Certified Mail#: 7000 0600 0023 5187 6153

December 7, 2004

Mr. David Crandell, President Parts Cleaning Technologies, L.L.C. 24901 Northwestern Highway, Suite 209 Southfield, MI 46705

> RE: Approval of Air Permit --Minor Source (Construction) Modification No.: 097-19581-00373 to Part 70 Permit No.: T097-15900-00373

Dear Mr. Crandell:

The Office of Environmental Services (OES) received your application on August 19, 2004, requesting a modification to the Part 70 Title V operating permit numbered T097-15900-00373, for the plant located at 2263 Distributors Drive, Indianapolis, Indiana, 46256.

OES is currently processing this part of the application as a minor source (construction) modification numbered 097-19581-00131, with provisions intended to satisfy the requirements of 326 Indiana Administrative Code (IAC) 2-7-10.5 (d)(5) [Part 70 permits; source modifications] rules.

Because each new emission unit's (#117 & #118) potential to emit (PTE) is 26 tons per year, these units are major for Hazardous Air Pollutants (HAPs). In addition, since these units utilize trichloroethylene (a halogenated HAP as the solvent), they are subject to National Emission Standards for Hazardous Air Pollutants (NESHAP) for Halogenated Solvent Cleaning, under Title 40 of the Code of Federal Regulations (CFR), Part 63.460-470, Subpart T.

In addition, the emission units stated above are subject to a NESHAP and the NESHAP is the most stringent applicable requirement, a minor source (construction permit) modification (097-19581-00373) is granted under 326 IAC 2-7-10.5 (d)(5). The operating permit is being processed separately under a significant permit modification numbered 097-19603-00373, which will undergo a 30-day public notice and U.S. EPA Reg. V comment review period.

The following emission units are approved for construction at the source:

Parts Cleaning Corporation:

(a) One (1) vapor spray open top degreaser (model VS 50-30-30 Autosonics, Serial Number 53103-3304), identified as unit #117, using vapor to clean metal, glass, and plastic parts, with a maximum throughput rate of 4,000 pounds per hour of material; and the air solvent interface of 15 square feet, controlled by control option 6 from 40 CFR 63.463 (b)(2)(i) Table 2: a freeboard ratio of 1.0, freeboard refrigeration, and reduced roomdraft. The existing carbon adsorber (model SVRM-3-5-0, Serial Number 72799), identified as unit #115 and exhausting through Stack SV-3 as point emission, has been added as additional control and not part of the compliance. (Fugitive emissions vent through S/V-1.) This degreaser is also equipped with one (1) shared solvent still (model 2DCR-550-IS), identified as unit #119, with a maximum distillation rate of 100 gallons/hr.

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(b) One (1) two dip vapor spray open top degreaser (model 2D500E D-30) using vapor to clean metal, glass, and plastic parts, with a maximum throughput of 2,500 pounds/hour of material and the air solvent interface of 15 square feet, controlled by control option 6 from 40CFR63.463(b)(2)(i) Table 2: a freeboard ratio of 1.0, freeboard refrigeration, and reduced roomdraft. The existing carbon adsorber (model SVRM-3-5-0, Serial Number 72799), identified as unit #115 and exhausting through Stack SV-3 as point emission, has been added as additional control and not as part of the compliance. (Fugitive emissions vent through S/V-1.) This degreaser is also equipped with one (1) shared solvent still (model 2DCR-550-IS), identified as unit #119, with a maximum distillation rate of 100 gallons/hr.

#### **Insignificant Activities**

Detrex Corporation:

(a) One (1) closed loop distillation solvent still, (model number 2DCR-550-IS), identified as unit #119, with a maximum distillation rate of 100 gallons per hour; connected to the degreasers #113, #117, #118, and to the present carbon adsorption unit (identified as unit #115), exhausting through SV-3 as point emission. In addition, an existing water treatment tank (TTO) system (identified as unit #116) is also utilized for water polishing prior to water discharge.

The following construction conditions are applicable to the proposed project:

- 1. The data and information supplied with the application shall be considered part of this permit revision approval. Prior to <u>any</u> proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and City of Indianapolis, Office of Environmental Services (OES).
- This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
   Pursuant to IC 13-15-5-3, this approval to construct becomes effective upon its issuance.
- 4. Pursuant to 326 IAC 2-1.1-9 (Revocation) and 326 IAC 2-7-10.5 (i) the IDEM Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
- 5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.
- 6. Pursuant to 326 IAC 2-7-10.5 (e)(3)(A)(i) [Part 70 permits; source modifications], operation of the new equipment may commence upon receiving approval (operational permit numbered 097-19603-00373) in accordance with 326 IAC 2-7-12.
- 7. The enclosed Affidavit of Construction verifying construction of proposed units as per the application mentioned above, shall be submitted to the IDEM, OAQ and OES. Operation of these proposed units shall comply with number 6. stated above and 326 IAC 2-7-10.5 (I)(2).

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8. If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Carmen Bugay of my staff via e-mail at <a href="mailto:cbugay@indygov.org">cbugay@indygov.org</a> or by phone at (317) 327-2512.

Sincerely,

Original signed by,

John B. Chavez Administrator

JBC/cmb

Enclosures: Notice of Decision (NOD) Technical Support Document (TSD) Affidavit of Construction

cc:

 Mr. Paul Zaglauer, Parts Cleaning Technologies (Indianapolis site) Mr. Stan Miles, Detrex Corporation Mindy Hahn, IDEM, OAQ U.S. EPA, Reg. V Marion County Health Department Matt Mosier, OES, Compliance Carmen Bugay, OES, Permits Files (2)

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# Attachment A Affidavit of Construction

Mail to: Indiana Department of Environmental Management Office Of Air Quality 100 North Senate Avenue P.O. Box 6015 Indianapolis, Indiana 46206-6015

Indianapolis Office of Environmental Services Air Compliance 2700 South Belmont Avenue Indianapolis, Indiana 46221

I,		, being duly sworn upon my oath, depose and say:
	(Name of	the Authorized Representative)
	1.	I live in County, Indiana and being of sound mind and over
		twenty-one (21) years of age, I am competent to give this affidavit.
	2.	I hold the position of for (Title)
		(Title) (Company Name)
	3.	By virtue of my position with,I have personal (Company Name)
		knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of <b>Parts Cleaning Technologies, L.L.C.</b>
	4.	I hereby certify that Parts Cleaning Technologies, L.L.C., located at 2263 Distributors Drive, Indianapolis, Indiana 46241, has constructed the one (1) vapor spray open top batch vapor degreaser, emission unit #117 (model number VS-50-30-30), and one (1) two dip vapor spray open top degreaser, emission unit #118 (model 2D500E D-30E); and one (1) closed loop distillation solvent still, emission unit #119 (model 2DCR-550-IS), in conformity with the requirements and intent of the construction permit application received by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ), and Indianapolis Office of Environmental Services (OES) on August 19, 2004 and as permitted pursuant to the 1st Minor Source Modification No. 097- 19581-00373, issued on <u>(insert date)</u>
Further Affiant said	not.	
I affirm under penalt belief.	ties of perj	jury that the representations contained in this affidavit are true, to the best of my information and
		Signature
		Date
STATE OF INDIAN )S	,	

COUNTY OF)	
Subscribed and sworn to me, a notary public in and for	County and State of

Indiana on this \_\_\_\_\_\_ day of \_\_\_\_\_\_, 20 \_\_\_\_\_.

My Commission expires: \_\_\_\_\_

Signature

Name (typed or printed)

Section 10: Affidavit.wpd 2/00

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY AND CITY OF INDIANAPOLIS, OFFICE OF ENVIRONMENTAL SERVICES

# **PART 70 OPERATING PERMIT**

# Parts Cleaning Technologies, L.L.C. 2263 Distributors Drive Indianapolis, Indiana 46241

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

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

Operation Permit No.: T097-15900-00373	
Issued by: Original signed by,	Issuance Date: 7/23/2003
Janet G. McGabe, Assistant Commissioner IDEM, Office of Air Quality, and	
John B. Chavez, Administrator Office of Environmental Services	Expiration Date: 7/23/2008
1st Minor Source Modification No.: 097-19581-00373	Conditions modified: A.1, A.3, D.1, D.1.1-D.1.8.
Issued by:	Issuance date: 12/07/2004
Original signed by,	
John B. Chavez, Administrator Office of Environmental Services	Expiration date: 7/23/2008

Operation Permit No:T097-15900-00373 1st Minor Source Modification No.: 097-19581-00373

#### SECTION A

# SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ), and the City of Indianapolis, Office of Environmental Services (OES). The information describing the emission units contained in conditions A.1., A.3 and A.4 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)] The Permittee owns and operates a stationary parts cleaning and solvent distribution facility.

Responsible Official:	President
Source Address:	2263 Distributors Drive, Indianapolis, Indiana 46241
Mailing Address:	2263 Distributors Drive, Indianapolis, Indiana 46241
General Source Number:	(317) 241-9379
SIC Code:	2869, 5051, 7389
County Location:	Marion
Source Location Status:	Basic nonattainment for ozone 8-hour standard;
	Attainment for all other criteria pollutants.
Source Status:	Part 70 Permit Program
	Minor Source, under PSD Rule; and
	Nonattainment New Source Review (NSR).
	Major Source, Section 112 of the Clean Air Act
	Not 1 of 28 Source Categories

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

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

- (a) One vapor spray open top degreaser (model VS 50-30-30 Autosonics, Serial Number 53103-3304), identified as unit #117, using vapor to clean metal, glass, and plastic parts, with a maximum throughput rate of 4,000 pounds per hour of material; and with the air solvent interface of 15 square feet, controlled by control option 6 from 40 CFR63.463 (b)(2)(i) Table 2: a freeboard ratio of 1.0, freeboard refrigeration, and reduced room draft. The existing carbon adsorber (model SVRM-3-5-0, Serial Number 72799), identified as unit #115 and exhausting through Stack SV-3 as point emission, has been added as additional control and is not as part of the compliance. (Fugitive emissions vent through S/V-1.) This degreaser is also equipped with one (1) shared solvent still (model 2DCR-550-IS), identified as unit #119, with a maximum distillation rate of 100 gallons/hr.
- (b) One two dip vapor spray open top degreaser (model 2D500E D-30E, Serial Number 72348), identified as unit #118, using vapor to clean metal, glass, and plastic parts, with a maximum throughput rate of 2,500 pounds per hour of material; and with the air solvent interface of 15 square feet, controlled by control option 6 from 40 CFR63.463 (b)(2)(i) Table 2: a freeboard ratio of 1.0, freeboard refrigeration, and reduced roomdraft. The existing carbon adsorber (model SVRM-3-5-0, Serial Number 72799), identified as unit #115 and exhausting through Stack SV-3 as point emission, has been added as additional control and is not part of the compliance. (Fugitive emissions vent through S/V-1.) This degreaser is also equipped with one (1) shared solvent still (model 2DCR-550-IS), identified as unit #119, with a maximum distillation rate of 100 gallons/hr.

