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: March 25, 2009

RE: ITT Corporation / 003-25123-00185

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

Notice of Decision: Approval - Registration

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

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

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

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

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

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

Enclosures
FN-REGIS.dot 1/2/08

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REGISTRATION
OFFICE OF AIR QUALITY

ITT Corporation
7310 Innovation Boulevard
Fort Wayne, Indiana 46818

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. 003-25123-00185	
Issued by: Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: March 25, 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 communications equipment and meteorological instrument manufacturing plant

Source Address:	7310 Innovation Boulevard, Fort Wayne, Indiana 46818
Mailing Address:	PO Box 731, Fort Wayne, Indiana 46801-0731
General Source Phone Number:	(260) 451-5220
SIC Code:	3663
County Location:	Allen County
Source Location Status:	Attainment for all 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) Two (2) large routers, identified as Units 11 and 12, constructed in 1993, with a maximum capacity of 115 pieces per hour, each, using a baghouse for control, identified as S-15, and exhausting to stack S-15.

(b) Three (3) small automated routers, identified as 3SMTRTER1, 3SMTRTER2, and 3SMTRTER3, constructed in 1993, with a maximum capacity of 160 pieces per hour, each, using a baghouse for control, identified as S-15, and exhausting to stack S-15.

(c) One (1) small automated router, identified as 3SMTRTER4, approved for construction in 2009, with a maximum capacity of 160 pieces per hour, using a baghouse for control, identified as S-14, and exhausting indoors.

(d) One (1) bar code laser etcher, identified as Etcher 1, constructed in 1993, with a maximum capacity of 493.2 parts per hour, using a dust collector for control, and exhausting indoors.

(e) One (1) bar code laser etcher, identified as Etcher 2, approved for construction in 2009, with a maximum capacity of 493.2 parts per hour, using a dust collector for control, and exhausting indoors.

(f) Three (3) natural gas-fired boilers, identified as Units 13, 14, and 15, constructed in 1993, rated at 2.5 MMBtu/hr, each, and exhausting to stacks S-16a, S-16b, and S-16c, respectively.

(g) Six (6) cold cleaners performing organic solvent degreasing operations:

(1) One (1) Cobehn Spray Cleaner, identified as CC1, constructed in 1993, using 0.019 gallons of non halogenated organic solvent per hour, and exhausting indoors.

(2) One (1) Cyber Clean 3000 Stencil Cleaner, identified as CC2, constructed in 1993, using 0.99 gallons of non halogenated organic solvent per hour, and exhausting to stack S-57.

(3) One (1) Cyber Clean 3000 Stencil Cleaner, identified as CC3, approved for construction in 2009, using 0.99 gallons of non halogenated organic solvent per hour, and exhausting to stack S-58.

(4) One (1) Smart Sonic Stencil Cleaner, identified as CC4, constructed in 1993, using 0.99 gallons of non halogenated organic solvent per hour, and exhausting indoors.

(5) One (1) Fisher Scientific Ultrasonic Table Top Cleaner, identified as CC5, constructed in 1993, using 0.001 gallons of non halogenated organic solvent per hour, and exhausting indoors.

(6) One (1) Branson 3200 Ultrasonic Table Top Cleaner, identified as CC6, constructed in 1993, using 0.0019 gallons of non halogenated organic solvent per hour, and exhausting indoors.

(h) One (1) Branson Open Top Vapor Degreaser, identified as VD1, constructed in 1993, using 0.014 gallons non halogenated organic solvent per hour, and exhausting indoors.

(i) Two (2) electric Fusion UV Cure Ovens, identified as Fusion UV Cure Oven 1 and 2, constructed in 1993, with a maximum capacity 2,520 pieces per day, each, and exhausting to stacks S-1 and S-11

(j) One (1) electric Fusion UV Cure Oven, identified as Fusion UV Cure Oven 3, approved for construction in 2009, with a maximum capacity 2,520 pieces per day, and exhausting to stack S-63.

(k) One (1) paint mixing and touch up operation, identified as paint mixing and touch up operation 1, constructed in 1993, using less than 5 gallons of coatings per day, and exhausting indoors.

(l) Seven (7) electric Heller I/R Ovens, identified as Unit 50 through Unit 56, constructed in 1993, with a maximum capacity 3,427.2 pieces per day, each, and exhausting to stacks S-50 through S-56.

(m) One (1) electric Blue M Curing Oven, identified as Blue M Curing Oven 1, constructed in 1993, with a maximum capacity 345.6 pieces per day, and exhausting to stack S-60.

(n) Three (3) electric Blue M Ovens, identified as Blue M Oven 18, 19, and 20, constructed in 1993, with a maximum capacity 1814.4 pieces per day, each, and exhausting indoors.

(o) Two (2) ERSA selective solder machines, identified as ERSA 1 and 2, approved for construction in 2009, using 0.0009 pounds of flux per hour and 0.17 gallons of organic solvent per hour, and exhausting to stacks S-64 and S-65.

(p) Two (2) soldering pots, identified as Soldering Pot 1 and 2, constructed in 1993, using a combination of 0.009 pounds of flux per hour, and exhausting indoors.

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. 003-25123-00185 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.

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) Two (2) large routers, identified as Units 11 and 12, constructed in 1993, with a maximum capacity of 115 pieces per hour, each, using a baghouse for control, identified as S-15, and exhausting to stack S-15.

(b) Three (3) small automated routers, identified as 3SMTRTER1, 3SMTRTER2, and 3SMTRTER3, constructed in 1993, with a maximum capacity of 160 pieces per hour, each, using a baghouse for control, identified as S-15, and exhausting to stack S-15.

(c) One (1) small automated router, identified as 3SMTRTER4, approved for construction in 2009, with a maximum capacity of 160 pieces per hour, using a baghouse for control, identified as S-14, and exhausting indoors.

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

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

D.1.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e), the particulate emission rate from the two (2) large routers and the four (4) small automated routers shall not exceed 0.551 pounds per hour, each

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

D.1.2 Particulate Control

In order to comply with Condition D.1.1, the control equipment for particulate control shall be in operation and control emissions from the two (2) large routers and the four (4) small automated routers at all times when these units are in operation.

