



## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

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

Michael R. Pence  
Governor

Thomas W. Easterly  
Commissioner

### NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding a New Source Review (NSR) Permit and  
Source Specific Operating Agreement (SSOA)

for Twigg Corporation in Morgan County

**NSR Permit and SSOA No. S109-35998-00066**

The Indiana Department of Environmental Management (IDEM), has received an application from Twigg Corporation located at 659 E York St., Martinsville, IN 46151 for a NSR Permit and SSOA. If approved by IDEM's Office of Air Quality (OAQ), this proposed permit would allow Twigg Corporation to operate a new stationary metal alloy engine parts manufacturing operation.

The applicant intends to construct and/or operate new equipment that will emit air pollutants, therefore the permit contains new permit conditions. The potential to emit air pollutants will be limited pursuant to the conditions contained in the SSOA. IDEM has reviewed this application, and has developed preliminary findings, consisting of a draft permit and supporting documents, that would allow the applicant to construct and operate this equipment.

A copy of the permit application and IDEM's preliminary findings are available at:

Morgan County Public Library  
110 South Jefferson Street  
Martinsville, IN 46151

A copy of the preliminary findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>.

#### **How can you participate in this process?**

The date that this notice is published in a newspaper marks the beginning of a 30-day public comment period. If the 30<sup>th</sup> day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the **air pollution impact** of this draft permit are received, with a request for a public hearing, IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing, you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM's mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number S109-35998-00066 in all correspondence.



**Comments should be sent to:**

Julie Alexander  
IDEM, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251  
(800) 451-6027, ask for extension 3-1782  
Or dial directly: (317) 233-1782  
Fax: (317) 232-6749 attn: Julie Alexander  
E-mail: JuAlexan@idem.IN.gov


All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor, or noise. For such issues, please contact your local officials.

For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: <http://www.in.gov/idem/5881.htm>; and the Citizens' Guide to IDEM on the Internet at: <http://www.in.gov/idem/6900.htm>.

**What will happen after IDEM makes a decision?**

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM's response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM's decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, and the IDEM public file room on the 12<sup>th</sup> floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251.

If you have any questions, please contact Julie Alexander of my staff at the above address.



Jenny Acker, Section Chief  
Permits Branch  
Office of Air Quality



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## DRAFT

## NEW SOURCE REVIEW PERMIT AND SOURCE SPECIFIC OPERATING AGREEMENT OFFICE OF AIR QUALITY

**Twigg Corporation  
659 E York St.  
Martinsville, Indiana 46151**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this New Source Review (NSR) Permit and Source Specific Operating Agreement (SSOA).

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-5.1, 326 IAC 2-9 and 40 CFR 52.780, with conditions listed on the attached pages.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Source Specific Operating Agreement (SSOA) under 326 IAC 2-9.

Source Specific Operating Agreement No. S109-35998-00066	
Issued by:  Jenny Acker, Section Chief Permits Branch Office of Air Quality	Issuance Date:

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## SECTION A

## SOURCE SUMMARY

This permit 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 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 pursuant to 326 IAC 2.

### A.1 General Information

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The Permittee owns and operates a stationary metal alloy engine parts manufacturing operation.

Source Address:	659 E York St., Martinsville, Indiana 46151
General Source Phone Number:	765-342-7126
SIC Code:	3724
County Location:	Morgan Washington Township
Source Location Status:	Nonattainment for SO <sub>2</sub> standard Attainment for all other criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

### A.2 Source Summary

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This stationary source consists of the following:

- (a) Surface Coating or Graphic Arts Operation [326 IAC 2-9-2.5]
- (b) Abrasive Cleaning Operation [326 IAC 2-9-5]
- (c) External Combustion Sources [326 IAC 2-9-13]

The source also contains the following units:

- (d) One (1) electric vacuum furnace, identified as VFW Big Mouth, with a maximum capacity of 360 lbs of metal/hour, approved in 2015 for construction, and exhausting indoors.
- (e) One (1) electric vacuum furnace, , identified as 38D, with a maximum capacity of 60 lbs of metal/hours, approved in 2015 for construction and exhausting indoors.
- (f) One (1) electric vacuum furnace, identified as Charlie, with a maximum capacity of 40 lbs of metal/hour, approved in 2015 for construction, and exhausting indoors.
- (g) One (1) pit furnace, with a maximum capacity of 8.0 lbs of metal/hour, approved in 2015 for construction, and exhausting indoors.
- (h) Two (2) water rinse tanks, identified as T1 and T3, each with a capacity of 23 gallons, approved in 2015 for construction, and exhausting to stack 01.
- (i) One (1) 40% by volume nitric acid and 7% by volume Turco 4104 tank, identified as T2, with a capacity of 23 gallons, approved in 2015 for construction and exhausting to stack 02.
- (j) One (1) 37% by volume hydrogen chloride (HCL) and 42% by volume iron chloride (FeCl<sub>3</sub>) tank, identified as T4, with a capacity of 23 gallons, approved in 2015 for construction and exhausting to stack 04.

- (k) One (1) Brulin 815 tank, identified as T5, with a capacity of 450 gallons, approved in 2015 for construction, and exhausting to stack 05.
- (l) One (1) Oakite Caustic Cleaner tank, identified as T6, each with a capacity of 450 gallons, approved in 2015 for construction and exhausting to stack 06.
- (m) Two (2) parts washers, both without a remote solvent reservoir, using solvents with vapor pressure less than two (2) kPa measured at thirty-eight degrees Centigrade (38°C), approved in 2015 for construction [326 IAC 8-3-2][326 IAC 8-3-8].
- (n) One (1) MIG welding station for maintenance work, with a capacity of 0.25 lbs/month, approved in 2015 for construction.
- (o) Ten (10) stick welding station with a capacity of 0.16 lbs/hr each, approved in 2015 for construction.
- (p) Nine (9) TIG welding station with a capacity of 0.99 lbs/hr each, approved in 2015 for construction.
- (q) One (1) plasma cutting station cutting 0.03 inch metal with a capacity of 2.00 in/minute, approved in 2015 for construction.
- (r) The following grinding and metal cutting operations:

Location	ID	Control	pounds of metal per hour	Fluid to aid in machining
Mori-Seki Area	Mori-Seki Lathe 1	oil mist collector 1	3.11	1 gal/day
	Mori-Seki Lathe 2		3.11	
	Mori-Seki Lathe 3		3.11	
	Bullard Mill	NA	0.05	
	WIRE EDM (W/C 398)		0.10	1.5 gal/day
	CNC Grinder		5.01	
	Haas Lathe 1	oil mist collector 2	0.75	1.5 gal/day
	Haas Lathe 2	NA		
Anocut Area	Anocut 1	NA	0.10	1 gal/week
	Anocut 2			
	Anocut 3			
Bullard Area	Bullard 1	NA	0.20	3 gal/week
	Bullard 2			
	Bullard 3			
	Bullard 4			

Location	ID	Control	pounds of metal per hour	Fluid to aid in machining
Government Segments	Large Drill Press	NA	0.05	1 gal/month
	Small Drill Press			2 gal/week
	Mori Seiki MV-80 Mill		0.07	0.50 gal/month
	Manual Lathe 1			0.50 gal/week
	Manual Lathe 2		0.01	2 gal/week
	King Mill (W/C 315)			1 gal/day
	Okuma Mill (W/C 385)		5.01	2 gal/week
	Okuma Mill (W/C 385)			NA
	Mori Seiki Frontier LII Lathe		0.05	1 gal/day
	EDM CNC (W/C 390)			NA
	Bridgeport Mill		0.10	1 gal/day
	PM 22 Mill			NA
	Lucas Mill		0.07	1 gal/day
	Small EDM (W/C 401)			NA
	Chop Saw		0.07	1 gal/day
	TI Case Gisholt Lathe (W/C 315)			NA
	Flat surface grinder, belt grinders, and bench grinders			NA
Rolls Royce Line	Okuma Mill	NA	0.10	1 gal/day
Stater Area	Haas Mill (W/C 335)	NA	0.10	4 gal/week
	Haas Mill (W/C 338)			1 gal/week
	Cutting Wheel (W/C 237)		0.05	-
	RT-A O/D Grinder (W/C 355)			-
	Mill (W/C 356)		0.07	-
	Manual Lathe (W/C 324)			-

A.3 New Source Review and SSOA Applicability [326 IAC 2-9-1][326 IAC 2-1.1-3(d)]

- (a) This source, otherwise required to have a permit under 326 IAC 2-5.1, 326 IAC 2-5.5, 326 IAC 2-6.1, 326 IAC 2-7, or 326 IAC 2-8, has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Source Specific Operating Agreement (SSOA) under 326 IAC 2-9.
- (b) Pursuant to 326 IAC 2-9-1(g), the source may apply for up to four (4) different SSOAs contained in 326 IAC 2-9.
- (c) Pursuant to 326 IAC 2-1.1-3(d), this New Source Review Permit is required for the following:
  - (1) External combustion sources complying with 326 IAC 2-9-13

## **SECTION B GENERAL CONDITIONS**

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

Terms in this permit 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 Affidavit of Construction [326 IAC 2-5.1-3(h)][326 IAC 2-5.1-4]**

This document shall also become the approval to operate pursuant to 326 IAC 2-5.1-4 when prior to the start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), verifying that the emission units were constructed as described in the application or the permit. The emission units covered in this permit may continue operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM if constructed as described.
- (b) If actual construction of the emission units differs from the construction described in the application, the source may not continue operation until the permit has been revised pursuant to 326 IAC 2 and an Operation Permit Validation Letter is issued.
- (c) The Permittee shall attach the Operation Permit Validation Letter received from the Office of Air Quality (OAQ) to this permit.

