



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

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

TO: Interested Parties / Applicant

DATE: December 28, 2011

RE: Royal Adhesives and Sealants, LLC / 141-30439-00146

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

## Notice of Decision: Approval – Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204.

For an **initial Title V Operating Permit**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **thirty (30)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(b).

For a **Title V Operating Permit renewal**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **fifteen (15)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(a).

The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of an initial Title V operating permit, permit renewal, or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency  
401 M Street  
Washington, D.C. 20406

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



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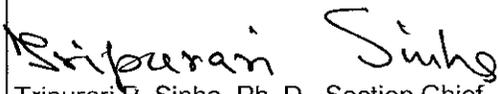
## Part 70 Operating Permit Renewal OFFICE OF AIR QUALITY

**Royal Adhesives and Sealants, L.L.C.**  
**2001 West Washington Street**  
**Indiana 46628-2032**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

**The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.**

This permit 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.: T141-30439-00146	
Issued by:  Tripurari P. Sinha, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: December 28, 2011 Expiration Date: December 28, 2016

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**Emergency Occurrence Report**  
**Part 70 Usage Report**  
**Quarterly ReportQuarterly Deviation and Compliance Monitoring Report**  
**Attachment A 40 CFR 63, Subpart HHHHH**

**SECTION A SOURCE SUMMARY**

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 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 permit 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 sealant and adhesive manufacturing plant.

Source Address: 2001 West Washington Street, South Bend, Indiana  
 46628-2032  
 General Source Phone Number: (574) 246-5335  
 SIC Code: 2891  
 County Location: St. Joseph  
 Source Location Status: Attainment for all criteria pollutants  
 Source Status: Part 70 Operating Permit Program  
 Minor Source, under PSD and Emission Offset Rules  
 Major Source, Section 112 of the Clean Air Act  
 Not 1 of 28 Source Categories

**A.2 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) The following adhesive and sealant churns, each containing a nitrogen blanket purging system which is integral to the churning process, each exhausting to its respective vent and equipped with its respective condenser for VOC control. These emissions units are affected units under 40 CFR 63, Subpart HHHHH: The sealant churns below have a combined maximum production capacity of 1,230 lbs/hr, and the adhesive churns have a combined maximum production capacity of 11,833 lbs/hr. The source will utilize a cartridge type dust collector, identified as DC-3, with 18 cartridges to control PM emissions from sealant churns CH-7, CH-8, and adhesive churns CH-1, CH-2, CH-3, CH-22, CH25, CH-26, CH-40, CH-41, CH-54, CH-55, and CH-56. The dust collector flowrate is 12,000 cubic feet per minute (cfm).

Churn Content ID	Stack ID	Condenser ID	Installation Date	Volume (gal)
Sealant CH-7	S-7	CE-7	November 1996	210
Sealant CH-8	S-8	CE-8	November 1996	210
Sealant CH-9	S-9	CE-9	June 1998	900
Sealant CH-10	S-10	CE-10	June 1998	900
Sealant CH-53	S-53	CE-53	November 1996	500
Adhesive CH-1	S-1	CE-1	November 1996	330
Adhesive CH-2	S-2	CE-2	November 1996	330
Adhesive CH-3	N/A	N/A	November 1996	55
Adhesive CH-22	S-22	CE-22	June 1998	2,000
Adhesive CH-25	S-25	CE-25	April 1999	750
Adhesive CH-26	S-26	CE-26	November 1996	1,500
Adhesive CH-27	S-27	CE-27	March 2001	1,522
Adhesive CH-28	S-28	CE-28	April 2003	500
Adhesive CH-29	S-29	CE-29	May 2005	3,000
Adhesive CH-40	S-40	CE-40	December 2006	1,000

<b>Churn Content ID</b>	<b>Stack ID</b>	<b>Condenser ID</b>	<b>Installation Date</b>	<b>Volume (gal)</b>
Adhesive CH-41	S-41	CE-41	2009	2,800
Adhesive CH-54	S-54	CE-54	November 1996	550
Adhesive CH-55	S-55	CE-55	November 1996	560
Adhesive CH-56	S-56	CE-56	November 1996	600

