

Mr. Les White  
United Signature Foods, LLC  
1800 Churchman Avenue  
Indianapolis, IN 46206-1531

Re: **097-12562-00137**  
First Significant Part 70 Permit Modification to  
T 097-6396-00137

Dear Mr. White:

United Signature Foods, LLC was issued a permit on December 31, 1998 for the operation of two (2) Cleaver Brooks Boilers, identified as Emission Units EU001 and EU002, with maximum rated capacity of 38 MMBtu/hr, installed in 1969. An application requesting changes to this permit was received on July 24, 2000. Pursuant to the provisions of 326 IAC 2-7-12, a Significant Permit Modification to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of the existing boiler EU001, maximum rated heat input capacity 38 MMBtu/hr, replacement with a new boiler under the same Emission Unit ID # EU001, maximum rated heat input capacity 29.4 MMBtu/hr, primarily combusting natural gas with No. 2 distillate oil as a backup fuel.

Please attach a copy of this Permit Modification and the following revised permit pages: 3, 4, 29, 30, 30a to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Mr. Boris Gorlin at (317) 327-2234. Thank you for your time and cooperation in this matter.

Sincerely,

Daniel Dovenbarger  
Administrator  
ERMD

cc: file  
compliance - Matt Mosier  
IDEM (OAQ)

Attachment

**PART 70 OPERATING PERMIT  
OFFICE OF AIR QUALITY  
and  
INDIANAPOLIS ENVIRONMENTAL RESOURCES  
MANAGEMENT DIVISION**

**United Signature Foods, LLC.  
1800 Churchman Avenue  
Indianapolis, Indiana 46203**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15, IC 13-17 and the Code of Indianapolis and Marion County, Chapter 511.

Operation Permit No.: T097-6396-00137	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality  Robert F. Holm, PH.D, Administrator Indianapolis Environmental Resources Management Division	Issuance Date:

Significant Permit Modification No.: 097-12562-00137	Pages affected: 3, 4, 29, 30, 30a, and 30b
Issued by:  Daniel Dovenbarger, Administrator Indianapolis Environmental Resources Management Division	Issuance Date:

C.11 Monitoring Methods [326 IAC 3]

**Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]**

- C.12 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
- C.13 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5(3)]
- C.14 Actions Related to Noncompliance Demonstrated by a Stack Test

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

- C.15 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-6] [326 IAC 2-7-19]
- C.16 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]
- C.17 General Record Keeping Requirements [326 IAC 2-7-5(3)(B)]
- C.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

**Stratospheric Ozone Protection**

- C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

**D.1 FACILITY OPERATION CONDITIONS - Two (2)Boilers, EU001 and EU002**

**Emission Limitations and Standards [326 IAC 2-7-5(1)]**

- D.1.1 General Provisions Relating to NSPS [326 12-1] [CFR Part 60, Subpart A]
- D.1.2 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1-1]
- D.1.3 Particulate Matter [326 IAC 6-2-2][326 IAC 6-2-4]

**Compliance Determination Requirements**

- D.1.4 Testing Requirements [326 IAC 2-7-6(1)]
- D.1.5 Sulfur Dioxide Emissions and Sulfur Content

**Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

- D.1.6 Visible Emissions Notations

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

- D.1.7 Record Keeping Requirements
- D.1.8 Reporting Requirements

**D.2 Insignificant Activities**

- D.2.1 Particulate Matter (PM) [326 IAC 6-3]
- D.2.2 Testing Requirements [326 IAC 2-7-6(1)]

**Certification**

**Emergency/Deviation Occurrence Report**

**Natural Gas Fired Boiler Certification**

**Semi Annual Compliance Report**

**Semi Annual Report**

**Attachment A (state rules adopted by reference)**

## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and The Indianapolis Environmental Resources Management Division (ERMD). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

---

The Permittee owns and operates stationary food products plant.

