



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
Toll Free (800) 451-6027  
[www.idem.IN.gov](http://www.idem.IN.gov)

TO: Interested Parties / Applicant

DATE: December 2, 2008

RE: Midwest Sheets Company, LLC / 159-27067-00016

FROM: Matthew Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

## Notice of Decision: Approval - Registration

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 4-21.5-3-4(d) this order is effective when it is served. When served by U.S. mail, the order is effective three (3) calendar days from the mailing of this notice pursuant to IC 4-21.5-3-2(e).

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures  
FN-REGIS.dot 1/2/08



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## REGISTRATION OFFICE OF AIR QUALITY

**Midwest Sheets Company, LLC**  
**815 Industrial Drive**  
**Tipton, Indiana 46072**

Pursuant to 326 IAC 2-5.1 (Construction of New Sources: Registrations) and 326 IAC 2-5.5 (Registrations), (herein known as the Registrant) is hereby authorized to construct and operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this registration.

Registration No. 159-16831-00016	
Original signed by: Paul Dubenetzky, Branch Chief Permits Branch Office of Air Quality	Issuance Date: January 8, 2004

Registration Notice Only Change No. 159-20773-00016, issued on March 29, 2005  
Registration Notice Only Change No. 159-24164-00016, issued on February 9, 2007

Registration Revision No. 159-27067-00016	
Issued by:  <i>Original Signed By:</i> Alfred C. Dumauval, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: December 2, 2008

## SECTION A

## SOURCE SUMMARY

This registration is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Registrant 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 Registrant to obtain additional permits pursuant to 326 IAC 2.

### A.1 General Information

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The Registrant owns and operates a stationary corrugated sheet manufacturing operation.

Source Address:	815 Industrial Drive, Tipton, Indiana 46072
Mailing Address:	815 Industrial Drive, Tipton, Indiana 46072
General Source Phone Number:	(765) 675-6732
SIC Code:	2653
County Location:	Tipton County
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Registration

### A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) One (1) natural gas-fired boiler, identified as EU-001, constructed in 1997, rated at 20.9 MMBtu/hr, and exhausting to stack S-001. Under 40 CFR 60 Subpart Dc the natural gas-fired boiler (EU-01) is considered an existing NSPS boiler.
- (b) Twenty (20) natural gas-fired space heaters, identified as H1 through H20, constructed in 1997, with a rating of 0.6 MMBtu/hr each.
- (c) Two (2) make-up air units, identified as EU-001A and EU-001B, constructed in 1997, rated at 4.394 MMBtu/hr each, with Four (4) small heater units, identified as EU-001C, EU-001D, EU-001E and EU-001F, constructed in 1997, rated at 1.850 MMBtu/hr each and exhausting to stack S-001.
- (d) One (1) 110 inch wide BHS corrugator, identified as EU-005, constructed in 1997 with a maximum speed of 1,200 ft/min, exhausting internally. The BHS corrugator has two (2) knives to trim excess paper from the corrugator and is vacuumed to an internal air tangent.
- (e) One (1) internal air tangent, identified as T1, a pneumatic device to transport trim corrugated material from one section of the plant to another, exhausting internally, constructed in 1997.
- (f) One (1) starch silo, identified as EU-04, constructed in 1997, maximum capacity 17,520,000 pounds per year, equipped with a bin vent filter.
- (g) One (1) small starch mixing operation, which consists of one (1) 400 gallon mixing tank and three (3) holding tanks, installed in 1997. The operation mixes corn starch, bora and small doses of resin (Opti-Rez).
- (h) One (1) small parts washer, identified as EU-003, installed in 1997, maximum capacity of 30 gallon. Lid size 2' X 3'. The lid is closed when not in operation.
- (i) Storage tanks, vessels and containers holding or storing liquid substances that do not contain any VOC or HAPs.

- (j) Lubrication including hand-held spray can lubricating, dipping metal parts into lubricating oil, and manual or automated addition of cutting oil in machining operations.
- (k) Brazing, soldering, or welding operations and associated equipment, with negligible particulate matter emissions.
- (l) Drilling, grinding, machine wood, metal or plastic, surface grinding, with negligible particulate matter emissions.
- (m) Filling drums, pails or other packaging containers with lubricating oils, waxes and greases.
- (n) Grinding and machining operation controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operation, with negligible particulate matter emissions.
- (o) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.

## SECTION B

## GENERAL CONDITIONS

### B.1 Definitions [326 IAC 2-1.1-1]

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Terms in this registration shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-1.1-1) shall prevail.

### B.2 Effective Date of Registration [IC 13-15-5-3]

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Pursuant to IC 13-15-5-3, this registration is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

### B.3 Registration Revocation [326 IAC 2-1.1-9]

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Pursuant to 326 IAC 2-1.1-9 (Revocation), this registration to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this registration.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this registration.
- (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 registration shall not require revocation of this registration.
- (d) For any cause which establishes in the judgment of IDEM, the fact that continuance of this registration is not consistent with purposes of this article.

### B.4 Prior Permits Superseded [326 IAC 2-1.1-9.5]

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- (a) All terms and conditions of permits established prior to Registration No. 159-16831-00016 and issued pursuant to permitting programs approved into the state implementation plan have been either:
  - (1) incorporated as originally stated,
  - (2) revised, or
  - (3) deleted.
- (b) All previous registrations and permits are superseded by this registration.