SECTION D.2 OPERATION CONDITIONS

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

(f) Three (3) natural gas-fired boilers, identified as Units 13, 14, and 15, constructed in 1993, rated at 2.5 MMBtu/hr, each, and exhausting to stacks S-16a, S-16b, and S-16c, respectively.

(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.2.1 Particulate [326 IAC 6-2-2]

Pursuant to 326 IAC 6-2-2 (Particulate Matter Emission Limitations for Sources of Indirect Heating), the particulate emissions from the three (3) boilers, identified as Units 13, 14, and 15 shall not exceed 0.6 pounds of particulate matter per million British thermal units heat input, each.

SECTION D.3 OPERATION CONDITIONS

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

(g) Six (6) cold cleaners performing organic solvent degreasing operations:

(1) One (1) Cobehn Spray Cleaner, identified as CC1, constructed in 1993, using 0.019 gallons of non halogenated organic solvent per hour, and exhausting indoors.

(2) One (1) Cyber Clean 3000 Stencil Cleaner, identified as CC2, constructed in 1993, using 0.99 gallons of non halogenated organic solvent per hour, and exhausting to stack S-57.

(3) One (1) Cyber Clean 3000 Stencil Cleaner, identified as CC3, approved for construction in 2009, using 0.99 gallons of non halogenated organic solvent per hour, and exhausting to stack S-58.

(4) One (1) Smart Sonic Stencil Cleaner, identified as CC4, constructed in 1993, using 0.99 gallons of non halogenated organic solvent per hour, and exhausting indoors.

(5) One (1) Fisher Scientific Ultrasonic Table Top Cleaner, identified as CC5, constructed in 1993, using 0.001 gallons of non halogenated organic solvent per hour, and exhausting indoors.

(6) One (1) Branson 3200 Ultrasonic Table Top Cleaner, identified as CC6, constructed in 1993, using 0.0019 gallons of non halogenated organic solvent per hour, and exhausting indoors.

(h) One (1) Branson Open Top Vapor Degreaser, identified as VD1, constructed in 1993, using 0.014 gallons non halogenated organic solvent per hour, and exhausting indoors.

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

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

D.3.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the Permittee shall:

(a) Equip the cleaner with a cover;

(b) Equip the cleaner with a facility for draining cleaned parts;

(c) Close the degreaser cover whenever parts are not being handled in the cleaner;

(d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(e) Provide a permanent, conspicuous label summarizing the operation requirements;

(f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.3.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, the Permittee shall ensure that the following control equipment requirements are met:

(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));

(B) The solvent is agitated; or

(C) The solvent is heated.

(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent is used is insoluble in, and heavier than, water.

(C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the Permittee shall ensure that the following operating requirements are met:

(1) Close the cover whenever articles are not being handled in the degreaser.

(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

D.3.3 Volatile Organic Compounds (VOC) [326 IAC 8-3-3]

Pursuant to 326 IAC 8-3-3 (Open Top Vapor Degreasing Operation), for open top vapor degreasing operations constructed after January 1, 1980, the Permittee shall:

(a) Equip the open top vapor degreaser with a cover that can be opened and closed easily without disturbing the vapor zone;

(b) Keep the cover closed at all times except when processing workloads through the degreaser;

(c) Minimize solvent carry-out by:

(1) Racking parts to allow complete drainage;

(2) Moving parts in and out of the degreaser at less than eleven (11) feet per minute;

(3) Degreasing the workload in the vapor zone at least thirty (30) seconds or until condensation ceases;

(4) Tipping out any pools of solvent on the cleaned parts before removal;

(5) Allowing parts to dry within the degreaser for at least fifteen (15) seconds or until visually dry;

(d) Not degrease porous or absorbent materials, such as cloth, leather, wood or rope;

(e) Not occupy more than half of the degreaser=s open top area with the workload;

(f) Not load the degreaser such that the vapor level drops more than fifty percent (50%) of the vapor depth when the workload is removed;

(g) Never spray above the vapor level;

(h) Repair solvent leaks immediately, or shut down the degreaser;

(i) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, such that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere;

(j) Not use workplace fans near the degreaser opening;

(k) Not allow visually detectable water in the solvent exiting the water separator; and

(l) Provide a permanent, conspicuous label summarizing the operating requirements.

D.3.4 Volatile Organic Compounds (VOC) [326 IAC 8-3-6]

Pursuant to 326 IAC 8-3-6 (Open Top Vapor Degreaser Operation and Control Requirements), for open top vapor degreasing operations with an air to solvent interface of ten and eight-tenths (10.8) square feet or greater, constructed after July 1, 1990:

(a) The Permittee shall ensure that the following control equipment requirements are met:

(1) Equip the degreaser with a cover that can be opened and closed easily without disturbing the vapor zone.

(2) Equip the degreaser with the following switches:

(A) A condenser flow switch and thermostat which shuts off sump heat if condenser coolant stops circulating or becomes too warm.

(B) A spray safety switch which shuts off spray pump if the vapor level drops more than four (4) inches.

(3) Equip the degreaser with a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(4) Equip the degreaser with one (1) of the following control devices:

(A) A freeboard ratio of seventy-five hundredths (0.75) or greater and a powdered cover if the degreaser opening is greater than ten and eight-tenths (10.8) square feet;

(B) A refrigerated chiller;

(C) An enclosed design in which the cover opens only when the article is actually entering or exiting the degreaser;

(D) A carbon adsorption system with ventilation which, with the cover open, achieves a ventilation rate of greater than or equal to fifty (50) cubic feet per minute per square foot of air to vapor interface area and an average of less than twenty-five parts per million of solvent is exhausted over one (1) complete adsorption cycle; or

(E) Other systems of demonstrated equivalent or better control as those outlined in (A) through (D). Such systems shall be submitted to the U.S.EPA as a SIP revision.

(b) Pursuant to 326 IAC 8-3-6(b) (Open Top Vapor Degreaser Operation and Control Requirements), the Permittee shall ensure that the following operating requirements are met:

(1) Keep the cover closed at all times except when processing workloads through the degreaser.