Responsible Official: Joseph F. Jansen  
Source Address: 1800 Churchman Avenue, Indianapolis, IN 46203  
Mailing Address: Same as above  
SIC Code: 2099  
County Location: Marion County  
County Status: Nonattainment for PM  
Source Status: Part 70 Permit Program  
Minor Source, under PSD and Emission Offset Rules;

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

---

This stationary source consists of the following emission units and pollution control devices:

- (a) Two (2) Cleaver Brooks boilers identified as EU001 and EU002, both units have a maximum rated capacity of 38 mmBtu and were installed in 1969. These units have no control equipment and exhaust through stack S1.

### A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

---

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) bag dump and mixer operation, with powder room
- (b) starch make up unit

### A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

---

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22).

**SECTION D.1 FACILITY OPERATION CONDITIONS**

**Facility Description [326 IAC 2-7-5(15)]**

- (a) One (1) Hurst Series 400 boiler, installed in 2000, identified as EU001, maximum rated heat input capacity 29.4 MMBtu per hour, primarily combusting natural gas with No. 2 distillate oil as a back-up fuel. This unit has no control equipment and exhausts through a stack identified as S1.
- (b) One(1) Cleaver Brooks boilers identified as EU002, primarily combusting natural gas with No. 2 distillate oil as a back-up fuel, maximum rated capacity of 38 MMBTU, installed in 1969. This unit has no control equipment and exhausts through a stack identified as S1.

**Emission Limitations and Standards [326 IAC 2-7-5(1)]**

D.1.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the boiler Emission Unit EU001 described in this section except when otherwise specified in 40 CFR Part 60, Subpart Dc.

D.1.2 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1-2(a)(3)] [326 IAC 12-1]

- (a) Pursuant to 326 IAC 7-1.1-2(a)(3) (SO<sub>2</sub> Emissions Limitations) and 40 CFR 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units):
  - (1) The SO<sub>2</sub> emissions from the 29.4 million Btu per hour Boiler, identified as emission unit EU001, shall not exceed five tenths (0.5) pounds per million Btu heat input; or
  - (2) The sulfur content of the fuel oil shall not exceed five-tenths percent (0.5%) by weight. [40 CFR 60.42c(d)]
  - (3) Pursuant to 40 CFR 60 Subpart Dc, the fuel oil sulfur content limit applies at all times, including periods of startup, shutdown, and malfunction.
- (b) Pursuant to 326 IAC 7-1.1 (SO<sub>2</sub> Emissions Limitations) the SO<sub>2</sub> emissions from the 38 MMBtu per hour boiler EU002 shall not exceed five tenths (0.5) pounds per MMBtu heat input when combusting distillate oil.

D.1.3 Particulate Matter [326 IAC 6-2]

- (a) Pursuant to 326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating) the Particulate Matter (PM) emissions from the 29.4 million Btu per hour boiler, identified as emission unit EU001, shall be limited to 0.365 pound per million Btu of heat input.

This limitation is based on the following equation:

$$Pt = \frac{1.09}{Q^{0.26}} = \frac{1.09}{67.4^{0.26}} = 0.365,$$

Where Pt = Pounds of particulate matter emitted per million Btu of heat input.  
Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input.

- (b) Pursuant to 326 IAC 6-2-2 (Particulate Matter Emission Limitations for Sources of indirect Heating), the PM emissions from the 38 MMBtu per hour heat input boiler shall be limited to 0.443 pounds per MMBtu heat input.

Since this boiler was existing and in operation before June 8, 1972, the following equation was used to derive pounds per MMBtu:

$$Pt = \frac{0.87}{Q^{0.16}} = \frac{0.87}{67.4^{0.16}} = 0.443,$$

Where: Pt = Pounds of particulate matter emitted per million Btu ( lbs/MMBtu ) heat input.

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

### Compliance Determination Requirements

#### D.1.4 Testing Requirements [326 IAC 2-7-6(1)]

The Permittee is not required to test the boilers EU001 and EU002 by this permit. However, IDEM and ERMD may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM and ERMD, compliance with the Particulate Matter limit specified in Condition D.1.4 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### D.1.5 Sulfur Dioxide Emissions and Sulfur Content

Pursuant to 40 CFR 60, Subpart Dc, the Permittee shall demonstrate compliance with Condition D.1.2, utilizing one of the following options:

- (a) Providing vendor analysis of fuel delivered, if accompanied by a certification; or
- (b) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
- (1) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
- (2) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.

### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.1.6 Visible Emissions Notations

- (a) Daily visible emission notations of the boilers EU001 and EU002, stack exhaust S1, shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that

specific process.

- (e) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

## **Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

### **D.1.7 Record Keeping Requirements**

---

- (a) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with (1) through (6) below. Pursuant to 40 CFR 60 Subpart Dc, the fuel oil sulfur limit applies at all times including periods of startup, shutdown, and malfunction.
  - (1) Calendar dates covered in the compliance determination period;
  - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
  - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and,  
  
if the fuel supplier certification is used to demonstrate compliance, the following, as a minimum, shall be maintained:
    - (4) Fuel supplier certifications.
    - (5) The name of the fuel supplier; and
    - (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report.

- (b) To document compliance with Condition D.1.7, the Permittee shall maintain records of daily visible emission notations of the boilers EU001 and EU002, stack S1.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.
- (d) When using natural gas, a record shall be maintained of the amount of fuel combusted each month. These records shall be retained for a period of two years following the date of such record.

### **D.1.8 Reporting Requirements**

- (a) A semiannual summary of the information to document compliance with Conditions D.1.2 shall be submitted to the address(es) listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the semiannual reporting period.
- (b) Pursuant to 40 CFR 60, §60.7, the owner of this source shall furnish the EPA, IDEM and ERMD the following written notifications:

- (1) Of the date construction of the new boiler EU001 is commenced postmarked no later than 30 days after such date.
- (2) Of the anticipated date of initial startup of the new boiler EU001 postmarked no more than 60 days nor less than 30 days prior to such date.
- (3) Of the actual date of initial new boiler EU001 startup date postmarked within 15 days after such date.

# Indiana Department of Environmental Management Office of Air Management

## Addendum to the Technical Support Document for Significant Part 70 Permit Modification

**Source Name:** United Signature Foods, LLC  
**Source Location:** 1800 Churchman Avenue, Indianapolis, Indiana, 46203  
**County:** Marion  
**SIC Code:** 2099  
**Operation Permit No.:** T 097-6396-00137  
**Permit Modification No.:** 097-12562-00137  
**Permit Reviewer:** Boris Gorlin

On August 19, 2000, the Indianapolis Environmental Resources Management Division (ERMD) had a notice published in the Indianapolis Star, Indiana, stating that **United Signature Foods, LLC** had applied for a Significant Part 70 Permit Modification relating to the operation of the following emission units:

- (a) one (1) Hurst Series 400 Boiler with maximum rated capacity of 29.4 MMBtu/hr, primarily combusting natural gas with No. 2 distillate oil as a backup fuel, in replacement of the existing Cleaver Brooks Boiler Emission Unit EU001, with maximum rated capacity of 38 MMBtu/hr.

The notice also stated that ERMD proposed to issue a permit for this construction and operation 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 October 20 and November 22, 2000, OAM (IDEM) submitted comments on the proposed Significant Part 70 Permit Modification. The summary of the comments is as follows:

### **Comment 1:**

The Minor Source Modification preceded the issuance of the Significant Permit Modification. This should be reflected in the TSD History section.

### **Response to Comment 1:**

The following paragraph is added to the TSD History section:

**On September 29, 2000, the Minor Source Modification for one (1) one (1) Hurst Series 400 Boiler with maximum rated capacity of 29.4 MMBtu/hr, primarily combusting natural gas with No. 2 distillate oil as a backup fuel, in replacement of the existing Cleaver Brooks Boiler Emission Unit EU001, with maximum rated capacity of 38 MMBtu/hr, was issued.**

### **Comment 2:**

The TSD should list all the requirements applicable to the new boiler Emission Unit 001, as well the existing boiler Emission Unit 002, including 326 IAC 6-1, 6-2 and 7-1.