### B.5 Annual Notification [326 IAC 2-5.1-2(f)(3)] [326 IAC 2-5.5-4(a)(3)]

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Pursuant to 326 IAC 2-5.1-2(f)(3) and 326 IAC 2-5.5-4(a)(3):

- (a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this registration.
- (b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003

Indianapolis, IN 46204-2251

- (c) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

**B.6 Source Modification Requirement [326 IAC 2-5.5-6(a)]**

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Pursuant to 326 IAC 2-5.5-6(a), 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.

**B.7 Registrations [326 IAC 2-5.1-2(i)]**

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Pursuant to 326 IAC 2-5.1-2(i), this registration does not limit the source's potential to emit.

**SECTION C**

**SOURCE OPERATION CONDITIONS**

Entire Source

**Emission Limitations and Standards [326 IAC 2-5.1-2(g)] [326 IAC 2-5.5-4(b)]**

**C.1 Opacity [326 IAC 5-1]**

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, unless otherwise stated in this registration:

- (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 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.

**C.2 Fugitive Dust Emissions [326 IAC 6-4]**

The Registrant shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

## SECTION D.1

## OPERATION CONDITIONS

Facility Description [326 IAC 2-5.1-2(f)(2)] [326 IAC 2-5.5-4(a)(2)]:

- (a) One (1) natural gas-fired boiler, identified as EU-001, constructed in 1997, rated at 20.9 MMBtu/hr, and exhausting to stack S-001. Under 40 CFR 60 Subpart Dc the natural gas-fired boiler (EU-01) is considered an existing NSPS boiler.
- (b) Twenty (20) natural gas-fired space heaters, identified as H1 through H20, constructed in 1997, with a rating of 0.6 MMBtu/hr each.
- (c) Two (2) make-up air units, identified as EU-001A and EU-001B, constructed in 1997, rated at 4.394 MMBtu/hr each, with Four (4) small heater units, identified as EU-001C, EU-001D, EU-001E and EU-001F, constructed in 1997, rated at 1.850 MMBtu/hr each and exhausting to stack S-001.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-5.1-2(f)(1)] [326 IAC 2-5.5-4(a)(1)]

#### D.1.1 Particulate Emission Limitations for Sources of Indirect Heating [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), particulate emissions from the one (1) natural gas-fired boiler (EU-001) shall not exceed 0.49 lb/MMBtu heat input.

## SECTION D.2

## OPERATION CONDITIONS

Facility Description [326 IAC 2-5.1-2(f)(2)] [326 IAC 2-5.5-4(a)(2)]:

- (f) One (1) starch silo, identified as EU-004, constructed in 1997, maximum capacity 17,520,000 pounds per year, equipped with a bin vent filter.
- (h) One (1) small parts washer, identified as EU-003, installed in 1997, maximum capacity of 30 gallon. Lid size 2' X 3'. The lid is closed when not in operation.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-5.1-2(f)(1)] [326 IAC 2-5.5-4(a)(1)]

#### D.2.1 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2(e), the particulate matter from the silo (EU-004) shall not exceed 4.10 pounds per hour when operating at a process weight rate of 1 ton per hour. The pounds per hour limitation were calculated with the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

#### D.2.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2] [326 IAC 8-3-5]

Pursuant to 326 IAC 8-3 (Organic Solvent Degreasing Operations), the one (1) small parts washer constructed after July 1, 1990 and does not have a remote solvent reservoir. Therefore, the requirements of 326 IAC 8-3-2, Organic Solvent Degreasing Operations: Cold Cleaner Operation and 326 IAC 8-3-5, Organic Solvent Degreasing Operations: Cold Cleaner Degreaser Operation and Control, are applicable. Compliance with 326 IAC 8-3-5 will satisfy the requirements 326 IAC 8-3-2.

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of the cold cleaner degreaser shall ensure that the following requirements are met:
  - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
    - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38° C) (one hundred degrees Fahrenheit (100° F));
    - (B) The solvent is agitated; or
    - (C) The solvent is heated.
  - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty eight degrees Celsius (38° C) (one hundred degrees Fahrenheit (100° F)),

then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
  - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
  - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty eight degrees Celsius (38° C) (one hundred degrees Fahrenheit (100° F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9° C) (one hundred twenty degrees Fahrenheit (120° F)):
    - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
    - (B) A water cover when solvent used is insoluble in, and heavier than, water.
    - (C) Other systems demonstrated equivalent control such as a refrigerated chiller or carbon absorption. Such systems shall be submitted to the US EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of the cold cleaning facility shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
  - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
  - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

#### D.2.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit is required for the starch silo equipped with a bin vent filter.

## SECTION E.1

## OPERATION CONDITIONS

Facility Description [326 IAC 2-5.1-2(f)(2)] [326 IAC 2-5.5-4(a)(2)]:

- (a) One (1) natural gas-fired boiler, identified as EU-001, constructed in 1997, rated at 20.9 MMBtu/hr, and exhausting to stack S-001. Under 40 CFR 60, Subpart Dc the natural gas-fired boiler (EU-001) is considered an existing NSPS boiler.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

### **New Source Performance Standards (NSPS) Requirements [326 IAC 2-5.1-2(f)(2)] [326 IAC 2-5.5-4(a)(2)]**

#### E.1.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]

The provisions of 40 CFR 60, Subpart A - General Provisions, which are incorporated as 326 IAC 12-1, apply to this facility described in this section except when otherwise specified in 40 CFR 60, Subpart Dc.

- (a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for the natural gas-fired boiler (EU-001) except as otherwise specified in 40 CFR Part 60, Subpart Dc.
- (b) Pursuant to 40 CFR 60.10, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue,  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

#### E.1.2 New Source Performance Standards for Small Industrial-Commercial-Institutional Steam Generating Units Requirements [40 CFR 60, Subpart Dc] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart Dc, the Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Dc (included as Attachment A), which are incorporated by reference as 326 IAC 12 for the natural gas-fired boiler EU-001.

