



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

TO: Interested Parties / Applicant

DATE: April 14, 2009

RE: TIN, Inc. dba Temple-Inland / 037-27506-00115

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



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

REGISTRATION OFFICE OF AIR QUALITY

TIN Inc. dba Temple-Inland
3565 E 550 S
St. Anthony, Indiana 47575

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. 037-27506-00115	
Issued by:  Alfred C. Dumauai, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: April 14, 2009

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

The Registrant owns and operates a stationary corrugated containers manufacturing plant.

Source Address:	3565 E 550 S, St. Anthony, Indiana 47575
Mailing Address:	P.O. Box 37, St. Anthony, Indiana 47575
General Source Phone Number:	(812) 326-2125
SIC Code:	2653
County Location:	Dubois County
Source Location Status:	Nonattainment for PM _{2.5} standard Attainment for all other criteria pollutants
Source Status:	Registration

A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) One (1) Akebono Flexographic printing press, 2-Color, Folder, identified as Akebono, constructed in 2004, with a maximum line speed of 200 feet per minute (ft/min), a maximum printing width of 181 inched (in), using a pneumatic trim collection system with a cyclone, identified as CY-05, installed in 2004 and exhausting to stack S-02. The trim collection system is used to collect scrap cardboard pieces, with a maximum throughput rate of 14,671 pounds per hour.
- (b) One (1) Ward Rotary Die Cutter, 2-Color, Folder Gluer, identified as Ward, installed in 2004, with a maximum line speed of 200 feet per minute (ft/min), a maximum printing width of 110 in., using a pneumatic trim collection system with a cyclone, identified as CY-05, installed in 2004 and exhausting to stack S-02.
- (c) One (1) S&S 701 Flexographic printing press, 2-Color, Folder Gluer, identified as S&S 701, installed in 2004, with a maximum line speed of 200 feet per minute (ft/min), a maximum width of 106 in., using a pneumatic trim collection system with a cyclone, identified as CY-05, installed in 2004 and exhausting to stack S-02.
- (d) One (1) Post Flexographic printing press, 2-Color, Folder Gluer, identified as Post, installed in 2004, with a maximum line speed of 1,000 feet per minute (ft/min), a maximum printing width of 81, using a pneumatic trim collection system with a cyclone, identified as CY-05, installed in 2004 and exhausting to stack S-02.
- (e) One (1) Single Head Taper, with gluer, identified as DH Taper, installed in 2004, with a maximum line speed of 50 ft/min with a maximum sheet width of 100 inches, exhausting to general ventilation.
- (f) One (1) Double Head Taper, with Gluer, identified as DH Taper, installed in 2004, with a maximum line speed of 50 feet per minute (ft/min), with a maximum sheet width of 100 inches, exhausting to general ventilation.

SECTION B

GENERAL CONDITIONS

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

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]

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]

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]

- (a) All terms and conditions of permits established prior to Registration No. 037-27506-00115 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)]

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

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)]

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

B.8 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

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

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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) Akebono Flexographic printing press, 2-Color, Folder, identified as Akebono, constructed in 2004, with a maximum line speed of 200 feet per minute (ft/min), a maximum printing width of 181 inched (in), using a pneumatic trim collection system with a cyclone, identified as CY-05, installed in 2004 and exhausting to stack S-02. The trim collection system is used to collect scrap cardboard pieces, with a maximum throughput rate of 14,671 pounds per hour.
- (b) One (1) Ward Rotary Die Cutter, 2-Color, Folder Gluer, identified as Ward, installed in 2004, with a maximum line speed of 200 feet per minute (ft/min), a maximum printing width of 110 in., using a pneumatic trim collection system with a cyclone, identified as CY-05, installed in 2004 and exhausting to stack S-02.
- (c) One (1) S&S 701 Flexographic printing press, 2-Color, Folder Gluer, identified as S&S 701, installed in 2004, with a maximum line speed of 200 feet per minute (ft/min), a maximum width of 106 in., using a pneumatic trim collection system with a cyclone, identified as CY-05, installed in 2004 and exhausting to stack S-02.
- (d) One (1) Post Flexographic printing press, 2-Color, Folder Gluer, identified as Post, installed in 2004, with a maximum line speed of 1,000 feet per minute (ft/min), a maximum printing width of 81, using a pneumatic trim collection system with a cyclone, identified as CY-05, installed in 2004 and exhausting to stack S-02.