(2) Minimize solvent carryout emissions by:

(A) Racking articles to allow complete drainage;

(B) Moving articles in and out of the degreaser at less than eleven feet per minute;

(C) Degreasing the workload in the vapor zone at least thirty (30) seconds or until condensation ceases;

(D) Tipping out any pools of solvent on the cleaned articled before removal; and

(E) Allowing articles to dry within the degreaser for at least fifteen (15) seconds or until visually dry.

(3) Prohibit the entrance into the degreaser of porous or absorbent materials such as, but not limited to, cloth, leather, wood or rope.

(4) Prohibit occupation of more than one half (2) of the degreaser=s open top area with the workload.

(5) Prohibit the loading of the degreaser to the point where the vapor level would drop more than four (4) inches when the workload is removed.

(6) Prohibit solvent spraying above the vapor level.

(7) Repair solvent leaks immediately or shut down the degreaser if leaks cannot be repaired immediately.

(8) Store waste solvent only in covered containers and prohibit the disposal transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent (by weight) could evaporate.

(9) Prohibit the exhaust ventilation rate from exceeding sixty-five cubic feet per minute per square foot of degreaser open area unless a greater ventilation rate is necessary to meet Occupational Safety and Health Administration (OSHA) requirements.

(10) Prohibit the use of workplace fans near the degreaser opening.

(11) Prohibit visually detectable water in the solvent exiting the water separator.

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:	ITT Corporation
Address:	7310 Innovation Boulevard
City:	Fort Wayne, Indiana 46818
Phone Number:	(260) 451-5032
Registration No.:	003-25123-00185

I hereby certify that ITT Corporation is :
☐ still in operation.
☐ no longer in operation.

I hereby certify that ITT Corporation is :
☐ in compliance with the requirements of Registration No. 003-25123-00185.
☐ not in compliance with the requirements of Registration No. 003-25123-00185.

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 Federally Enforceable State Operating Permit (FESOP) Transitioning to a Registration

Source Description and Location

Source Name:	**ITT Corporation**
Source Location:	**7310 Innovation Boulevard, Fort Wayne, Indiana 46818**
County:	**Allen**
SIC Code:	**3663**
Registration No.:	**003-25123-00185**
Permit Reviewer:	**Brian Williams**

On August 7, 2007, the Office of Air Quality (OAQ) received an application from ITT Corporation, formerly ITT Aerospace Communications Division, related to the construction and operation of new emission units at an existing communications equipment and meteorological instrument manufacturing plant and transition from a FESOP to a Registration due to the removal of several existing emission units.

Existing Approvals

The source has been operating under FESOP Renewal No. 003-13873-00185, issued on May 8, 2003.

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

County Attainment Status

The source is located in Allen County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Attainment effective February 12, 2007, for the Fort Wayne area, including Allen County, 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.
Unclassifiable or attainment effective April 5, 2005, for PM2.5.

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

(b) PM2.5
Allen County has been classified as attainment for PM2.5. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM2.5 emissions, and the effective date of these rules was July 15th, 2008. Indiana has three years from the publication of these rules to revise its PSD rules, 326 IAC 2-2, to include those requirements. The May 8, 2008 rule revisions require IDEM to regulate PM10 emissions as a surrogate for PM2.5 emissions until 326 IAC 2-2 is revised.

(c) Other Criteria Pollutants
Allen County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

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

Background and Description of Emission Units and Pollution Control Equipment

The Office of Air Quality (OAQ) has reviewed an application, submitted by ITT Corporation on August 7, 2007, relating to the removal of existing emission units and the construction and operation of new emission units at an existing communications equipment and meteorological instrument manufacturing plant. As a result, this source will transition from a FESOP to a Registration.

The source consists of the following existing emission unit(s):

(a) Two (2) large routers, identified as Units 11 and 12, constructed in 1993, with a maximum capacity of 115 pieces per hour, each, using a baghouse for control, identified as S-15, and exhausting to stack S-15.

(b) Three (3) small automated routers, identified as 3SMTRTER1, 3SMTRTER2, and 3SMTRTER3, constructed in 1993, with a maximum capacity of 160 pieces per hour, each, using a baghouse for control, identified as S-15, and exhausting to stack S-15.

(c) One (1) bar code laser etcher, identified as Etcher 1, constructed in 1993, with a maximum capacity of 493.2 parts per hour, using a dust collector for control, and exhausting indoors.

(d) Three (3) natural gas-fired boilers, identified as Units 13, 14, and 15, constructed in 1993, rated at 2.5 MMBtu/hr, each, and exhausting to stacks S-16a, S-16b, and S-16c, respectively.

(e) Five (5) cold cleaners performing organic solvent degreasing operations:

(1) One (1) Cobehn Spray Cleaner, identified as CC1, constructed in 1993, using 0.019 gallons of non halogenated organic solvent per hour, and exhausting indoors.

(2) One (1) Cyber Clean 3000 Stencil Cleaner, identified as CC2, constructed in 1993, using 0.99 gallons of non halogenated organic solvent per hour, and exhausting to stack S-57.

(3) One (1) Smart Sonic Stencil Cleaner, identified as CC4, constructed in 1993, using 0.99 gallons of non halogenated organic solvent per hour, and exhausting indoors.

(4) One (1) Fisher Scientific Ultrasonic Table Top Cleaner, identified as CC5, constructed in 1993, using 0.001 gallons of non halogenated organic solvent per hour, and exhausting indoors.

(5) One (1) Branson 3200 Ultrasonic Table Top Cleaner, identified as CC6, constructed in 1993, using 0.0019 gallons of non halogenated organic solvent per hour, and exhausting indoors.

(f) One (1) Branson Open Top Vapor Degreaser, identified as VD1, constructed in 1993, using 0.014 gallons non halogenated organic solvent per hour, and exhausting indoors.

(g) Two (2) electric Fusion UV Cure Ovens, identified as Fusion UV Cure Oven 1 and 2, constructed in 1993, with a maximum capacity 2,520 pieces per day, each, and exhausting to stacks S-1 and S-11

(h) One (1) paint mixing and touch up operation, identified as paint mixing and touch up operation 1, constructed in 1993, using less than 5 gallons of coatings per day, and exhausting indoors.