- 40 CFR 60.40c  
40 CFR 60.41c  
40 CFR 60.48c(a), (g), (i) and (j)

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE BRANCH**

**REGISTRATION  
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-5.1-2(f)(3) and 326 IAC 2-5.5-4(a)(3).

<b>Company Name:</b>	Midwest Sheets Company, LLC
<b>Address:</b>	815 Industrial Drive
<b>City:</b>	Tipton, Indiana 46072
<b>Phone Number:</b>	(765) 675-6732
<b>Registration No.:</b>	159-27067-00016

- I hereby certify that Midwest Sheets Company, LLC is :  still in operation.  
 no longer in operation.
- I hereby certify that Midwest Sheets Company, LLC is :  in compliance with the requirements of Registration No. 159-27067-00016.  
 not in compliance with the requirements of Registration No. 159-27067-00016.

<b>Authorized Individual (typed):</b>
<b>Title:</b>
<b>Signature:</b>
<b>Phone Number:</b>
<b>Date:</b>

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

<b>Noncompliance:</b>

**Attachment A, NSPS Subpart Dc  
Miswest Sheets Company, LLC  
815 Industrial Drive  
Tipton, Indiana 46072**

**New Source Performance Standards for Small Industrial-Commercial Institutional Steam Generating Units, 40 CFR 60, Subpart Dc**

**§ 60.40c Applicability and delegation of authority.**

(a) Except as provided in paragraph (d) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr).

(b) In delegating implementation and enforcement authority to a State under section 111(c) of the Clean Air Act, §60.48c(a)(4) shall be retained by the Administrator and not transferred to a State.

(c) Steam generating units that meet the applicability requirements in paragraph (a) of this section are not subject to the sulfur dioxide (SO<sub>2</sub>) or particulate matter (PM) emission limits, performance testing requirements, or monitoring requirements under this subpart (§§60.42c, 60.43c, 60.44c, 60.45c, 60.46c, or 60.47c) during periods of combustion research, as defined in §60.41c.

(d) Any temporary change to an existing steam generating unit for the purpose of conducting combustion research is not considered a modification under §60.14.

(e) Heat recovery steam generators that are associated with combined cycle gas turbines and meet the applicability requirements of subpart GG or KKKK of this part are not subject to this subpart. This subpart will continue to apply to all other heat recovery steam generators that are capable of combusting more than or equal to 2.9 MW (10 MMBtu/hr) heat input of fossil fuel but less than or equal to 29 MW (100 MMBtu/hr) heat input of fossil fuel. If the heat recovery steam generator is subject to this subpart, only emissions resulting from combustion of fuels in the steam generating unit are subject to this subpart. (The gas turbine emissions are subject to subpart GG or KKKK, as applicable, of this part).

(f) Any facility covered by subpart AAAA of this part is not covered by this subpart.

(g) Any facility covered by an EPA approved State or Federal section 111(d)/129 plan implementing subpart BBBB of this part is not covered by this subpart.

**§ 60.41c Definitions.**

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act and in subpart A of this part.

*Annual capacity factor* means the ratio between the actual heat input to a steam generating unit from an individual fuel or combination of fuels during a period of 12 consecutive calendar months and the potential heat input to the steam generating unit from all fuels had the steam generating unit been operated for 8,760 hours during that 12-month period at the maximum design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility during a period of 12 consecutive calendar months.

*Coal* means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society of Testing and Materials in ASTM D388 (incorporated by reference, see §60.17), coal refuse, and petroleum coke. Coal-derived synthetic fuels derived from coal for the purposes of creating useful heat, including but not limited to solvent refined coal, gasified coal, coal-oil mixtures, and coal-water mixtures, are also included in this definition for the purposes of this subpart.

*Coal refuse* means any by-product of coal mining or coal cleaning operations with an ash content greater than 50 percent (by weight) and a heating value less than 13,900 kilojoules per kilogram (kJ/kg) (6,000 Btu per pound (Btu/lb) on a dry basis.

*Cogeneration steam generating unit* means a steam generating unit that simultaneously produces both electrical (or mechanical) and thermal energy from the same primary energy source.

*Combined cycle system* means a system in which a separate source (such as a stationary gas turbine, internal combustion engine, or kiln) provides exhaust gas to a steam generating unit.

*Combustion research* means the experimental firing of any fuel or combination of fuels in a steam generating unit for the purpose of conducting research and development of more efficient combustion or more effective prevention or control of air pollutant emissions from combustion, provided that, during these periods of research and development, the heat generated is not used for any purpose other than preheating combustion air for use by that steam generating unit ( *i.e.* , the heat generated is released to the atmosphere without being used for space heating, process heating, driving pumps, preheating combustion air for other units, generating electricity, or any other purpose).

*Conventional technology* means wet flue gas desulfurization technology, dry flue gas desulfurization technology, atmospheric fluidized bed combustion technology, and oil hydrodesulfurization technology.

*Distillate oil* means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396 (incorporated by reference, see §60.17).

*Dry flue gas desulfurization technology* means a SO<sub>2</sub> control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline reagent and water, whether introduced separately or as a premixed slurry or solution and forming a dry powder material. This definition includes devices where the dry powder material is subsequently converted to another form. Alkaline reagents used in dry flue gas desulfurization systems include, but are not limited to, lime and sodium compounds.

*Duct burner* means a device that combusts fuel and that is placed in the exhaust duct from another source (such as a stationary gas turbine, internal combustion engine, kiln, etc.) to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a steam generating unit.