(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 [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the trim collection system with a cyclone (CY-05) shall not exceed 15.6 pounds per hour when operating at a process weight rate of 14,671 pounds per hour.

The pound per hour limitation was 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 equations:

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

D.1.2 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 pneumatic trim collection system with a cyclone.

Compliance Determination Requirements [326 IAC 2-5.1-2(g)] [326 IAC 2-5.5-4(b)]

D.1.3 Particulate

In order to comply with D.1.1, the cyclone (CY-05) shall be in operation and control emissions from the pneumatic trim collection system operations at all times the trim collection system operation is in operation.

D.1.4 Cyclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. The emissions unit shall be shut down no later than the completion on the processing of the material in the pneumatic trim collection system operation. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

Company Name:	TIN Inc. dba Temple-Inland
Address:	3565 E 550 S
City:	St. Anthony, Indiana 47575
Phone Number:	(812) 326-2125
Registration No.:	037-27506-00115

I hereby certify that TIN Inc. dba Temple-Inland is :

still in operation.

no longer in operation.

I hereby certify that TIN Inc. dba Temple-Inland is :

in compliance with the requirements of Registration No. 037-27506-00115.

not in compliance with the requirements of Registration No. 037-27506-00115.

Authorized Individual (typed):
Title:
Signature:
Phone Number:
Date:

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.

Noncompliance:

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

Technical Support Document (TSD) for a FESOP
Transitioning to a Registration

Source Description and Location

Source Name: TIN Inc. dba Temple-Inland
Source Location: 3565 E 550 S, St. Anthony, Indiana 47575
County: Dubois
SIC Code: 2653
Registration No.: 037-27506-00115
Permit Reviewer: Marcia Earl

On February 19, 2009, the Office of Air Quality (OAQ) received an application from TIN Inc. dba Temple-Inland related to the transition of FESOP F037-19190-00115, issued on August 12, 2004, to a Registration. TIN Inc. dba Temple-Inland has reduced the potential to emit (PTE) by lowering the VOC content of most inks used, and corrected the ink application rate such that the source-wide VOC emissions are below Title V levels and the source can qualify for a Registration.

Existing Approvals

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

- (a) FESOP No. F037-19190-00115, issued on August 12, 2004.
- (b) Administrative Amendment No. 037-20637-00115, issued on February 3, 2005.
- (c) Administrative Amendment No. 037-22042-00115, issued on December 12, 2005.

Due to this application, the source is transitioning from a FESOP to a Registration.

County Attainment Status

The source is located in Dubois County.

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

- (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 NO_x emissions are considered when evaluating the rule applicability relating to ozone. Dubois County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (b) **PM_{2.5}**
Dubois County has been classified as nonattainment for PM_{2.5} in 70 FR 943 dated January 5, 2005. On May 8th, 2008, U.S. EPA promulgated specific New Source Review rules for PM_{2.5} emissions, and the effective date of these rules was July 15th, 2008. Therefore, direct PM_{2.5} and SO₂ emissions were reviewed pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5. See the State Rule Applicability – Entire Source section.
- (c) **Other Criteria Pollutants**
Dubois County has been classified as attainment or unclassifiable in Indiana for PM₁₀, SO₂, 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.