### **Response to Comment 2:**

The TSD State Rule Applicability section is modified:

~~All the State Rules applicable to the existing boiler EU001 will be applicable to the new proposed~~

~~boiler EU001. No other rules apply.~~

### 326 IAC 6-1(Nonattainment Area Particulate Limitations)

Boilers Emission Units EU001 and EU002 are not subject to this rule because the sourcewide PM potential to emit and PM actual emissions are less than 100 ton/yr and PM actual emissions are less than 10 ton/yr.

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

Pursuant to 326 IAC 6-2-2 (Particulate Matter Emission Limitations for Sources of Indirect Heating), the PM emissions from the 38 MMBTU per hour heat input boiler shall be limited to 0.435 pounds per MMBtu heat input.

Since the boiler was existing and in operation before June 8, 1972, the following equation was used to derive pounds per MMBtu:

$$Pt = \frac{0.87}{Q^{0.16}} = \frac{0.87}{76^{0.16}} = 0.435,$$

Where: Pt = Pounds of particulate matter emitted per million Btu ( lbs/MMBtu ) heat input.  
Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input.

Pursuant to 326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating) the Particulate Matter (PM) emissions from the 29.4 million Btu per hour boiler, identified as emission unit EU001, shall be limited to 0.365 pound per million Btu of heat input.

This limitation is based on the following equation:

$$Pt = \frac{1.09}{Q^{0.26}} = \frac{1.09}{67.4^{0.26}} = 0.365,$$

Where Pt = Pounds of particulate matter emitted per million Btu of heat input.  
Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input.

### 326 IAC 7-1 (Sulfur Dioxide Emission Limitations)

Pursuant to 326 IAC 7-1.1, the SO<sub>2</sub> emissions from the new 29.4 MMBTU per hour boiler, identified as Emission Unit EU001, and existing 38 MMBtu per hour boiler, identified as EU002, primarily combusting natural gas with Number 2 distillate oil as a backup fuel, shall not exceed five tenths (0.5) pounds per MMBtu heat input when combusting distillate oil.

#### Comment 3:

The TSD Justification for Modification section must state that NSPS (40 CFR 60, Subpart Dc) applicability triggers the **Significant** Permit Modification.

#### Response to Comment 3:

The TSD Justification for Modification section is changed to reflect the NSPS (40CFR 60, Subpart Dc) and 326 IAC 2-7-10.5(d) applicability:

~~This Modification is a Title I modification because it is subject to NSPS. According to 326 IAC 2-7-12(b)(1)(E), this is not a minor modification. Therefore, the Part 70 operating permit T097-6396-00137 is being modified through a Part 70 Significant Permit Modification.~~

**This modification consists of the addition of a new boiler EU001 and a PTE change. Since the NSPS (40 CFR 60, Subpart Dc) is the primary rule, according to 326 IAC 2-7-10.5(d)6, a Minor Source Modification and a subsequent Significant Permit Modification are required.**

**Comment 4:**

There must be a Record Keeping Requirement condition to require the natural gas monthly usage records to be maintained and retained for a period of two years following the date of such record.

**Response to Comment 4:**

Condition D.1.7 (d) is added to the Significant Permit Modification (page 30a):

- (d) When using natural gas, a record shall be maintained of the amount of fuel combusted each month. These records shall be retained for a period of two years following the date of such record.**

**Comment 5:**

NSPS notification requirements (60.7) need to be added.

**Response to Comment 5:**

The following language is added to the TSD Federal Rule Applicability section and to the Permit condition D.1.8 (Reporting Requirements, pages 30a & 30b):

- (b) Pursuant to 40 CFR 60, §60.7, the owner of this source shall furnish the EPA, IDEM and ERMD the following written notifications:**
- (1) Of the date construction of the new boiler EU001 is commenced postmarked no later than 30 days after such date.**
  - (2) Of the anticipated date of initial startup of the new boiler EU001 postmarked no more than 60 days nor less than 30 days prior to such date.**
  - (3) Of the actual date of initial new boiler EU001 startup date postmarked within 15 days after such date.**

**Comment 6:**

Limit SO<sub>2</sub> emissions to avoid PSD.

