

033-48020-00043

AI ID: 14845



June 26, 2024

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53, IGCN 1003
Indianapolis, IN 46204-2251

Received by State of Indiana IDEM-OAQ
via email June 28, 2024 MJ-2

RE: *Title V Administrative Amendment Application*
Steel Dynamics, Inc. - Flat Roll Group - Butler Division
Source ID 033-00043

To Whom It May Concern:

Enclosed is an application for an Administrative Amendment of the Part 70 Operating Permit (Title V) for the Steel Dynamics, Inc. - Flat Roll Group - Butler Division (SDI) stationary steel mini-mill located at 4500 County Road 59, Butler, Indiana (Butler Facility).

If you have any questions concerning this application, please contact Ms. Emily Stewart of Trinity Consultants at (317) 451-8100.

Sincerely,

STEEL DYNAMICS, INC.

A handwritten signature in blue ink, appearing to read "Bill Bougher", is written over a light blue circular stamp.

Bill Bougher
Environmental Engineer
(260) 868-8191

ADMINISTRATIVE AMENDMENT APPLICATION



**Steel Dynamics, Inc. – Flat Roll Group, Butler Division /
Butler, Indiana**

Prepared By:

TRINITY CONSULTANTS
8900 Keystone Crossing
Suite 1070
Indianapolis, IN 46240
(317) 451-8100

June 2024

Project No. 241501.0003



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1. INTRODUCTION

Steel Dynamics, Inc. – Flat Roll Group, Butler Division (SDI) is a mini-mill facility in Butler, Indiana (Butler Facility). SDI currently operates the Butler Facility under a Part 70 (Title V) operating permit No. T033-41286-00043, issued by the Indiana Department of Environmental Management (IDEM) on January 3, 2022, and last modified on October 13, 2023 (TV AA No. 033-47031-00043). SDI is requesting an Administrative Amendment for the addition of a new natural gas-fired boiler at the existing pickling line at the Butler Facility. State forms are included in Appendix A and emission calculations are provided in Appendix B.

2. SOURCE DESCRIPTION

2.1 Source Location

The Butler Facility is located at 4500 County Road 59 in Butler, Indiana. The Butler Facility is located in DeKalb County, which has been designated as attainment or unclassifiable for all criteria pollutants.¹

The Butler Facility is an existing major source under the Prevention of Significant Deterioration (PSD) and an area source under Section 112 of the Clean Air Act.

2.2 Emission Unit Description

SDI is proposing to add a new natural gas-fired boiler at the existing pickling line operation at the Butler Facility. The potential uncontrolled emissions from the proposed boiler are below with the exemption thresholds per 326 IAC 2-1.1-3(e)(1). Therefore, SDI is requesting that IDEM incorporate the descriptive information for the boiler into the permit under Section A.3 as follows:

One (1) natural gas-fired boiler, identified as Boiler No. 1a, with a nominal rating of 500 horsepower, exhausting to Stack 15.

¹ 326 IAC 1-4-18

3. AIR EMISSIONS QUANTIFICATION

The proposed natural gas-fired boiler is expected to generate emissions of particulate matter (PM), PM with an aerodynamic diameter less than 10 microns (PM₁₀), PM with an aerodynamic diameter less than 2.5 microns (PM_{2.5}), sulfur dioxide (SO₂), nitrogen oxides (NO_x), volatile organic compounds (VOC), carbon monoxide (CO), and hazardous air pollutants (HAPs).

3.1 Potential To Emit Summary

The uncontrolled PTE from the proposed boiler at the Butler Facility is summarized in Table 3-1. Detailed emission calculations for the proposed unit are included in Appendix B.

Table 3-1. Butler Facility Uncontrolled PTE from Proposed Boiler

Emission Unit	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO	Total HAP	Highest Single HAP ²
Boiler No. 1a	0.17	0.67	0.67	0.05	1.86	0.48	2.83	7.72E-03	6.57E-03
Exemption Thresholds ¹	5	5	5	10	10	10	25	2.5	1
Source Modification Required?	No	No	No	No	No	No	No	No	No

¹326 IAC 2-1.1-3(e)(1)

²Highest Single HAP is Formaldehyde

4. REGULATORY APPLICABILITY

This section of the permit application summarizes the key air quality regulations that are potentially applicable to the new boiler at the Butler Facility.

