Mr. Bob Renock
Holsum of Fort Wayne, Inc.
P.O. Box 11468
Fort Wayne, Indiana 46858

Dear Mr. Renock:

Re: Exempt Construction and Operation Status,
003-14217-00259

The application from Holsum of Fort Wayne, Inc., received on March 29, 2001, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that only the natural gas-fired boiler, to be located at 136 Murray Street, Fort Wayne, Indiana, is classified as exempt from air pollution permit requirements:

(a) One (1) 5.2 MMBtu/hr natural gas-fired boiler, installed in November 2000.

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 Alternative Opacity Limitations), 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 continuos opacity monitor in a six (6) hour period.

(2) Pursuant to 326 IAC 6-2-4 (Emission Limitations), particulate emissions from indirect heating of the 5.2 MMBtu/hr boiler shall not exceed 0.6 pounds per MMBtu.

(3) Pursuant to the existing operating permit, OP-003-6247-00259, issued August 4, 1997, all existing operations will meet the requirements in this operating permit. This permit is required to be renewed to a Minor Source Operating Permit (MSOP) by August 4, 2002 and the new boiler will be rolled into the MSOP at that time.

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

ERG/EG

cc: File - Allen County
Allen County Health Department
Air Compliance - Jennifer Dorn
Permit Tracking - Janet Mobley
Technical Support and Modeling - Michele Boner
Compliance Data Section - Karen Nowak
Operating Permit File - OP-003-6247-00259

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for an Exemption

Source Background and Description

Source Name: Holsum of Fort Wayne, Inc.
Source Location: 136 Murray Street, Fort Wayne, IN 46858
County: Allen
SIC Code: 2051
Exemption No.: 003-14217-00259
Permit Reviewer: ERG/EG

The Office of Air Quality (OAQ) has reviewed an application from Holsum of Fort Wayne relating to the construction and operation of natural gas fired boiler.

Permitted Emission Units and Pollution Control Equipment*

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

(a) One (1) 5.2 MMBtu/hr natural gas-fired boiler, installed in November 2000.

*Not previously permitted but emissions are at exemption levels.

New Emission Units and Pollution Control Equipment Receiving Prior Approval

There are no new construction activities included in this permit.

Existing Approvals

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

(a) OP 003-6247-00259, issued on August 4, 1997.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
Stack #5	Natural gas-fired boiler	35	1	69,373	320

Recommendation

The staff recommends to the Commissioner that the 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.

An application for the purposes of this review was received on March 29, 2001 with additional information received on April 9, 2001.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (pages 1and 2 of Appendix A).

Potential To Emit 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	0.2
PM-10	0.2
SO_2	0.01
VOC	0.1
CO	1.9
NO_x	2.3
Total HAP	0.04

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) all pollutants are less than 100 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) all pollutants are less than 25 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-6.1.

(c) The potential to emit (as defined in 326 IAC 2-7-1(29)) all 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.

(d) 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 not subject to the provisions of 326 IAC 2-7.

(e) This type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2.

County Attainment Status

The source is located in Allen County.

Pollutant	Status
PM-10	Attainment
SO_2	Attainment
NO_2	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

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

(b) Allen County has been classified as attainment or unclassifiable for all criteria. 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 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions* (ton/yr)
PM	0.2
PM10	0.2
SO_2	0.01
VOC	0.1
CO	1.9
NO_x	2.3
Total HAPs	0.04

* The addition of the natural gas-fired boiler will increase the PTE of NO_x emissions from 4.1 to 6.4 tpy and PTE of Co emissions from 1.0 to 2.9 tpy.

(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 in 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.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source. The boiler has a heat input capacity less than 10 MMBtu/hr; therefore, NSPS Subpart Dc does not apply.

(b) There are no 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 Allen County and the potential to emit of all criteria pollutants 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 Alternative Opacity Limitations), 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 the natural gas fired boiler 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.

326 IAC 6-2-4 (Emission Limitations for Facilities specified in 326 IAC 6-2-1(d))

(a) Particulate emissions from indirect heating facilities constructed after September 21, 1983 shall be limited by the following equation:

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

Where: Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.
Q = Total source maximum operating capacity rating in million Btu per hour (MMBTu/hr) heat input. The maximum operating capacity rating is defined as maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is conducted in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

The 5.2 MMBtu/hr boiler, used at Holsum of Fort Wayne was constructed in 2001.

The 5.2 MMBtu/hr boiler has a maximum capacity of 5.2 MMBtu/hr, which yields a Pt value of 0.71 pounds of PM per MMBtu.

$$Pt = \frac{1.09}{5.2^{0.26}} = \frac{1.09}{1.53} = 0.71$$

326 IAC 6-2-4 states that a indirect heating facility constructed after September 21, 1983 shall not exceed 0.6 pounds per MMBtu.

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

This source does not have potential VOC emissions equal to or greater than twenty five (25) tons per year, therefore this source is not subject to the provisions of 326 IAC 8-1-6.

Conclusion

The operation of this natural gas fired boiler shall be subject to the conditions of the attached proposed Exemption 003-13517-00259.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler

Company Name: **Holsum of Fort Wayne, Inc.**
Address City IN Zip: **Ft. Wayne, IN 22201**
OP: **003-6247-00259**
Permit Number: **003-00259**
Reviewer: ERG/ETG
Date: 04/30/2001

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
5.2	45.6

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.2	0.2	0.01	2.3	0.1	1.9

*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).

See page 2 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler
HAPs Emissions

Company Name: **Holsum of Fort Wayne, Inc.**
Address City IN Zip: **Ft. Wayne, IN 22201**
OP: **003-6247-00259**
Permit Number: **003-00259**
Reviewer: ERG/ETG
Date: 04/30/2001

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	4.783E-05	2.733E-05	1.708E-03	4.100E-02	7.744E-05

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	1.139E-05	2.505E-05	3.189E-05	8.655E-06	4.783E-05

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.