**Response to Comment 6:**

326 IAC 2-2 (PSD Rule) non-applicability explanation is added to the TSD State Rule Applicability section:

**326 IAC 2-2 (Prevention of Significant Deterioration)**

**This source is a minor PSD source (the sourcewide SO<sub>2</sub> PTE before modification was 170 ton/yr); the modification (boiler replacement) is not a major PSD modification, because the**

**new boiler (EU001) PTE (65.8 ton/yr) is less than 250 ton/yr. It is also less than the existing boiler PTE (85 ton/yr). Therefore, the PSD rule 326 IAC 2-2 is not applicable.**

**Indiana Department of Environmental Management  
Office of Air Management  
and  
Indianapolis Environmental Resources Management Division**

Technical Support Document (TSD) for a Significant Part 70 Permit  
Modification

**Source Background and Description**

<b>Source Name:</b>	<b>United Signature Foods, LLC</b>
<b>Source Location:</b>	<b>1800 Churchman Avenue, Indianapolis, Indiana, 46203</b>
<b>County:</b>	<b>Marion</b>
<b>SIC Code:</b>	<b>2099</b>
<b>Operation Permit No.:</b>	<b>T 097-6396-00137</b>
<b>Operation Permit Issuance Date:</b>	<b>December 31, 1998</b>
<b>Significant Permit Modification No.:</b>	<b>097-12562-00137</b>
<b>Permit Reviewer:</b>	<b>Boris Gorlin</b>

The Indianapolis Environmental Resources Management Division (ERMD) has reviewed a modification application from the United Signature Foods, LLC relating to the construction of the following emission units and pollution control devices:

- (a) one (1) Hurst Series 400 Boiler with maximum rated capacity of 29.4 MMBtu/hr, primarily combusting natural gas with No. 2 distillate oil as a backup fuel, in replacement of the existing Cleaver Brooks Boiler Emission Unit EU001, with maximum rated capacity of 38 MMBtu/hr.

**History**

On December 31, 1998, the source was issued a Part 70 operating permit **T097-6396-00137** for the operation of two (2) Cleaver Brooks Boilers, identified as Emission Units EU001 and EU002, with maximum rated capacity of 38 MMBtu/hr, installed in 1969.

On July 24, 2000, United Signature Foods, LLC submitted an application to the ERMD requesting to replace the existing boiler EU001, maximum rated heat input capacity 38 MMBtu/hr, with a new boiler under the same Emission Unit ID # EU001, maximum rated heat input capacity 29.4 MMBtu/hr, primarily combusting natural gas with No. 2 distillate oil as a backup fuel.

On September 29, 2000, the Minor Source Modification for one (1) one (1) Hurst Series 400 Boiler with maximum rated capacity of 29.4 MMBtu/hr, primarily combusting natural gas with No. 2 distillate oil as a backup fuel, in replacement of the existing Cleaver Brooks Boiler Emission Unit EU001, with maximum rated capacity of 38 MMBtu/hr, was issued.

**Existing Approvals**

The source was issued a Part 70 Operating Permit 6396-00137 on December 31, 1998.

**Enforcement Issue**

There are no enforcement actions pending.

### Recommendation

The staff recommends to the Administrator that the Significant Part 70 Permit Modification 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 July 24, 2000.

### Emission Calculations

See Appendix A of this document for detailed emissions calculations (one page).

### Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source 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.”

Pollutant	Potential To Emit (tons/year)
PM	1.84
PM-10	0.92
SO <sub>2</sub>	65.77
VOC	0.18
CO	4.60
NO <sub>x</sub>	18.40

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

### Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 1998 OAM/ERMD emission data (no backup fuel - No. 2 distillate oil - was used).

Pollutant	Actual Emissions (tons/year)
PM	0.089
PM-10	0.089
SO <sub>2</sub>	0.0176
VOC	0.089
CO	1.03
NO <sub>x</sub>	4.13
HAP (specify)	0

### Potential to Emit of Modification

The table below summarizes the potential to emit, reflecting all limits, of this modification. The control equipment is considered federally enforceable only after issuance of this Part 70 permit

modification.