#### **SECTION D.1**

#### FACILITY OPERATION CONDITIONS

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

## New Emission Units at Parts Cleaning Technologies, L.L.C:

- (a) One (1) vapor spray open top degreaser (model VS 50-30-30 Autosonics, Serial Number 53103-3304), identified as unit #117, using vapor to clean metal, glass, and plastic parts, with a maximum throughput rate of 4,000 pounds per hour of material; and the air solvent interface of 15 square feet, controlled by control option 6 from 40 CFR63.463 (b)(2)(i) Table 2: a freeboard ratio of 1.0, freeboard refrigeration, and reduced roomdraft. The existing carbon adsorber (model SVRM-3-5-0, Serial Number 72799), identified as unit #115 and exhausting through Stack SV-3 as point emission, has been added as additional control and is not as part of the compliance. (Fugitive emissions vent through S/V-1.) This degreaser is also equipped with one (1) shared solvent still (model 2DCR-550-IS), identified as unit #119), with a maximum distillation rate of 100 gallons/hr.
  - (b) One (1) two dip vapor spray open top degreaser (model 2D500E D-30E, Serial Number 72348), using vapor to clean metal, glass, and plastic parts, with a maximum throughput rate of 2,500 pounds per hour of material; and the air solvent interface of 15 square feet, controlled by control option 6 from 40CFR63.463 (b)(2)(i) Table 2: a freeboard ratio of 1.0, freeboard refrigeration, and reduced roomdraft. The existing carbon adsorber, (model SVRM-3-5-0, Serial Number 72799), identified as unit #115, and exhausting through Stack SV-3 as point emission, has been added as additional control and is not part of the compliance. (Fugitive emissions vent through S/V-1.) This degreaser is also equipped with one (1) shared solvent still (model 2DCR-550-IS), identified as unit 119, with a maximum distillation rate of 100 gallons/hr.

(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 2-7-5(1)]

- D.1.1 General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR Part 63, Subpart A] The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 63, Subpart T.
- D.1.2 Halogenated Solvent Cleaning Machine NESHAP [40 CFR Part 63, Subpart T] This facility is subject to 40 CFR Part 63, Subpart T, (Halogenated Solvent Cleaning Machine NESHAP), which is incorporated by reference as 326 IAC 20- 6-1.
  - (a) Pursuant to 40 CFR 63.463(a) and (b), the Permittee shall conform to the following design requirements:
    - (1) The cleaning machines shall be designed or operated such that it has a reduced room draft as described in 40 CFR 63.463 (e)(2)(ii).
    - (2) The cross rod cleaning machine (#113) shall utilize control option 4 of 40 CFR 63.463 (b)(2)(i) Table 2: a freeboard ratio of 1.0, superheated vapor, and reduced room draft; and the two open top batch degreasers (#117 and #118) shall utilize control option 6 from 40 CFR 63.463 (b)(2)(i), Table 2: a freeboard

ration of 1.0, freeboard refrigeration and reduced room draft, or other equivalent methods of control as determined using the procedure in 40 CFR 63.469.

- (3) Each cleaning machine shall have an automated parts handling system capable of moving parts or parts baskets at a speed of 3.4 meters per minutes (11 feet per minute) or less from the initial loading of parts through removal of cleaned parts.
- (4) The cleaning machines shall be equipped with a device that shuts off sump heat if the sump liquid solvent level drops to the sump heater coils.
- (5) The cleaning machines shall have a primary condenser.
- (6) The cleaning machines shall be equipped with a vapor level control device that shuts off sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser.
- (b) Pursuant to 40 CFR 63.463 (d), the following <u>work and operational practice requirements</u> for the degreasing operation are applicable:
  - (1) Control air disturbances across each cleaning machine opening(s) by creating a reduced room draft as described in 40 CFR 63.463 (e)(2)(ii).
  - (2) The parts baskets or the parts being cleaned in each cleaning machine shall not occupy more than 50 percent of the solvent/air interface area unless the parts baskets or parts are introduced at a speed of 0.9 meters per minute (3 feet per minute) or less.
  - (3) Any spraying operations shall be done within the vapor zone or within a section of each solvent cleaning machine that is not directly exposed to the ambient air.
  - (4) Parts shall be oriented so that the solvents drains from them freely. Parts having cavities or blind holes shall be tipped or rotated before being removed from any solvent cleaning machine unless an equally effective approach has been approved by the IDEM Commissioner.
  - (5) Parts baskets or parts shall not be removed from any solvent cleaning machine until dripping has stopped.
  - (6) During startup of each vapor cleaning machine, the primary condenser shall be turned on before the sump heater.
  - (7) During shutdown of each vapor cleaning machine, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off.
  - (8) When solvent is added or drained from any solvent cleaning machine, the solvent shall be transferred using threaded or other leak proof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.
  - (9) Each solvent cleaning machine and associated controls shall be maintained as recommended by the manufacturers of the equipment or using alternative maintenance practices that have been demonstrated to the U.S. EPA Administrator's satisfaction to achieve the same or better results as those recommended by the manufacturer.

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- (10) Each operator of a solvent cleaning machine shall complete and pass the applicable sections of the test of solvent cleaning operating procedures in Appendix A, Subpart T of 40 CFR 63, if requested during an inspection by the IDEM and OES.
- (11) Waste solvents, still bottoms, and sump bottoms shall be collected and stored in closed containers. The closed containers may contain a device that would allow pressure relief, but would not allow liquid solvent to drain from the container.
- (12) Sponges, fabric, wood, and paper products shall not be cleaned.
- (c) Pursuant to 40 CFR 63.463(e), the Permittee shall comply with the following requirements:
  - (1) The Permittee shall conduct monitoring of each control device used to comply with 40 CFR 63.463 as provided in 40 CFR 63.466, monitoring procedures.
  - (2) Determine during each monitoring period if the control devices (emission units #113, #117, and #118) used to comply with the above standards, meet the following requirements:
    - (A) When using a <u>reduced room draft</u>, the Permittee shall:
      - Ensure that the flow or movement of air across the top of the freeboard area of each solvent cleaning machine or within each solvent cleaning machine enclosure does not exceed 15.2 meters per minute (50 feet per minute) at anytime as measured using the procedures in 40 CFR 63.466(d).
      - (ii) Establish and maintain the operating conditions under which the wind speed was demonstrated to be 15.2 meters per minute (50 feet per minute) or less as described in 40 CFR 63.466 (d).
    - (B) When using a <u>superheated vapor system</u> the Permittee shall:
      - (i) Ensure that the temperature of the solvent vapor at the center of the superheated vapor zone is at least 10EF above the solvent's boiling point.
      - (ii) Ensure that the manufacturer's specifications for determining the minimum proper dwell time within the superheated vapor system is followed.
      - (iii) Ensure that parts remain within the superheated vapor for at least the minimum proper dwell time.
    - (C) When using <u>freeboard refrigeration</u>, the Permittee shall:
      - Ensure that the chilled air blanket temperature (in EF) measured at the center of the air blanket while the solvent cleaning machines are in the idling mode, shall not exceed 30% of the solvents boiling point, as per 40 CFR 63.463 (e)(2)(i), and 63.466 (a)(1).

- (3) An exceedance has occurred if :
  - (A) The requirements of paragraphs (c)(2)(A)(ii), (c)(2)(B)(ii) and (c)(2)(B)(iii) of this condition are not met; and
  - (B) The requirements of paragraphs (c)(2)(A)(i), (c)(2)(B)(i) and (c)(2)(C)(i) of this condition have not been met and are not corrected within 15 days of detection. Adjustments or repairs shall be made to the each solvent cleaning system or control device to reestablish required levels. The parameters must be remeasured immediately upon adjustment or repair and demonstrated to be within the required limits.
- (4) The Permittee shall report all exceedances and all corrections and adjustments made to avoid an exceedance as specified in 40 CFR 63.468.

### D.1.3 Volatile Organic Compounds (VOC) [326 IAC 8-3-3]

Pursuant to 326 IAC 8-3-3 (Open Top Vapor Degreasing Operations), for open top vapor degreasing operations constructed after January 1, 1980, which includes each degreaser, #113, #117, and #118, the Permittee shall do the following:

- (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;
- 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 each degreaser's opening;

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- (k) Not allow visually detectable water in the solvent exiting the water separator; and
- (I) Provide a permanent, conspicuous label summarizing the operating requirements.

### D.1.4 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 and constructed after July 1, 1990, the Permittee shall ensure that the following requirements are met:

- (a) The Permittee shall ensure that the following <u>control equipment requirements</u> are met for each degreaser (#113, #117 and #118):
  - (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.
  - (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; or
    - (B) A refrigerated chiller; or
    - (C) An enclosed design in which the cover opens only when the article is actually entering or exiting the degreaser; or
    - (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) The Permittee shall ensure that the following <u>operating requirements</u> are met for each degreaser (#113, #117 and #118):
  - (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 articles 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 (½) 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 each 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.