Description of Emission Units and Pollution Control Equipment
--

The source consists of the following existing emission units:

- (a) One (1) Akebono Flexographic printing press, 2-Color, Folder, identified as Akebono, constructed in 2004, with a maximum line speed of 200 feet per minute (ft/min), a maximum printing width of 181 inches (in), using a pneumatic trim collection system with a cyclone, identified as CY-05, installed in 2004 and exhausting to stack S-02. The trim collection system is used to collect scrap cardboard pieces, with a maximum throughput rate of 14,671 pounds per hour.
- (b) One (1) Ward Rotary Die Cutter, 2-Color, Folder Gluer, identified as Ward, installed in 2004, with a maximum line speed of 200 feet per minute (ft/min), a maximum printing width of 110 in., using a pneumatic trim collection system with a cyclone, identified as CY-05, installed in 2004 and exhausting to stack S-02.
- (c) One (1) S&S 701 Flexographic printing press, 2-Color, Folder Gluer, identified as S&S 701, installed in 2004, with a maximum line speed of 200 feet per minute (ft/min), a maximum width of 106 in., using a pneumatic trim collection system with a cyclone, identified as CY-05, installed in 2004 and exhausting to stack S-02.
- (d) One (1) Post Flexographic printing press, 2-Color, Folder Gluer, identified as Post, installed in 2004, with a maximum line speed of 1,000 feet per minute (ft/min), a maximum printing width of 81, using a pneumatic trim collection system with a cyclone, identified as CY-05, installed in 2004 and exhausting to stack S-02.
- (e) One (1) Single Head Taper, with gluer, identified as DH Taper, installed in 2004, with a maximum line speed of 50 ft/min with a maximum sheet width of 100 inches, exhausting to general ventilation.
- (f) One (1) Double Head Taper, with Gluer, identified as DH Taper, installed in 2004, with a maximum line speed of 50 feet per minute (ft/min), with a maximum sheet width of 100 inches, exhausting to general ventilation.

“Integral Part of the Process” Determination

Pursuant to FESOP F037-19190-00115, the source submitted the following justification such that the cyclone be considered as an integral part of the pneumatic trim collection system:

The intended purpose of the cyclone is to pull the paper trim material away from the printing presses and collects it for shipment off-site. The cyclone is part of a pneumatic conveying device for the transfer of paper trim material to a central collection point for baling. The bales of paper trim are sold by the source and delivered to paper brokers. Because the paper trim is sold, the trim is considered by the source as a product, and not a waste.

IDEM, OAQ has evaluated the information submitted and agreed that the cyclone be considered an integral part of the pneumatic trim collection system. Therefore, the permitting level will be determined using the potential to emit after the cyclone. Operating conditions in the proposed permit will specify that this cyclone shall operate at all times when the pneumatic trim collection system is in operation.

Enforcement Issues

IDEM is aware that the source is in violation of Condition B.5 (Termination of Right to Operate) [326 IAC 2-8-9] [326 IAC 2-8-3(h)]. The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of this source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9. IDEM is reviewing this matter and will take appropriate action.

Emission Calculations

See Appendix A, page 1 through 8 of this TSD for detailed emission calculations.

Permit Level Determination – Registration

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 ₁₀ [*]	PM _{2.5}	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
Printing Presses (Ink) (Akebono, S&S 701 and Ward)	0.00	0.00	0.00	0.00	0.00	23.72	0.00	1.62	1.62 Diethylene glycol monoethyl ether
Gluing Operation (S&S 701, Double Taper and Single Taper)	0.00	0.00	0.00	0.00	0.00	0.57	0.00	0.37	0.37 Vinyl Acetate
Trim Collection System (integral cyclone)	0.77	0.77	0.77	0.00	0.00	0.00	0.00	0.00	--
Total PTE of Entire Source	0.77	0.77	0.77	0.00	0.00	24.29	0.00	1.99	--

Process/ Emission Unit	Potential To Emit of the Entire Source (tons/year)								
	PM	PM ₁₀ *	PM _{2.5}	SO ₂	NO _x	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 VOCs is within the ranges listed in 326 IAC 2-5.5-1(b)(1). The PTE of all other regulated criteria pollutants are less than the ranges 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.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

- (a) The requirements of the New Source Performance Standard for Standards of Performance for the Graphic Arts Industry: Publication Rotogravure Printing, 40 CFR 60, Subpart QQ (326 IAC 12), are not included in the permit, because this NSPS applies only to rotogravure printing presses, and TIN Inc dba Temple-Inland uses only flexographic presses.
- (b) The requirements of the New Source Performance Standard for Performance for Flexible Vinyl and Urethane Coating and Printing Source, 40 CFR 60, Subpart FFF (326 IAC 12), are not included in this permit, because this source does not print or coat flexible vinyl or urethane products.
- (c) There are no other 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)