The sourcewide emissions limits after modification (Boiler EU001 replacement) will stay the same as in the original Part 70 operating permit T097-6396-00137.

Process/facility	Potential to Emit (tons/year)						
	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
One (1) new Hurst Series 400 boiler, 29.4 MMBtu/hr	1.84	0.92	65.77	0.18	4.60	18.40	0

### County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM-10	Attainment
SO <sub>2</sub>	Maintenance
NO <sub>2</sub>	Attainment
Ozone	Maintenance
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 and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion 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) Marion County has been classified as attainment or unclassifiable for all the 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.

### Federal Rule Applicability

The new 29.4 MMBtu Hurst Series 400 natural gas and No. 2 distillate oil fired boiler, identified as EU001, is subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60, Subpart Dc). The following limits and requirements from Subpart Dc apply:

- (a) Pursuant to 40 CFR 60 Subpart Dc, the fuel oil sulfur content limit of 0.5% by weight applies at all times, including periods of startup, shutdown, and malfunction for EU001
- (b) Pursuant to 40 CFR 60, Subpart Dc, the Permittee shall demonstrate compliance utilizing one of the following options:
  - (1) Providing vendor analysis of fuel delivered, if accompanied by a certification; or

- (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
  - (3) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
  - (4) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
- (c) The Permittee shall maintain records in accordance with 40 CFR 60 Subpart Dc. The fuel oil sulfur limit applies at all times including periods of startup, shutdown, and malfunction.
- (d) A semi-annual summary of the information to document compliance with 40 CFR 60 Subpart Dc in any compliance period when No. 2 fuel oil was combusted, and the natural gas fired boiler certification, shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) month period being reported. The report submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) **Pursuant to 40 CFR 60, §60.7, the owner of this source shall furnish the EPA, IDEM and ERMD the following written notifications:**
- (1) **Of the date construction of the new boiler EU001 is commenced postmarked no later than 30 days after such date.**
  - (2) **Of the anticipated date of initial startup of the new boiler EU001 postmarked no more than 60 days nor less than 30 days prior to such date.**
  - (3) **Of the actual date of initial new boiler EU001 startup date postmarked within 15 days after such date.**

The existing 38 MMBtu/hr boiler EU002 is not subject to NSPS due to date of construction (1969).

### **State Rule Applicability**

#### 326 IAC 6-1(Nonattainment Area Particulate Limitations)

Boilers Emission Units EU001 and EU002 are not subject to this rule because the sourcewide PM potential to emit and PM actual emissions are less than 100 ton/yr and PM actual emissions are less than 10 ton/yr.

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

Pursuant to 326 IAC 6-2-2 (Particulate Matter Emission Limitations for Sources of Indirect Heating), the PM emissions from the 38 MMBTU per hour heat input boiler shall be limited to 0.435 pounds per MMBtu heat input.

Since the boiler was existing and in operation before June 8, 1972, the following equation was used to derive pounds per MMBtu:

$$Pt = \frac{0.87}{Q^{0.16}} = \frac{0.87}{76^{0.16}} = 0.435,$$

Where: Pt = Pounds of particulate matter emitted per million Btu ( lbs/MMBtu ) heat input.  
Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input.

Pursuant to 326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating) the Particulate Matter (PM) emissions from the 29.4 million Btu per hour boiler, identified as emission unit EU001, shall be limited to 0.365 pound per million Btu of heat input.

This limitation is based on the following equation:

$$Pt = \frac{1.09}{Q^{0.26}} = \frac{1.09}{67.4^{0.26}} = 0.365,$$

Where Pt = Pounds of particulate matter emitted per million Btu of heat input.  
Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input.

#### 326 IAC 7-1 (Sulfur Dioxide Emission Limitations)

Pursuant to 326 IAC 7-1.1, the SO<sub>2</sub> emissions from the new 29.4 MMBTU per hour boiler, identified as Emission Unit EU001, and existing 38 MMBtu per hour boiler, identified as EU002, primarily combusting natural gas with Number 2 distillate oil as a backup fuel, shall not exceed five tenths (0.5) pounds per MMBtu heat input when combusting distillate oil.