The following emission units (items (b) – (h)) and (i) - (x) are subject to the National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing Requirements [40 CFR Part 63, Subpart HHHHH]:

- (b) A five and three gallon adhesive canning line, with a maximum production of 8,291 lb/hr, with no VOC control, constructed in April 1997;
- (c) A one gallon adhesive canning line, with a maximum production of 3,238 lb/hr, with no VOC control, constructed in April 1997;
- (d) Two (2) tube filling systems: a double-head system, and a high-speed-single-head system constructed in February 1997. These systems have a combined maximum production capacity of 3,627 lbs/hr, with no VOC control;
- (e) A VOL storage tank, identified as ST-11, with a volume of less than 40 cubic meters but greater than 1,000 gallons, erected in 1987 but not yet constructed/used, with pressure venting to the atmosphere and no emission control;
- (f) Two (2) Volatile Organic Liquid (VOL) storage tanks, identified as ST-1 and ST-4, each with a volume of 95 cubic meters and a vapor pressure less than 15.0 kiloPascals, constructed in 1986, with pressure venting to the atmosphere and no emission control;
- (g) Six (6) VOL storage tanks, identified as ST-2, ST-3, ST-5, ST-6, ST-7 and ST-8, each with a volume of 57 cubic meters, constructed in 1986, with pressure venting to the atmosphere and no emission control;
- (h) Two (2) VOL storage tanks, identified as ST-9 and ST-10, each with a volume of less than 40 cubic meters but greater than 1,000 gallons, constructed in 1987, with pressure venting to the atmosphere and no emission control;

The following conditions from previous approvals have been determined to be no longer applicable. Therefore, they were not incorporated into this Part 70 Permit. Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. NSPS (40 CFR 60, Subpart Kb)

1. The requirements of 40 CFR 60.116b(a) and (b) have been incorporated into the state rules. Therefore, these tanks are no longer subject to the recordkeeping requirements of 40 CFR 60, Subpart Kb because pursuant to 40 CFR 60.110b(b), as amended in the October 15, 2003 Federal Register, these tanks are not subject to this rule. Therefore, all conditions in permit for the storage tanks have not been incorporated into this permit
- (i) Three (3) baghouse dust collectors, identified as DC-1, DC-2, and DC-3, designed to control particulate matter emissions from all facilities except for VOL storage tanks ST-1 through ST-11.
  - (j) One (1) 25 hp Shear Mixer, constructed in 2009, identified as E-25, with a maximum capacity of 150 gallons, using baghouse dust collector, identified as DC-7 as control.

- (k) One (1) 40 hp Shear Mixer, constructed in 2009, identified as E-40, with a maximum capacity of 500 gallons, using baghouse dust collector, identified as DC-7 as control.
- (l) One (1) 75 hp Shear Mixer, constructed in 2009, identified as E-75, with a maximum capacity of 500 gallons, using baghouse dust collector, identified as DC-7 as control.
- (m) One (1) Ross process vessel, constructed in 2009, identified as E-20, with a maximum capacity of 150 gallons, using baghouse dust collector, identified as DC-7 as control.
- (n) One (1) Ross process vessel, constructed in 2009, identified as E-10, with a maximum capacity of 40 gallons, using baghouse dust collector, identified as DC-7 as control.
- (o) One (1) process vessel, constructed in 2009, identified as R-1, with a maximum capacity of 1,000 gallons, using baghouse dust collector, identified as DC-7DC-7 as control.
- (p) One (1) process vessel, constructed in 2009, identified as R-2, with a maximum capacity of 1,000 gallons, using baghouse dust collector, identified as DC-7 as control.
- (q) One (1) process vessel, constructed in 2009, identified as R-3, with a maximum capacity of 50 gallons, using baghouse dust collector, identified as DC-7 as control.
- (r) One (1) process vessel, constructed in 2009, identified as R-4, with a maximum capacity of 250 gallons, using baghouse dust collector, identified as DC-7 as control.
- (s) One (1) process vessel, constructed in 2009, identified as R-5, with a maximum capacity of 250 gallons, using baghouse dust collector, identified as DC-7 as control.
- (t) One (1) process vessel, constructed in 2009, identified as R-7, with a maximum capacity of 750 gallons, using baghouse dust collector, identified as DC-7 as control.
- (u) One (1) process vessel, constructed in 2009, identified as R-8, with a maximum capacity of 250 gallons, using baghouse dust collector, identified as DC-7 as control.
- (v) One (1) process vessel, constructed in 2009, identified as R-9, with a maximum capacity of 1,000 gallons, using baghouse dust collector, identified as DC-7 as control.
- (w) Three (3) storage tanks, constructed in 2009, identified as ST-15, ST-16 and ST-17, each with a maximum capacity of 8,000 gallons.
- (x) Two (2) baghouse dust collectors, identified as DC-7, and DC-8.