- (d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Pulp and Paper Industry, 40 CFR 63, subpart S (326 IAC 20-33), are not included in this permit because this source is not a major source of hazardous air pollutants (HAPs).
- (e) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Printing and Publishing Industry, 40 CFR 63, Subpart KK (326 IAC 20-18), are not included in this permit for the printing presses (Akebono, S&S 701, Ward and Post) because the coating operation is not a publication rotogravure, packaging rotogravure or wide-web flexographic printing press and the source is not a major source of HAPs.
- (f) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Paper and Other Web (Surface Coating), 40 CFR 63, Subpart JJJJ (326 IAC 20-65), are not included in this permit, since this source is not a major source of HAPs.

- (g) The requirements of National Emission Standards for Hazardous Air Pollutants (NESHAP) for Printing, Coating and Dyeing of Fabrics and Other Textiles 40 CFR 63, Subpart OOOO (326 IAC 20-77), are not included in this permit, because this source is not a major source of hazardous air pollutants (HAPs).
- (h) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this permit.

Compliance Assurance Monitoring (CAM)

- (i) 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.

State Rule Applicability Determination

The following state rules are applicable to the source:

326 IAC 2-5.5 (Registrations)

Registration applicability is discussed under the Permit Level Determination – Registration section above.

326 IAC 2-2 (Prevention of significant Deterioration (PSD))

This source is not a major stationary source, under PSD (326 IAC 2-2), because the potential to emit of all attainment regulated pollutants are less than 250 tons per year, and this source is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).

Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

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.

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.

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.

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.

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.

326 IAC 6.5 (Particulate Matter Limitations Except Lake County)

This source is located in Dubois County, and the potential to emit (PTE) particulate matter (PM) is less than one hundred (100) tons per year and the actual particulate matter (PM) emissions are less than ten (10) tons per year. Therefore, the requirements of 326 IAC 6.5 do not apply.

FLexographic Printing Presses

326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)

Each of the printing presses (Akebono, Ward, S&S 701 and Post) are 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.

326 IAC 8-2-5 (Paper Coating Operations)

The printing presses (Akebono, Ward, S&S 701 and Post) can not perform web coating or involves saturation processes. Therefore, the requirements of 326 IAC 8-2-5 do not apply to this source.

326 IAC 8-5-5 (Graphic Arts Operations)

The printing presses (Akebono, Ware, S&S 701 and Post) were constructed after November 1, 1980; however the printing presses (Akebono, Ware, S&S 701 and Post) do not have the potential to emit 25 tons or more per year of VOCs.

Trim Collection System with Integral Cyclone

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the trim collection system with a cyclone (CY-05) shall not exceed 15.6 pounds per hour when operating at a process weight rate of 14,671 pounds per hour.

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

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

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

The cyclone (CY-05) shall be in operation and control emissions from the pneumatic trim collection system operations at all times the trim collection system operation is in operation.

Gluing Operations

326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)

Each of the gluers (Ward, S&S 701, Post, DH taper, and SH taper) are 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.

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 February 19, 2009.

The operation of this source shall be subject to the conditions of the attached proposed Registration No. 037-27506-00115. The staff recommends to the Commissioner that this Registration be approved.

IDEM Contact

- (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

Appendix A: Emission Summary

Company Name: TIN Inc. dba Temple-Inland
Address City IN Zip: 3565 E 550 S, St. Anthony, Indiana 47575
Permit No: M037-27506-00115
Reviewer: Marcia Earl
Date: March 2009

Uncontrolled/Controlled Emissions

Emission Units	PM	PM ₁₀	PM _{2.5}	SO ₂	VOC	CO	NO _x	HAPs	Worst Single HAP
Printing Presses (Akebone, S&S 701 and Ward)	0.00	0.00	0.00	0.00	23.72	0.00	0.00	1.62	1.62 Diethylene glycol monoethyl ether
Gluing Operation (S&S 701, Ward and Post)	0.00	0.00	0.00	0.00	0.57	0.00	0.00	0.37	0.37 Vinyl Acetate
Trim Collection System*	0.77	0.77	0.77	0.00	0.00	0.00	0.00	0.00	
Total	0.77	0.77	0.77	0.00	24.29	0.00	0.00	1.99	

* Cyclone (CY-05) is integral to the trim collection system. Therefore, calculations were taken after control.