### D.1.5 Monitoring Procedures [40 CFR 63.466]

Pursuant to 40 CFR 63.466, the Permittee shall comply with the following monitoring procedures:

- (a) The Permittee shall conduct monitoring and record the results on a weekly basis for the control devices, as appropriate, specified in paragraph(s) below:
  - (1) For unit #113, the Permittee shall use a thermometer or thermocouple to measure the temperature at the center of the superheated solvent vapor zone, while the solvent cleaning machine is in the idling mode.
  - (2) For units #117 and #118, the Permittee shall use a thermometer or thermocouple to measure the temperature at the center of the air blanket for the freeboard chiller, while the solvent cleaning machines are in the idling mode.

- (b) The Permittee shall monitor the <u>hoist speed</u> as described below:
  - (1) The Permittee shall determine the hoist speed by measuring the time it takes for the hoist to travel a measured distance. The speed is equal to the distance in meters divided by the time in minutes.
  - (2) The monitoring shall be conducted monthly. If after the first year, no exceedances of the hoist speed are measured, the Permittee may begin monitoring the hoist speed quarterly.
  - (3) If the exceedance of the hoist speed occurs during quarterly monitoring, the monitoring frequency returns to the monthly until another year of compliance without an exceedance is demonstrated.
  - (4) If the Permittee can demonstrate to the IDEM Commissioner and OES Administrator's satisfaction in the initial compliance report that the hoist cannot exceed a speed of 3.4 meters per minute (11 feet per minute), the required monitoring frequency is quarterly, including during the first year of compliance.
- (c) The Permittee shall conduct monitoring and record the results, for a <u>reduced room draft</u>, as specified in the following paragraphs:
  - (1) When using <u>an enclosure</u> to meet reduced room draft, the Permittee shall conduct an initial monitoring test and, thereafter, monthly monitoring tests of the wind speed within the enclosure using the procedure specified below and a monthly visual inspection of the enclosure to determine if it is free of cracks, holes and other defects.
    - (A) Determine the direction of the wind current in the enclosure by slowly rotating a velometer inside the entrance to the enclosure until the maximum speed is located.
    - (B) Record the maximum wind speed.
  - (2) When using room parameters to meet reduced room draft, the Permittee shall conduct an initial monitoring test of the windspeed and room parameters, quarterly monitoring of windspeed, and weekly monitoring of room parameters as specified in procedures of 40 CFR 63.466 (d)(1). Measurement of the windspeed shall be performed within 6 inches above the top of the freeboard area of the solvent cleaning machine by:
    - (A) Determining the direction of the wind by slowly rotating a velometer or similar device until the maximum speed is located.
    - (B) Orienting a velometer in the direction of the wind current at each of the four corners of the machine.
    - (C) Record the reading of each corner.
    - (D) Average the values obtained at each corner and record the average windspeed. The average windspeed shall not exceed 50 feet per minute.

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for emission units #113, #117, #118, and all required control devices.

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

#### D.1.7 Record Keeping Requirements [40 CFR 63.467] [40 CFR 63.466]

- (a) Pursuant to 40 CFR 63.467(a), the Permittee shall maintain, in written or electronic form, records of the following information specified below, <u>for the life time of each machine</u>:
  - (1) Owners's manuals, or if not available, written maintenance and operating procedures, for the solvent cleaning machine and control equipment.
  - (2) The date of installation of each solvent cleaning machine and all of its control devices. If the exact date of the installation is not known, a letter certifying that the cleaning machine and its control devices were installed prior to, or on, November 29, 1993, or after November 29, 1993, may be substituted.
  - (3) Records of the halogenated HAP solvent content for each solvent used in each solvent cleaning machine.
- (b) Pursuant to 40 CFR 63.467(b), the Permittee shall maintain, in written or electronic form, records of the following information specified below for a period of 5 years:
  - (1) Records of the date and results of the weekly measurement of the temperature at the center of the superheated solvent vapor zone (for unit #113), while the solvent cleaning machine is in the idling mode, as required in 40 CFR 63.466.
  - (2) Records of the date and results of the weekly measurement of the temperature at the center of the air blanket (for units #117 and #118), while each solvent machine is in the idling mode, as required by 40 CFR 63.466.
  - (3) Information on the actions taken to comply with 40 CFR 63.463(e) and (f). This information shall include records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels.
  - (4) Estimates of annual solvent consumption for each solvent cleaning machine.
- (c) Pursuant to 40 CFR 63.466 (d)(1) and/or (d)(2), the Permittee shall record the monthly monitoring results of the maximum wind speed and visual inspections, when using an enclosure to meet reduced room draft as control; and/or weekly monitoring of room parameters and quarterly monitoring of wind speed, when using room parameters to meet reduced room draft.
- (d) To document compliance with Condition D.1.6, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (e) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

#### D.1.8 Reporting Requirements

A summary of the information to document compliance with Condition D.1.2 shall be submitted to the address listed in Section C - General Reporting Requirements of this permit, and to the

Operation Permit No:T097-15900-00373 1st Minor Source Modification No.: 097-19581-00373

following address as stated below:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

City of Indianapolis Office of Environmental Services Air Compliance 2700 South Belmont Avenue Indianapolis, Indiana 46221

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

- (a) An initial notification report for the cross rod batch degreaser (#113) was submitted on August 31, 2001.
- (b) An initial statement of compliance for cross rod batch degreaser (#113) was submitted on September 5, 2001.
- (c) An initial notification report for the new degreasers (#117 and #118), and solvent still (#119), shall be submitted as soon as practicable before the construction is planned to commence, and shall include all of the information required in 40 CFR 63.5 (d)(1) of Subpart A (General Provisions), with the revisions and additions specified in 40 CFR 63.468 (b)(1) through (b)(3).
- (d) An initial statement of compliance for the new degreasers (#117 and #118), and solvent still (#119), shall be submitted no later than 150 days after startup, and shall include requirements specified in 40 CFR 63.468 (d)(1) through (d)(6).
- (e) The Permittee shall submit an annual report by February 1 of the year following the one for which the reporting is being made. This report shall include the requirements as follows:
  - (1) A signed statement from the facility owner or his designee stating that, "All operators of solvent cleaning machines have received training on the proper operation of solvent cleaning machines and their control devices sufficient to pass the test required in 40 CFR 63.463(d)(10)."
  - (2) An estimate of solvent consumption for each solvent cleaning machine during the reporting period.
- (f) The Permittee shall submit an exceedance report to the IDEM Commissioner and OES Administrator semi-annually except when, the Commissioner determines, on a case-bycase basis that more frequent reporting is necessary to accurately assess the compliance status of the source or, an exceedance occurs. Once an exceedance has

occurred the Permittee shall follow a quarterly reporting format until a request to reduce reporting frequency under paragraph 40 CFR 63.468 (i) of this section is approved. Exceedance reports shall be delivered or postmarked by the 30th day following the end of each calender half or quarter, as appropriate. The exceedance report shall include the applicable information as given below:

- (1) Information on the actions taken to comply with 40 CFR 63.463 (e) and (f). This information shall include records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels.
- (2) If an exceedance has occurred, the reason for the exceedance and a description of the actions taken.
- (3) If no exceedances of a parameter have occurred, or a piece of equipment has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report.
- (g) Pursuant to 40 CFR 63.463 (i), the Permittee who is required to submit an exceedance report on a quarterly (or more frequent) basis may reduce the frequency of reporting to semiannual if the following conditions are met:
  - (1) The source has demonstrated a full year of compliance without an exceedance.
  - (2) The Permittee continues to comply with all relevant record keeping and monitoring requirements specified in Subpart A (General Provisions) and in 40 CFR 63, Subpart T.
  - (3) The IDEM Commissioner does not object to a reduced frequency of reporting for the affected source as provided in paragraphs (e)(3)(iii) of Subpart A (General Provisions) of 40 CFR 63.
- (h) If the Permittee requests an equivalency determination as described in 40 CFR 63.469, then the Permittee shall submit an equivalency request report to the U.S. EPA Administrator and receive an approval prior to startup.

# Indiana Department of Environmental Management, Office of Air Quality and City of Indianapolis, Office of Environmental Services

Technical Support Document (TSD) for a Minor Source Modification and Significant Permit Modification to a Part 70 Operating Permit

### Source Background and Description

Source Name:	Parts Cleaning Technologies, L.L.C
Source Location:	2263 Distributors Drive, Indianapolis, Indiana 46241
County:	Marion
SIC Code:	2869, 5051, 7389
Operation Permit No.:	T097-15900-00373
1st Minor Source(Construction) Mod. No.:	097-19581-00373
1st Significant Permit Modification No.:	097-19603-00373
Permit Reviewer:	Carmen Bugay

The Office of Air Quality (OAQ) and the Office of Environmental Services (OES) have reviewed a Part 70 permit application from Parts Cleaning Technology, L.L.C. relating to the construction and operation of parts cleaning under Standard Industrial Classification codes (SIC) of 2869 (Industrial organic chemicals), 5051 (Metals service centers and offices, parts cleaning), 7389 (Business Services Not Elsewhere Classified, solvents recovery); and consisting of the following equipment:

### Parts Cleaning Corporation:

- (a) One (1) vapor spray open top degreaser (model VS 50-30-30 Autosonics, Serial Number 53103-3304), identified as unit #117, using vapor to clean metal, glass, and plastic parts, with a maximum throughput rate of 4,000 pounds per hour of material; and the air solvent interface of 15 square feet, controlled by control option 6 from 40 CFR 63.463 (b)(2)(i) Table 2: a freeboard ratio of 1.0, freeboard refrigeration, and reduced roomdraft. The existing carbon adsorber (model SVRM-3-5-0, Serial Number 72799), identified as unit #115 and exhausting through Stack SV-3 as point emission, has been added as additional control and not part of the compliance. (Fugitive emissions vent through S/V-1.) This degreaser is also equipped with one (1) shared solvent still (model 2DCR-550-IS), identified as unit #119, with a maximum distillation rate of 100 gallons/hr.
- (b) One (1) two dip vapor spray open top degreaser (model 2D500E D-30) using vapor to clean metal, glass, and plastic parts, with a maximum throughput of 2,500 pounds/hour of material and the air solvent interface of 15 square feet, controlled by control option 6 from 40CFR63.463(b)(2)(i) Table 2: a freeboard ratio of 1.0, freeboard refrigeration, and reduced roomdraft. The existing carbon adsorber (model SVRM-3-5-0, Serial Number 72799), identified as unit #115 and exhausting through Stack SV-3 as point emission, has been added as additional control and not as part of the compliance. (Fugitive emissions vent through S/V-1.) This degreaser is also equipped with one (1) shared solvent still (model 2DCR-550-IS), identified as unit #119, with a maximum distillation rate of 100 gallons/hr.