#### 326 IAC 2-2 (Prevention of Significant Deterioration)

**This source is a minor PSD source (the sourcewide SO<sub>2</sub> PTE before modification was 170 ton/yr); the modification (boiler replacement) is not a major PSD modification, because the new boiler (EU001) PTE (65.8 ton/yr) is less than 250 ton/yr. It is also less than the existing boiler PTE (85 ton/yr). Therefore, the PSD rule 326 IAC 2-2 is not applicable.**

#### Justification for Modification

This modification consists of the addition of a new boiler EU001 and a PTE change. Since the NSPS (40 CFR 60, Subpart Dc) is the primary rule, according to 326 IAC 2-7-10.5(d)6, a Minor Source Modification and a subsequent Significant Permit Modification are required.

#### Proposed Changes

The following changes were made in the Part 70 operating permit T097-6396-00137:

- (a) The front page was modified to reflect the Significant Permit Modification.
- (b) The condition A.2 (Emission Units and Pollution Control Equipment Summary) was modified to reflect replacement of the existing boiler EU001, 38 MMBTU/hr, with a proposed new boiler EU001, 29.4 MMBTU/hr.
- (c) Section D.1 (Facility Operation Conditions) was changed to reflect replacement of the existing boiler EU001 with a proposed new boiler.

The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language appears in **bold**):

Front Page:

Minor Source Modification No.: 097-12436-0352	Pages affected: 3, 4, 29, 30, 30a, 30b
Issued by:  Mona A. Salem Chief Operating Officer Department of Public Works	Issuance Date:

Page 3:

Table of content was updated to incorporate this modification.

Page 4:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]  
[326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) **One (1)Hurst Series 400 boiler, installed in 2000, identified as EU001, maximum rated heat input capacity 29.4 MMBTU per hour, and one (1) Cleaver Brooks boiler identified as EU002, maximum rated capacity of 38 MMBtu, installed in 1969, each boiler primarily combusting natural gas with Number 2 distillate oil as a backup fuel. These units have no control equipment and exhaust through a stack identified as S1.**
- ~~(a) Two (2) Cleaver Brooks boilers identified as EU001 and EU002, both units have a maximum rated capacity of 38 MMBtu and were installed in 1969. These units have no control equipment and exhaust through stack S1.~~

Pages 29, 30, 30a, and 30b:

**SECTION D.1 FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]
(b) <b>One (1) Hurst Series 400 boiler, installed in 2000, identified as EU001, maximum rated heat input capacity 29.4 MMBTU per hour, primarily combusting natural gas with No. 2 distillate oil as a back-up fuel. This unit has no control equipment and exhausts through a stack identified as S1.</b>
(c) <b>One (1) Two (2) Cleaver Brooks boilers identified as EU001 and EU002, primarily combusting natural gas with No. 2 distillate oil as a back-up fuel, <del>Both emissions units have a maximum rated capacity of 38 MMBtu, and were installed in 1969. This These units has have</del> no control equipment and exhausts through a stack identified as S1.</b>

**Emission Limitations and Standards [326 IAC 2-7-5(1)]**

**D.1.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]**

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the boiler Emission Unit EU001 described in this section except when otherwise specified in 40 CFR Part 60, Subpart Dc.

**D.1.2 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1-2(a)(3)] [326 IAC 12-1]**

(a) Pursuant to 326 IAC 7-1.1-2(a)(3) (SO<sub>2</sub> Emissions Limitations) and 40 CFR 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units):

- (1) The SO<sub>2</sub> emissions from the 29.4 million Btu per hour Boiler, identified as emission unit EU001, shall not exceed five tenths (0.5) pounds per million Btu heat input; or
- (2) The sulfur content of the fuel oil shall not exceed five-tenths percent (0.5%) by weight. [40 CFR 60.42c(d)]
- (3) Pursuant to 40 CFR 60 Subpart Dc, the fuel oil sulfur content limit applies at all times, including periods of startup, shutdown, and malfunction.