(i) Seven (7) electric Heller I/R Ovens, identified as Unit 50 through Unit 56, constructed in 1993, with a maximum capacity 3,427.2 pieces per day, each, and exhausting to stacks S-50 through S-56.

(j) One (1) electric Blue M Curing Oven, identified as Blue M Curing Oven 1, constructed in 1993, with a maximum capacity 345.6 pieces per day, and exhausting to stack S-60.

(k) Three (3) electric Blue M Ovens, identified as Blue M Oven 18, 19, and 20, constructed in 1993, with a maximum capacity 1814.4 pieces per day, each, and exhausting indoors.

(l) Two (2) soldering pots, identified as Soldering Pot 1 and 2, constructed in 1993, using a combination of 0.009 pounds of flux per hour, and exhausting indoors.

The following is a list of the new emission unit(s) and pollution control device(s):

(a) One (1) small automated router, identified as 3SMTRTER4, approved for construction in 2009, with a maximum capacity of 160 pieces per hour, using a baghouse for control, identified as S-14, and exhausting indoors.

(b) One (1) electric Fusion UV Cure Oven, identified as Fusion UV Cure Oven 3, approved for construction in 2009, with a maximum capacity 2,520 pieces per day, and exhausting to stack S-63.

(c) Two (2) ERSA selective solder machines, identified as ERSA 1 and 2, approved for construction in 2009, using 0.0009 pounds of flux per hour and 0.17 gallons of organic solvent per hour, and exhausting to stacks S-64 and S-65.

(d) One (1) bar code laser etcher, identified as Etcher 2, approved for construction in 2009, with a maximum capacity of 493.2 parts per hour, using a dust collector for control, and exhausting indoors.

(e) One (1) Cyber Clean 3000 Stencil Cleaner, identified as CC3, approved for construction in 2009, using 0.99 gallons of non halogenated organic solvent per hour, and exhausting to stack S-58.

The following emission unit(s) have been removed from the source:

(a) Confromal Coater #2, identified as Unit 3, installed in 1993, using air atomization applicators, coating a maximum of 240 plastic parts per hour, utilizing a fully enclosed chamber with absorbent material on floor surface and dry filters for particulate matter overspray control and exhausting through one (1) stack, identified as stack S-3.

(b) Three (3) cold cleaners preforming organic solvent degreasing operations:

(1) Conformax AU Dip Tank, identified as Unit 1, installed in 1993, with a maximum capacity of 10 gallons, exhausting to stack S-1;

(2) EMC Stencil Cleaner Machine, identified as Unit 9, installed in 1993, used for cold cleaning operations, with a maximum capacity of 45 pounds per hour, exhausting at stack S-9; and

(3) EMC Resolute 100 IPA Cleaner, identified as Unit 10, installed in 1995, with a maximum capacity of 240 pieces per hour, exhausting to stack S-10.

(c) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 including:

(1) Two (2) Baron Blakeslee degreasers using en-solv solvent;

Enforcement Issues

There are no pending enforcement actions related to this source.

Emission Calculations

See Appendix A 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	PM10 *	PM2.5	SO_2	NOx	VOC	CO	Total HAPs	Worst Single HAP
Large and Small Routers	7.55	7.55	7.55	0	0	0	0	0	0
Bar Code Laser Etchers	0.007	0.007	0.007	0	0	0	0	0	0
Boilers	0.06	0.25	0.25	0.02	3.29	0.18	2.76	0.062	0.06 Hexane
Cobehn Cleaner	0	0	0	0	0	1.04	0	0	0
Cyber Clean 3000 Stencil Cleaners	0	0	0	0	0	2.03	0	0	0
Smart Sonic Stencil Cleaner	0	0	0	0	0	1.02	0	0	0
Fisher Scientific Cleaner	0	0	0	0	0	0.02	0	0	0
Branson 3200 Cleaner	0	0	0	0	0	0.05	0	0	0
Branson Cleaner	0	0	0	0	0	0.66	0	0	0
Fusion UV Ovens	0	0	0	0	0	0.012	0	0	0
Touch-Up Paint Operation	0	0	0	0	0	0.25	0	0.21	0.06 Chromium
Heller IR Ovens	0	0	0	0	0	1.01E-04	0	negl.	negl.
Blue M Curing Oven	0	0	0	0	0	1.45E-05	0	negl.	negl.
Blue M Ovens	0	0	0	0	0	0.22	0	negl.	negl.
ERSA Selective Soldering Machines	0	0	0	0	0	4.82	0	0	0
Soldering Pots	0	0	0	0	0	0.038	0	0	0
Miscellaneous Chemical Usage	0	0	0	0	0	0.72	0	negl.	negl.
Total PTE of Entire Source	**7.62**	**7.81**	**7.81**	**0.02**	**3.29**	**11.06**	**2.76**	**0.27**	**0.06**
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 PM, PM10, and PM2.5 are 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 for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc (326 IAC 12), are not included in the permit, since the three (3) boilers (Units 13, 14, and 15) each have a maximum design heat input capacity less than 10 MMBtu/hr.

(b) 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)

(a) The requirements of the National Emission Standard for Hazardous Air Pollutants (NESHAPs), 326 IAC 20-6 (40 CFR 63.460, Subpart T (Halogenated Solvent Cleaning)), are not included in this permit for the degreasing operations because this source does not use halogenated solvents.

(b) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, 40 CFR 63, Subpart HHHHHH are not included in the permit, since this source does not perform any Paint stripping operations that involve the use of chemical strippers that contain methylene chloride (MeCl), Chemical Abstract Service number 75092, in paint removal processes. Additionally, the source does not apply coatings containing compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd) using spray application.

(c) 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)

(a) 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:

(a) 326 IAC 2-5.5 (Registrations)
Registration applicability is discussed under the Permit Level Determination – Registration section above.

(b) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-4.1.

(c) 326 IAC 2-6 (Emission Reporting)
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.