### **B.3 Term of Conditions [326 IAC 2-1.1-9.5]**

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

### **B.4 Enforceability**

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

### **B.5 Severability**

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

### **B.6 Property Rights or Exclusive Privilege**

This permit does not convey any property rights of any sort or any exclusive privilege.

### **B.7 Duty to Provide Information**

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of

requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

**B.8 Prior Permits Superseded [326 IAC 2-1.1-9.5]**

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- (a) All terms and conditions of permits established prior to SSOA No. S109-35998-00066 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 permit.

**B.9 Annual Notification [326 IAC 2-9-1(d)]**

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Pursuant to 326 IAC 2-9-1(d):

- (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 SSOA.
- (b) The annual notice shall be submitted in the format attached no later than January 30 of each year to:
- Indiana Department of Environmental Management  
Compliance and Enforcement 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.10 Source Modification Requirement [326 IAC 2-9-1(e)]**

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Pursuant to 326 IAC 2-9-1(e), before the Permittee modifies its operations in such a way that it will no longer comply with the applicable restrictions and conditions of this SSOA, it shall obtain the appropriate approval from IDEM, OAQ under 326 IAC 2-2, 326 IAC 2-3, 326 IAC 2-4.1, 326 IAC 2-5.1, 326 IAC 2-6.1, 326 IAC 2-7, and 326 IAC 2-8.

**B.11 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]**

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Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.12 Permit Revocation [326 IAC 2-1.1-9][326 IAC 2-9-1(j)]

- (a) Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:
  - (1) Violation of any conditions of this permit.
  - (2) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
  - (3) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
  - (4) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
  - (5) For any cause which establishes in the judgment of IDEM the fact that continuance of this permit is not consistent with purposes of this article.
- (b) Pursuant to 326 IAC 2-9-1(j), noncompliance with any applicable provision 326 IAC 2-9 or any requirement contained in this SSOA may result in the revocation of this SSOA and make this source subject to the applicable requirements of a major source.

## SECTION C

## SOURCE OPERATION CONDITIONS

Entire Source
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### Emission Limitations and Standards [326 IAC 2-9]

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

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (Applicability) and 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this SSOA:

- (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 Permittee 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).

### Compliance Requirements [326 IAC 2-1.1-11][326 IAC 2-9]

#### C.3 Compliance with Applicable Requirements [326 IAC 2-9-1(i)]

Pursuant to 326 IAC 2-9-1(i), the owner or operator is hereby notified that this operating agreement does not relieve the Permittee of the responsibility to comply with the provisions of any applicable federal, state, or local rules, or any New Source Performance Standards (NSPS), 40 CFR Part 60, or National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 61 or 40 CFR Part 63.

### Record Keeping and Reporting Requirements [326 IAC 2-9]

#### C.4 General Record Keeping Requirements [326 IAC 2-9-1(f)]

Pursuant to 326 IAC 2-9-1(f), records of all required monitoring data, reports and support information required by this SSOA shall be physically present or electronically accessible at the source location for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

#### C.5 Reporting Requirements [326 IAC 2-9-1(h)]

Pursuant to 326 IAC 2-9-1(h), any exceedance of any requirement contained in this operating agreement shall be reported, in writing, within one (1) week of its occurrence. Said report shall include information on the actions taken to correct the exceedance, including measures to reduce emissions, in order to comply with the established limits. If an exceedance is the result of a malfunction, then the provisions of 326 IAC 1-6 apply.

## SECTION D.1

## OPERATION CONDITIONS

Operation Description: Surface Coating or Graphic Arts Operation [326 IAC 2-9-2.5]

(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 2-9]

#### D.1.1 Volatile Organic Compounds and Hazardous Air Pollutants Limits [326 IAC 2-9-2.5(b)(2)(B)]

Pursuant to 326 IAC 2-9-2.5(b)(2)(B), the total amount of volatile organic compounds (VOC) and hazardous air pollutants (HAP), as supplied, delivered to the surface coating operation shall not exceed the following:

- (a) the total amount of VOC shall not exceed two (2) tons per month,
- (b) the total amount of any single HAP shall not exceed eight hundred thirty-three (833) pounds per month, and
- (c) the total amount of any combination of HAP shall not exceed one (1) ton per month.

#### D.1.2 Particulate [326 IAC 2-9-2.5(b)(5)]

Pursuant to 326 IAC 2-9-2.5(b)(5), particulate matter emissions from spray applications shall be controlled by a dry filter system or an equivalent control device.

The source shall operate the particulate control device at all times the surface coating operation is in operation in accordance with the manufacturer's specifications.

A source shall be considered in compliance with this requirement provided the overspray is not visibly detectable at the exhaust or accumulated on the rooftops or on the ground.

### Record Keeping and Reporting Requirements [326 IAC 2-9]

#### D.1.3 Record Keeping Requirements [326 IAC 2-9-2.5(b)(3)]

Pursuant to 326 IAC 2-9-2.5(b)(4), the source shall keep the following records of the surface coating operation:

- (a) the number of gallons of each solvent containing material used,
- (b) the VOC and HAP content (pounds per gallon, as supplied) of each solvent containing material used,
- (c) material safety data sheets (MSDS) developed under 29 CFR 1910.1200(g) or a manufacturer data sheet containing the manufacturer's formulation data for each solvent containing material used.

If a range of VOC or HAP content is provided on either the MSDS or the manufacturer data sheet, the highest content reported shall be used.

If both the MSDS and manufacturer data sheet are available, the manufacturer data sheet shall be the primary source for determining the VOC or HAP content (pounds/gallon) of each solvent containing material,

- (d) a monthly summation of VOC and HAP usage, and

- (e) purchase orders and invoices for each solvent containing material used.

Section C - General Record Keeping Requirements of this SSOA contains the Permittee's obligations with regard to the records required by this condition.

D.1.4 Reporting Requirements [326 IAC 2-9-2.5(b)(6)]

Pursuant to 326 IAC 2-9-2.5(b)(6), the Permittee shall include with the annual notice required in Section B - Annual Notification, an inventory listing of the monthly volatile organic compound (VOC) and hazardous air pollutant (HAP) totals, and the total VOC and HAP emissions for the previous twelve (12) months.

## SECTION D.2

## OPERATION CONDITIONS

Operation Description: Abrasive Cleaning Operation [326 IAC 2-9-5]

(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 2-9]

#### D.2.1 Abrasive Cleaning Limitations [326 IAC 2-9-5(1)]

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Pursuant to 326 IAC 2-9-5(1):

- (a) The units of the abrasive cleaning operation shall be totally enclosed.
- (b) The particulate matter (PM) emissions from the abrasive cleaning operation shall not exceed one-hundredth (0.01) grain per actual cubic foot of outlet air.
- (c) The exhaust air flow rate of the abrasive cleaning operation shall not exceed forty thousand (40,000) actual cubic feet of outlet air per minute.

### Record Keeping and Reporting Requirements [326 IAC 2-9]

#### D.2.2 Record Keeping Requirements [326 IAC 2-9-5(5)]

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Pursuant to 326 IAC 2-9-5(5), the source shall maintain records of the types of air pollution control devices utilized at the source and the abrasive cleaning operation, and the operation and maintenance manuals for those devices. Section C - General Record Keeping Requirements of this SSOA contains the Permittee's obligations with regard to the records required by this condition.