# **Insignificant Activities**

#### Detrex Corporation:

(a) One (1) closed loop distillation solvent still, (model number 2DCR-550-IS), identified as unit #119, with a maximum distillation rate of 100 gallons per hour; connected to the degreasers #113, #117, #118, and to the present carbon adsorption unit (identified as unit #115), exhausting through SV-3 as point emission. In addition, an existing water treatment tank (TTO) system (identified as unit #116) is also utilized for water polishing prior to water discharge.

#### **History and Source Definition**

There are two (2) companies located at the same location (2263 Distributors Drive, Indianapolis, Indiana 46241):

- (1) Parts Cleaning Technologies, L.L.C., a parts cleaning and solvent distribution, started operation in 2002.
- (2) Detrex Corporation, a waste solvent recovery and storage facility, started operation before 1980.

Before 2002, Detrex Corporation (referred to as "Detrex Corp.") was a waste solvent recovery, solvent distribution, and parts cleaning facility and was the only company located at this address. Parts Cleaning Technologies, L.L.C. (referred to as "Parts Cleaning") purchased the parts cleaning and solvent distribution portion of the business from Detrex Corp. in 2002.

Currently, Parts Cleaning sends 100% of the waste solvent to Detrex Corp. for recovery. Parts Cleaning uses the heat generated from a 2.5 MMBtu/hr boiler, which belongs to Detrex Corp. Currently, Detrex Corp has a waste permit for the waste solvent distillation process.

Since the two (2) companies are located on contiguous properties and have a support relationship, IDEM and OES have determined that Parts Cleaning Technologies, L.L.C and Detrex Corporation are one (1) source for air emissions under the Part 70 program.

### Existing Emission Units at Parts Cleaning Technologies, L.L.C:

(a) One (1) cross rod batch vapor degreaser (model 2DCR-550-1S-SPC1, Serial Number 71481), identified as unit #113 and installed in 2001, using vapor to clean metal, glass and plastic parts, with a maximum throughput rate of 7,000 pounds per hour of material; and the air solvent interface of 36 square feet, controlled by control option 4 from 40 CFR 63.463 (b)(2)(i) Table 2: a freeboard ratio of 1.0, superheated vapor and reduced room draft. A carbon adsorber (model SVRM-3-5-0, Serial Number 72799), identified as unit #115 and exhausting through Stack S/V-3 as point emission, has been added as additional control and is not part of the compliance. (Fugitive emissions vent through S/V-1.) This degreaser is also equipped with one (1) solvent still (model MR600 SW, Serial Number 73745), identified as unit #114 with a maximum distillation rate of 400 gallons/hr.

Note: There is no significant emission unit located at Detrex Corporation.

# Insignificant Activities

The source also consists of the following existing insignificant activities, as defined in 326 IAC 2-7-1(21):

# Existing Emission Units at Parts Cleaning Technologies, L.L.C:

- (a) Forced and induced draft cooling tower system not regulated under a NESHAP.
- (b) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (c) Other emission units, not regulated by a NESHAP, with PM10 and SO<sub>2</sub> emissions less than five (5) pounds per hour or twenty-five (25) pounds per day, CO emissions less than twenty-five (25) pounds per day, lead emissions less than six-tenths (0.6) tons per year or three and twenty-nine (3.29) pounds per day, and emitting greater than one (1) pound per day but less than five (5) pounds per day or one (1) ton per year of a single HAP, or emitting greater than one (1) pound per day but less than twelve and five tenths (12.5) pounds per day or two and five tenths (2.5) ton per year of any combination of HAPs:
  - (1) Two (2) inside vertical tanks, identified as #106 and #107, constructed in 1979, each with a maximum capacity of 1,000 gallons.
  - (2) Two (2) horizontal tanks, identified as #108 and #109, constructed in 1985, each with a maximum capacity of 1,200 gallons.
  - (3) One (1) TTO tank with a carbon drum, identified as #116 and constructed in 2001, with a maximum capacity of 100 gallons, used for water polishing prior to discharge of the water, and exhausting into the building.
  - (4) One (1) outside virgin solvent storage tank, identified as #110, constructed in 1979, with a maximum capacity of 10,000 gallons.
  - (5) One (1) drumming operation.

### Existing Emission Units at Detrex Corporation:

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, including one (1) Kewanee 62 HP boiler, identified as #103 and constructed in 1988, with a maximum heat capacity of 2.51 MMBtu/hr, and exhausting through stack SV-2. [326 IAC 6-2-4]
- (b) Other emission units, not regulated by a NESHAP, with PM10 and SO<sub>2</sub> emissions less than five (5) pounds per hour or twenty-five (25) pounds per day, CO emissions less than twenty-five (25) pounds per day, lead emissions less than six-tenths (0.6) tons per year or three and twenty-nine (3.29) pounds per day, and emitting greater than one (1) pound per day but less than five (5) pounds per day or one (1) ton per year of a single HAP, or emitting greater than one (1) pound per day but less than twelve and five tenths (12.5) pounds per day or two and five tenths (2.5) ton per year of any combination of HAPs:
  - (1) One (1) solvent still (model MR 600 SW), identified as #101, and exhausting into the building.
  - (2) One (1) drying column, identified as #104.
  - (3) One (1) distillate receiver, identified as #105.
  - (4) One (1) drumming operation.

## Justification for Part 70 Minor Source Modification:

Each new emission unit's (#117 & #118) potential to emit (PTE) is 26 tons per year, therefore these units are major for HAPs. In addition, since these units utilize trichloroethylene (a halogenated HAP as the solvent), they are subject to National Emission Standards for Hazardous Air Pollutants (NESHAP) for Halogenated Solvent Cleaning, under 40 CFR 63.460-470, Subpart T.

The emission units stated above are subject to a NESHAP and the NESHAP is the most stringent applicable requirement, therefore a minor source modification (097-19581-00373) is granted under 326 IAC 2-7-10.5 (d)(5).

The permit revisions to incorporate the new units into the Part 70 operating permit, cannot be processed as a minor permit modification, because the units are subject to NESHAP, under Title I of the Clean Air Act. Therefore, this permit is being modified pursuant to 326 IAC 2-7-12 (d), a significant permit modification (097-19603-00373).

# **Existing Approvals**

The source has constructed or has been operating under the following previous approvals:

(a) Part 70 permit T097-15900-00373, issued July 23, 2003.

The following emission units as stated above in the **Insignificant Activities** section have been deleted in this modification, since these units were removed from the site on June 4, 2004:

- (c) other emissions units not regulated by NESHAP...:
  - (1) Two (2) inside vertical tanks, identified as #106 and #107, constructed in 1979, each with a maximum capacity of 1,000 gallons.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous permits are superseded by this permit.

# **Unpermitted Emission Units and Pollution Control Equipment**

There are no unpermitted facilities operating at this source during this review process.

### Enforcement Issue

There are no enforcement actions pending.

### Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (⁰F)
S/V-1, (fugitive emissions), S/V-3	New Open top batch vapor spray Degreasers (#117 & #118), Solvent Still (#119), (Existing TTO Tank #116 with a carbon drum for water polishing)	3	2	4,250	ambient
S/V-3 (main vent for Point Emissions)	(#113, #117, & #118 degreasers go through the Existing Carbon Adsorber #115)	14	14	3,800	ambient

### Recommendation

The staff recommends to the IDEM Commissioner and OES Administrator that this minor source modification and significant permit modification of the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

An administratively complete Part 70 permit modification application for the purposes of this review was received on August 19, 2004. Additional information (site visit) was received on October 6, 2004.

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

#### **Emission Calculations**

See Appendix A of this document for detailed emissions calculations (Appendix A, pages 1-3).

#### **Potential to Emit After Issuance**

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls.

	Potential to Emit After Issuance (tons/year)						
Process/Facility	PM	<b>PM</b> <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NOx	HAPs
Vapor Degreaser #113	-	-	-	63.0 <sup>1</sup>	-	-	63.0 <sup>1</sup>
Vapor Degreaser #117	-	-	-	26.25	-	-	26.25
Vapor Degreaser #118	-	-	-	26.25	-	-	26.25
NG Boiler (Insignificant)	0.08	0.08	0.01	0.06	0.92	1.10	Negligible
Insignificant Activities (Distillation/Solvent Still #119)	-	-	-	Less than 5.0	-	-	Less than 5.0
Total Emissions	0.08	0.08	0.01	Less than 121	0.92	1.10	Less than 121
Title V Source Thresholds		100	100	100	100	100	10 for a single HAP and 25 for combined HAPs

Note<sup>1</sup>: Vapor Degreaser #113 total VOC/HAPs PTE is changed from 168 tons per year to 63 tons per year, as per revised calculations stated in the TSD addendum of Part 70 operation permit numbered T097-15900-00373, dated July 23, 2003 and Appendix A of this TSD.

### **County Attainment Status**

The source is located in Marion County.