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

(1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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

<u>Routers and Bar Code Laser Etchers</u>

(a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(14) (Particulate Emission Limitations for Manufacturing Processes), the bar code laser etchers are exempt from the requirements of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) because the potential particulate emissions are less than 0.551 pounds per hour, each, when operating at the maximum process weight rate.

The two (2) large routers and the four (4) small automated routers each have a maximum process weight rate less than 100 pounds per hour. Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour

Baghouses S-14 and S-15 shall be in operation at all times the routers are in operation, in order to comply with this limit.

Boilers

(a) 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)
The natural gas-fired boilers, identified as Unit 13, 14, and 15 are subject to 326 IAC 6-2-4 because they were constructed after September 21, 1983. Pursuant to 326 IAC 6-2-4(a) (Particulate emission limitations for sources of indirect heating: emission limitations for facilities specified in 326 IAC 6-2-1(d)), particulate emissions from this boiler must be calculated using the following equation:

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

Where:

P_t = pounds of particulate matter emitted per million Btu heat input (lb/MMBtu).
Q = total source operating capacity (7.5 MMBtu/hr).

$$P_t = \frac{1.09}{7.50^{0.26}}$$

P_t = 0.65 lb/MMBtu

However, pursuant to 326 IAC 6-2-4(a) particulate emissions from each boiler shall not exceed 0.6 lb/MMBtu heat input when Q is less than 10 MMBtu/hr.

Based on the calculation below, the boilers can comply with this limit.

When burning natural gas:
PM Emissions = 1.9 lb PM/MMSCF * MMSCF/1,020 MMBtu = 0.0019 lbs/MMBtu

(b) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)
The boilers are exempt from the requirements of 326 IAC 6-3, because, pursuant to 326 IAC 1-2-59, liquid and gaseous fuels and combustion air are not considered as part of the process weight.

(c) 326 IAC 7-1.1-1 (Sulfur Dioxide Emission Limitations)
This source is not subject to 326 IAC 7-1.1-1 (Sulfur Dioxide Emission Limitations) because the potential to emit sulfur dioxide from the boilers is less than twenty-five (25) tons per year and ten (10) pounds per hour.

(d) 326 IAC 9-1-1 (Carbon Monoxide Emission Limits)
The boiler (ID No. 004) is not subject to 326 IAC 9-1-1 (Carbon Monoxide Emission Limits) because there are no applicable emission limits for the source under 326 IAC 9-1-2.

(e) 326 IAC 10-1-1 (Nitrogen Oxides Control)
The boiler (ID No. 004) is not subject to 326 IAC 10-1-1 (Nitrogen Oxides Control) because the source is not located in Clark or Floyd counties.

(f) 326 IAC 12 (New Source Performance Standards)
See Federal Rule Applicability Section of this TSD.

(g) 326 IAC 20 (Hazardous Air Pollutants)
See Federal Rule Applicability Section of this TSD.

Cleaners

(a) 326 IAC 8-3-2 (Cold Cleaner Operations)
The Cobehn Spray Cleaner, Cyber Clean 3000 Stencil Cleaners, Smart Sonic Stencil Cleaner, Fisher Scientific Ultrasonic Table Top Cleaner, and Branson 3200 Ultrasonic Table Top Cleaner, are subject to the requirements of 326 IAC 8-3-2 (Cold Cleaner Operations) since they were constructed after January 1, 1980. Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations) for cold cleaning operations the Permittee shall:

(1) Equip the cleaner with a cover;

(2) Equip the cleaner with a facility for draining cleaned parts;

(3) Close the degreaser cover whenever parts are not being handled in the cleaner;

(4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(5) Provide a permanent, conspicuous label summarizing the operation requirements;

(6) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

(b) 326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)
The Cobehn Spray Cleaner, Cyber Clean 3000 Stencil Cleaners, Smart Sonic Stencil Cleaner, Fisher Scientific Ultrasonic Table Top Cleaner, and Branson 3200 Ultrasonic Table Top Cleaner, are subject to the requirements of 326 IAC 8-3-5 since they were constructed after July 1, 1990.

(1) Pursuant to 326 IAC 8-3-5(a), the Permittee shall ensure that the following control equipment requirements are met:

(A) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(i) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));

(ii) The solvent is agitated; or

(iii) The solvent is heated.

(B) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(C) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(D) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(E) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):

(i) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(ii) A water cover when solvent is used is insoluble in, and heavier than, water.

(iii) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(2) Pursuant to 326 IAC 8-3-5(b), the Permittee shall ensure that the following operating requirements are met:

(A) Close the cover whenever articles are not being handled in the degreaser.

(B) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(C) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

(c) 326 IAC 8-3-3 (Open Top Vapor Degreasing Operation)
The Branson Open Top Vapor Degreaser, identified as VD1, is subject to the requirements of 326 IAC 8-3-3, since it was constructed after January 1, 1980. Pursuant to 326 IAC 8-3-3 (Open Top Vapor Degreasing Operation), the Permittee shall:

(1) Equip the open top vapor degreaser with a cover that can be opened and closed easily without disturbing the vapor zone;

(2) Keep the cover closed at all times except when processing workloads through the degreaser;

(3) Minimize solvent carry-out by:

(A) Racking parts to allow complete drainage;

(B) Moving parts in and out of the degreaser at less than eleven (11) feet per minute;

(C) Degreasing the workload in the vapor zone at least thirty (30) seconds or until condensation ceases;

(D) Tipping out any pools of solvent on the cleaned parts before removal;

(E) Allowing parts to dry within the degreaser for at least fifteen (15) seconds or until visually dry;

(4) Not degrease porous or absorbent materials, such as cloth, leather, wood or rope;

(5) Not occupy more than half of the degreaser's open top area with the workload;

(6) Not load the degreaser such that the vapor level drops more than fifty percent (50%) of the vapor depth when the workload is removed;

(7) Never spray above the vapor level;

(8) Repair solvent leaks immediately, or shut down the degreaser;

(9) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, such that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere;

(10) Not use workplace fans near the degreaser opening;

(11) Not allow visually detectable water in the solvent exiting the water separator; and

(12) Provide a permanent, conspicuous label summarizing the operating requirements.