## SECTION D.3

## OPERATION CONDITIONS

Operation Description: External Combustion Sources [326 IAC 2-9-13]

(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 2-9]

#### D.3.1 External Combustion Sources Limitations [326 IAC 2-9-13(b)(2)(A)][326 IAC 2-9-13(c)]

- (a) Pursuant to 326 IAC 2-9-13(b)(2)(A), the fuel usage for the external combustion units at this source shall be limited to less than one thousand million cubic feet (1000 MMcf) of natural gas per twelve (12) consecutive month period.
- (b) Pursuant to 326 IAC 2-9-13(c), sources must be able to demonstrate compliance no later than thirty (30) days after receipt of a written request by IDEM, OAQ, or U.S. EPA. No other demonstration of compliance shall be required.

#### D.3.2 Opacity [326 IAC 2-9-13(b)(1)]

Pursuant to 326 IAC 2-9-13(b)(1), the visible emissions from the source shall not exceed twenty percent (20%) opacity in twenty-four (24) consecutive readings in a six (6) minute period. The opacity shall be determined using 40 CFR 60, Appendix A, Method 9.

### Record Keeping and Reporting Requirements

#### D.3.3 Record Keeping Requirements

To document the compliance status with Condition D.3.1, the source shall keep records of the total monthly fuel usage for all external combustion units.

Section C - General Record Keeping Requirements of this SSOA contains the Permittee's obligations with regard to the records required by this condition.

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

**SOURCE SPECIFIC OPERATING AGREEMENT (SSOA)  
Annual Notification**

This form should be used to comply with the notification requirements under 326 IAC 2-9.

<b>Company Name:</b>	Twigg Corporation
<b>Address:</b>	659 E York St.
<b>City:</b>	Martinsville, Indiana 46151
<b>Phone #:</b>	765-342-7126
<b>SSOA #:</b>	S109-35998-00066

I hereby certify that Twigg Corporation is:

☐ still in operation.

I hereby certify that Twigg Corporation is:

☐ no longer in operation.

☐ in compliance with the requirements  
of SSOA S109-35998-00066.

☐ not in compliance with the requirements  
of SSOA S109-35998-00066.

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

**Indiana Department of Environmental Management  
Office of Air Quality  
Compliance and Enforcement Branch  
Annual Report**

- (a) the total amount of VOC shall not exceed two (2) tons per month,
- (b) the total amount of any single HAP shall not exceed eight hundred thirty-three (833) pounds per month, and
- (c) the total amount of any combination of HAP shall not exceed one (1) ton per month.

Year: \_\_\_\_\_

[illegible]

Phone: \_\_\_\_\_

Mail to: Permit Administration and Support Section

Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

Twigg Corporation  
659 E York St.  
Martinsville, Indiana 46151

### Affidavit of Construction

I, \_\_\_\_\_, being duly sworn upon my oath, depose and say:  
(Name of the Authorized Representative)

1. I live in \_\_\_\_\_ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.
2. I hold the position of \_\_\_\_\_ for \_\_\_\_\_.  
(Title) (Company Name)
3. By virtue of my position with \_\_\_\_\_, I have personal  
(Company Name)  
knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of \_\_\_\_\_.  
(Company Name)
4. I hereby certify that Twigg Corporation, located at 659 E York St., Martinsville, Indiana 46151, completed construction of the metal alloy engine parts source on \_\_\_\_\_ in conformity with the requirements and intent of the permit application received by the Office of Air Quality on June 29, 2015 and as permitted pursuant to the New Source Review Permit and SSOA No. S109-35998-00066 issued on \_\_\_\_\_.
5. Additional \_\_\_\_\_ were constructed/substituted as described in the attachment to this document  
(operations/facilities)  
and were not made in accordance with the construction approval. (Delete this statement if it does not apply.)

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

STATE OF INDIANA)  
)SS

COUNTY OF \_\_\_\_\_ )

Subscribed and sworn to me, a notary public in and for \_\_\_\_\_ County and State of  
Indiana on this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_.  
My Commission expires: \_\_\_\_\_.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name (typed or printed)

**Indiana Department of Environmental Management  
Office of Air Quality**

**Technical Support Document (TSD) for a New Source Review (NSR)  
Permit and a Source Specific Operating Agreement (SSOA)**

<b>Source Description and Location</b>
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<b>Source Name:</b>	<b>Twigg Corporation</b>
<b>Source Location:</b>	<b>659 E York St., Martinsville, IN 46151</b>
<b>County:</b>	<b>Morgan (Washington Township)</b>
<b>SIC Code:</b>	<b>3724 (Aircraft Engines and Engine Parts)</b>
<b>Operation Permit No.:</b>	<b>S109-35998-00066</b>
<b>Permit Reviewer:</b>	<b>J Alexander</b>

The Office of Air Quality (OAQ) has reviewed an application, submitted by Twigg Corporation on June 26, 2015, for a New Source Review (NSR) Permit and a Source Specific Operating Agreement (SSOA) for operation of a stationary metal alloy engine parts manufacturing operation.

<b>Existing Approvals</b>
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There have been no previous approvals issued to this source.

<b>Permit Level Determination – NSR and SSOA</b>
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This source is obtaining a New Source Review (NSR) Permit and Source Specific Operating Agreement (SSOA) for approval to construct (pursuant to 326 IAC 2-5.1-3) and operate (pursuant to 326 IAC 2-9), since the source-wide limited potential to emit of one or more criteria pollutants is greater than twenty-five (25) tons per year.

This source consists of the following operations:

- (a) Surface coating or graphic arts operation complying with 326 IAC 2-9-2.5(b)(2)(B);
- (b) Abrasive cleaning operation complying with 326 IAC 2-9-5;
- (c) External combustion sources complying with 326 IAC 2-9-13

Based on emission factors from EPA's Compilation of Air Pollutant Emission Factors AP-42, Chapter 1, External Combustion Sources, IDEM has determined that external combustion sources complying with the fuel usage limitations contained in this SSOA will have a limited PTE of SO<sub>2</sub> and NO<sub>x</sub> greater than twenty-five (25) tons per year.

The source also contains a number of units that collectively are below the exemption thresholds in 326 IAC 2-1.1-3(e)(1). Any changes to operation of these units can affect the PTE, and therefore, the status of the following units under 326 IAC 2-1.1-3

- (a) One (1) electric vacuum furnace, identified as VFW Big Mouth, with a maximum capacity of 360 lbs of metal/hour, approved in 2015 for construction, and exhausting indoors.
- (b) One (1) electric vacuum furnace, , identified as 38D, with a maximum capacity of 60 lbs of metal/hours, approved in 2015 for construction and exhausting indoors.

- (c) One (1) electric vacuum furnace, identified as Charlie, with a maximum capacity of 40 lbs of metal/hour, approved in 2015 for construction, and exhausting indoors.
- (d) One (1) pit furnace, with a maximum capacity of 8.0 lbs of metal/hour, approved in 2015 for construction, and exhausting indoors.
- (e) Two (2) water rinse tanks, identified as T1 and T3, each with a capacity of 23 gallons, approved in 2015 for construction, and exhausting to stack 01.
- (f) One (1) 40% by volume nitric acid and 7% by volume Turco 4104 tank, identified as T2, with a capacity of 23 gallons, approved in 2015 for construction and exhausting to stack 02.
- (g) One (1) 37% by volume hydrogen chloride (HCL) and 42% by volume iron chloride ( $\text{FeCl}_3$ ) tank, identified as T4, with a capacity of 23 gallons, approved in 2015 for construction and exhausting to stack 04.
- (h) One (1) Brulin 815 tank, identified as T5, with a capacity of 450 gallons, approved in 2015 for construction, and exhausting to stack 05.
- (i) One (1) Oakite Caustic Cleaner tank, identified as T6, each with a capacity of 450 gallons, approved in 2015 for construction and exhausting to stack 06.
- (j) Two (2) parts washers, both without a remote solvent reservoir, using solvents with vapor pressure less than two (2) kPa measured at thirty-eight degrees Centigrade (38 °C), approved in 2015 for construction [326 IAC 8-3-2][326 IAC 8-3-8].
- (k) One (1) MIG welding station for maintenance work, with a capacity of 0.25 lbs/month, approved in 2015 for construction.
- (l) Ten (10) stick welding station with a capacity of 0.16 lbs/hr each, approved in 2015 for construction.
- (m) Nine (9) TIG welding station with a capacity of 0.99 lbs/hr each, approved in 2015 for construction.
- (n) One (1) plasma cutting station cutting 0.03 inch metal with a capacity of 2.00 in/minute, approved in 2015 for construction.
- (o) The following grinding and metal cutting operations:

Location	ID	Control	pounds of metal per hour	Fluid to aid in machining
Mori-Seki Area	Mori-Seki Lathe 1	oil mist collector 1	3.11	1 gal/day
	Mori-Seki Lathe 2		3.11	
	Mori-Seki Lathe 3		3.11	
	Bullard Mill	NA	0.05	
	WIRE EDM (W/C 398)		0.10	
	CNC Grinder		5.01	
	Haas Lathe 1	oil mist collector 2	0.75	1.5 gal/day
	Haas Lathe 2	NA		

Location	ID	Control	pounds of metal per hour	Fluid to aid in machining
Anocut Area	Anocut 1	NA	0.10	1 gal/week
	Anocut 2			
	Anocut 3			
Bullard Area	Bullard 1	NA	0.20	3 gal/week
	Bullard 2			
	Bullard 3			
	Bullard 4			
Government Segments	Large Drill Press	NA	0.05	1 gal/month
	Small Drill Press			2 gal/week
	Mori Seiki MV-80 Mill		0.07	0.50 gal/month
	Manual Lathe 1			0.50 gal/week
	Manual Lathe 2		0.01	2 gal/week
	King Mill (W/C 315)			1 gal/day
	Okuma Mill (W/C 385)		3.11	2 gal/week
	Okuma Mill (W/C 385)			NA
	Mori Seiki Frontier LII Lathe		5.01	1 gal/day
	EDM CNC (W/C 390)			NA
	Bridgeport Mill		0.05	1 gal/day
	PM 22 Mill			NA
	Lucas Mill		0.10	1 gal/day
	Small EDM (W/C 401)			NA
	Chop Saw		0.07	1 gal/day
	TI Case Gisholt Lathe (W/C 315)			NA
	Flat surface grinder, belt grinders, and bench grinders			NA
Rolls Royce Line	Okuma Mill	NA	0.10	1 gal/day
Stater Area	Haas Mill (W/C 335)	NA	0.10	4 gal/week
	Haas Mill (W/C 338)			1 gal/week
	Cutting Wheel (W/C 237)		0.05	-
	RT-A O/D Grinder (W/C 355)			-
	Mill (W/C 356)		0.07	-
	Manual Lathe (W/C 324)			-

For a source that operates under 326 IAC 2-9 (Source Specific Operating Agreement Program), the source is required to comply with the pre-established emission limitations and standards contained in the specific SSOA(s) under 326 IAC 2-9. For a detailed description of the requirements specific to each SSOA, see 326 IAC 2-9.

#### Enforcement Issues

IDEM is aware that equipment has been constructed and 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 of this TSD for detailed emission calculations.

<b>Federal Rule Applicability Determination</b>
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New Source Performance Standards (NSPS)

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (b) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR 63.3880, Subpart MMMM (326 IAC 20-80), are not included in the permit, since the source is not a major source of HAPs.
- (c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs): Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, 40 CFR 63.11169, Subpart HHHHHH, are not included in the permit, since this source does not use any coatings that contain methylene chloride (MeCl), chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd).
- (d) There are no 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 2-9 (Source Specific Operating Agreement Program)  
SSOA applicability is discussed under the Permit Level Determination – SSOA section above.
- (b) 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.
- (c) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)  
Pursuant to 326 IAC 6-3-1(b)(9), the welding operations are exempt from the rule because each station uses less than 625 pounds of rod or wire per day. Pursuant to 326 IAC 6-3-1(b)(14), all grinding operations are exempt from the rule because each unit has potential emissions of less than 0.551 pounds per hour. Pursuant to 326 IAC 6-3-2(e), the table below outlines the allowable particulate emission rate for the units subject to this rule.

Process Description	Process Weight Rate (ton/hr)	Process Weight Rate (lb/hr)	326 IAC 6-3-2 Limit (lb/hr)	Uncontrolled PM Emissions (lb/hr)	Controlled PM Emissions (lb/hr)	Capable of Compliance with 326 IAC 6-3-2
B-1	0.10	195	0.862	3.84	0.04	Yes, with Control
B-2	0.05	109	0.584	1.03	0.01	Yes, with Control
B-3	0.14	280	1.098	4.53	0.05	Yes, with Control
B-4	0.08	168	0.780	1.60	0.02	Yes, with Control
B-5	0.14	285	1.111	2.71	0.03	Yes, with Control
B-6	0.42	835	2.284	13.49	0.13	Yes, with Control

The pounds per hour limitation was calculated with the following equation:

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

$$E = 4.10 P^{0.67}$$

Where: E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour

- (d) 326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating)  
Pursuant to 326 IAC 6-2-1(d), indirect heating facilities which received permit to construct after September 21, 1983 are subject to the requirements of 326 IAC 6-2-4.

The particulate matter emissions (Pt) shall be limited by the following equation:

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

Where:

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

Q = Total source maximum operating capacity rating in 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 .

Pursuant to 326 IAC 6-2-4(a), for Q less than 10 MMBtu/hr, Pt shall not exceed 0.6 lb/MMBtu.

Indirect Heating Units Which Began Operation After September 21, 1983						
Facility	Construction Date*	Operating Capacity (MMBtu/hr)	Q (MMBtu/hr)	Calculated Pt (lb/MMBtu)	Particulate Limitation, (Pt) (lb/MMBtu)	PM PTE based on AP-42 (lb/MMBtu)
Shipping Door Space Heater	2015	0.20	2.21	0.89	0.60	0.002
Receiving Cage Space Heater	2015	0.13	2.21	0.89	0.60	0.002
Anocut Space Heater	2015	0.08	2.21	0.89	0.60	0.002
Weld Room Space Heater 1	2015	0.05	2.21	0.89	0.60	0.002
Weld Room Space Heater 2	2015	0.05	2.21	0.89	0.60	0.002

Indirect Heating Units Which Began Operation After September 21, 1983						
Facility	Construction Date*	Operating Capacity (MMBtu/hr)	Q (MMBtu/hr)	Calculated Pt (lb/MMBtu)	Particulate Limitation, (Pt) (lb/MMBtu)	PM PTE based on AP-42 (lb/MMBtu)
Weld Room Space Heater 3	2015	0.10	2.21	0.89	0.60	0.002
Stores Space Heater 1	2015	0.05	2.21	0.89	0.60	0.002
Stores Space Heater 2	2015	0.05	2.21	0.89	0.60	0.002
New Building Space Heater 1	2015	0.10	2.21	0.89	0.60	0.002
New Building Space Heater 2	2015	0.10	2.21	0.89	0.60	0.002
New Building Space Heater 3	2015	0.10	2.21	0.89	0.60	0.002
New Building Space Heater 4	2015	0.10	2.21	0.89	0.60	0.002
Clean Room Space Heater 1	2015	0.05	2.21	0.89	0.60	0.002
Clean Room Space Heater 2	2015	0.05	2.21	0.89	0.60	0.002
Pit Furnace	2015	1.00	2.21	0.89	0.60	0.002
Where: Q = Includes the capacity (MMBtu/hr) of the new unit(s) and the capacities for those unit(s) which were in operation at the source at the time the new unit(s) was constructed.						
Note: Boilers shown in strikethrough were subsequently removed from the source. The effect of removing these boilers on "Q" is shown in the year the boiler was removed.						

- (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 requirements of 326 IAC 6-5 are not included in the SSOA, since each of the SSOAs contained under 326 IAC 2-9 (Source Specific Operating Agreement Program) that limit fugitive emissions include pre-established fugitive dust control measures.
- (g) 326 IAC 8-1-6 (New facilities; general reduction requirements)  
The VOC emissions from the emission units at the source are less than twenty-five (25.0) tons per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 8-1-6 (New facilities; general reduction requirements) are not applicable.
- (h) 326 IAC 8-3-2 (Cold Cleaner Degreaser Control Equipment and Operating Requirements)  
Pursuant to 326 IAC 8-3-2, for cold cleaning degreasers without remote solvent reservoirs constructed after July 1, 1990:
  - (1) The Permittee shall ensure the following control equipment and operating requirements are met:
    - (A) Equip the degreaser with a cover.
    - (B) Equip the degreaser with a device for draining cleaned parts.
    - (C) Close the degreaser cover whenever parts are not being handled in the degreaser.
    - (D) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases.
    - (E) Provide a permanent, conspicuous label that lists the operating requirements in (a)(3), (a)(4), (a)(6), and (a)(7) of this condition.