Pollutant	Status	
PM-10	Unclassifiable	
SO <sub>2</sub>	Maintenance Attainment	
NO <sub>2</sub>	Attainment	
Ozone - 1 Hour	Maintenance Attainment	
Ozone - 8 Hour	Basic Nonattainment	
СО	Attainment	
Lead	Unclassifiable	

(a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are precursors for the formation of ozone, and are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS). Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as maintenance attainment for the 1hour ozone standard; and basic nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for nonattainment new source review (NSR).

- (b) Marion County has been classified as attainment for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (c) Fugitive Emissions Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and 2-3 and since there are no applicable New Source Performance Standards (NSPS) that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

# Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

### Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to emission units #117 and #118.
- (b) The vapor degreasers #117 and #118 use trichloroethylene, which is a halogenated HAP, as the solvent. Therefore, these vapor degreasers are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Halogenated Solvent Cleaning (40 CFR 63.460-63.470, Subpart T).
  - (1) The provisions of 40 CFR 63, Subpart A General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facilities described in this section except when otherwise specified in 40 CFR 63, Subpart T.
  - (2) The Permittee has chosen control option 6 for degreasers #117 and #118 of 40 CFR 63.463 (b)(2)(i) Table 2: a freeboard ratio of 1.0, freeboard refrigeration, and reduced room draft; and has added a carbon adsorber as additional control and not as part of the compliance option. Pursuant to 40 CFR 63.463, the following requirements are applicable to the Permittee:
    - (A) Pursuant to 40 CFR 63.463(a) and (b), the Permittee shall conform to the following <u>design requirements</u>:
      - (i) The cleaning machines shall be designed or operated such that it has a reduced room draft as described in 40 CFR 63.463(e)(2)(ii).
      - (ii) The cleaning machines shall be employed with a control combination of freeboard ratio of 1.0, freeboard refrigeration, and reduced room draft, or other equivalent methods of control as determined using the procedure in 40 CFR 63.469.

- (iii) Each cleaning machine shall have an automated parts handling system capable of moving parts or parts baskets at a speed of 3.4 meters per minutes (11 feet per minute) or less from the initial loading of parts through removal of cleaned parts.
- (iv) Each cleaning machine shall be equipped with a device that shuts off sump heat if the sump liquid solvent level drops to the sump heater coils.
- (v) Each cleaning machine shall have a primary condenser.
- (vi) Each cleaning machine shall be equipped with a vapor level control device that shuts off sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser.
- (B) Pursuant to 40 CFR 63.463(d), the following <u>work and operational practice</u> requirements for the degreasing operation are applicable:
  - Control air disturbances across each cleaning machine opening(s) by creating a reduced room draft as described in 40 CFR 63.463(e)(2)(ii).
  - (ii) The parts baskets or the parts being cleaned in each cleaning machine shall not occupy more than 50 percent of the solvent/air interface area unless the parts baskets or parts are introduced at a speed of 0.9 meters per minute (3 feet per minute) or less.
  - (iii) Any spraying operations shall be done within the vapor zone or within a section of each solvent cleaning machine that is not directly exposed to the ambient air.
  - (iv) Parts shall be oriented so that the solvents drain from them freely. Parts having cavities or blind holes shall be tipped or rotated before being removed from any solvent cleaning machine unless an equally effective approach has been approved by the U.S. EPA Administrator.
  - (v) Parts baskets or parts shall not be removed from any solvent cleaning machine until dripping has stopped.
  - (vi) During startup of each vapor cleaning machine, the primary condenser shall be turned on before the sump heater.
  - (vii) During shutdown of each vapor cleaning machine, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off.
  - (viii) When solvent is added or drained from any solvent cleaning machine, the solvent shall be transferred using threaded or other leak proof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.
  - (ix) Each solvent cleaning machine and associated controls shall be maintained as recommended by the manufacturers of the equipment or using alternative maintenance practices that have been demonstrated to the U.S. EPA Administrator's satisfaction to achieve the same or better results as those recommended by the manufacturer.

- (x) Each operator of a solvent cleaning machine shall complete and pass the applicable sections of the test of solvent cleaning operating procedures in Appendix A, Subpart T of 40 CFR 63, if requested during an inspection by the IDEM Commissioner and OES Administrator.
- (xi) Waste solvents, still bottoms, and sump bottoms shall be collected and stored in closed containers. The closed containers may contain a device that would allow pressure relief, but would not allow liquid solvent to drain from the container.
- (xii) Sponges, fabric, wood, and paper products shall not be cleaned.
- (C) Pursuant to 40 CFR 63.463(e), the Permittee shall comply with the following requirements:
  - The Permittee shall conduct monitoring of each control device used to comply with 40 CFR 63.463 as provided in 40 CFR 63.466, monitoring procedures.
  - Determine during each monitoring period if the control devices (emission units #113, #117, and #118) used to comply with the above standards, meets the following requirements:
    - (AA) When using a <u>reduced room draft</u>, the Permittee shall:
      - Ensure that the flow or movement of air across the top of the freeboard area of each solvent cleaning machine or within each solvent cleaning machine enclosure does not exceed 15.2 meters per minute (50 feet per minute) at anytime as measured using the procedures in 40 CFR 63.466(d).
      - Establish and maintain the operating conditions under which the wind speed was demonstrated to be 15.2 meters per minute (50 feet per minute) or less as described in 40 CFR 63.466(d).
      - (iii) When using <u>an enclosure</u> to meet reduced roomdraft as described in 40 CFR 63.466, the owner or operator shall conduct an initial monitoring test and thereafter, monthly monitoring tests of the windspeed within the enclosure using the procedures specified in 40 CFR 63.466 (d)(2) and as stated below; and a monthly visual inspection of the enclosure to determine if it is free of cracks, holes, and other defects.
        - (1) Determine the direction of wind current in the enclosure by slowly rotating a velometer inside the entrance to the enclosure until the maximum speed is located.
        - (2) Record the maximum windspeed.
      - (iv) If the reduced room draft is maintained by controlling room parameters, the owner or operator shall conduct an initial monitoring test of the windspeed and room parameters, quarterly monitoring of

windspeed, and weekly monitoring of room parameters as specified in procedures of 40 CFR 63.466 (d)(1) and as stated below. Measurement of the windspeed shall be performed within 6 inches above the top of the freeboard area of the solvent cleaning machine by:

- (1) Determining the direction of the wind by slowly rotating a velometer or similar device until the maximum speed is located.
- (2) Orienting a velometer in the direction of the wind current at each of the four corners of the machine.
- (3) Record the reading of each corner.
- (4) Average the values obtained at each corner and record the average windspeed.
- (BB) When using <u>freeboard refrigeration</u>, the Permittee shall:
  - Ensure that the chilled air blanket temperature (in EF) measured at the center of the air blanket, while the solvent cleaning machine is in the idling mode, shall not exceed 30% of the solvents boiling point, as per 40 CFR 63.463 (e)(2)(i) and 63.466 (a)(1).
- (CC) When using a <u>superheated vapor system</u> the Permittee shall:
  - (i) Ensure that the temperature of the solvent vapor at the center of the superheated vapor zone is at least 10EF above the solvent's boiling point.
  - (ii) Ensure that the manufacturer's specifications for determining the minimum proper dwell time within the superheated vapor system is followed.
  - (iii) Ensure that parts remain within the superheated vapor for at least the minimum proper dwell time.
- (D) Monitor hoist speed according to 40 CFR 63.466 (c).
- (E) The owner or operator shall report all exceedances and all corrections and adjustments made to avoid an exceedance as specified in 40 CFR 63.468.
- (c) This Part 70 Permit does involve pollutant-specific emissions units (vapor degreaser #117 and #118) as defined in 40 CFR 64.1 for a single HAP (Trichloroethylene):
  - (1) With the potential to emit before controls equal to or greater than the major source threshold for a single HAP;
  - (2) That is subject to an emission limitation or standard for HAPs; and
  - (3) Uses a control device as defined in 40 CFR 64.1 to comply with that emission limitation or standard.

However, the vapor degreasers #117 and #118 are subject to the NESHAP for Halogenated Solvent Cleaning (40 CFR 63, Subpart T); and this NESHAP was promulgated after

November 15, 1990, pursuant to 40 CFR 64.2(b)(i). Therefore, these units are exempt from the requirements of 40 CFR 64 (Compliance Assurance Monitoring).

(d) The requirements of Section 112(j) of the Clean Air Act (40 CFR Part 63.50 through 63.56) are not applicable to this source because the source does not include one or more units that belong to one or more source categories affected by the Section 112(j) MACT Hammer date of May 15, 2002.

#### State Rule Applicability - Entire Source

#### 326 IAC 2-1-1.5 (Air Quality Requirements)

VOCs are precursors for the formation of ozone, and are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS). Thus when evaluating rule applicability relating to the ozone standards, VOC emissions are considered. Since Marion County has been designated as maintenance attainment for the 1-hour ozone standard; and basic nonattainment for the 8-hour ozone standard, VOC emissions were reviewed pursuant to the requirements for nonattainment new source review (NSR).

Before this modification, total VOC PTE was 68.06 tons/year, therefore not a major source of nonattainment NSR. Since the net increase of VOC PTE is at 52.50 tons/year, which is less than the threshold limit of 100 tons/year, this modification does not constitute being major under nonattainment NSR. However, the total VOC PTE will be 120.56 tons/year after this modification, therefore the source will be considered as a major source for nonattainment NSR; and any future modifications will need to be reviewed under these requirements.

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

This source was constructed in 1979 and modified in 2000. This source is not 1 of the 28 source categories and the potential to emit of PSD regulated pollutants before control has never exceeded two hundred and fifty (250) tons per year. Therefore, this source is not a PSD major source and the requirements of 326 IAC 2-2 are not applicable.

### 326 IAC 2-4.1 (New Source Toxics Control)

The potential to emit (PTE) of HAP from the vapor degreasers #117 and #118 is greater than 10 tons per year for a single HAP and greater than 25 tons per year for any combination of HAPs. The vapor degreasers mentioned above, are subject to 40 CFR 63, Subpart T, therefore, the requirements of 326 IAC 2-4.1 are not applicable.