**Appendix A: Emission Calculations
VOC and HAPs From Converting Operation**

Company Name: TIN Inc dba Temple-Inland
Address City IN Zip: 3565 E 550 S, St Anthony, Indiana 47575
Permit No: M037-27506-00115
Reviewer: Marcia Earl
Date: March 2009

Emission Unit - Akebone

THROUGHPUT				
Press ID	Maximum Line Speed (ft/min) @ 100% Coverage	Maximum Print Width (inches)	Mmin ² /Year	Potential Gallons Ink (year)
Akebone	200	181	228,321	52,999

INK VOCS					
Ink Name	Maximum Coverage (lbs/MMin ²)	Weight % Volatiles	Flash Off %	Throughput (MMin ² /Year)	Emissions (tons/year)
Worst Cast Ink					
7EWWD6210-HG LR GCM1 91 WHITE INK	2.5	3.79%	100%	228,321	10.82

Glue VOCs					
Glue Name	Maximum Coverage (lbs/MMin ²)	Weight % Volatiles	Flash Off %	Throughput (MMin ² /Year)	Emissions (tons/year)
No Glue					

Total VOC Emissions = 10.82 tons/yr

INK HAPs					
Ink Name	Maximum Coverage (lbs/MMin ²)	Weight % HAP	Flash Off %	Throughput (MMin ² /Year)	Emissions (tons/year)
Worst Cast Ink					
7EBW72019 - HI DENSITY BLENDING BLACK	2.5	0.26%	100%	228,321	0.74

Glue HAPs					
Glue Name	Maximum Coverage (lbs/MMin ²)	Weight % HAP	Flash Off %	Throughput (MMin ² /Year)	Emissions (tons/year)
No Glue			100%	228,321	0.00

Total HAP Emissions = 0.74 tons/yr

Worst Case HAP Diethylene glycol monoethyl ether

**Appendix A: Emission Calculations
VOC and HAPs From Converting Operation**

Company Name: TIN Inc. dba Temple-Inland
Address City IN Zip: 3565 E 550 S, St. Anthony, Indiana 47575
Permit No: M037-27506-00115
Reviewer: Marcia Earl
Date: March 2009

Emission Unit - S&S 701

THROUGHPUT				
Press ID	Maximum Line Speed (ft/min) @ 100% Coverage	Maximum Print Width (inches)	Mmin ² /Year	Potential Gallons Ink (year)
S&S 701	200	106	133,713	31,038

INK VOCS					
Ink Name	Maximum Coverage (lbs/MMin ²)	Weight % Volatiles	Flash Off %	Throughput (MMin ² /Year)	Emissions (tons/year)
Worst Cast Ink					
7EWW6210-HG LR GCM1 91 WHITE INK	2.5	3.79%	100%	133,713	6.33

Glue VOCS					
Glue Name	Maximum Coverage (lbs/MMin ²)	Weight % Volatiles	Flash Off %	Throughput (MMin ² /Year)	Emissions (tons/year)
WB-3706	1.0	0.16%	100%	133,713	0.11

Total VOC Emissions = 6.44 tons/yr

INK HAPs					
Ink Name	Maximum Coverage (lbs/MMin ²)	Weight % HAP	Flash Off %	Throughput (MMin ² /Year)	Emissions (tons/year)
Worst Cast Ink					
7EBW72019 - HI DENSITY BLENDING BLACK	2.5	0.26%	100%	133,713	0.43

Worst Case HAP Diethylene glycol monoethyl ether

Glue HAPs					
Glue Name	Maximum Coverage (lbs/MMin ²)	Weight % HAP	Flash Off %	Throughput (MMin ² /Year)	Emissions (tons/year)
WB-3706 RB-001	1	0.10%	100%	133,713	0.07