*Emerging technology* means any SO<sub>2</sub> control system that is not defined as a conventional technology under this section, and for which the owner or operator of the affected facility has received approval from the Administrator to operate as an emerging technology under §60.48c(a)(4).

*Federally enforceable* means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR parts 60 and 61, requirements within any

applicable State implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 51.24.

*Fluidized bed combustion technology* means a device wherein fuel is distributed onto a bed (or series of beds) of limestone aggregate (or other sorbent materials) for combustion; and these materials are forced upward in the device by the flow of combustion air and the gaseous products of combustion. Fluidized bed combustion technology includes, but is not limited to, bubbling bed units and circulating bed units.

*Fuel pretreatment* means a process that removes a portion of the sulfur in a fuel before combustion of the fuel in a steam generating unit.

*Heat input* means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other sources (such as stationary gas turbines, internal combustion engines, and kilns).

*Heat transfer medium* means any material that is used to transfer heat from one point to another point.

*Maximum design heat input capacity* means the ability of a steam generating unit to combust a stated maximum amount of fuel (or combination of fuels) on a steady state basis as determined by the physical design and characteristics of the steam generating unit.

*Natural gas* means: (1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or (2) liquefied petroleum (LP) gas, as defined by the American Society for Testing and Materials in ASTM D1835 (incorporated by reference, see §60.17).

*Noncontinental area* means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

*Oil* means crude oil or petroleum, or a liquid fuel derived from crude oil or petroleum, including distillate oil and residual oil.

*Potential sulfur dioxide emission rate* means the theoretical SO<sub>2</sub> emissions (nanograms per joule (ng/J) or lb/MMBtu heat input) that would result from combusting fuel in an uncleaned state and without using emission control systems.

*Process heater* means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.

*Residual oil* means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5, and 6, as defined by the American Society for Testing and Materials in ASTM D396 (incorporated by reference, see §60.17).

*Steam generating unit* means a device that combusts any fuel and produces steam or heats water or any other heat transfer medium. This term includes any duct burner that combusts fuel and is part of a combined cycle system. This term does not include process heaters as defined in this subpart.

*Steam generating unit operating day* means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

*Wet flue gas desulfurization technology* means an SO<sub>2</sub> control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a liquid material. This definition includes devices where the liquid material is subsequently converted to another form. Alkaline reagents used in wet flue gas desulfurization systems include, but are not limited to, lime, limestone, and sodium compounds.

*Wet scrubber system* means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from a steam generating unit to control emissions of PM or SO<sub>2</sub>.

*Wood* means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including but not limited to sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

#### **§ 60.48c Reporting and recordkeeping requirements.**

(a) The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction and actual startup, as provided by §60.7 of this part. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

(2) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under §60.42c, or §60.43c.

(3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

(4) Notification if an emerging technology will be used for controlling SO<sub>2</sub> emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of §60.42c(a) or (b)(1), unless and until this determination is made by the Administrator.

(b) The owner or operator of each affected facility subject to the SO<sub>2</sub> emission limits of §60.42c, or the PM or opacity limits of §60.43c, shall submit to the Administrator the performance test data from the initial and any subsequent performance tests and, if applicable, the performance evaluation of the CEMS and/or COMS using the applicable performance specifications in appendix B of this part.

(c) The owner or operator of each coal-fired, oil-fired, or wood-fired affected facility subject to the opacity limits under §60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period.

(d) The owner or operator of each affected facility subject to the SO<sub>2</sub> emission limits, fuel oil sulfur limits, or percent reduction requirements under §60.42c shall submit reports to the Administrator.

(e) The owner or operator of each affected facility subject to the SO<sub>2</sub> emission limits, fuel oil sulfur limits, or percent reduction requirements under §60.42c shall keep records and submit reports as required under paragraph (d) of this section, including the following information, as applicable.

- (1) Calendar dates covered in the reporting period.
- (2) Each 30-day average SO<sub>2</sub> emission rate (ng/J or lb/MMBtu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.
- (3) Each 30-day average percent of potential SO<sub>2</sub> emission rate calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of the corrective actions taken.
- (4) Identification of any steam generating unit operating days for which SO<sub>2</sub> or diluent (O<sub>2</sub> or CO<sub>2</sub>) data have not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and a description of corrective actions taken.
- (5) Identification of any times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and a description of corrective actions taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit.
- (6) Identification of the F factor used in calculations, method of determination, and type of fuel combusted.
- (7) Identification of whether averages have been obtained based on CEMS rather than manual sampling methods.
- (8) If a CEMS is used, identification of any times when the pollutant concentration exceeded the full span of the CEMS.
- (9) If a CEMS is used, description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specifications 2 or 3 of appendix B of this part.
- (10) If a CEMS is used, results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part.
- (11) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under paragraph (f)(1), (2), (3), or (4) of this section, as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.
  - (f) Fuel supplier certification shall include the following information:
    - (1) For distillate oil:
      - (i) The name of the oil supplier;
      - (ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in §60.41c; and
      - (iii) The sulfur content of the oil.

(2) For residual oil:

(i) The name of the oil supplier;

(ii) The location of the oil when the sample was drawn for analysis to determine the sulfur content of the oil, specifically including whether the oil was sampled as delivered to the affected facility, or whether the sample was drawn from oil in storage at the oil supplier's or oil refiner's facility, or other location;

(iii) The sulfur content of the oil from which the shipment came (or of the shipment itself); and

(iv) The method used to determine the sulfur content of the oil.