- (F) Store waste solvent only in closed containers.
- (G) Prohibit the disposal or transfer of waste solvent in such a manner that could allow greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.
- (2) The Permittee shall ensure the following additional control equipment and operating requirements are met:
  - (A) Equip the degreaser with one (1) of the following control devices if the solvent is heated to a temperature of greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):
    - (i) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
    - (ii) A water cover when solvent used is insoluble in, and heavier than, water.
    - (iii) A refrigerated chiller.
    - (iv) Carbon adsorption.
    - (v) An alternative system of demonstrated equivalent or better control as those outlined in (b)(1)(A) through (D) of this condition that is approved by the department. An alternative system shall be submitted to the U.S. EPA as a SIP revision.
  - (B) Ensure the degreaser cover is designed so that it can be easily operated with one (1) hand if the solvent is agitated or heated.
  - (C) If used, solvent spray:
    - (i) must be a solid, fluid stream; and
    - (ii) shall be applied at a pressure that does not cause excessive splashing.
- (i) 326 IAC 8-3-8 (Material Requirements for Cold Cleaner Degreasers)  
Pursuant to 326 IAC 8-3-8, on and after January 1, 2015, the Permittee shall not operate a cold cleaner degreaser with a solvent that has a VOC composite partial vapor pressure than exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).
- (j) 326 IAC 12 (New Source Performance Standards)  
See Federal Rule Applicability Section of this TSD.
- (k) 326 IAC 20 (Hazardous Air Pollutants)  
See Federal Rule Applicability Section of this TSD.

<b>Compliance Determination, Monitoring, Record Keeping, and Reporting Requirements</b>
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The following records need to be maintained for each purchase of cold cleaner degreaser solvent:

- (1) The name and address of the solvent supplier.
- (2) The date of purchase (or invoice/bill dates of contract servicer indicating service date).

- (3) The type of solvent purchased.
- (4) The total volume of the solvent purchased.
- (5) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

For a source that operates under 326 IAC 2-9 (Source Specific Operating Agreement Program), the source is required to comply with the pre-established emission limitations and standards, compliance determination, compliance monitoring, and record keeping and reporting requirements contained in the specific SSOA(s) under 326 IAC 2-9. For a detailed description of the requirements specific to each SSOA, see 326 IAC 2-9.

### **Conclusion and Recommendation**

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 June 26, 2015.

The operation of this source shall be subject to the conditions of the attached proposed New Source Review (NSR) Permit and SSOA No. S109-35998-00066. The staff recommends to the Commissioner that this NSR Permit and SSOA be approved.

### **IDEM Contact**

- (a) Questions regarding this proposed permit can be directed to Julie Alexander 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) 233-1782 or toll free at 1-800-451-6027 extension 3-1782.
- (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.in.gov/idem](http://www.in.gov/idem)

### Emissions Calculations Summary

**Source Name:** Twigg Corporation  
**Source Location:** 659 E York St., Martinsville, IN 46151  
**Operation Permit No.:** S109-35998-00066  
**Permit Reviewer:** J Alexander

Potential to Emit after Issuance (tons/yr)												
Emission Unit	PM	PM10	PM2.5 *	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	Hexane	Lead	HCL	Manganese	Total HAPs
Surface Coating or Graphic Arts Operation [326 IAC 2-9-2.5] <sup>1</sup>	-	-	-	-	-	24.00	-	4.998	4.998	4.998	4.998	12.00
Abrasive Cleaning Operation [326 IAC 2-9-5] <sup>2</sup>	15.02	15.02	15.02	-	-	-	-	-	-	-	-	-
External Combustion Sources [326 IAC 2-9-13]	0.95	3.80	3.80	0.30	50.00	2.75	42.00	0.90	-	-	1.90E-04	0.94
<b>Total</b>	<b>15.97</b>	<b>18.82</b>	<b>18.82</b>	<b>0.30</b>	<b>50.00</b>	<b>26.75</b>	<b>42.00</b>	<b>5.90</b>	<b>4.998</b>	<b>4.998</b>	<b>4.998</b>	<b>12.94</b>
Exempt Units <sup>3</sup>												
Heat Treatment	0.13	0.13	0.13	0.48	0.18	1.02E-03	0.06	-	-	-	-	-
Grinding Operations without fluid	2.06E-03	2.06E-03	2.06E-03	-	-	-	-	-	6.79E-06	-	-	6.79E-06
Grinding Operations with fluid	-	-	-	-	-	5.75	-	-	-	-	-	-
Acid Etching Area	-	-	-	-	-	2.14E-03	-	-	-	0.039	-	0.04
Welding & Cutting	0.36	0.36	0.36	-	-	-	-	-	-	-	0.026	0.03
Part Washers	-	-	-	-	-	0.20	-	-	-	-	-	-
<b>Exempt Units Total</b>	<b>0.50</b>	<b>0.50</b>	<b>0.50</b>	<b>0.48</b>	<b>0.18</b>	<b>5.94</b>	<b>0.06</b>	<b>-</b>	<b>6.79E-06</b>	<b>0.039</b>	<b>0.026</b>	<b>0.06</b>
<b>Exemption Levels</b>	<b>5.00</b>	<b>5.00</b>	<b>5.00</b>	<b>10.00</b>	<b>10.00</b>	<b>10.00</b>	<b>25.00</b>	<b>1.000</b>	<b>1.000</b>	<b>1.000</b>	<b>1.000</b>	<b>2.50</b>
<b>Site Total</b>	<b>16.46</b>	<b>19.31</b>	<b>19.31</b>	<b>0.78</b>	<b>50.18</b>	<b>32.69</b>	<b>42.06</b>	<b>5.90</b>	<b>4.998</b>	<b>5.037</b>	<b>5.024</b>	<b>13.01</b>

#### Methodology

1) Calculations are based on limits in 326 IAC 2-9-2.5(b)(2)(B).

VOC (tons/year) = 2 tons per month (limit in 326 IAC 2-9-2.5(b)(2)(B) x 12 months per year

Single HAP (tons/year) = 833 lbs per month (limit in 326 IAC 2-9-2.5(b)(2)(B) x 12 months per year / 2,000 lbs per ton

Total HAPs (tons/year) = 1 tons per month (limit in 326 IAC 2-9-2.5(b)(2)(B) x 12 months per year

2) Calculations are based on limits in 326 IAC 2-9-5(1).

PM/PM<sub>10</sub>/PM<sub>2.5</sub> (tons/yr) = 0.01 gr/ascf (limit in 326 IAC 2-9-5(1)) x 40,000 acfm (limit in 326 IAC 2-9-5(1)) x 60 mins/hr x 1/7000 lb/gr x 8760 hr/yr x 1 ton/2000 lbs x 6 units

3) The PTE for these units is based on information provided by the source. The PTE for the parts washers is based on the actual MSDS and actual throughput provided by the source. If the source wishes to make any changes to the units below, an application will need to be submitted and the unit reevaluated.

**Emissions Calculations**  
**Criteria Pollutant and HAPs Emissions from**  
**Natural Gas-Fired Combustion Equipment**  
**MMBtu/hr <100**

**Source Name:** Twigg Corporation  
**Source Location:** 659 E York St., Martinsville, IN 46151  
**Operation Permit No.:** S109-35998-00066  
**Permit Reviewer:** J Alexander

Potential Throughput - SSOA

MMCF/yr

1,000.00

	Pollutant						
	PM*	PM10*	PM2.5	SO <sub>2</sub>	NOx	VOC	CO
Emission Factor in lb/MMCF	1.90	7.60	7.60	0.60	100.00	5.50	84.00
Potential Emission in tons/yr	0.95	3.80	3.80	0.30	**see below	2.75	42.00

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

PM2.5 emission factor is filterable and condensable PM2.5 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	Total - Organics
Emission Factor in lb/MMcf	2.10E-03	1.20E-03	0.08	1.80	3.40E-03	
Potential Emission in tons/yr	1.05E-03	6.00E-04	0.04	0.90	1.70E-03	0.94

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	Total - Metals
Emission Factor in lb/MMcf	5.00E-04	1.10E-03	1.40E-03	3.80E-04	2.10E-03	
Potential Emission in tons/yr	2.50E-04	5.50E-04	7.00E-04	1.90E-04	1.05E-03	2.74E-03
					<b>Total HAPs</b>	<b>0.94</b>
					<b>Worst HAP</b>	<b>0.90</b>