4.1 Federal Regulatory Applicability

4.1.1 Attainment Status of DeKalb County

DeKalb County has been designated as attainment for all pollutants per 326 IAC 1-4-18. Since the county is designated attainment or unclassifiable for all other criteria pollutants, emissions increase from the project will be reviewed pursuant to the requirements for PSD under 326 IAC 2-2.

4.1.2 Prevention of Significant Deterioration (PSD)

The Butler Facility is an existing major stationary source under the Prevention of Significant Deterioration (PSD) program; therefore, the emissions increase from the proposed project is evaluated against the major PSD significant emission rates (SER) for all PSD-regulated pollutants. The addition of this boiler will not increase the production rate of the Pickling Line, which is based on steel production rates at the EAFs and customer demand for pickled steel.

As shown in Table 4-1, the emission increases due to the proposed project do not exceed the SER for any regulated NSR pollutant. Therefore, the project is not subject to PSD review.

Table 4-1. Project Emissions Increases

Emission Unit	PM	PM ₁₀	PM _{2.5}	SO ₂	NOx	VOC	CO
Boiler No. 1a	0.17	0.67	0.67	5.26E-02	1.86	0.48	2.83
Total	0.17	0.67	0.67	5.26E-02	1.86	0.48	2.83
SER	25	15	10	40	40	40	100
PSD/NNSR Triggered?	No	No	No	No	No	No	No

4.1.3 New Source Performance Standards

New Source Performance Standards (NSPS), located in 40 CFR Part 60 and implemented in Indiana regulation 326 IAC 12, require new, modified, or reconstructed sources to control emissions to specified levels. Moreover, any source subject to an NSPS is also subject to the general provisions of NSPS Subpart A, except where expressly noted.

4.1.3.1 Subpart Dc –Small Industrial-Commercial-Institutional Steam Generating Units

Pursuant to 40 CFR 60.40c(a), NSPS Subpart Dc applies to each steam generating unit that has a maximum rated heat input no more than 100 MMBtu/hr (HHV) but greater than or equal to 10 MMBtu/hr (HHV) and for which construction commenced after June 9, 1989. The proposed Boiler No. 1a will have a nameplate heat input capacity between 10 and 100 MMBtu/hr; therefore, it is subject to the requirements of NSPS Dc. Form 53512 (FED-01) detailing the applicable portions of this rule is included in Appendix A.

4.1.4 National Emissions Standards for Hazardous Air Pollutants

NESHAPs apply to sources in specifically regulated industrial source classifications (Clean Air Act Section 112(d)) or on a case-by-case basis (Clean Air Act Section 112(g)) for facilities not regulated as a specific industrial source type. Pollutant specific NESHAPs may also be applicable under 40 CFR Part 61. Many NESHAPs have been developed for particular industrial source categories under 40 CFR Part 63. Therefore, the potential applicability of a particular NESHAP to a facility can be readily ascertained based on the industrial source category covered. There are no changes to NESHAP applicability for the facility.

4.2 Indiana Regulatory Applicability

4.2.1 Administrative Amendment (326 IAC 2-7-11)

Pursuant to 326 IAC 2-7-11, SDI is applying for an administrative amendment to the Title V permit for the Butler Facility. These changes may be addressed as an administrative amendment according to 326 IAC 2-7-11(a)(8)(A) and 326 IAC 2-7-11(a)(7) because they add an exempt unit as described in 326 IAC 2-1.1-3 and do not trigger new applicable requirements. Appropriate permit application forms are included in Appendix A.

4.2.2 Particulate Emissions Limitations for Sources of Indirect Heating (326 IAC 6-2)

The provisions of 326 IAC 6-2-4 regulate PM emissions from indirect heating facilities constructed after September 21, 1983. The proposed boiler is classified as an indirect heating facility based on the definition of combustion for indirect heating in 326 IAC 1-2-19. Allowable PM emissions from the Butler Facility were calculated using the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Where:

Pt = pounds of particulate matter emitted per million Btu (MMBtu) heat input

Q = total source maximum operating capacity rating in million Btu per hour (mmBtu/hr) heat input.

The Butler Facility has a facility-wide heat input for indirect heating sources of 434.21 MMBtu/hr. Based on the equation above, allowable PM emissions from the proposed boiler are calculated at 0.2247 lb/MMBtu.

The emissions from the natural gas-fired boiler were calculated using emission factors from AP 42, Chapter 1.4. These factors indicate that the emission rate is 0.0019 lb/MMBtu; therefore, no control device is required to satisfy the requirements of 326 IAC 6-2.