(3) For coal:

(i) The name of the coal supplier;

(ii) The location of the coal when the sample was collected for analysis to determine the properties of the coal, specifically including whether the coal was sampled as delivered to the affected facility or whether the sample was collected from coal in storage at the mine, at a coal preparation plant, at a coal supplier's facility, or at another location. The certification shall include the name of the coal mine (and coal seam), coal storage facility, or coal preparation plant (where the sample was collected);

(iii) The results of the analysis of the coal from which the shipment came (or of the shipment itself) including the sulfur content, moisture content, ash content, and heat content; and

(iv) The methods used to determine the properties of the coal.

(4) For other fuels:

(i) The name of the supplier of the fuel;

(ii) The potential sulfur emissions rate of the fuel in ng/J heat input; and

(iii) The method used to determine the potential sulfur emissions rate of the fuel.

(g)(1) Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.

(2) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in §60.48c(f) to demonstrate compliance with the SO<sub>2</sub> standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

(3) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to this subpart) at that property are natural gas, wood, distillate oil meeting the most current requirements in §60.42C to use fuel certification to demonstrate compliance with the SO<sub>2</sub> standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

(h) The owner or operator of each affected facility subject to a federally enforceable requirement limiting the annual capacity factor for any fuel or mixture of fuels under §60.42c or §60.43c shall calculate the annual capacity factor individually for each fuel combusted. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of the calendar month.

(i) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

(j) The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

## Indiana Department of Environmental Management Office of Air Quality

### Technical Support Document (TSD) for a Registration Revision

#### Source Description and Location

<b>Source Name:</b>	<b>Midwest Sheets Company, LLC</b>
<b>Source Location:</b>	<b>815 Industrial Drive, Tipton, Indiana 46072</b>
<b>County:</b>	<b>Tipton</b>
<b>SIC Code:</b>	<b>2653</b>
<b>Registration No.:</b>	<b>159-27067-00016</b>
<b>Permit Reviewer:</b>	<b>Marcia Earl</b>

On October 3, 2008, the Office of Air Quality (OAQ) received an application from Midwest Sheets Company, LLC related to the continued operation of an existing corrugated sheet manufacturing operations.

#### Existing Approvals

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

- (a) Registration No. 159-16831-00016, issued on January 8, 2004.
- (b) Notice Only Change No. 159-20773-00016, issued on March 29, 2005.
- (c) Notice Only Change No. 159-24164-00016, issued on February 9, 2007.

#### County Attainment Status

The source is located in Tipton County.

Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O <sub>3</sub>	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. <sup>1</sup>
PM <sub>10</sub>	Unclassifiable effective November 15, 1990.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Not designated.
<sup>1</sup> Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM <sub>2.5</sub> .	

- (a) **Ozone Standards**  
 Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Tipton 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.

- (b) **PM<sub>2.5</sub>**  
Tipton County has been classified as attainment for PM<sub>2.5</sub>. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM<sub>2.5</sub> emissions, and the effective date of these rules was July 15<sup>th</sup>, 2008. Indiana has three years from the publication of these rules to revise its PSD rules, 326 IAC 2-2, to include those requirements. The May 8, 2008 rule revisions require IDEM to regulate PM<sub>10</sub> emissions as a surrogate for PM<sub>2.5</sub> emissions until 326 IAC 2-2 is revised.
- (c) **Other Criteria Pollutants**  
Tipton County has been classified as attainment or unclassifiable in Indiana for PM<sub>10</sub>, SO<sub>2</sub>, CO and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

### **Fugitive Emissions**

The fugitive emissions of criteria pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-5.5 (Registrations) applicability.

### **Background and Description of Emission Units and Pollution Control Equipment**

The source consists of the following existing emission units:

- (a) One (1) natural gas-fired boiler, identified as EU-001, constructed in 1997, rated at 20.9 MMBtu/hr, and exhausting to stack S-001. Under 40 CFR 60 Subpart Dc the natural gas-fired boiler (EU-01) is considered an existing NSPS boiler.
- (b) Twenty (20) natural gas-fired space heaters, identified as H1 through H20, constructed in 1997, with a rating of 0.6 MMBtu/hr each.

### **Background and Description of Unpermitted Emission Units**

The Office of Air Quality (OAQ) has reviewed an application, submitted by Midwest Sheets Company, LLC on October 3, 2008, requesting that the registration be revised to include all emission units that were constructed in 1997 and not previously registered.

- (a) Two (2) make-up air units, identified as EU-001A and EU-001B, constructed in 1997, rated at 4.394 MMBtu/hr each, with Four (4) small heater units, identified as EU-001C, EU-001D, EU001E and EU-001F, constructed in 1997, rated at 1.850MMBtu/hr each and exhausting to stack S-001.
- (b) One (1) 110 inch wide BHS corrugator, identified as EU-005, constructed in 1997 with a maximum speed of 1,200 ft/min, exhausting internally. The BHS corrugator has two (2) knives to trim excess paper from the corrugator and is vacuumed to an internal air tangent.
- (c) One (1) internal air tangent, identified as T1, a pneumatic device to transport trim corrugated material from one section of the plant to another, exhausting internally, constructed in 1997.
- (d) One (1) starch silo, identified as EU-004, constructed in 1997, maximum capacity 17,520,000 pounds per year, equipped with a bin vent filter.
- (e) One (1) small starch mixing operation, which consists of one (1) 400 gallon mixing tank and three (3) holding tanks, installed in 1997. The operation mixes corn starch, bora and small doses of resin (Opti-Rez). The process containers are self-enclosed with trace amounts of particulate matter.
- (f) One (1) small parts washer, identified as EU-003, installed in 1997, maximum capacity of 30 gallon. Lid size 2' X 3'. The lid is closed when not in operation.