(d) 326 IAC 8-3-6 (Open Top Vapor Degreaser Operation and Control Requirements)
The Branson Open Top Vapor Degreaser, identified as VD1, is subject to the requirements of 326 IAC 8-3-6, since it was constructed after July 1, 1990.

(1) Pursuant to 326 IAC 8-3-6(a), the Permittee shall ensure that the following control equipment requirements are met:

(A) Equip the degreaser with a cover that can be opened and closed easily without disturbing the vapor zone.

(B) Equip the degreaser with the following switches:

(i) A condenser flow switch and thermostat which shuts off sump heat if condenser coolant stops circulating or becomes too warm.

(ii) A spray safety switch which shuts off spray pump if the vapor level drops more than four (4) inches.

(C) Equip the degreaser with a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(D) Equip the degreaser with one (1) of the following control devices:

(i) A freeboard ratio of seventy-five hundredths (0.75) or greater and a powdered cover if the degreaser opening is greater than ten and eight-tenths (10.8) square feet;

(ii) A refrigerated chiller;

(iii) An enclosed design in which the cover opens only when the article is actually entering or exiting the degreaser;

(iv) A carbon adsorption system with ventilation which, with the cover open, achieves a ventilation rate of greater than or equal to fifty (50) cubic feet per minute per square foot of air to vapor interface area and an average of less than twenty-five parts per million of solvent is exhausted over one (1) complete adsorption cycle; or

(v) Other systems of demonstrated equivalent or better control as those

outlined in (A) through (D). Such systems shall be submitted to the U.S.EPA as a SIP revision.

(2) Pursuant to 326 IAC 8-3-6(b), the Permittee shall ensure that the following operating requirements are met:

(A) Keep the cover closed at all times except when processing workloads through the degreaser.

(B) Minimize solvent carryout emissions by:

(i) Racking articles to allow complete drainage;

(ii) Moving articles in and out of the degreaser at less than eleven feet per minute;

(iii) Degreasing the workload in the vapor zone at least thirty (30) seconds or until condensation ceases;

(iv) Tipping out any pools of solvent on the cleaned articled before removal; and

(v) Allowing articles to dry within the degreaser for at least fifteen (15) seconds or until visually dry.

(C) Prohibit the entrance into the degreaser of porous or absorbent materials such as, but not limited to, cloth, leather, wood or rope.

(D) Prohibit occupation of more than one half (2) of the degreaser=s open top area with the workload.

(E) Prohibit the loading of the degreaser to the point where the vapor level would drop more than four (4) inches when the workload is removed.

(F) Prohibit solvent spraying above the vapor level.

(G) Repair solvent leaks immediately or shut down the degreaser if leaks cannot be repaired immediately.

(H) Store waste solvent only in covered containers and prohibit the disposal transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent (by weight) could evaporate.

(I) Prohibit the exhaust ventilation rate from exceeding sixty-five cubic feet per minute per square foot of degreaser open area unless a greater ventilation rate is necessary to meet Occupational Safety and Health Administration (OSHA) requirements.

(J) Prohibit the use of workplace fans near the degreaser opening.

(K) Prohibit visually detectable water in the solvent exiting the water separator.

(e) 326 IAC 12 (New Source Performance Standards)
See Federal Rule Applicability Section of this TSD.

(f) 326 IAC 20 (Hazardous Air Pollutants)
See Federal Rule Applicability Section of this TSD.

Touch-Up Paint Operation

(a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
The touch-up paint operation does not apply paint using spray application methods. As a result, no particulate matter is generated. In addition, the touch-up paint operation uses less than five (5) gallons of coatings per day. Therefore, pursuant to 326 IAC 6-3-1(b)(15), the touch-up paint operation is exempt from the requirements of 326 IAC 6-3-2

(b) 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations)
The touch-up paint operation was constructed after July 1, 1990 and is located in Allen County. However, the touch-up paint operation has actual VOC emissions less than fifteen (15) pounds per day before add-on controls. Therefore, the touch-up paint operation is not subject to the requirements of 326 IAC 8-2-9.

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 August 7, 2007.

The construction and operation of this source shall be subject to the conditions of the attached proposed Registration No. 003-25123-00185. The staff recommends to the Commissioner that this Registration be approved.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Brian Williams 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) (234-5375) or toll free at 1-800-451-6027 extension (4-5375).

(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 Calculations
PM/PM10/PM2.5 From Printed Circuit Board Routers

Company Name: **ITT Corporation**
Address City IN Zip: **7310 Innovation Boulevard, Fort Wayne, Indiana 46818**
Permit Number: **003-25123-00185**
Reviewer: **Brian Williams**

Large and Small Routers

Emission Unit	Control Device ID	Control Efficiency (%)	Outlet Grain Loading (grain/dscf)	Air Flow Rate (acfm)	Uncontrolled PM Emissions (lbs/hr)*	Uncontrolled PM Emissions (tons/yr)*	Controlled PM Emissions (lbs/hr)*	Controlled PM Emissions (tons/yr)*
Large and Small Routers (existing)	S-15	94.00%	0.024	308	1.06	4.63	0.06	0.28
Small Router (new)	S-14	99.00%	0.0052	150	0.67	2.93	0.01	0.03
Total						**7.55**		**0.31**

Methodology
*PM10 and PM2.5 assumed to be equal to PM.
Uncontrolled PM (lb/hr) = Outlet Grain Loading (gr/dscf) * Air Flow Rate (acfm) * 60 (min/hr) * 1/7000 (lb/gr) * (1/(1-Control %))
Uncontrolled PM (tons/yr) = Uncontrolled PM Emissions (lbs/hr) * 8760 (hr/yr) * 1/2000 (ton/lbs)
Controlled PM (lb/hr) = Uncontrolled PM Emissions (lbs/hr) * (1- Control %)
Controlled PM (tons/yr) = Controlled PM Emissions (lbs/hr) * 8760 (hr/yr) * 1/2000 (ton/lbs)