**Methodology**

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu

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

**Emissions Calculations  
Heat Treat Furnaces**

**Source Name:** Twigg Corporation  
**Source Location:** 659 E York St., Martinsville, IN 46151  
**Operation Permit No.:** S109-35998-00066  
**Permit Reviewer:** J Alexander

Emission Unit	Metal Throughput (lbs/hr)	Metal Throughput (tons/hr)
Vacuum Furnace- VFW Big Mouth	360.00	0.18
Vacuum Furnace- 38D	60.00	0.03
Vacuum Furnace- Charlie	40.00	0.02
Pit Furnace	8.00	4.00E-03

	PM	PM10	PM2.5 *	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO
Emission Factors (lbs/ton metal)	0.13	0.13	0.13	0.47	0.18	1.00E-03	0.06
Uncontrolled PTE (tons/yr)							
Vacuum Furnace- VFW Big Mouth	0.10	0.10	0.10	0.37	0.14	7.88E-04	0.04
Vacuum Furnace- 38D	0.02	0.02	0.02	0.06	0.02	1.31E-04	7.49E-03
Vacuum Furnace- Charlie	0.01	0.01	0.01	0.04	0.02	8.76E-05	4.99E-03
Pit Furnace	2.26E-03	2.26E-03	2.26E-03	8.22E-03	3.12E-03	1.75E-05	9.99E-04
<b>Total</b>	<b>0.13</b>	<b>0.13</b>	<b>0.13</b>	<b>0.48</b>	<b>0.18</b>	<b>1.02E-03</b>	<b>0.06</b>

**Methodology:**

The Pit Furnace is natural gas-fired. All other heat treatment furnaces are electric.

Emission factors are from Table 1-15 of "Energy and Environmental Profile of the U.S. Iron and Steel Industry", August 2000, U.S. Department of Energy, Office of Industrial Technologies, DOE/EE-0229.

Uncontrolled PTE (tons/yr) = Metal throughput (tons/hr) x EF (lbs/ton) x 8760 hours/yr x 1 ton/2000 lbs

**Emissions Calculations  
Metal Processing Equipment Not Using Fluids**

**Source Name:** Twigg Corporation  
**Source Location:** 659 E York St., Martinsville, IN 46151  
**Operation Permit No.:** S109-35998-00066  
**Permit Reviewer:** J Alexander

Area	Equipment	Max Throughput lb/hr	Emission Factor lb/lb throughput	PM/PM10/PM2.5			HAP			
				lb/hr	lb/day	tons/yr	Lead <sup>2</sup> wt%	PTE		
								lb/hr	lb/day	tons/yr
Government Segments	Bridgeport Mill	0.05	1.00E-03	5.00E-05	1.20E-03	2.19E-04	0.33%	1.65E-07	3.96E-06	7.23E-07
Government Segments	Chop Saw	0.05	1.00E-03	5.00E-05	1.20E-03	2.19E-04	0.33%	1.65E-07	3.96E-06	7.23E-07
Government Segments	TI Case Gisholt Lathe (W/C 315)	0.05	1.00E-03	5.00E-05	1.20E-03	2.19E-04	0.33%	1.65E-07	3.96E-06	7.23E-07
Government Segments	Misc. Grinding (Flat Surface Grinder, Belt Grinders, Bench Grinders)	0.10	1.00E-03	1.00E-04	2.40E-03	4.38E-04	0.33%	3.30E-07	7.92E-06	1.45E-06
Government Segments	PM 22 Mill	0.05	1.00E-03	5.00E-05	1.20E-03	2.19E-04	0.33%	1.65E-07	3.96E-06	7.23E-07
Government Segments	Lucas Mill	0.05	1.00E-03	5.00E-05	1.20E-03	2.19E-04	0.33%	1.65E-07	3.96E-06	7.23E-07
Stater Area	Manual Lathe (W/C 324)	0.07	1.00E-03	7.00E-05	1.68E-03	3.07E-04	0.33%	2.31E-07	5.54E-06	1.01E-06
Stater Area	Mill (W/C 356)	0.05	1.00E-03	5.00E-05	1.20E-03	2.19E-04	0.33%	1.65E-07	3.96E-06	7.23E-07
<b>Total</b>		<b>0.47</b>		<b>4.70E-04</b>	<b>0.01</b>	<b>2.06E-03</b>		<b>1.55E-06</b>	<b>3.72E-05</b>	<b>6.79E-06</b>

**Notes:**

- Grinding emission factor is a conservative estimate that 0.1% of the part weight is lost as PM
  - Lead emissions based on alloy content of free-machining steels (e.g., 12L14), 0.33% lead by weight, used as worst case estimate
- Metal throughputs are based on actual processing rates, plus a safety factor of 1.5.
- PTE  $PM_{10}/PM_{2.5}$  (US tons/yr) = Max Throughput (lb/hr) x Emission Factor (lb/lb throughput) x 8,760 (hr/yr) / 2,000 (lb/US ton)
- PTE lead (US/tons/yr) = PM PTE (US tons/yr) x wt % lead

**Emissions Calculations**  
**Criteria Pollutant and HAPs Emissions from**  
**Metal Processing Equipment Using Fluids**

**Source Name:** Twigg Corporation  
**Source Location:** 659 E York St., Martinsville, IN 46151  
**Operation Permit No.:** S109-35998-00066  
**Permit Reviewer:** J Alexander

Area	Equipment	Material (Fluid)	Max Material Usage	Max Material Usage Units	Process Weight Rate (lbs metal/ hour)	Density (lbs/gal)	VOC (Weight %)	VOC (lbs/gal)	Control Device	Control Efficiency	Uncontrolled VOC PTE (tons/yr)	Controlled VOC PTE (tons/yr)
Mori-Seki Area	Mori-Seki Lathe 1	Fuchs Ecocool 7830	1.00	gal/day	3.11	8.22	24.14%	1.98	Oil Mist Collector 1	95%	0.36	0.02
Mori-Seki Area	Mori-Seki Lathe 2	Fuchs Ecocool 7830	1.00	gal/day	3.11	8.22	24.14%	1.98	Oil Mist Collector 1	95%	0.36	0.02
Mori-Seki Area	Mori-Seki Lathe 3	Fuchs Ecocool 7830	1.00	gal/day	3.11	8.22	24.14%	1.98	Oil Mist Collector 1	95%	0.36	0.02
Mori-Seki Area	Bullard Mill	Fuchs Ecocool 7830	1.00	gal/day	0.05	8.22	24.14%	1.98	N/A	0%	0.36	0.36
Mori-Seki Area	Wire EDM (W/C 398)	DI Water	1.00	gal/day	0.10	8.35	0.00%	0	N/A	0%	0	0
Mori-Seki Area	CNC Grinder	DI Water	1.00	gal/day	5.01	8.35	0.00%	0	N/A	0%	0	0
Mori-Seki Area	Haas Lathe 1	Fuchs Ecocool 7830	1.50	gal/day	0.75	8.22	24.14%	1.98	Oil Mist Collector 2	95%	0.54	0.03
Mori-Seki Area	Haas Lathe 2	Fuchs Ecocool 7830	1.50	gal/day	0.75	8.22	24.14%	1.98	N/A	0%	0.54	0.54
Rolls Royce Line	Okuma Mill	Fuchs Ecocool 7830	1.00	gal/day	0.10	8.22	24.14%	1.98	N/A	0%	0.36	0.36
Government Segments	Large Drill Press	Fuchs Ecocool 7830	1.00	gal/month	0.05	8.22	24.14%	1.98	N/A	0%	0.01	0.01
Government Segments	Mori Seiki MV-80 Mill	Fuchs Ecocool 7830	2.00	gal/wk	0.05	8.22	24.14%	1.98	N/A	0%	0.10	0.10
Government Segments	Small Drill Press	Fuchs Ecocool 7830	1.00	gal/month	0.05	8.22	24.14%	1.98	N/A	0%	0.01	0.01
Government Segments	Manual Lathe 1	Fuchs Ecocool 7830	0.50	gal/wk	0.07	8.22	24.14%	1.98	N/A	0%	0.03	0.03
Government Segments	Manual Lathe 2	Fuchs Ecocool 7830	0.50	gal/wk	0.07	8.22	24.14%	1.98	N/A	0%	0.03	0.03
Government Segments	King Mill (W/C 315)	Fuchs Ecocool 7830	0.50	gal/wk	0.10	8.22	24.14%	1.98	N/A	0%	0.03	0.03
Government Segments	Okuma Mill (W/C 385)	Fuchs Ecocool 7830	2.00	gal/wk	0.10	8.22	24.14%	1.98	N/A	0%	0.10	0.10
Government Segments	Okuma Mill (W/C 385)	Fuchs Ecocool 7830	2.00	gal/wk	0.10	8.22	24.14%	1.98	N/A	0%	0.10	0.10
Government Segments	Mori Seiki Frontier LII Lathe	Fuchs Ecocool 7830	1.00	gal/day	3.11	8.22	24.14%	1.98	N/A	0%	0.36	0.36
Government Segments	EDM CNC (W/C 390)	EDM 40P Oil	2.00	gal/wk	5.01	7.18	49%	3.50	N/A	0%	0.18	0.18
Government Segments	Small EDM (W/C 401)	EDM 40P Oil	1.00	gal/day	5.01	7.18	49%	3.50	N/A	0%	0.64	0.64
Stater Area	Haas Mill (W/C 335)	Fuchs Ecocool 7830	4.00	gal/wk	0.10	8.22	24.14%	1.98	N/A	0%	0.21	0.21
Stater Area	Haas Mill (W/C 338)	Fuchs Ecocool 7830	4.00	gal/wk	0.10	8.22	24.14%	1.98	N/A	0%	0.21	0.21
Stater Area	Cutting Wheel (W/C 237)	Vari-Cool Coolant	1.00	gal/wk	0.05	8.83	52%	4.59	N/A	0%	0.12	0.12
Stater Area	RT-A O/D Grinder (W/C 355)	Fuchs Ecocool 7830	1.00	gal/wk	0.05	8.22	24.14%	1.98	N/A	0%	0.05	0.05
Anocut Area	Anocut 1	Salt Solution	1.00	gal/wk	0.10	8.35	0.00%	0	N/A	0%	0	0
Anocut Area	Anocut 2	Salt Solution	1.00	gal/wk	0.10	8.35	0.00%	0	N/A	0%	0	0
Anocut Area	Anocut 3	Fuchs Ecocool 7830	1.00	gal/wk	0.10	8.22	24.14%	1.98	N/A	0%	0.05	0.05
Bullard Area	Bullard 1	Fuchs Ecocool 7830	3.00	gal/wk	0.20	8.22	24.14%	1.98	N/A	0%	0.15	0.15
Bullard Area	Bullard 2	Fuchs Ecocool 7830	3.00	gal/wk	0.20	8.22	24.14%	1.98	N/A	0%	0.15	0.15
Bullard Area	Bullard 3	Fuchs Ecocool 7830	3.00	gal/wk	0.20	8.22	24.14%	1.98	N/A	0%	0.15	0.15
Bullard Area	Bullard 4	Fuchs Ecocool 7830	3.00	gal/wk	0.20	8.22	24.14%	1.98	N/A	0%	0.15	0.15
<b>Total (tons/yr)</b>											<b>5.75</b>	<b>4.20</b>