- (g) Storage tanks, vessels and containers holding or storing liquid substances that do not contain any VOC or HAPs.
- (h) Lubrication including hand-held spray can lubricating, dipping metal parts into lubricating oil, and manual or automated addition of cutting oil in machining operations.
- (i) Brazing, soldering, or welding operations and associated equipment, with negligible particulate matter emissions.
- (j) Drilling, grinding, machine wood, metal or plastic, surface grinding, with negligible particulate matter emissions.
- (k) Filling drums, pails or other packaging containers with lubricating oils, waxes and greases.
- (l) Grinding and machining operation controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operation, with negligible particulate matter emissions.
- (m) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.

**Enforcement Issues**

IDEM is aware that equipment has been constructed prior to receipt of the proper permit. IDEM is reviewing this matter and will take the appropriate action. This proposed approval is intended to satisfy the requirements of the construction permit rules.

**Emission Calculations**

See Appendix A, pages 1 through 6 of this TSD for detailed emission calculations.

**Potential to Emit of the Entire Source After Issuance of the Registration Revision**

The following table reflects the unlimited potential to emit (PTE) of the entire source before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Process/ Emission Unit	Potential To Emit of the Entire Source (tons/year)								
	PM	PM <sub>10</sub> <sup>*</sup>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	Total HAPs	Worst Single HAP
Natural Gas-fired combustion	0.40	1.63	1.63	0.13	21.50	1.18	18.06	0.41	0.41 Hexane
Starch Silo (EU-004)	13.75	4.82	4.82	0.00	0.00	0.00	0.00	0.00	0.00
Corrugator (EU-005)	0.09	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.00
Small Parts Washer (EU-003)	0.00	0.0	0.00	0.00	0.00	0.26	0.00	0.00	0.00
<b>Total PTE of Entire Source</b>	<b>14.24</b>	<b>6.54</b>	<b>6.54</b>	<b>0.13</b>	<b>21.50</b>	<b>1.44</b>	<b>18.06</b>	<b>0.41</b>	<b>-</b>

Process/ Emission Unit	Potential To Emit of the Entire Source (tons/year)								
	PM	PM <sub>10</sub> *	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	Total HAPs	Worst Single HAP
Exemptions Levels	5	5	5	10	10	5 or 10	25	25	10
Registration Levels	25	25	25	25	25	25	100	25	10

negl. = negligible  
\* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".

- (a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of NO<sub>x</sub> is within the range listed in listed in 326 IAC 2-5.5-1(b)(1). Therefore, the source is subject to the provisions of 326 IAC 2-5.5 (Registrations). A Registration will be issued.
- (b) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and the PTE of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-7.

This Registration is being revised through a Registration Revision pursuant to 326 IAC 2-5.5.6(g), because the revision involves emission units constructed in 1997 but not previously listed, which are not described in 326 IAC 2-5.5.6(d) (Registration Notice-Only Changes).

**Federal Rule Applicability Determination**

New Source Performance Standards (NSPS)

- (a) The source is subject to the requirements of the New Source Performance Standard for 40 CFR 60 Subpart Dc (Standards of Performance for Small Industrial-Commercial Institutional Steam Generating Units), which is incorporated by reference 326 IAC 12, because the natural gas-fired boiler (EU-001) has an input rate less than 100 MMBtu per hour but greater than or equal to 10 MMBtu per hour.

Applicable portions of the NSPS are the following:

- 40 CFR 60.40c
- 40 CFR 60.41c
- 40 CFR 60.48c(a), (g), (i) and (j)

Nonapplicable portions of the NSPS will not be included in the permit.

The requirements of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated as 326 IAC 12-1, apply to the natural gas-fired boiler EU-001 except as otherwise specified in 40 CFR 60, Subpart Dc.

- (b) There are no other New Source Performance Standards (NSPS)(40 CFR Part 60) included in the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (c) The requirements of the National Emission Standards for Hazardous Air Pollutants for 40 CFR

63 Subpart T (National Emission Standards for Halogenated Solvent Cleaning), are not included in this permit, since the small parts washer (EU-003) does not use halogenated solvents in total concentration of greater than five percent (5%) by weight.

- (d) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.

#### Compliance Assurance Monitoring (CAM)

- (e) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the unlimited potential to emit of the source is less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

<b>State Rule Applicability Determination</b>
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The following state rules are applicable to the source:

- (a) 326 IAC 2-5.5 (Registrations)  
Registration applicability is discussed under the Permit Level Determination – Registration section above.
- (b) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))  
The potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-4.1.
- (c) 326 IAC 2-6 (Emission Reporting)  
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.
- (d) 326 IAC 5-1 (Opacity 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:
- (1) 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.
  - (2) 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.
- (e) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)  
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.
- (f) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)  
The source is not subject to the requirements of 326 IAC 6-5, because the source does not have potential fugitive particulate emissions greater than 25 tons per year. Therefore, 326 IAC 6-5 does not apply.

- (g) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)  
Each of the emission units at this source is not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from each emission unit is less than twenty-five (25) tons per year.