Total HAP Emissions = 0.5 tons/yr

Worst Case HAP Vinyl Acetate

**Appendix A: Emission Calculations
VOC and HAPs From Converting Operation**

Company Name: TIN Inc. dba Temple-Inland
Address City IN Zip: 3565 E 550 S, St. Anthony, Indiana 47575
Permit No: M037-27506-00115
Reviewer: Marcia Earl
Date: March 2009

Emission Unit - Ward

THROUGHPUT				
Press ID	Maximum Line Speed (ft/min) @ 100% Coverage	Maximum Print Width (inches)	Mmin ² /Year	Potential Gallons Ink (year)
Ward	200	110	138,758	32,209

INK VOCS					
Ink Name	Maximum Coverage (lbs/MMin ²)	Weight % Volatiles	Flash Off %	Throughput (MMin ² /Year)	Emissions (tons/year)
Worst Cast Ink					
7EWW6210-HG LR GCM1 91 WHITE INK	2.5	3.79%	100%	138,758	6.57

Glue VOCs					
Glue Name	Maximum Coverage (lbs/MMin ²)	Weight % Volatiles	Flash Off %	Throughput (MMin ² /Year)	Emissions (tons/year)
No Glue					

Total VOC Emissions =	6.57 tons/yr
-----------------------	--------------

INK HAPs					
Ink Name	Maximum Coverage (lbs/MMin ²)	Weight % HAP	Flash Off %	Throughput (MMin ² /Year)	Emissions (tons/year)
Worst Cast Ink					
7EBW72019 - HI DENSITY BLENDING BLACK	2.5	0.26%	100%	138,758	0.45

Glue HAPs					
Glue Name	Maximum Coverage (lbs/MMin ²)	Weight % HAP	Flash Off %	Throughput (MMin ² /Year)	Emissions (tons/year)
No Glue					

Total HAP Emissions =	0.45 tons/yr
-----------------------	--------------

Worst Case HAP Diethylene glycol monoethyl ether
--

**Appendix A: Emission Calculations
VOC and HAP Emissions From Converting Operation**

Company Name: TIN Inc. dba Temple-Inland
Address City IN Zip: 3565 E 550 S, St. Anthony, Indiana 47575
Permit No: M037-27506-00115
Reviewer: Marcia Earl
Date: March 2009

Emission Unit - 04 - Post

THROUGHPUT			
Press ID	Maximum Line Speed (ft/min) @ 100% Coverage	Maximum Print Width (inches)	Mmin ² /Year
Post	200	81	510,883

INK VOCS					
Ink Name	Maximum Coverage (lbs/MMin ²)	Weight % Volatiles	Flash Off %	Throughput (MMin ² /Year)	Emissions (tons/year)
No Ink					

Glue VOCs					
Glue Name	Maximum Coverage (lbs/MMin ²)	Weight % Volatiles	Flash Off %	Throughput (MMin ² /Year)	Emissions (tons/year)
Worst Case Glue					
WB-3706	1.0	0.16%	100%	510,883	0.41

Total VOC Emissions = 0.41 tons/yr

INK HAPs					
Ink Name	Maximum Coverage (lbs/MMin ²)	Weight % HAP	Flash Off %	Throughput (MMin ² /Year)	Emissions (tons/year)
No Ink					

Glue HAPs					
Glue Name	Maximum Coverage (lbs/MMin ²)	Weight % HAP	Flash Off %	Throughput (MMin ² /Year)	Emissions (tons/year)
Worst Case Glue					
WB-3706 RB-001	1	0.10%	100%	510,883	0.26

Total HAP Emissions = 0.26 tons/yr

Worst Case HAP Vinyl Acetate

**Appendix A: Emission Calculations
VOC and HAP Emissions From Converting Operation**

Company Name: TIN Inc. dba Temple-Inland
Address City IN Zip: 3565 E 550 S, St. Anthony, Indiana 47575
Permit No: M037-27506-00115
Reviewer: Marcia Earl
Date: March 2009