APPENDIX A. STATE FORMS



AIR PERMIT APPLICATION COVER SHEET
 State Form 50639 (R4 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
 100 N. Senate Avenue, MC 61-53 Room 1003
 Indianapolis, IN 46204-2251
 Telephone: (317) 233-0178 or
 Toll Free: 1-800-451-6027 x30178 (within Indiana)
 Facsimile Number: (317) 232-6749
www.IN.gov/idem

- NOTES:**
- The purpose of this cover sheet is to obtain the core information needed to process the air permit application. This cover sheet is required for all air permit applications submitted to IDEM, OAQ. Place this cover sheet on top of all subsequent forms and attachments that encompass your air permit application packet.
 - Submit the completed air permit application packet, including all forms and attachments, to **IDEM Air Permits Administration** using the address in the upper right hand corner of this page.
 - IDEM will send a bill to collect the filing fee and any other applicable fees.
 - Detailed instructions for this form are available on the Air Permit Application Forms website.

FOR OFFICE USE ONLY

PERMIT NUMBER:

033-48020-00043

DATE APPLICATION WAS RECEIVED:

Received by State of Indiana IDEM-OAQ
 via email June 28, 2024 MJ-2

1. Tax ID Number:

PART A: Purpose of Application

Part A identifies the purpose of this air permit application. For the purposes of this form, the term "source" refers to the plant site as a whole and NOT to individual emissions units.

2. Source / Company Name: Steel Dynamics, Inc. - Flat Roll Group - Butler Division
3. Plant ID: 033 – 0043

4. Billing Address: 4500 County Road 59

City: Butler **State:** IN **ZIP Code:** 46721 –

5. Permit Level: Exemption Registration SSOA MSOP FESOP TVOP PBR

6. Application Summary: Check all that apply. Multiple permit numbers may be assigned as needed based on the choices selected below.

- | | | |
|---|---|--|
| <input type="checkbox"/> Initial Permit | <input type="checkbox"/> Renewal of Operating Permit | <input type="checkbox"/> Asphalt General Permit |
| <input type="checkbox"/> Review Request | <input type="checkbox"/> Revocation of Operating Permit | <input type="checkbox"/> Alternate Emission Factor Request |
| <input type="checkbox"/> Interim Approval | <input type="checkbox"/> Relocation of Portable Source | <input type="checkbox"/> Acid Deposition (Phase II) |
| <input type="checkbox"/> Site Closure | <input type="checkbox"/> Emission Reduction Credit Registry | |

Transition (between permit levels) *From:* _____ *To:* _____

- Administrative Amendment:
- | | |
|---|---|
| <input type="checkbox"/> Company Name Change | <input type="checkbox"/> Change of Responsible Official |
| <input type="checkbox"/> Correction to Non-Technical Information | <input type="checkbox"/> Notice Only Change |
| <input checked="" type="checkbox"/> Other (specify): Addition of insignificant activity | |

- Modification:
- | | |
|--|---|
| <input type="checkbox"/> New Emission Unit or Control Device | <input type="checkbox"/> Modified Emission Unit or Control Device |
| <input type="checkbox"/> New Applicable Permit Requirement | <input type="checkbox"/> Change to Applicability of a Permit Requirement |
| <input type="checkbox"/> Prevention of Significant Deterioration | <input type="checkbox"/> Emission Offset <input type="checkbox"/> MACT Preconstruction Review |
| <input type="checkbox"/> Minor Source Modification | <input type="checkbox"/> Significant Source Modification |
| <input type="checkbox"/> Minor Permit Modification | <input type="checkbox"/> Significant Permit Modification |
| <input type="checkbox"/> Other (specify): | |

7. Is this an application for an initial construction and/or operating permit for a "Greenfield" Source? Yes No

8. Is this an application for construction of a new emissions unit at an Existing Source? Yes No

PART B: Pre-Application Meeting

Part B specifies whether a meeting was held or is being requested to discuss the permit application.

9. Was a meeting held between the company and IDEM prior to submitting this application to discuss the details of the project?

No Yes: *Date:*

10. Would you like to schedule a meeting with IDEM management and your permit writer to discuss the details of this project?

No Yes: *Proposed Date for Meeting:*

PART C: Confidential Business Information

Part C identifies permit applications that require special care to ensure that confidential business information is kept separate from the public file.

Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in the Indiana Administrative Code (IAC). To ensure that your information remains confidential, refer to the IDEM, OAQ information regarding submittal of confidential business information. For more information on confidentiality for certain types of business information, please review IDEM's Nonrule Policy Document Air-031-NPD regarding Emission Data.