#### Individual Facilities

- (h) 326 IAC 6-2-3 (Particulate Emission Limitations for Sources of Indirect Heating)  
The twenty (20) natural gas-fired space heaters (H1 through H20), the 2 make-up air units, (EU-001A and EU-001B) and the four (4) small heater units (EU-001C, EU-001D, EU-001E and EU-001F) are not subject to 326 IAC 6-3-2, because the heaters are direct fired heaters and not indirect fired heaters.
- (i) 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)  
The one (1) natural gas-fired boiler (EU-001) with a maximum heat capacity of 20.9 MMBtu, constructed after September 21, 1983, must comply with the requirements of 326 IAC 6-2-4. The emission limitations are based on the following equation given in 326 IAC 6-2-4:

$$Pt = 1.09/Q^{0.26}$$

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the 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 contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

The heat input capacity of the natural gas heaters is 20.9 MMBtu/hr total.

$$Pt = 1.09/(20.9)^{0.26} = 0.49 \text{ lb/MMBtu heat input.}$$

Based on the AP-42 particulate emission factor of 1.9 lb/mmcf, the potential particulate emissions are:  $1.9 \text{ lb/mmcf} \times 1 \text{ mmcf} / 1,000 \text{ MMBtu} = 0.0019 \text{ lb/MMBtu}$ . Therefore the source is able to comply with this limit when burning natural gas.

- (j) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)  
(1) Pursuant to 326 IAC 6-3-2(e), the particulate matter from the silo (EU-004) shall not exceed 4.10 pounds per hour when operating at a process weight rate of 1 ton per hour. The pounds per hour limitation were calculated with the following equation:  
  
Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

- (2) Pursuant to 326 IAC 6-3-1(b)(14), the BHS corrugator (EU-005) is exempt from

326 IAC 6-3, since the potential particulate emissions are less than 0.551 pounds per hour.

- (k) 326 IAC 8-3 (Organic Solvent Degreasing Operations)  
Pursuant to 326 IAC 8-3 (Organic Solvent Degreasing Operations), the one (1) small parts washer constructed after July 1, 1990 and does not have a remote solvent reservoir. Therefore, the requirements of 326 IAC 8-3-2, Organic Solvent Degreasing Operations: Cold Cleaner Operation and 326 IAC 8-3-5, Organic Solvent Degreasing Operations: Cold Cleaner Degreaser Operation and Control, are applicable. Compliance with 326 IAC 8-3-5 will satisfy the requirements 326 IAC 8-3-2.
- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of the cold cleaner degreaser shall ensure that the following requirements are met:
- (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
    - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38° C) (one hundred degrees Fahrenheit (100° F));
    - (B) The solvent is agitated; or
    - (C) The solvent is heated.
  - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty eight degrees Celsius (38° C) (one hundred degrees Fahrenheit (100° F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
  - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
  - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
  - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty eight degrees Celsius (38° C) (one hundred degrees Fahrenheit (100° F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9° C) (one hundred twenty degrees Fahrenheit (120° F)):
    - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
    - (B) A water cover when solvent used is insoluble in, and heavier than, water.
    - (C) Other systems demonstrated equivalent control such as a refrigerated chiller or carbon absorption. Such systems shall be submitted to the US

EPA as a SIP revision.

- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of the cold cleaning facility shall ensure that the following operating requirements are met:
  - (1) Close the cover whenever articles are not being handled in the degreaser.
  - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
  - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.
- (l) 326 IAC 12 (New Source Performance Standards)  
See Federal Rule Applicability Section of this TSD.
- (m) 326 IAC 20 (Hazardous Air Pollutants)  
See Federal Rule Applicability Section of this TSD.

<b>Conclusion and Recommendation</b>
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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 October 3, 2008.

The operation of this source shall be subject to the conditions of the attached proposed Registration No. 159-27067-00016. The staff recommends to the Commissioner that this Registration be approved.

<b>IDEM Contact</b>
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- (a) Questions regarding this proposed permit can be directed to Marcia Earl at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-0863 or toll free at 1-800-451-6027 extension 3-0863.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: [www.idem.in.gov](http://www.idem.in.gov)

**Appendix A: Emission Summary**

Page 1 of 6 TSD App A

**Company Name:** Midwest Sheets LLC  
**Address City Zip:** 815 Industrial Drive, Tipton, Indiana 46072  
**Permit No:** R159-27067-00016  
**Reviewer:** Marcia Earl  
**Date:** November 2008

**Uncontrolled Emissions**

<b>Emission Units</b>	<b>PM</b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>	<b>SO<sub>2</sub></b>	<b>VOC</b>	<b>CO</b>	<b>NOx</b>	<b>HAPs</b>
Natural Gas-fired combustion (EU-001and H1 through H20)	0.40	1.63	1.63	0.13	1.18	18.06	21.50	0.41
Starch Silo (EU-004)	13.75	4.82	4.82	0.00	0.00	0.00	0.00	0.00
Small Parts Washer (EU-003)	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.00
BHS Corrugator (EU-005)	0.09	0.09	0.09	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>14.24</b>	<b>6.54</b>	<b>6.54</b>	<b>0.13</b>	<b>1.44</b>	<b>18.06</b>	<b>21.50</b>	<b>0.41</b>

**Controlled Emissions**

<b>Emission Units</b>	<b>PM</b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>	<b>SO<sub>2</sub></b>	<b>VOC</b>	<b>CO</b>	<b>NOx</b>	<b>HAPs</b>
Natural Gas-fired combustion (EU-001and H1 through H20)	0.40	1.63	1.63	0.13	1.18	18.06	21.50	0.41
Starch Silo (EU-004)	0.79	0.26	0.04	0.00	0.00	0.00	0.00	0.00
Small Parts Washer EU-003	0.00	0.00	0	0.00	0.26	0.00	0.00	0.00
BHS Corrugator (EU-005)	0.09	0.09	0.09	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>1.28</b>	<b>1.98</b>	<b>1.76</b>	<b>0.13</b>	<b>1.44</b>	<b>18.06</b>	<b>21.50</b>	<b>0.41</b>