A.3 Specifically Regulated Insignificant Activities  
[326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]

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This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Two (2) natural gas fired boilers, each installed in February 1997, and identified as B-1 and B-2, each rated at 1.68 million British Thermal Units per hour (MMBtu/hr), and exhausting to stacks SB-1 and SB-2, respectively. [326 IAC 6-2-4];
- (b) Part Cleaner (Churn 2, 36x15x10); 20 gallon, constructed after 1980. [326 IAC 8-3-2][326 IAC 8-3-5];

- (c) Part Cleaner (Churn 8, 36x15x10); 20 gallon, constructed after 1980. [326 IAC 8-3-2][326 IAC 8-3-5];
- (d) Part Cleaner (Churn 53, 36x15x10); 20 gallon, constructed after 1980. [326 IAC 8-3-2][326 IAC 8-3-5];
- (e) Part Cleaner (55 Gallon Prosys press, 36x15x10); 20 gallon, constructed after 1980. [326 IAC 8-3-2][326 IAC 8-3-5];
- (f) Part Cleaner (Maintenance Shop, 36x15x10); 20 gallon, constructed after 1980. [326 IAC 8-3-2][326 IAC 8-3-5];
- (g) Part Cleaner (Maintenance Shop, 36x15x10, galvanized finish); 20 gallon, constructed after 1980. [326 IAC 8-3-2][326 IAC 8-3-5]; and
- (h) Part Cleaner (Maintenance Shop, 70x15x10); 40 gallon, constructed after 1980. [326 IAC 8-3-2][326 IAC 8-3-5].

The following insignificant activities (items (i) – o)) are subject to the National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing Requirements [40 CFR Part 63, Subpart HHHHH]:

- (i) Volatile Organic Compound (VOC) and Hazardous Air Pollution (HAP) storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons;
- (j) Any unit emitting greater than 1 pound per day but less than 12.5 pounds per day or 2.5 ton per year of any combination of HAPs, including:  
  
Piping losses using standard SOCMF factors for non-leaking pipes, valves, and pumps for raw materials in VOL storage tanks: ST-1, ST-4, ST-2, ST-3, ST-5, ST-6, ST-7, ST-8, ST-9, ST-10, ST-11, ST-12, and ST-13, and holding tanks: T1, T2, T3, T4, T5, T7, T9, T10, T11;
- (k) The following adhesive holding tanks, each with the potential to emit (PTE) of less than 1 ton single HAP/year, less than 2.5 tons of a combination of HAPs/year, and less than 10 tons VOC/year, with uncontrolled emissions from conservation vents:

<b>Holding Tank Content, ID</b>	<b>Installation Date</b>	<b>Maximum Capacity (gal)</b>
Adhesive T-1	January 1997	6,000
Adhesive T-2	January 1997	6,000
Adhesive T-3	January 1997	3,000
Adhesive T-4	January 1997	3,000
Adhesive T-5	January 1997	3,000
Adhesive T-9	January 1997	3,000

The adhesive holding tanks have a combined throughput of 11,529 lbs/hr;