Appendix A: Emission Calculations
PM/PM10/PM2.5 From Bar Code Laser Etchers

Company Name: **ITT Corporation**
Address City IN Zip: **7310 Innovation Boulevard, Fort Wayne, Indiana 46818**
Permit Number: **003-25123-00185**
Reviewer: **Brian Williams**

Emission Unit	Maximum (part/hr)	PM Emission Factor (lb/part)*	Potential PM Emissions (lb/hr)**	Potential PM Emissions (ton/yr)**
Bar Code Laser Etcher	493.2	1.54E-06	7.61E-04	3.33E-03
Bar Code Laser Etcher	493.2	1.54E-06	7.61E-04	3.33E-03
Total				**0.007**

Methodology
*Source estimates 0.0007 grams of particulate emitted per part
**PM10 and PM2.5 assumed to be equal to PM.
Etching Time required for each part = 7.3 (seconds/part)
Maximum number of parts per minute = 8.22
PM Emissions (lb/hr) = Max. part/hr * PM EF (lb/part)
PM Emissions (ton/yr) = Max. part/hr * PM EF (lb/part) * 1/2000 (ton/lb) * 1/8760 (yr/hr)

Appendix A: Emission Calculations
Natural Gas Combustion In Boilers

Company Name: ITT Corporation
Address City IN Zip: 7310 Innovation Boulevard, Fort Wayne, Indiana 46818
Permit Number: 003-25123-00185
Reviewer: Brian Williams

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
7.5	65.7

Pollutant

	PM*	PM10*	SO2	NO_x	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.06	0.25	1.97E-02	3.29	0.18	2.76

*PM emission factor is filterable PM only. PM10 emission factor is condensable and filterable PM10 combined.
**Emission Factors for NO_x: Uncontrolled = 100, Low NO_x Burner = 50, Low NO_x Burners/Flue gas recirculation = 32

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMCF	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	6.899E-05	3.942E-05	2.464E-03	5.913E-02	1.117E-04

HAPs - Metals

	Lead	Cadmuim	Chromium	Manganese	Nickel
Emission Factor in lb/MMCF	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	1.643E-05	3.614E-05	4.599E-05	1.248E-05	6.899E-05

Methodology
All Emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF - 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (AP-42 Supplement D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emission Calculations
VOC from Cleaners

Company Name: ITT Corporation
Address City IN Zip: 7310 Innovation Boulevard, Fort Wayne, Indiana 46818
Permit Number: 003-25123-00185
Reviewer: Brian Williams

One (1) Branson Cleaner

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Gal of Mat. (gal/hr)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year
IONOX I3950	10.84	100.00%	0.0%	100.00%	0.0%	0.014	10.84	10.84	0.15	3.60	0.66

Two (2) Cyber Clean 3000 Stencil Cleaners (0.989 gal/hr, each)

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Gal of Mat. (gal/hr)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year
LONOX L5314	8.63	2.72%	0.0%	2.72%	0.0%	1.978	0.23	0.23	0.46	11.13	2.03

One (1) Smart Sonic Stencil Cleaner (0.989 gal/hr)

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Gal of Mat. (gal/hr)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year
LONOX L5314	8.63	2.72%	0.0%	2.72%	0.0%	0.989	0.23	0.23	0.23	5.57	1.02

One (1) Branson 3200 - Table Top Cleaner

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Gal of Mat. (gal/hr)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year
Isopropyl Alcohol SG2 (Microcircuits)	6.55	100.00%	0.0%	100.00%	0.0%	0.001	6.55	6.55	0.01	0.20	0.04
Ethyl Alcohol (Alpha)	6.58	100.00%	0.0%	100.00%	0.0%	0.001	6.58	6.58	0.00	0.10	0.02
									Total		**0.05**

One (1) Fisher Scientific - Table Top Cleaner

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Gal of Mat. (gal/hr)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year
Ethyl Alcohol	6.58	100.00%	0.0%	100.00%	0.0%	0.001	6.58	6.58	0.00	0.10	0.02

One (1) Cobehn Cleaner

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Gal of Mat. (gal/hr)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year
Spray Clean Solvent	12.34	100.00%	0.0%	100.00%	0.0%	0.019	12.34	12.34	0.24	5.69	1.04

METHODOLOGY
Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Appendix A: Emissions Calculations
VOC
From Fusion and Heller Ovens

Company Name: ITT Corporation
Address City IN Zip: 7310 Innovation Boulevard, Fort Wayne, Indiana 46818
Permit Number: 003-25123-00185
Reviewer: Brian Williams

Three (3) Fusion UV Ovens

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Gal of Mat. (gal/hr)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year
5960 Fastgasket Cured-In-Place Gasket Flange Sealant	9.17	0.56%	0.0%	0.56%	0.0%	0.055	0.052	0.052	0.00	0.07	0.012

Seven (7) Heller Infrared Ovens

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Gal of Mat. (gal/hr)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year
Epibound 7275	10.68	0.94%	0.0%	0.94%	0.0%	2.31E-04	0.10	0.10	2.31E-05	5.56E-04	1.01E-04

METHODOLOGY
Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Appendix A: Emission Calculations
VOC and HAPs from Touch Up Paint Operations

Company Name: ITT Corporation
Address City IN Zip: 7310 Innovation Boulevard, Fort Wayne, Indiana 46818
Permit Number: 003-25123-00185
Reviewer: Brian Williams

VOC

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Gal of Mat. (gal/hr)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	Transfer Efficiency
MIL-DTL-53039B, Type 1 Coating, Aliphatic Polyurethane, Single Component CARC, Green 383, 34094	11.05	31.76%	0%	31.76%	0.0%	0.0087	3.51	3.51	0.03	0.73	0.13	0.00	100.0%
Flat Black A/D Enamel (N-6018)	9.7	45.69%	0%	46%	0.0%	0.0005	4.42	4.42	2.28E-03	0.055	0.01	0.00	100.0%
Methyl Amyl Ketone	6.76	100.00%	0.0%	100.00%	0.0%	0.003	6.76	6.76	0.02	0.50	0.09	0.00	100.0%
Polane * S Plus Polyurethane Enamel, Special ITT Tan	11.96	26.42%	0.0%	26.42%	0.0%	0.001	3.16	3.16	3.65E-03	0.09	0.02	0.00	100.0%
Polane * HS Plus Exterior Catalyst	9.34	9.96%	0.0%	9.96%	0.0%	1.45E-04	0.93	0.93	1.34E-04	3.23E-03	5.89E-04	0.00	100.0%
											0.25	**0.0**	