11. Is any of the information contained within this application being claimed as **Confidential Business Information**?

No Yes

PART D: Certification Of Truth, Accuracy, and Completeness

Part D is the official certification that the information contained within the air permit application packet is truthful, accurate, and complete. Any air permit application packet that we receive without a signed certification will be deemed incomplete and may result in denial of the permit.

For a Part 70 Operating Permit (TVOP) or a Source Specific Operating Agreement (SSOA), a "responsible official" as defined in 326 IAC 2-7-1(34) must certify the air permit application. For all other applicants, this person is an "authorized Individual" as defined in 326 IAC 2-1.1-1(1).

I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate, and complete.

Jeff Rickman
Name (typed)

Signature

General Manager
Title

Date

6/26/24



OAQ GENERAL SOURCE DATA APPLICATION
GSD-01: Basic Source Level Information
 State Form 50640 (R5 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
 100 N. Senate Avenue, MC 61-53 Room 1003
 Indianapolis, IN 46204-2251
 Telephone: (317) 233-0178 or
 Toll Free: 1-800-451-6027 x30178 (within Indiana)
 Facsimile Number: (317) 232-6749
www.IN.gov/idem

Received by State of Indiana IDEM-OAQ
 via email June 28, 2024 MJ-2

NOTES:

- The purpose of GSD-01 is to provide essential information about the entire source of air pollutant emissions. GSD-01 is a required form.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for public inspection.

033-48020-00043

PART A: Source / Company Location Information		
1. Source / Company Name: Steel Dynamics, Inc. - Flat Roll Group - Butler Division		2. Plant ID: 033 – 00043
3. Location Address: 4500 County Road 59		
City: Butler	State: IN	ZIP Code: 46721 –
4. County Name: Dekalb		5. Township Name: Wilmington
6. Geographic Coordinates:		
Latitude: 41°22'13.24"N		Longitude: 84°54'40.64"W
7. Universal Transferred Mercator Coordinates (if known):		
Zone:	Horizontal:	Vertical:
8. Adjacent States: Is the source located within 50 miles of an adjacent state?		
<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes – <i>Indicate Adjacent State(s):</i> <input type="checkbox"/> Illinois (IL) <input checked="" type="checkbox"/> Michigan (MI) <input checked="" type="checkbox"/> Ohio (OH) <input type="checkbox"/> Kentucky (KY)		
9. Attainment Area Designation: Is the source located within a non-attainment area for any of the criteria air pollutants?		
<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes – <i>Indicate Nonattainment Pollutant(s):</i> <input type="checkbox"/> CO <input type="checkbox"/> Pb <input type="checkbox"/> NO _x <input type="checkbox"/> O ₃ <input type="checkbox"/> PM <input type="checkbox"/> PM ₁₀ <input type="checkbox"/> PM _{2.5} <input type="checkbox"/> SO ₂		
10. Portable / Stationary: Is this a portable or stationary source? <input type="checkbox"/> Portable <input checked="" type="checkbox"/> Stationary		

PART B: Source Summary	
11. Company Internet Address (optional):	
12. Company Name History: Has this source operated under any other name(s)?	
<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes – <i>Provide information regarding past company names in Part I, Company Name History.</i>	
13. Portable Source Location History: Will the location of the portable source be changing in the near future?	
<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> No <input type="checkbox"/> Yes – <i>Complete Part J, Portable Source Location History, and Part K, Request to Change Location of Portable Source.</i>	
14. Existing Approvals: Have any exemptions, registrations, or permits been issued to this source?	
<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes – <i>List these permits and their corresponding emissions units in Part M, Existing Approvals.</i>	
15. Unpermitted Emissions Units: Does this source have any unpermitted emissions units?	
<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes – <i>List all unpermitted emissions units in Part N, Unpermitted Emissions Units.</i>	
16. New Source Review: Is this source proposing to construct or modify any emissions units?	
<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes – <i>List all proposed new construction in Part O, New or Modified Emissions Units.</i>	
17. Risk Management Plan: Has this source submitted a Risk Management Plan?	
<input checked="" type="checkbox"/> Not Required <input type="checkbox"/> No <input type="checkbox"/> Yes → Date submitted: _____ EPA Facility Identifier: – –	

PART C: Source Contact Information

IDEM will send the original, signed permit decision to the person identified in this section. This person MUST be an employee of the permitted source.