#### 326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has an operating permit under 326 IAC 2-7, Part 70 Permit Program. Pursuant to this rule, the owner/operator of the source must submit an emission statement for the source. This statement must be received by July 1 starting in 2005, and every three (3) years thereafter, as stated in 326 IAC 2-6-3 (1)(b)(2); and contain the minimum requirement as specified in 326 IAC 2-6-4 (c). The submittal should cover the period defined in 326 IAC 2-6-2(8) (Emission Statement Operating Year).

#### 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:

- (a) Opacity shall not exceed an average of thirty percent (30%) 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.

# State Rule Applicability - Vapor Degreasers (#117 and #118)

326 IAC 8-1-6 (General Reduction Requirements for VOC Emissions)

The vapor degreaser #117 and #118 were constructed after January 1, 1980 and has the potential to emit VOC greater than 25 tons per year. However, the requirements of 326 IAC 8-3-3 and 326 IAC 8-3-6 apply to this unit; and thus the requirements of 326 IAC 8-1-6 are not applicable.

### 326 IAC 8-3-3 (Open Top Vapor Degreasing Operations)

This source was constructed after January 1, 1980 and performs open top vapor degreasing operations. Therefore, these degreasers (#117 and #118) are subject to 326 IAC 8-3-3, and 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 covers 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
- (I) Provide a permanent, conspicuous label summarizing the operating requirements.

### 326 IAC 8-3-6 (Open Top Vapor Degreaser Operation and Control Requirements)

This source was constructed after July 1, 1990, and has open top degreasers with an air to solvent interface of 10.8 square feet or greater. Therefore, these degreasers are subject to 326 IAC 8-3-6 and the Permittee shall ensure that the following requirements are met:

(a) The Permittee shall ensure that the following <u>control equipment requirements</u> are met for each degreaser (#113, #117, and #118):

- (1) Equip the degreasers with a cover that can be opened and closed easily without disturbing the vapor zone;
- (2) Equip the degreasers 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 shuts off spray pump if the vapor level drops more than four (4) inches. (The vapor degreaser #113 at this source does not have a spray pump).
- (3) Equip the degreasers with a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
- (4) Equip the degreasers 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; or
  - (B) A refrigerated chiller; or
  - (C) An enclosed design in which the cover opens only when the article is actually entering or exiting each degreaser; or
  - (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) The Permittee shall ensure that the following <u>operating requirements</u> are met for each degreaser (#113, #117, and #118):
  - (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 degreasers of porous or absorbent materials such as, but not limited to, cloth, leather, wood or rope;
- (4) Prohibit occupation of more than one half (½) of the degreasers' open top area with the workload;
- (5) Prohibit the loading of the degreasers 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 each 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.

### **Compliance Requirements**

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, and OES in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

- 1. Pursuant to 40 CFR 63.466, the existing vapor degreaser (#113) has applicable compliance monitoring conditions as specified in (a) (1); and new vapor degreasers (#117 and #118), have applicable compliance monitoring conditions as specified in (a) (2) below:
  - (a) The Permittee shall conduct monitoring and record the results as per 40 CFR 63.466
    (a)(1) through (a) (2) and 63.467 on a weekly basis for the control devices, as appropriate, specified in paragraph(s) below:
    - (1) For unit #113, the Permittee shall use a thermometer or thermocouple to measure the temperature at the center of the superheated solvent vapor zone, while the solvent cleaning machine is in the idling mode.

- (2) For units #117 and #118, the Permittee shall use a thermometer or thermocouple to measure the temperature at the center of the air blanket for the freeboard chiller, while the solvent cleaning machine is in the idling mode.
- (b) The Permittee shall monitor the <u>hoist speed</u> per 40 CFR 63.466 (c)(2) on each degreaser as described below:
  - (1) The Permittee shall determine the hoist speed by measuring the time it takes for the hoist to travel a measured distance. The speed is equal to the distance in meters divided by the time in minutes.
  - (2) The monitoring shall be conducted monthly. If after the first year, no exceedances of the hoist speed are measured, the Permittee may begin monitoring the hoist speed quarterly.
  - (3) If the exceedance of the hoist speed occurs during quarterly monitoring, the monitoring frequency returns to the monthly until another year of compliance without an exceedance is demonstrated.
  - (4) If the Permittee can demonstrate to the IDEM Commissioner and OES Administrator's satisfaction in the initial compliance report that the hoist cannot exceed a speed of 3.4 meters per minute (11 feet per minute), the required monitoring frequency is quarterly, including during the first year of compliance.
- (c) The Permittee shall conduct monitoring and record the results as per 40 CFR 63.466
  (d)(2) and 63.467 when using a cover for reduced room draft, and as per 40 CFR 63.466
  (d)(1) when controlling room parameters for reduced room draft as specified in the following paragraphs:
  - (1) The Permittee shall conduct an initial monitoring test and, thereafter, monthly monitoring tests of the windspeed within the enclosure or room parameters using the procedure specified in 40 CFR 63.466 (d)(1) and/or (d)(2) and a monthly visual inspection of the enclosure to determine if the enclosure is free of cracks, holes and other defects (or weekly monitoring of room parameters).
    - (A) Determine the direction of the wind current by slowly rotating a velometer until the maximum speed is located.
    - (B) Record the maximum wind speed within enclosure (or average four corner values for room parameters).

These monitoring conditions are necessary because the vapor degreasers must function properly to ensure compliance with 40 CFR 63, Subpart T.

### Conclusion

The construction of the degreasers #117, #118, and solvent still #119, shall be subject to the conditions of this minor source modification numbered 097-19581-00373 and Part 70 significant permit modification numbered 097-19603-00373.

# Part 70 permit changes:

The table of contents (TOC) and any references of reporting or notifications to OES, have been changed to reflect the proper names.

The following changes are being made to the Part 70 permit. These changes are **bolded** and deletions are struck-through for emphasis as follows:

#### SECTION A

### SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ), and the City of Indianapolis, Office of Environmental Services (OES). The information describing the emission units contained in conditions A.1., A.3 and A.4 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary parts cleaning and solvent distribution facility.

Responsible Official:	President
Source Address:	2263 Distributors Drive, Indianapolis, Indiana 46241
Mailing Address:	2263 Distributors Drive, Indianapolis, Indiana 46241
General Source No:	(317) 241-9379
SIC Code:	<b>2869</b> , 5051, <b>7389</b>
County Location:	Marion
Source Location Status	Basic nonattainment for the 8-hour ozone standard;
	Attainment for all other criteria pollutants.
Source Status:	Part 70 Permit Program
	Minor Source, under PSD Rule; and
	Nonattainment New Source Review (NSR).
	Major Source, Section 112 of the Clean Air Act
	Not 1 of 28 Source Categories
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A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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

- (a) One (1) cross rod batch vapor degreaser (model 2DCR-550-1S-SPCC 1, Serial Number 71481), identified as unit #113 and installed in 2001, using vapor to clean metal, glass and plastic parts, with a maximum throughput rate of 7,000 pounds of parts per hour of material; and the air solvent interface of 36 square feet, controlled by control option 4 from 40 CFR 63.463 (b)(2)(i) Table 2: a freeboard ratio of 1.0, superheated vapor and reduced room draft. A carbon adsorber (model SVRM-3-5-0, Serial Number 72799), (identified as #115 and exhausting through Stack S/V-3 as point emission), has been added as additional control and is not part of the compliance. (Fugitive emissions vent through S/V-1.) This degreaser is also equipped with one (1) solvent still (model MR600 SW, Serial Number 73745), (identified as unit #114), with a maximum distillation rate of 400 gallons/hr.
- (b) One (1) vapor spray open top degreaser (model VS 50-30-30 Autosonics, Serial Number 53103-3304), identified as unit #117, using vapor to clean metal, glass, and plastic parts, with a maximum throughput rate of 4,000 pounds per hour of material; and the air solvent interface of 15 square feet, controlled by control option 6 from 40 CFR 63.463 (b)(2)(i) Table 2: a freeboard ratio of 1.0, freeboard refrigeration, and reduced roomdraft.

The existing carbon adsorber (model SVRM-3-5-0, Serial Number 72799), identified as unit #115 and exhausting through Stack SV-3 as point emission, has been added as additional control and not part of the compliance. (Fugitive emissions vent through S/V-1.) This degreaser is also equipped with one (1) shared solvent still (model 2DCR-550-IS), identified as unit #119, with a maximum distillation rate of 100 gallons/hr.

(c) One (1) two dip vapor spray open top degreaser (model 2D500E D-30E, Serial Number 72348), using vapor to clean metal, glass, and plastic parts, with a maximum throughput rate of 2,500 pounds per hour of material; and the air solvent interface of 15 square feet, controlled by control option 6 from 40CFR63.463(b)(2)(i) Table 2: a freeboard ratio of 1.0, freeboard refrigeration, and reduced roomdraft. The existing carbon adsorber (model SVRM-3-5-0, Serial Number 72799), identified as unit #115 and exhausting through Stack SV-3 as point emission, has been added as additional control and not as part of the compliance. (Fugitive emissions vent through S/V-1.) This degreaser is also equipped with one (1) shared solvent still (model 2DCR-550-IS), identified as unit #119, with a maximum distillation rate of 100 gallons/hr.

# B.3 Enforceability [326 IAC 2-7-7]

(b) The Indianapolis Air Pollution Control Board (IAPCB) has adopted by reference state rules listed in Appendix A of this permit. The version adopted by reference includes all amendments, additions and repeals filed with the Secretary of State through August 10, 1997
 May 10, 2003 and published in the Indiana Register September 1, 1997 June 1, 2003, unless otherwise indicated in the adoption by reference or in Attachment A. For the purposes of this permit, all state rules adopted by reference by the IAPCB are enforceable by OES using local enforcement procedures. Unless otherwise stated, all terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by OES.