**Methodology:**

The coolant manufacturers were contacted to obtain the VOC contents, since they are not provided on the MSDSs. The densities were provided on the MSDSs.

Uncontrolled VOC Emissions (tons/yr) = Max Material Usage (gal/day) x VOC Content (lbs/gal) x (8,760 hrs/yr) / (2,000 lbs/ton)

Controlled VOC Emissions (tons/yr) = Uncontrolled VOC Emissions x (1-Control Efficiency)

**Emission Calculations  
Acid Etching Area**

**Source Name:** Twigg Corporation  
**Source Location:** 659 E York St., Martinsville, IN 46151  
**Operation Permit No.:** S109-35998-00066  
**Permit Reviewer:** J Alexander

Tank ID	Tank Size (gal)	Tank Material	Volume % Material in Tank	Density of Material (lbs/gal)	VOC Content of Material (%)	VOC Content of Material (lbs/gal)	HCl Weight %	VOC PTE (tons/yr)	HCl PTE (tons/yr)
T2	23.00	Nitric Acid	40%	12.60	0%	0	0%	0	0
		Turco 4104	7%	9.26	-	1.33	0%	2.14E-03	0
T4	23.00	HCl	37%	12.43	0%	0	37%	0	0.04
		FeCl <sub>3</sub>	42%	24.20	0%	0	0%	0	0
T5	450.00	Brulin 815	100%	8.97	0%	0	0%	0	0
T6	450.00	Oakite Caustic Cleaner	100%	9.76	0%	0	0%	0	0
<b>Total PTE (tons/yr)</b>								<b>2.14E-03</b>	<b>0.04</b>

**Methodology:**

Note: Each tank is changed out twice per year

Tanks T1 and T3 are each 23 gallon water rinse tanks, so they are not included in the calculations because there are no VOC or HAP emissions.

VOC Emissions (tons/yr) = Tank Size (gal) x (2 Tank Changeouts/year) x (Volume % Material in Tank) x VOC Content of Material (lbs/gal) / (2,000 lbs/ton)

HAP Emissions (tons/yr) = Tank Size (gal) x (2 Tank Changeouts/year) x (Volume % Material in Tank) x Density (lbs/gal) x HAP Weight % / (2,000 lbs/ton)

**Appendix A: Emissions Calculations**  
**Welding and Thermal Cutting**

**Source Name:** Twigg Corporation  
**Source Location:** 659 E York St., Martinsville, IN 46151  
**Operation Permit No.:** S109-35998-00066  
**Permit Reviewer:** J Alexander

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)		EMISSION FACTORS* (lb pollutant/lb electrode)				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
				PM/PM10/PM2.5	Mn	Ni	Cr	PM/PM10/PM2.5	Mn	Ni	Cr	
WELDING												
Metal Inert Gas (MIG)(carbon steel)	1.00	3.36E-04		5.50E-03	5.00E-04			1.85E-06	1.68E-07	0	0	1.68E-07
Stick (E7018 electrode)	10.00	0.16		0.02	9.00E-04			0.03	1.44E-03	0	0	1.44E-03
Tungsten Inert Gas (TIG)(carbon steel)	9.00	0.99		5.50E-03	5.00E-04			0.05	4.46E-03	0	0	4.46E-03
FLAME CUTTING	Number of Stations	Max. Metal Thickness Cut (in.)	Max. Metal Cutting Rate (in./minute)	EMISSION FACTORS (lb pollutant/1,000 inches cut, 1" thick)**				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
				PM/PM10/PM2.5	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Plasma**	1.00	0.03	2.00	3.90E-03				1.50E-05	0	0	0	0
EMISSION TOTALS												
Potential Emissions lbs/hr								0.08	5.90E-03	0	0	5.90E-03
Potential Emissions lbs/day								1.99	0.14	0	0	0.14
Potential Emissions tons/year								0.36	0.03	0	0	0.03

**Methodology:**

\*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column.

\*\*Emission Factor for plasma cutting from American Welding Society (AWS). Trials reported for wet cutting of 8 mm thick mild steel with 3.5 m/min cutting speed (at 0.2 g/min emitted). Therefore, the emission factor for plasma cutting is for 8 mm thick rather than 1 inch, and the maximum metal thickness is not used in calculating the emissions.

Using AWS average values: (0.25 g/min)/(3.6 m/min) x (0.0022 lb/g)/(39.37 in./m) x (1,000 in.) = 0.0039 lb/1,000 in. cut, 8 mm thick

Plasma cutting emissions, lb/hr: (# of stations)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 8 mm thick)

Cutting emissions, lb/hr: (# of stations)(max. metal thickness, in.)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 1" thick)

Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)

Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day

Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/year x 1 ton/2,000 lbs.

Max. electrode consumption per MIG station, lbs/hr = 0.25 lbs/month / (30 day/month) \* (24 hours/day)

**Emissions Calculations  
Parts Washers**

**Source Name:** Twigg Corporation  
**Source Location:** 659 E York St., Martinsville, IN 46151  
**Operation Permit No.:** S109-35998-00066  
**Permit Reviewer:** J Alexander

Material	Density (Lb/Gal)	Weight % Volatile (H2O &	Weight % Organics	*Max Gal of Mat. (gal/yr)	Pounds VOC per gallon of material	Potential VOC tons per year
Isopropyl Alcohol	6.56	100.00%	1.00	30.00	6.56	0.10
Isopropyl Alcohol	6.56	100.00%	1.00	30.00	6.56	0.10
<b>Total:</b>						<b>0.20</b>

**METHODOLOGY**

The parts washer is an exempt unit based on the MSDS and actual throughput provided by the source.