- (l) Two (2) sealant holding tanks, identified as T-10 and T-11, each with a volume of 3,000 gallons, each with the potential to emit (PTE) of less than 1 ton single HAP/year, less than 2.5 tons of a combination of HAPs/year, and less than 10 tons VOC/year, which to date have not been installed;
- (m) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks,

- and fluid handling equipment;
- (n) A VOL storage tank, identified as ST-12, with a volume of less than 40 cubic meters but greater than 1,000 gallons, with pressure venting to the atmosphere and no emission control;
- (o) Activities with VOC emissions equal to or less than 3 lbs/hour or 15 lbs/day, including:
  - (1) A manually operated five/fifty-five gallon sealant pail/drum line, with a maximum production capacity of 1,914 lb/hr, constructed in 1997;
  - (2) A manually operated five/fifty-five gallon adhesive pail/drum line, with a maximum production capacity of 1,820 lb/hr, constructed in 1997.
  - (3) Three (3) "post" churns, producing both solvent and adhesive materials, permitted for construction in 2007, identified as W-5, W-20, and W-70A. These churns do not have nitrogen blanket purging systems.
  - (4) One (1) 750-gallon water-based adhesive mixing churn, identified as W-750, with a maximum capacity of 6,600 pounds of water-based adhesives per hour, constructed in 2008; and
  - (5) One (1) 550-gallon water-based adhesive mixing churn, identified as W-550, with a maximum capacity of 4,800 pounds of water-based adhesives per hour, constructed in 2008.
- (p) Natural gas-fired combustion sources with heat input equal to or less than ten (10) MMBtu/hr, including:
  - (1) Two air make-up units identified as AMU-1 & 2, each rated at 1.69 MMBtu/hr and exhausting to separate stacks; and
  - (2) Twenty-five natural gas fired forced air heating units, each rated at 0.4 MMBtu/hr.
- (q) Application of oils, greases, lubricants or other non-volatile materials applied as temporary protective coating;
- (r) Closed loop heating and cooling systems;
- (s) Solvent recycling systems with batch capacity less than or equal to 100 gallons;
- (t) Water based adhesives that are less than or equal to 5% by volume of VOCs excluding HAPs;
- (u) Heat exchanger cleaning and repair;
- (v) Process vessel degassing and cleaning to prepare for internal repairs;
- (w) Paved and unpaved roads and parking lots with public access;
- (x) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower;
- (y) A laboratory as defined in 326 IAC 2-7-1(20)(C);

- (z) A one-gallon, water-based sealant canning line, constructed in March 1997, with a PTE of less than 5 tons PM (particulate matter)/year;
- (aa) A 465 gallon water-based adhesive mixing churn, identified as W200, with a PTE of less than 5 tons PM (particulate matter)/year, constructed in 1997.
- (bb) A 1050 gallon water-based adhesive mixing churn, identified as W300, with a PTE of less than 5 tons PM (particulate matter)/year, constructed in 1997.
- (cc) A 500 gallon Non-Solvent, Liquid Rubber Sealant Mixing Churn, identified as CH-52, constructed in 1997.
- (dd) One (1) 350-gallon water-based adhesive mixing churn, identified as W-400, with a maximum capacity of 560 pounds of water-based adhesives per hour. The PTE is less than 5 tons PM (particulate matter)/year, constructed in 2001.
- (ee) One (1) parachlorobenzotrifluoride (PCBTF) storage tank, approved for construction in 2009, identified as ST-13, with a maximum storage capacity of 20,000 gallons, emissions are uncontrolled.
- (ff) One (1) tert-butyl acetate storage tank, approved for construction in 2009, identified as ST-14, with a maximum storage capacity of 35,000 gallons, emissions are uncontrolled.
- (gg) Two (2) solvent recovery stills, approved for construction in 2009.

Tert-butyl acetate and PCBTF are exempt VOCs and do not contribute to VOC / HAP emissions. ST-13, ST-14 and the solvent recovery still are insignificant activities without applicable rule and will not be incorporated into the Part 70 Operating Permit.