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

- C.17 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]
  - (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement Pursuant to 326 IAC 2-6-3(b)(2), starting in 2005 and every three (3) years thereafter, the Permittee shall submit by July 1, an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
    - Indicate estimated actual emissions of criteria all pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting); listed in 326 IAC 2-6-4(a);
    - (2) Indicate estimated actual emissions of other-regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant which is used only for purposes of Section 19 of this rule") from the source, for purposes of Part 70 fee assessment.
  - (b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

### The statement must be submitted to:

Indiana Department of Environmental Management Technical Support and Modeling Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015 and

City of Indianapolis Office of Environmental Services **Air Compliance** 2700 South Belmont Avenue Indianapolis, Indiana 46221

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) (b) The annual emission statement required by this permit 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, and OES, on or before the date it is due.

# SECTION D.1 FACILITY OPERATION CONDITIONS (Table continued on next page) Facility Description [326 IAC 2-7-5(15)]:

Emission Units at Parts Cleaning Technologies, L.L.C:

- (a) One (1) cross rod batch vapor degreaser (model 2DCR-550-1S-SPCC1, Serial Number 71481), identified as unit #113 and installed in 2001, using vapor to clean metal, glass and plastic parts, with a maximum throughput rate usage of 7,000 pounds of parts per hour of material and the air solvent interface of 36 square feet, controlled by control option 4 from 40CFR63.463(b)(2)(i) Table 2: a freeboard ratio of 1.0, superheated vapor, and reduced roomdraft. A carbon adsorber (model SVRM-3-5-0, Serial Number 72799), ( identified as unit #115 and exhausting through Stack S/V-3 as point emission), has been added as additional control and is not part of the compliance. (Fugitive emissions vent through S/V-1.) This degreaser is also equipped with one (1) solvent still (model MR600 SW, Serial Number 73745), ( identified as unit #114), with a maximum distillation rate of 400 gallons/hr.
- (b) One (1) vapor spray open top degreaser (model VS 50-30-30 Autosonics), identified as unit #117, using vapor to clean metal, glass, and plastic parts, with a maximum throughput rate of 4,000 pounds per hour of material and the air solvent interface of 15 square feet, controlled by control option 6 from 40CFR63.463(b)(2)(i) Table 2: a freeboard ratio of 1.0, freeboard refrigeration, and reduced roomdraft. The existing carbon adsorber (model SVRM-3-5-0, Serial Number 72799), identified as unit #115 and exhausting through Stack SV-3 as point emission, has been added as additional control and not as part of the compliance. (Fugitive emissions vent through S/V-1.) This degreaser is also equipped with one (1) shared solvent still (model 2DCR-550-IS), identified as unit #119, with a maximum distillation rate of 100 gallons/hr.
- (c) One (1) two dip vapor spray open top degreaser (model 2D500E D-30) using vapor to clean metal, glass, and plastic parts, with a maximum throughput of 2,500 pounds/hour of material and the air solvent interface of 15 square feet, controlled by control option 6 from 40CFR63.463(b)(2)(i) Table 2: a freeboard ratio of 1.0, freeboard refrigeration, and reduced roomdraft. The existing carbon adsorber (model SVRM-3-5-0, Serial Number 72799), identified as unit #115 and exhausting through Stack SV-3 as point emission, has been added as additional control and not as part of the compliance. (Fugitive emissions vent through S/V-1.) This degreaser is also equipped with one (1) shared solvent still (model 2DCR-550-IS), identified as unit #119, with a maximum distillation rate of 100 gallons/hr.

# D.1.2 Halogenated Solvent Cleaning Machine NESHAP [40 CFR Part 63, Subpart T]

This facility is subject to 40 CFR Part 63, Subpart T, (Halogenated Solvent Cleaning Machine NESHAP), which is incorporated by reference as 326 IAC 20-6-1.

- (a) Pursuant to 40 CFR 63.463(a) and (b), the Permittee shall conform to the following design requirements:
  - (1) The cleaning machine**s** shall be designed or operated such that it has a reduced room draft as described in 40 CFR 63.463(e)(2)(ii).
  - (2) The cross rod cleaning machine (#113) shall be employed with a control combination of freeboard ratio of 1.0, superheated vapor, and reduced room draft; by utilize control option 4 of 40 CFR 63.463 (b)(2)(i) Table 2: a freeboard ratio of 1.0, superheated vapor, and reduced room draft; and the two open top batch degreasers (#117 and #118) shall utilize control option 6 from 40 CFR 63.463(b)(2)(i), Table 2: a freeboard ratio of 1.0, freeboard refrigeration and reduced room draft, or other equivalent methods of control as determined using the procedure in 40 CFR 63.469.
  - (3) The **Each** cleaning machine shall have an automated parts handling system capable of moving parts or parts baskets at a speed of 3.4 meters per minutes (11 feet per minute) or less from the initial loading of parts through removal of cleaned parts.
  - (4) The cleaning machine**s** shall be equipped with a device that shuts off sump heat if the sump liquid solvent level drops to the sump heater coils.
  - (5) The cleaning machine**s** shall have a primary condenser.
  - (6) The cleaning machines shall be equipped with a vapor level control device that shuts off sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser.
- (b) Pursuant to 40 CFR 63.463(d), the following work and operational practice requirements for the degreasing operation are applicable:
  - (1) Control air disturbances across the **each** cleaning machine opening(s) by creating a reduced room draft as described in 40 CFR 63.463(e)(2)(ii).
  - (2) The parts baskets or the parts being cleaned in the each cleaning machine shall not occupy more than 50 percent of the solvent/air interface area unless the parts baskets or parts are introduced at a speed of 0.9 meters per minute (3 feet per minute) or less.
  - (3) Any spraying operations shall be done within the vapor zone or within a section of the **each** solvent cleaning machine that is not directly exposed to the ambient air.
  - (4) Parts shall be oriented so that the solvents drains from them freely. Parts having cavities or blind holes shall be tipped or rotated before being removed from any solvent cleaning machine unless an equally effective approach has been approved by the **IDEM** Commissioner.
  - (9) Each solvent cleaning machine and associated controls shall be maintained as recommended by the manufacturers of the equipment or using alternative maintenance practices that have been demonstrated to the Commissioner's U.S. EPA Administrator's satisfaction to achieve the same or better results as those recommended by the manufacturer.

- (c) Pursuant to 40 CFR 63.463(e), the Permittee shall comply with the following requirements:
  - (2) Determine during each monitoring period if the control devices (emission units #113, #117, and #118) used to comply with the above standards meets the following requirements:
    - (A) When using a <u>reduced room draft</u>, the Permittee shall:
      - Ensure that the flow or movement of air across the top of the freeboard area of the each solvent cleaning machine or within the each solvent cleaning machine enclosure does not exceed 15.2 meters per minute (50 feet per minute) at anytime as measured using the procedures in 40 CFR 63.466(d).
    - (C) When using <u>freeboard refrigeration</u>, the Permittee shall:
      - (i) Ensure that the chilled air blanket temperature (in F) measured at the center of the air blanket while the solvent cleaning machines are in the idling mode, shall not exceed 30% of the solvents boiling point, as per 40 CFR 63.463 (e)(2)(i), and 63.466 (a)(1).
  - (3) An exceedance has occurred if :
    - (A) The requirements of paragraphs (c)(2)(A)(ii), (c)(2)(B)(ii) and (c) 2)(B)(iii) of this condition are not met; and
    - (B) The requirements of paragraphs (c)(2)(A)(i), (c)(2)(B)(i) and (c)(2)(C)(i) of this condition have not been met and are not corrected within 15 days of detection. Adjustments or repairs shall be made to the each solvent cleaning system or control device to reestablish required levels. The parameters must be remeasured immediately upon adjustment or repair and demonstrated to be within the required limits.

# D.1.3 Volatile Organic Compounds (VOC) [326 IAC 8-3-3]

Pursuant to 326 IAC 8-3-3 (Open Top Vapor Degreasing Operations), for open top vapor degreasing operations constructed after January 1, 1980, **which includes each degreaser**, **#113**, **#117**, **and #118**, the Permittee shall do the following:

### D.1.4 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 and constructed after July 1, 1990, the Permittee shall ensure that the following requirements are met:

- (a) The Permittee shall ensure that the following control equipment requirements are met for each degreaser (#113, #117 and #118):
- (b) The Permittee shall ensure that the following operating requirements are met **for each degreaser ( #113, #117 and #118)**:
  - (2) Minimize solvent carryout emissions by:
    - (D) tipping out any pools of solvent on the cleaned articleds before removal; and

## D.1.5 Monitoring Procedures [40 CFR 63.466]

Pursuant to 40 CFR 63.466, the Permittee shall comply with the following monitoring procedures:

- (a) The Permittee shall conduct monitoring and need to add these records for (a) (b) and (c) to the recordkeeping section record the results on a weekly basis for the control devices, as appropriate, specified in paragraph(s) below:
  - (1) **For unit #113,** T the Permittee shall use a thermometer or thermocouple to measure the temperature at the center of the superheated solvent vapor zone while the solvent cleaning machine is in the idling mode.
  - (2) For units #117 and #118, the Permittee shall use a thermometer or thermocouple to measure the temperature at the center of the air blanket for the freeboard chiller, while the solvent cleaning machines are in the idling mode.
- (b) The Permittee shall monitor the <u>hoist speed</u> as described below:
  - (4) If the Permittee can demonstrate to the IDEM Commissioner and OES Administrator's satisfaction in the initial compliance report that the hoist cannot exceed a speed of 3.4 meters per minute (11 feet per minute), the required monitoring frequency is quarterly, including during the first year of compliance.
- (c) The Permittee shall conduct monitoring and record the results, for a <u>reduced room draft</u>, as specified in the following paragraphs:
  - (1) When using <u>an enclosure</u> to meet reduced room draft, Tthe Permittee shall conduct an initial monitoring test and, thereafter, monthly monitoring tests of the windspeed within the enclosure using the procedure specified below and a monthly visual inspection of the enclosure to determine if it is free of cracks, holes and other defects.
  - (2) When using <u>room parameters</u> to meet reduced room, the Permittee shall conduct an initial monitoring test of the wind speed and room parameters, quarterly monitoring of windspeed, and weekly monitoring of room parameters as specified in procedures of 40 CFR 63.466 (d)(1). Measurement of the wind speed shall be performed within 6 inches above the top of the freeboard area of the solvent cleaning machine by:
    - (A) Determining the direction of the wind by slowly rotating a velometer or similar device until the maximum speed is located.
    - (B) Orienting a velometer in the direction of the wind current at each of the four corners of the machine.
    - (C) Record the reading of each corner.
    - (D) Average the values obtained at each corner and record the average windspeed, according to 40 CFR 63.466 (d)(1).