~~D.1.3 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1-2(a)(2)]~~

~~(b) Pursuant to 326 IAC 7-1.1 (SO<sub>2</sub> Emissions Limitations) the SO<sub>2</sub> emissions from the ~~two (2)~~ ~~thirty-eight~~ 38 MMBtu per hour boilers EU002 shall not exceed five tenths (0.5) pounds per MMBtu heat input when combusting distillate oil.~~

**D.1.4 3 Particulate Matter [326 IAC 6-2-2]**

(a) Pursuant to 326 IAC 6-2-2 (Particulate Matter Emission Limitations for Sources of Indirect Heating), the PM emissions from the ~~two (2)~~ 38 MMBtu per hour heat input boilers shall be limited to 0.435 pounds per MMBtu heat input.

Since the boilers ~~was~~ were existing and in operation before June 8, 1972, the following equation was used to derive pounds per MMBtu:

$$Pt = \frac{0.87}{Q^{0.16}} = \frac{0.87}{76^{0.16}} = 0.435,$$

Where: Pt = Pounds of particulate matter emitted per million Btu ( lbs/MMBtu ) heat input.

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

(b) Pursuant to 326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating) the Particulate Matter (PM) emissions from the 29.4 million Btu per hour boiler, identified as emission unit EU001, shall be limited to 0.365 pound per million Btu of heat input.

This limitation is based on the following equation:

$$Pt = \frac{1.09}{Q^{0.26}} = \frac{1.09}{67.4^{0.26}} = 0.365,$$

Where Pt = Pounds of particulate matter emitted per million Btu of heat input.

Q = Total source maximum operating capacity rating in million Btu per

hour (MMBtu/hr) heat input.

## Compliance Determination Requirements

### D.1.4 Testing Requirements [326 IAC 2-7-6(1)]

The Permittee is not required to test the boilers EU001 and EU002 by this permit. However, IDEM and ERMD may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM and ERMD, compliance with the Particulate Matter limit specified in Condition D.1.4 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

### D.1.35 Sulfur Dioxide Emissions and Sulfur Content

Pursuant to 40 CFR 60, Subpart Dc, the Permittee shall demonstrate compliance with Condition D.1.2, utilizing one of the following options:

- (a) Providing vendor analysis of fuel delivered, if accompanied by a certification; or
- (b) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
  - (1) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
  - (2) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.

## Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

### D.1.6 Visible Emissions Notations

- (a) Daily visible emission notations of the boilers EU001 and EU002, stack exhaust S1, shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

## Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

### D.1.57 Record Keeping Requirements

- (a) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with (1) through (6) below. Pursuant to 40 CFR 60 Subpart Dc, the fuel oil sulfur limit applies at all times including periods of startup, shutdown, and malfunction.

- (1) Calendar dates covered in the compliance determination period;
- (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
- (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications.
- (5) The name of the fuel supplier; and
- (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report.

- (b) To document compliance with Condition D.1.6, the Permittee shall maintain records of daily visible emission notations of the boilers EU001 and EU002, stack S1.**
- ~~(b)~~(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.
- (d) When using natural gas, a record shall be maintained of the amount of fuel combusted each month. These records shall be retained for a period of two years following the date of such record.**

#### D.1.68 Reporting Requirements

- (a)** A semiannual summary of the information to document compliance with Conditions D.1.2 shall be submitted to the address(es) listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the semiannual reporting period.

- 
- (b) Pursuant to 40 CFR 60, §60.7, the owner of this source shall furnish the EPA, IDEM and ERMD the following written notifications:**

- (1) Of the date construction of the new boiler EU001 is commenced postmarked no later than 30 days after such date.**
- (2) Of the anticipated date of initial startup of the new boiler EU001 postmarked no more than 60 days nor less than 30 days prior to such date.**
- (3) Of the actual date of initial new boiler EU001 startup date postmarked within 15 days after such date.**

#### Conclusion

The operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Permit Modification No. 097-12562-00137.