18. Name of Source Contact Person: Bill Bougher		
19. Title (optional): Environmental Engineer		
20. Mailing Address: 4500 County Road 59		
City: Butler	State: IN	ZIP Code: 46721 –
21. Electronic Mail Address (optional): bill.bougher@steeldynamics.com		
22. Telephone Number: (260) 868 – 8191	23. Facsimile Number (optional): (260) 868 – 8058	

PART D: Authorized Individual/Responsible Official Information

IDEM will send a copy of the permit decision to the person indicated in this section, if the Authorized Individual or Responsible Official is different from the Source Contact specified in Part C.

24. Name of Authorized Individual or Responsible Official: Jeff Rickman		
25. Title: General Manager		
26. Mailing Address: 4500 County Road 59		
City: Butler	State: IN	ZIP Code: 46721 –
27. Telephone Number: (260) 868 – 8000	28. Facsimile Number (optional): () –	
<p>29. Request to Change the Authorized Individual or Responsible Official: Is the source officially requesting to change the person designated as the Authorized Individual or Responsible Official in the official documents issued by IDEM, OAQ? <i>The permit may list the title of the Authorized Individual or Responsible Official in lieu of a specific name.</i></p> <p><input type="checkbox"/> No <input checked="" type="checkbox"/> Yes – Change Responsible Official to: Jeff Rickman</p>		

PART E: Owner Information

30. Company Name of Owner: Steel Dynamics, Inc.		
31. Name of Owner Contact Person: Jeff Rickman		
32. Mailing Address: 4500 County Road 59		
City: Butler	State: IN	ZIP Code: 46721 –
33. Telephone Number: (260) 868 – 8000	34. Facsimile Number (optional): () –	
34. Operator: Does the "Owner" company also operate the source to which this application applies?		
<input type="checkbox"/> No – Proceed to Part F below. <input checked="" type="checkbox"/> Yes – Enter "SAME AS OWNER" on line 35 and proceed to Part G below.		

PART F: Operator Information

35. Company Name of Operator: SAME AS OWNER		
36. Name of Operator Contact Person:		
37. Mailing Address:		
City:	State:	ZIP Code: –
38. Telephone Number: () –	39. Facsimile Number (optional): () –	

PART L: Source Process Description			
Complete this section to summarize the main processes at the source.			
64. Process Description	65. Products	66. SIC Code	67. NAICS Code
Steel Manufacturing	Steel Coils	3312	331111

PART M: Existing Approvals (if applicable)		
Complete this section to summarize the approvals issued to the source since issuance of the main operating permit.		
68. Permit ID	69. Emissions Unit IDs	70. Expiration Date
41286	Title V Renewal	
44671	Title V Significant Permit Modification	
47031	Administrative Amendment	

PART N: Unpermitted Emissions Units (if applicable)				
Complete this section only if the source has emission units that are not listed in any permit issued by IDEM, OAQ.				
71. Emissions Unit ID	72. Type of Emissions Unit	73. Actual Dates		
		Began Construction	Completed Construction	Began Operation

PART O: New or Modified Emissions Units (if applicable)						
Complete this section only if the source is proposing to add new emission units or modify existing emission units.						
74. Emissions Unit ID	75. NEW	76. MOD	77. Type of Emissions Unit	78. Estimated Dates		
				Begin Construction	Complete Construction	Begin Operation

Part C: Performance Testing Requirements

Part C identifies the performance testing requirements that are applicable to the process or emission unit.

6. Performance Testing:	N/A
7. Date of Initial Performance Test:	N/A
8. Test Methods:	N/A
9. Was the initial performance test approved by IDEM?	<input type="checkbox"/> Yes: <i>Date approved:</i> _____ <input type="checkbox"/> No
10. Did the initial performance test show compliance with the rule?	<input type="checkbox"/> Yes <input type="checkbox"/> No: <i>Date of next performance test:</i> _____

Part D: Important Dates

Part D identifies specific dates associated with the federal standard that are applicable to the process or emission unit.

11. Date Initial Notification was Submitted:	TBD
12. Initial Compliance Date:	<input checked="" type="checkbox"/> Startup: TBD <input type="checkbox"/> Other: _____
13. Other Dates	Description: <u>N/A</u> Date: _____
	Description: <u>N/A</u> Date: _____
	Description: <u>N/A</u> Date: _____

Part E: Other Information

Part E identifies any additional information pertaining to the applicable federal rule. Attach additional information using form GSD-09 as necessary.