### D.1.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility emission units #113, #117, #118, and its all required control devices.

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

### D.1.7 Record Keeping Requirements [40 CFR 63.467] [40 CFR 63.466]

- (a) Pursuant to 40 CFR 63.467(a), the Permittee shall maintain, in written or electronic form, records of the following information specified below, for the life time of the each machine:
  - (2) The date of installation of the **each** solvent cleaning machine and all of its control devices. If the exact date of the installation is not known, a letter certifying that the cleaning machine and its control devices were installed prior to, or on, November 29, 1993, or after November 29, 1993, may be substituted.
  - (3) Records of the halogenated HAP solvent content for each solvent used in **a each** solvent cleaning machine.
- (b) Pursuant to 40 CFR 63.467(b), the Permittee shall maintain, in written or electronic form, records of the following information specified below for a <u>period of 5 years</u>:
  - (1) Records of the date and results of the weekly measurement of the temperature at the center of the superheated solvent vapor zone (for unit #113), while the solvent cleaning machine is in the idling mode, as required in 40 CFR 63.466.
  - (2) Records of the date and results of the weekly measurement of the temperature at the center of the air blanket (for units #117 and #118), while each solvent machine is in the idling mode, as required by 40 CFR 63.466.
  - (2) (3) Information on the actions taken to comply with 40 CFR 63.463(e) and (f). This information shall include records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels.
  - (3) (4) Estimates of annual solvent consumption for each solvent cleaning machine.
- (c) Pursuant to 40 CFR 63.466 (d)(1) and/or (d)(2), the Permittee shall record the monthly monitoring results of the wind direction and the maximum wind speed and visual inspections, when using an enclosure to meet a reduced room draft as control; and/or weekly monitoring of room parameters and quarterly monitoring of wind speed, when using room parameters to meet reduced room draft.

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

### D.1.8 Reporting Requirements

- (c) An initial notification report for the new degreasers (#117 and #118), and solvent still (#119), shall be submitted as soon as practicable before the construction is planned to commence, and shall include all of the information required in 40 CFR 63.5 (d)(1) of Subpart A (General Provisions), with the revisions and additions specified in 40 CFR 63.468 (b)(1) through (b)(3).
- (d) An initial statement of compliance for the new degreasers (#117 and #118), and solvent still (#119), shall be submitted no later than 150 days after startup, and shall include requirements specified in 40 CFR 63.468 (d)(1) through (d)(6).
- (c) (e) The Permittee shall submit an annual report by February 1 of each the year following the one for which the reporting is being made. This report shall include the requirements as follows:
- (d) (f) The Permittee shall submit an exceedance report to the IDEM Commissioner and OES Administrator semi-annually except when, the Commissioner determines, on a case-by-case

basis that more frequent reporting is necessary to accurately assess the compliance status of the source or, an exceedance occurs. Once an exceedance has occurred the Permittee shall follow a quarterly reporting format until a request to reduce reporting frequency under paragraph 40 CFR 63.468 (i) of this section is approved. Exceedance reports shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. The exceedance report shall include the applicable information as given below:

- (e) (g) Pursuant to 40 CFR 63.463 (i), the Permittee who is required to submit an exceedance report on a quarterly (or more frequent) basis may reduce the frequency of reporting to semiannual if the following conditions are met:
  - (3) The **IDEM** Commissioner does not object to a reduced frequency of reporting for the affected source as provided in paragraphs (e)(3)(iii) of Subpart A (General Provisions) of 40 CFR 63.
- (f) (h) If T the Permittee requestings an equivalency determination as described in 40 CFR 63.469, then the Permittee shall submit an equivalency request report to the Commissioner U.S. EPA Administrator, and receive an approval prior to startup.

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Appendix A: Emission Calculations VOC and HAPs Emissions The Vapor Degreaser (#113)

Company Name: Parts Cleaning Technologies, L.L.C Address: 2263 Distributors Drive, Indianapolis, IN 46241 Part 70: 097-15900-00373 (Part 70 permit) T097-19581-00373 (minor source modification) T097-19603-00373 (significant permit modification) Reviewed: ERG/YC (Part 70 permit) Modified & Verified by: Carmen Bugay/Boris Gorlin Date: October 6, 2004

Unit #113--Existing batch vapor degreaser **Process Description:** Solvent/Air Interface: 36\* ft<sup>2</sup> (= 3.344 m<sup>2</sup>) (\*Note: Number changed from 96 ft2 to 36 in TSD addendum of 097-15900-00373)

Maximum Throughput Rate:4,000 lbs/hr of partsSolvent used:TrichloroethyleneVOC by Weight:100%HAPs by Weight:100%

#### 1. Uncontrolled Potential to Emit VOC/HAP:

Pursuant to 40 CFR 63.465(e)(1), the PTE for each individual solvent cleaning machine is determined by the following equation:

Formula: PTE (tons/year) = H x W x SAI x 2.2046 lbs/kg x 1 ton/2000 lbs

Where	PTE =	the potential to emit for the solvent cleaning machine (kilograms of solvent per year).	
	H =	hours of operation for solvent cleaning machine (hours per year)	
	W =	the working mode uncontrolled emission rate (kilograms per square meter per hour).	
		W= 1.95 kilograms per square meter per hour for batch vapor machines.	
	SAI =	solvent/air interface area of the solvent cleaning machine (square meters).	
	PTE of VOC/HAP	$= 8760 \text{ hr/yr x } 1.95 \text{ kg/m}^2/\text{hr x } 3.344 \text{ m}^2 \text{ x } 2.2046 \text{ lbs/kg x } 1 \text{ ton/}2000 \text{ lbs} = 62.97 \text{ tons/y}$	r

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Appendix A: Emission Calculations VOC and HAPs Emissions New Vapor Degreaser (#117)

Company Name: Parts Cleaning Technologies, L.L.C Address: 2263 Distributors Drive, Indianapolis, IN 46241 Part 70: T097-15900-00373 T097-19581-00373 (minor source modification) T097-19603-00373 (significant permit modification) Reviewed & Verified by: Carmen Bugay/Boris Gorlin Date: October 6, 2004

#### **Process Description:**

Solvent/Air Interface: 15\* ft<sup>2</sup> (= 1.394 m<sup>2</sup>) Maximum Throughput Rate: 4,000 lbs/hr of parts Solvent used: Trichloroethylene VOC by Weight: 100% HAPs by Weight: 100%

#### 1. Uncontrolled Potential to Emit VOC/HAP:

Pursuant to 40 CFR 63.465(e)(1), the PTE for each individual solvent cleaning machine is determined by the following equation:

Formula: PTE (tons/year) = H x W x SAI x 2.2046 lbs/kg x 1 ton/2000 lbs

Where PTE =	the potential to emit for the solvent cleaning mach	nine (kilograms of solvent per year).
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- H = hours of operation for solvent cleaning machine (hours per year)
- W = the working mode uncontrolled emission rate (kilograms per square meter per hour). W= 1.95 kilograms per square meter per hour for batch vapor machines.
- SAI = solvent/air interface area of the solvent cleaning machine (square meters).

PTE of VOC/HAP	$= 8760 \text{ hr/yr} \times 1.95 \text{ kg/m}^2/\text{h}$	r x 1.394 m <sup>2</sup> x 2.2046 lbs/kg x 1 ton/2000 lbs :	= 26.25 tons/yr
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Appendix A: Emission Calculations VOC and HAPs Emissions New Batch Vapor Degreaser (#118)

Company Name: Parts Cleaning Technologies, L.L.C Address: 2263 Distributors Drive, Indianapolis, IN 46241 Part 70: T097-15900-00373 T097-19581-00373 (minor source modification) T097-19603-00373 (significant permit modification) Reviewed & Verified by: Carmen Bugay/Boris Gorlin Date: October 6, 2004

#### **Process Description:**

Solvent/Air Interface: 15\* ft<sup>2</sup> (= 1.394 m<sup>2</sup>) Maximum Throughput Rate: 2,500 lbs/hr of parts Solvent used: Trichloroethylene VOC by Weight: 100% HAPs by Weight: 100%

#### 1. Uncontrolled Potential to Emit VOC/HAP:

Pursuant to 40 CFR 63.465(e)(1), the PTE for each individual solvent cleaning machine is determined by the following equation:

Formula: PTE (tons/year) = H x W x SAI x 2.2046 lbs/kg x 1 ton/2000 lbs

Where	PTE = H =	the potential to emit for the solvent cleaning machine (kilograms of solvent per year). hours of operation for solvent cleaning machine (hours per year)	
	W =	the working mode uncontrolled emission rate (kilograms per square meter per hour).	
	SAI =	N= 1.95 kilograms per square meter per hour for batch vapor machines. solvent/air interface area of the solvent cleaning machine (square meters).	
PTE o	f VOC/HAP	= 8760 hr/yr x 1.95 kg/m <sup>2</sup> /hr x 1.394 m <sup>2</sup> x 2.2046 lbs/kg x 1 ton/2000 lbs = <b>26.25 tons/y</b>	