METHODOLOGY
Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (gal/hour) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

HAPs

Material	Density (lb/gal)	Gallons of Material (gal/hr)	Weight % Xylene	Weight % Toluene	Weight % Ethylbenzene	Weight % Napthalene	Weight % Methyl Isobutyl Ketone	Weight % Chromium	Weight % Cobalt	Weight % Zinc	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	Napthalene Emissions (ton/yr)	MIBK Emissions (ton/yr)	Chromium Emissions (ton/yr)	Cobalt Emissions (ton/yr)	Zinc Emissions (ton/yr)
MIL-DTL-53039B, Type 1 Coating, Aliphatic Polyurethane, Single Component CARC, Green 383, 34094	11.05	0.0087	11.0%	5.0%	2.0%	0.4%	5.0%	14.0%	6.0%	6.0%	0.05	0.02	0.01	1.68E-03	0.02	0.06	0.03	0.03
Total											**0.05**	**0.02**	**0.01**	**1.68E-03**	**0.02**	**0.06**	**0.03**	**0.03**

METHODOLOGY
HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Total HAPs (tons/yr) = 0.21

Appendix A: Emissions Calculations
VOC
From Blue M Ovens

Company Name: ITT Corporation
Address City IN Zip: 7310 Innovation Boulevard, Fort Wayne, Indiana 46818
Permit Number: 003-25123-00185
Reviewer: Brian Williams

Blue M Curing Oven

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Gal of Mat. (gal/hr)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year
Epibound 7275	10.68	0.94%	0.0%	0.94%	0.0%	3.31E-05	0.10	0.10	3.31E-06	7.94E-05	1.45E-05

Three (3) Blue M Ovens

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Gal of Mat. (gal/hr)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year
Epoxy Adhesive	10.51	2.54%	0.0%	2.54%	0.0%	1.88E-01	0.27	0.27	5.01E-02	1.20E+00	2.19E-01
Epoxy Adhesive	11.09	0.06%	0.0%	0.06%	0.0%	1.22E-01	0.01	0.01	8.17E-04	1.96E-02	3.58E-03
											0.22

METHODOLOGY
Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Appendix A: Emission Calculations
VOC
From ERSA Selective Solder Machines and Soldering Pots

Company Name: **ITT Corporation**
Address City IN Zip: **7310 Innovation Boulevard, Fort Wayne, Indiana 46818**
Permit Number: **003-25123-00185**
Reviewer: **Brian Williams**

Two (2) ERSA Selective Solder Machines

VOC Emissions from Solvent Use

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Gal of Mat. (gal/hr)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year
Isopropyl Alcohol SG2	6.55	100.00%	0%	100.00%	0.0%	0.1679	6.55	6.55	1.10	26.40	**4.82**

METHODOLOGY
Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Two (2) ERSA Selective Solder Machines

VOC Emissions from Soldering Flux

Material	Usage (lb/hr)	Weight % VOC	Potential VOC (tons/yr)
Rework Flux KRF 233	0.00093	40.00%	**0.002**

Two (2) Soldering Pots

VOC Emissions from Soldering Flux

Material	Usage (lb/hr)	Weight % VOC	Potential VOC (tons/yr)
959 Flux	0.009	100.00%	**0.038**

METHODOLOGY
Potential VOC Tons per Year = Usage (lb/hr) * Weight % VOC * (8760 hr/yr) * (1 ton/2000 lbs)

Appendix A: Emission Calculations
Summary of Emissions

Company Name: ITT Corporation
Address City IN Zip: 7310 Innovation Boulevard, Fort Wayne, Indiana 46818
Permit Number: 003-25123-00185
Reviewer: Brian Williams

Unlimited Potential to Emit (tons/year)										
Emission Unit	**PM**	**PM10**	**PM2.5**	**SO_2**	**NOx**	**VOC**	**CO**	**Total HAPs**	**Single HAP**	
Large and Small Routers	7.55	7.55	7.55	0	0	0	0	0	0	
Bar Code Lasers	0.007	0.007	0.007	0	0	0	0	0	0	
Boilers	0.06	0.25	0.25	0.02	3.29	0.18	2.76	0.062	5.91E-02	Hexane
Cobehn Cleaner	0	0	0	0	0	1.04	0	0	0	
Two (2) Cyber Clean 300 Stencil Cleaners	0	0	0	0	0	2.03	0	0	0	
Smart Sonic Stencil Cleaner	0	0	0	0	0	1.02	0	0	0	
Fisher Scientific	0	0	0	0	0	0.02	0	0	0	
Branson 3200	0	0	0	0	0	0.05	0	0	0	
Branson Cleaner	0	0	0	0	0	0.66	0	0	0	
Fusion UV Ovens	0	0	0	0	0	0.012	0	0	0	
Touch Up Paint Operations	0	0	0	0	0	0.25	0	0.21	5.89E-02	Chromium
Heller I/R Ovens	0	0	0	0	0	1.01E-04	0	negl.	negl.	
Blue M Curing Oven	0	0	0	0	0	1.45E-05	0	negl.	negl.	
3 Blue M Ovens				0	0	0.22	0	0	0	
ERSA Selective Solder Machines	0	0	0	0	0	4.82	0	0	0	
Soldering Pots	0	0	0	0	0	0.038	0	0	0	
Miscellaneous Chemical Usage*	0	0	0	0	0	0.72	0	negl.	negl.	
Total	**7.62**	**7.81**	**7.81**	**0.02**	**3.29**	**11.06**	**2.76**	**0.27**	**0.059**	**Hexane**

*Source uses minimal amounts of various solvents, cleaners, and adhesives that contain VOC.
IDEM has conservativley estimated 0.72 tons of VOC are emitted from miscellaneous chemical usage per year.
negl. = negligible