APPENDIX B. EMISSION CALCULATIONS

Appendix B: Emissions Calculations

Company Name: Steel Dynamics, Inc. - Flat Roll Group - Butler Division
Source Address: 4500 County Road 59, Butler, IN 46721

Uncontrolled Potential to Emit

Emission Unit	PM	PM ₁₀	PM _{2.5}	SO ₂	NOx	VOC	CO	Total HAP	Highest Single HAP ²
Boiler No. 1a	0.17	0.67	0.67	0.05	1.86	0.48	2.83	7.72E-03	6.57E-03
Exemption Thresholds ¹	5	5	5	10	10	10	25	2.5	1
Source Modification Required?	No	No	No	No	No	No	No	No	No

¹326 IAC 2-1.1-3(e)(1)

²Highest Single HAP is Formaldehyde

PSD Emission Increases

Emission Unit	PM	PM ₁₀	PM _{2.5}	SO ₂	NOx	VOC	CO
Boiler No. 1a	0.17	0.67	0.67	5.26E-02	1.86	0.48	2.83
Total	0.17	0.67	0.67	5.26E-02	1.86	0.48	2.83
SER	25	15	10	40	40	40	100
PSD/NNSR Triggered?	No	No	No	No	No	No	No

Appendix B: Emissions Calculations
Boiler No. 1a - Natural Gas Combustion (Less than 100 MMBtu/hr)

Company Name: Steel Dynamics, Inc. - Flat Roll Group - Butler Division
 Source Address: 4500 County Road 59, Butler, IN 46721

Boiler Capacity (1000 Btu/hr)	20412
Boiler Capacity (MMBtu/hr)	20.412

Emission Factor in lb/MMCF					Pollutant						
					PM*	PM10*	PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF					1.9	7.6	7.6	0.6	21.20	5.5	32.26
Emissions Unit	Number of Units	Heat Input Capacity (MMBtu/hr)	Heat Input Capacity Total (MMBtu/hr)	Potential Throughput (MMCF/yr)	Potential Emissions (tons/yr)						
Boiler No. 1a	1	20.412	20.412	175.3030588	0.17	0.67	0.67	0.05	1.86	0.48	2.83

Notes:
 *PM emission factor is filterable PM only. PM10 and PM2.5 emission factors are filterable and condensable PM combined.
 Emissions factors for NOx and CO per manufacturers specifications.

Emission Factor in lb/MMCF			HAPs - Organics					
			Benzene	Dichlorobenzene	Formaldehyde	Naphthalene	Toluene	Mercury
Emission Factor in lb/MMCF			2.10E-03	1.20E-03	7.50E-02	6.10E-04	3.40E-03	2.60E-04
Emissions Unit	Heat Input Capacity (MMBtu/hr)	Potential Throughput (MMCF/yr)	Potential Emissions (tons/yr)					
Boiler No. 1a	20.412	175.3030588	1.84E-04	1.05E-04	6.57E-03	5.35E-05	2.98E-04	2.28E-05

Emission Factor in lb/MMCF			HAPs - Metals					Total HAPs (Organics+Metals)
			Lead*	Cadmium	Chromium	Manganese	Nickel	
Emission Factor in lb/MMCF			5.00E-04	1.10E-03	1.40E-03	3.80E-04	2.10E-03	
Emissions Unit	Heat Input Capacity (MMBtu/hr)	Potential Throughput (MMCF/yr)	Potential Emissions (tons/yr)					
Boiler No. 1a	20.412	175.3030588	4.38E-05	9.64E-05	1.23E-04	3.33E-05	1.84E-04	7.72E-03

The five highest organic and metal HAPs emission factors are provided above.
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.
 *Lead is regulated under 326 IAC 2-2.
 Note: A review of EPA's SPECIATE 4.3 database for HAPs associated with natural gas combustion reveals that n-hexane (the HAP form of hexane) is not emitted as part of natural gas combustion. Therefore, the AP-42 emission factor for hexane does not include any n-hexane and was not included when calculating HAPs from natural gas combustion.

Methodology

All emission factors are based on normal firing.
 MMBtu = 1,000,000 Btu
 MMCF = 1,000,000 Cubic Feet of Gas
 Heating Value of Natural Gas is assumed to be 1020 MMBtu/MMCF
 Potential Throughput (MMCF/yr) = Heat Input Capacity (MMBtu/hr) * 8,760 hrs/yr * 1 MMCF/1,020 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)
 Potential Emission (tons/yr) = Throughput (MMCF/yr) * Emission Factor (lb/MMCF) * (1 ton/2,000 lb)