- (hh) One (1) trash compactor constructed in 2009 is connected to the baghouse dust collector DC-8. The trash compactor is used to compact 1,075 cubic yards of trash annually from the facility. The trash is a mix of paper, cardboard and other non-hazardous solid waste material.
- (ii) The following thirteen (13) adhesive and sealant churns, installed in 2006, used to produce water based materials. Each churn will run a maximum of one (1) batch per day.

Churn ID	Stack ID	Volume (gal)
W-100	EF-3	334
W-500	EF-3	979
W-600	EF-3	1014
W-700	EF-3	1500
W-800	EF-3	2000
W-900	EF-3	1650
W-1100 (Casein - 2)	EF-3	1100
W-5 (Air Mixers)	EF-3	61
W-10 (10 HP Post)	EF-3	55
W-15 (15 HP Post)	EF-3	300
W-30 (30 HP Post)	EF-3	500
W-45 (Hochmeyer)	EF-3	45
W-55 (55 Drum)	EF-3	55

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

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This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

## SECTION B GENERAL CONDITIONS

### B.1 Definitions [326 IAC 2-7-1]

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Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

### B.2 Permit Term [326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)][IC 13-15-3-6(a)]

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- (a) The Part 70 Operating Permit, T141-30439-00146, is issued for a fixed term of five (5) years, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

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

### B.4 Enforceability [326 IAC 2-7-7] [IC 13-17-12]

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

### B.5 Severability [326 IAC 2-7-5(5)]

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

### B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

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

### B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

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- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

### B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

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- (a) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:

- (i) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(34), and
- (ii) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) A "responsible official" is defined at 326 IAC 2-7-1(34).

**B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]**

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- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than April 15 of each year to:

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

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

- (b) The annual compliance certification report 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 on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was continuous or intermittent;
  - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
  - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)][326 IAC 2-7-6(1) and (6)][326 IAC 1-6-3]

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- (a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

- (b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

**B.11 Emergency Provisions [326 IAC 2-7-16]**

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- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, no later than four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or  
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)  
Facsimile Number: 317-233-6865  
Northern Regional Office phone: (574) 245-4870; fax: (574) 245-4877.

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

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

No later than two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
  - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
  - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
  - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
  - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

**B.13** Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]

- (a) All terms and conditions of permits established prior to T141-30439-00146 and issued pursuant to permitting programs approved into the state implementation plan have been either:
  - (1) incorporated as originally stated,
  - (2) revised under 326 IAC 2-7-10.5, or
  - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

**B.14** Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

**B.15** Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit.

[326 IAC 2-7-5(6)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
  - (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.16 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permit Administration and Support Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

- (b) A timely renewal application is one that is:
  - (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
  - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if,

subsequent to the completeness determination, the Permittee fails to submit by the reasonable deadline specified, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

**B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]**

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(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management  
Permit Administration and Support Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

**B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]**

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(a) No Part 70 permit revision or notice shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

**B.19 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]**

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(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b),(c), or (e) without a prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
- (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management

Permit Administration and Support Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b),(c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]  
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]  
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

**B.20 Source Modification Requirement [326 IAC 2-7-10.5]**

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A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

**B.21 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]**

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

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

**B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]**

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- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

Indiana Department of Environmental Management  
Permit Administration and Support Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

## SECTION C SOURCE OPERATION CONDITIONS

Entire Source

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

**C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]**

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

**C.2 Opacity [326 IAC 5-1]**

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

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

**C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]**

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

**C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]**

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

**C.5 Fugitive Dust Emissions [326 IAC 6-4]**

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

**C.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]**

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

- (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
- (2) If there is a change in the following:
  - (A) Asbestos removal or demolition start date;
  - (B) Removal or demolition contractor; or
  - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**  
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**  
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Licensed Asbestos Inspector**  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

### **Testing Requirements [326 IAC 2-7-6(1)]**

#### **C.7 Performance Testing [326 IAC 3-6]**

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- (a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period. The extension request submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

##### **C.8 Compliance Requirements [326 IAC 2-1.1-11]**

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The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

#### **Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]**

##### **C.9 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]**

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Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or of initial start-up, whichever is later, to begin such monitoring. If due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance or the date of initial startup, whichever is later, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

**C.10 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

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- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

**Corrective Actions and Response Steps [326 IAC 2-7-5][326 IAC 2-7-6]**

**C.11 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

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Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

**C.12 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]**

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If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

**C.13 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]**

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Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

- (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
  - (1) initial inspection and evaluation;
  - (2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or
  - (3) any necessary follow-up actions to return operation to normal or usual manner of operation.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not necessary limited to, the following:

- (1) monitoring results;
  - (2) review of operation and maintenance procedures and records; and/or
  - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall record the reasonable response steps taken.