Emission Unit - DH taper/gluer

THROUGHPUT			
Press ID	Maximum Line Speed (ft/min) @ 100% Coverage	Maximum Print Width (inches)	Mmin ² /Year
Post	50	110	34,690

INK VOCS					
Ink Name	Maximum Coverage (lbs/MMin ²)	Weight % Volatiles	Flash Off %	Throughput (MMin ² /Year)	Emissions (tons/year)
No Ink					

Glue VOCs					
Glue Name	Maximum Coverage (lbs/MMin ²)	Weight % Volatiles	Flash Off %	Throughput (MMin ² /Year)	Emissions (tons/year)
Worst Case Glue					
WB-3706	1.0	0.16%	100%	34,690	0.03

Total VOC Emissions = 0.03 tons/yr

INK HAPs					
Ink Name	Maximum Coverage (lbs/MMin ²)	Weight % HAP	Flash Off %	Throughput (MMin ² /Year)	Emissions (tons/year)
No Ink					

Glue HAPs					
Glue Name	Maximum Coverage (lbs/MMin ²)	Weight % HAP	Flash Off %	Throughput (MMin ² /Year)	Emissions (tons/year)
Worst Case Glue					
WB-3706 RB-001	1.0	0.10%	100%	34,690	0.02

Total HAP Emissions = 0.02 tons/yr

Worst Case HAP Vinyl Acetate

**Appendix A: Emission Calculations
VOC and HAP Emissions From Converting Operation**

Company Name: TIN Inc. dba Temple-Inland
Address City IN Zip: 3565 E 550 S, St. Anthony, Indiana 47575
Permit No: M037-27506-00115
Reviewer: Marcia Earl
Date: March 2009

Emission Unit SH taper/gluer

THROUGHPUT			
Press ID	Maximum Line Speed (ft/min) @ 100% Coverage	Maximum Print Width (inches)	Mmin ² /Year
	50	110	34,690

INK VOCS					
Ink Name	Maximum Coverage (lbs/MMin ²)	Weight % Volatiles	Flash Off %	Throughput (MMin ² /Year)	Emissions (tons/year)
No Ink					

Glue VOCs					
Glue Name	Maximum Coverage (lbs/MMin ²)	Weight % Volatiles	Flash Off %	Throughput (MMin ² /Year)	Emissions (tons/year)
Worst Case Glue					
WB-3706	1.0	0.16%	100%	34,690	0.03

Total VOC Emissions =	0.03 tons/yr
-----------------------	--------------

INK HAPs					
Ink Name	Maximum Coverage (lbs/MMin ²)	Weight % HAPs	Flash Off %	Throughput (MMin ² /Year)	Emissions (tons/year)
No Ink					

Glue HAPs					
Glue Name	Maximum Coverage (lbs/MMin ²)	Weight % HAPs	Flash Off %	Throughput (MMin ² /Year)	Emissions (tons/year)
Worst Case Glue					
WB-3706 RB-001	1.0	0.10%	100%	34,690	0.02

Total HAP Emissions =	0.02 tons/yr
-----------------------	--------------

Worst Case HAP Vinyl Acetate

**Appendix A: Emission Calculations
Trim Collection System with integral cyclone**

Company Name: TIN Inc. dba Temple-Inland
Address City IN Zip: 3565 E 550 S, St. Anthony, Indiana 47575
Permit No: M037-27506-00115
Reviewer: Marcia Earl
Date: March 2009

		After Control (tons/year)
* Particulate Control Equipment = Cyclone		
Outlet Grain Loading (grains/acf) =	0.001	0.77
Air Flow Rate (acf/minute) =	20400	
Control Efficiency (%) =	90%	

The cyclone (CY-05) is integral to the Trim Collection System. Therefore the calculations were taken after control.

* Assume all PM emissions are equal to PM₁₀.

METHODOLOGY

Potential to emit (PTE) of PM/PM₁₀/PM_{2.5} After Control (tons/year) = Outlet grain loading (grain/acf) * Air Flow Rate (acf/minute)
60 minutes/hour * 1 lb/7000 grains * 8760 hours/year * t ton/2000 lbs