The parts washer contain 5 gallons of isopropyl alcohol and are changed out once every 2 months.

Pounds of VOC per Gallon material = (Density (lb/gal) \* Weight % Organics)

Potential VOC Tons per Year = Pounds of VOC per Gallon material (lb/gal) \* Max Gal of Material (gal/yr) \* (1 ton/2000 lbs)

There are no HAPs in the solvent.



## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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**Michael R. Pence**  
Governor

**Thomas W. Easterly**  
Commissioner

July 28, 2015

Mr. Forest Rawlins  
Twigg Corporation  
659 E York Street  
Martinsville, IN 46151

Re: Public Notice  
Twigg Corporation  
Permit Level: SSOA - New Source Review  
Permit Number: 109 - 35998 - 00066

Dear Mr. Rawlins:

Enclosed is a copy of your draft SSOA - New Source Review, Technical Support Document, emission calculations, and the Public Notice which will be printed in your local newspaper.

The Office of Air Quality (OAQ) has prepared two versions of the Public Notice Document. The abbreviated version will be published in the newspaper, and the more detailed version will be made available on the IDEM's website and provided to interested parties. Both versions are included for your reference. The OAQ has requested that the Martinsville Daily Reporter-Times in Mooresville, Indiana publish the abbreviated version of the public notice no later than July 31, 2015. You will not be responsible for collecting any comments, nor are you responsible for having the notice published in the newspaper.

OAQ has submitted the draft permit package to the Morgan Co Public Library, 110 S Jefferson St in Martinsville IN. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Julie Alexander, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 3-1782 or dial (317) 233-1782.

Sincerely,  
*Len Pogost*

Len Pogost  
Permits Branch  
Office of Air Quality

Enclosures  
PN Applicant Cover letter-2014. Dot4/10/14



## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • [www.idem.IN.gov](http://www.idem.IN.gov)

**Michael R. Pence**  
Governor

**Thomas W. Easterly**  
Commissioner

### ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING

July 28, 2015

Martinsville Daily Reporter-Times  
Attn: Classifieds  
P.O. Box 308  
Mooresville, Indiana 46158

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for Twigg Corporation, Morgan County, Indiana.

Since our agency must comply with requirements which call for a Notice of Public Comment, we request that you print this notice one time, no later than August 1, 2015.

Please send a notarized form, clippings showing the date of publication, and the billing to the Indiana Department of Environmental Management, Accounting, Room N1345, 100 North Senate Avenue, Indianapolis, Indiana, 46204.

**To ensure proper payment, please reference account # 100174737.**

We are required by the Auditor's Office to request that you place the Federal ID Number on all claims. If you have any conflicts, questions, or problems with the publishing of this notice or if you do not receive complete public notice information for this notice, please call Len Pogost at 800-451-6027 and ask for extension 3-2803 or dial 317-233-2803.

Sincerely,

*Len Pogost*

Len Pogost  
Permit Branch  
Office of Air Quality

Permit Level: SSOA - New Source Review  
Permit Number: 109 - 35998 - 00066

Enclosure  
PN Newspaper.dot 6/13/2013



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Governor

Thomas W. Easterly  
Commissioner

July 28, 2015

To: Morgan Co Public Library 110 S Jefferson St Martinsville IN

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

Subject: **Important Information to Display Regarding a Public Notice for an Air Permit**

**Applicant Name: Twigg Corporation**  
**Permit Number: 109 - 35998 - 00066**

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Request to publish the Notice of 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. **Please make this information readily available until you receive a copy of the final package.**

If you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185. Questions pertaining to the permit itself should be directed to the contact listed on the notice.

Enclosures  
PN Library.dot 6/13/2013



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Commissioner

### Notice of Public Comment

**July 28, 2015**  
**Twigg Corporation**  
**109 - 35998 - 00066**

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.


Enclosed is a Notice of Public Comment, which has been placed in the Legal Advertising section of your local newspaper. The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana's Air Permitting Program.

**Please Note:** *If you feel you have received this Notice in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at [PPEAR@IDEM.IN.GOV](mailto:PPEAR@IDEM.IN.GOV). If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.*

Enclosure  
PN AAA Cover.dot 6/13/13


# Mail Code 61-53

IDEM Staff	LPOGOST 7/28/2015 Twigg Corporation 109 - 35998 - 00066 draft/		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	 Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail:  <b>CERTIFICATE OF MAILING ONLY</b>	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee
											Remarks
1		Forest Rawlins Twigg Corporation 659 E York Street Martinsville IN 46151 (Source CAATS)									
2		Roy W Rapp III CEO Twigg Corporation 659 E York Street Martinsville IN 46151 (RO CAATS)									
3		Morgan County Commissioners 180 South Main Street Martinsville IN 46151 (Local Official)									
4		Martinsville City Council and Mayors Office P.O. Box 1415, 59 South Jefferson Street Martinsville IN 46151 (Local Official)									
5		Morgan Co Public Library 110 S Jefferson St Martinsville IN 46151-1999 (Library)									
6		Clayton D. & Patricia A. Arthur 5178 Brenda Boulevard Greenwood IN 46143 (Affected Party)									
7		Morgan County Health Department 180 S Main Street, Suite 252 Martinsville IN 46151-1988 (Health Department)									
8		David Jones 7977 N. Taylors Rd. Mooresville IN 46158 (Affected Party)									
9		Claudia Parker 6761 Centenary Rd. Mooresville IN 46158 (Affected Party)									
10		James Swails 6568 E. Rosebud Lane Mooresville IN 46158 (Affected Party)									
11		John Thurston 6548 E. Watson Mooresville IN 46158 (Affected Party)									
12		Mr. Alic Bent August Mack Environmental, Inc. 1302 N Meridian St, Suite 300 Indianapolis IN 46202 (Consultant)									
13		Resident 990 S Grant Street Martinsville IN 46151 (Affected Party)									
14		Resident 989 S Grant Street Martinsville IN 46151 (Affected Party)									
15		Resident 2885 Ballinger Road Martinsville IN 46151 (Affected Party)									

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <b>Domestic Mail Manual R900, S913, and S921</b> for limitations of coverage on inured and COD mail. See <b>International Mail Manual</b> for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
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# Mail Code 61-53

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Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handling Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		Resident 760 E York Street Martinsville IN 46151 (Affected Party)										
2		Resident 770 E York Street Martinsville IN 46151 (Affected Party)										
3		Resident 780 E York Street Martinsville IN 46151 (Affected Party)										
4		Resident 790 E York Street Martinsville IN 46151 (Affected Party)										
5		Resident 1010 S Colfax Street Martinsville IN 46151 (Affected Party)										
6		Resident 1060 S Colfax Street Martinsville IN 46151 (Affected Party)										
7		Resident 1070 S Colfax Street Martinsville IN 46151 (Affected Party)										
8		Resident 659 E South Street Martinsville IN 46151 (Affected Party)										
9		Resident 1080 Colfax Street Martinsville IN 46151 (Affected Party)										
10		Resident 1090 Colfax Street Martinsville IN 46151 (Affected Party)										
11		Resident 760 E South Street Martinsville IN 46151 (Affected Party)										
12		Resident 790 E South Street Martinsville IN 46151 (Affected Party)										
13		Resident 639 E South Street Martinsville IN 46151 (Affected Party)										
14		Resident 3990 Red Bud Lane Martinsville IN 46151 (Affected Party)										
15		Resident 689 E South Street Martinsville IN 46151 (Affected Party)										

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mail merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <b>Domestic Mail Manual R900, S913, and S921</b> for limitations of coverage on insured and COD mail. See <b>International Mail Manual</b> for limitations of coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
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											Remarks
1		Resident 735 E South Street Martinsville IN 46151 (Affected Party)									
2		Resident 737 E South Street Martinsville IN 46151 (Affected Party)									
3		Resident 990 S Lincoln Street Martinsville IN 46151 (Affected Party)									
4		Resident 610 E South Street Martinsville IN 46151 (Affected Party)									
5		Resident 989 S Lincoln Street Martinsville IN 46151 (Affected Party)									
6		Resident 660 E York Street Martinsville IN 46151 (Affected Party)									
7		Resident 3303 46th Plaza East Bradenton FL 34203 (Affected Party)									
8		Resident 19 Pleasant Drive Martinsville IN 46151 (Affected Party)									
9											
10											
11											
12											
13											
14											
15											

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