**Appendix A: Emissions Calculations  
Natural Gas Combustion Operation  
MM BTU/HR <100**

**Company Name:** Midwest Sheets LLC  
**Address City IN Zip:** 815 Industrial Drive, Tipton, Indiana 46072  
**Permit Number:** R159-27067-00016  
**Reviewer:** Marcia Earl  
**Date:** November 2008

Heat Input Capacity  
MMBtu/hr

49.09

Potential Throughput  
MMCF/yr

430.0

UNITS	RATING (MMBtu/hr)	TOTAL
(1) Boiler (EU-001)	20.9	20.9
(20) Space Heaters (H1 through H20)	0.6	12.0
(2) make-up air units (EU-001A and EU-001B)	4.394	8.788
(4) small heaters (EU-001C, EU-001D, EU-001E and EU-001F)	1.85	7.4
Total		49.09

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM <sub>10</sub> *	PM <sub>2.5</sub> *	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO
Potential Emission in tons/yr	1.9	7.6	7.6	0.6	100.0 **see below	5.5	84.0
	0.40	1.63	1.63	0.13	21.50	1.18	18.06

\*PM emission factor is filterable PM only. PM<sub>10</sub>/PM<sub>2.5</sub> emission factors are filterable and condensable combined.

\*\*Emission Factors for NO<sub>x</sub>: Uncontrolled = 100, Low NO<sub>x</sub> Burner = 50, Low NO<sub>x</sub> 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

**Appendix A: Emissions Calculations  
Natural Gas Combustion Operation  
MM BTU/HR <100  
HAPs Emissions**

**Company Name:** Midwest Sheets LLC  
**Address City IN Zip:** 815 Industrial Drive, Tipton, Indiana 46072  
**Permit Number:** R159-27067-00016  
**Reviewer:** Marcia Earl  
**Date:** November 2008

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
49.09	430.0

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	4.52E-04	2.580E-04	1.613E-02	3.870E-01	7.310E-04

HAPs - Metals					
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	1.08E-04	2.365E-04	3.010E-04	8.171E-05	4.515E-04

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

**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

**Appendix A: Emission Calculations  
Starch Silo EU-004**

**Company Name:** Midwest Sheets Company, LLC  
**Address City Zip:** 815 Industrial Drive, Tipton, Indiana 46072  
**Permit No:** R159-27067-00016  
**Reviewer:** Marcia Earl  
**Date:** November 2008

Emission Unit	Units Process (lbs/yr)	Unit Weight lbs/sf (174 lbs/mmsf)	Maximum Throughput		PM Emission Factor (lb/ton)	PM <sub>10</sub> Emission Factor (lb/ton)	PM <sub>2.5</sub> Emission Factor (lb/ton)
			(lb/hr)	(ton/yr)			
Starch Silo EU-004	17,520,000	1.00	2,000.00	8760.00	3.14	1.10	1.10

Uncontrolled PM Emissions (ton/yr)	Uncontrolled PM <sub>10</sub> Emissions (ton/yr)	Uncontrolled PM <sub>2.5</sub> Emissions (ton/yr)
13.75	4.82	4.82

**Methodology**

Uncontrolled PM Emissions (tons/yr) = Maximum Throughput (tons/yr) \* PM Emission Factor (lb/ton) / 1 ton/2000 (lb/ton)

Emission factors are from AP-42 table 11.12-2 (cement supplement)

**Appendix A: Emission Calculations  
Small Parts Washer (EU-003)**

**Company Name:** Midwest Sheets Company, LLC  
**Address City Zip:** 815 Industrial Drive, Tipton, Indiana 46072  
**Permit No:** R159-27067-00016  
**Reviewer:** Marcia Earl  
**Date:** November 2008

Emission Unit	Unit Size (gallon)	Max Potential Quantity Loss lbs/yr	Density lbs/gallon	Petroleum Naptha		
				Percent	lb/hr	lb/yr
Parts washer (Crystal Clean 100+)	30	78	6.54	100%	0.06	510.12

Total VOC	Run days in 2007	PTE VOC (tons/yr)	Total VOC
510.12	365	0.26	

**Methodology**

Potential to Emit (PTE) VOC ton/yr = Max. Potential Quantity Loss (lbs/yr) \* Density (lbs/gal.) = Total VOC (lbs/yr)  
 Total VOC (lbs/yr / 1ton/2,000 lbs = PTE VOC (tons/yr)

The Crystal Clean 100+ degreaser does not contain hazardous air pollutants (HAPs).

**Appendix A: Emission Calculations  
Corrugator (EU-005)**

**Company Name:** Midwest Sheets Company, LLC  
**Address City Zip:** 815 Industrial Drive, Tipton, Indiana 46072  
**Permit No:** R159-27067-00016  
**Reviewer:** Marcia Earl  
**Date:** November 2008

Emission Unit	Units Process (sq.ft/hr)	Unit Weight lbs/sf (174 lbs/mmsf)	Maximum Throughput		PM Emission Factor (lb/ton)	Uncontrolled PM Emissions (ton/yr)
			(lb/hr)	(ton/yr)		
BHS Corrugator (EU-005)	660,000	0.017%	114.84	502.99	0.35	0.088

Emissions based upon mmsf, not on weight. Emission factor is industry specific and is provided by source.

**Methodology**

Uncontrolled PM Emissions (tons/yr) = Maximum Throughput (tons/yr) \* PM Emission Factor (lb/ton) / 1 ton/2000 (lb/ton)