as 250 linear feet per hour. This capacity represents the total length of all units that can be produced during an hour and is a number that is more meaningful to Lippert Components. Please change the unit rate on Page 1 of 7 and the supporting Technical Support Document to reflect a maximum capacity of 250 linear feet per hour.

### Response #1

The description of the paint booth in the permit will be amended for this language.

**Appendix A: Emissions Calculations  
VOC and Particulate  
From Surface Coating Operations**

**Company Name:** Lippert Components, Inc.  
**Address City IN Zip:** 1202 Fuller Drive, Garrett, IN 46738  
**CP:** 033-10466  
**Pit ID:** 033-00071  
**Reviewer:** hrz  
**Date:** 12-22-98

Material	Density (Lb/Gal)	Weight % Volatile (H2O& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency
Reynco Coating 5447	8.6	62.00%	61.7%	0.3%	63.7%	36.30%	0.07400	250.000	0.07	0.03	0.48	11.46	2.09	52.96	0.07	80%
<b>State Potential Emissions</b>											<b>0.48</b>	<b>11.46</b>	<b>2.09</b>	<b>52.96</b>		
<b>Add worst case coating to all solvents</b>																

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)  
Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)  
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)  
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)  
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)  
Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \* (8760 hrs/yr) \* (1 ton/2000 lbs)  
Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)  
Total = Worst Coating + Sum of all solvents used

**Company Name:** Lippert Components, Inc.  
**Address City IN Zip:** 1202 Fuller Drive, Garrett, IN 46738  
**CP:** 033-10466  
**Plt ID:** 033-00071  
**Reviewer:** hrz  
**Date:** 12-22-98

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

1.6

14.0

Emission Factor in lb/MMCF	PM 7.6	SO2 0.6	NOx 100.0	VOC 5.5	CO 84.0
Potential Emission in tons/yr	0.1	0.0	0.7	0.0	0.6

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for NOx: uncontrolled = 100, Low Nox Burner = 50, Flue gas recirculation = 32

Emission Factors for CO: uncontrolled = 84, Low NOx Burner = 84, Flue gas recirculation = 84

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

Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-03-006-03

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