**C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]**

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.
- (b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

**C.15 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]**

Pursuant to 326 IAC 2-6-3(b)(1), starting in 2004 and every three (3) years thereafter, the Permittee shall submit no later than ~~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:

- (a) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
- (b) Indicate estimated actual emissions of 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 purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-50 IGCN 1003  
Indianapolis, Indiana 46204-2251

The emission statement does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

**C.16 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]**

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- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

**C.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]**

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- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (b) The address for report submittal is:  
  
Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, any notice, report, or other submission 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 on or before the date it is due.
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

**Stratospheric Ozone Protection**

**C.18 Compliance with 40 CFR 82 and 326 IAC 22-1**

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Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with applicable standards for recycling and emissions reduction.

**SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS**

**Emissions Unit Description [326 IAC 2-7-5(15)]: Adhesive and Sealant Churns**

- (a) The following adhesive and sealant churns, each containing a nitrogen blanket purging system which is integral to the churning process, each exhausting to its respective vent and equipped with its respective condenser for VOC control. These emissions units are affected units under 40 CFR63, Subpart HHHHH:

Churn Content ID	Stack ID	Condenser ID	Installation Date	Volume (gal)
Sealant CH-7	S-7	CE-7	November 96	210
Sealant CH-8	S-8	CE-8	November 96	210
Sealant CH-9	S-9	CE-9	June 98	900
Sealant CH-10	S-10	CE-10	June 98	900
Sealant CH-53	S-53	CE-53	November 96	500
Adhesive CH-1	S-1	CE-1	November 96	330
Adhesive CH-2	S-2	CE-2	November 96	330
Adhesive CH-3	N/A	N/A	November 96	55
Adhesive CH-22	S-22	CE-22	June 98	2,000
Adhesive CH-25	S-25	CE-25	April 99	750
Adhesive CH-26	S-26	CE-26	November 96	1,500
Adhesive CH-27	S-27	CE-27	March 2001	1,522
Adhesive CH-28	S-28	CE-28	April 03	500
Adhesive CH-29	S-29	CE-29	May 2005	3,000
Adhesive CH-40	S-40	CE-40	December 2006	1,000
Adhesive CH-41	S-41	CE-41	2009	2,800
Adhesive CH-54	S-54	CE-54	November 96	550
Adhesive CH-55	S-55	CE-55	November 96	560
Adhesive CH-56	S-56	CE-56	November 1996	600

The sealant churns above have a combined maximum production capacity of 1,230 lbs/hr, and the adhesive churns have a combined maximum production capacity of 11,833 lbs/hr. The source will utilize a cartridge type dust collector, identified as DC-3, with 18 cartridges to control PM emissions from sealant churns CH-7, CH-8, and adhesive churns CH-1, CH-2, CH-3, CH-22, CH25, CH-26, CH-40, Ch-41, CH-54, CH-55, and CH-56. The dust collector flowrate is 12,000 cubic feet per minute (cfm).

The following emission units (item b-o) are an affected unit under 40 CFR 63, Subpart HHHHH:

- (b) A five and three gallon adhesive canning line, with a maximum production of 8,291 lb/hr, with no VOC control, constructed in April 1997.
- (c) One (1) 25 hp Shear Mixer, to be constructed in 2009, identified as E-25, with a maximum capacity of 150 gallons, using baghouse dust collector, identified as DC-7 as control.
- (d) One (1) 40 hp Shear Mixer, to be constructed in 2009, identified as E-40, with a maximum capacity of 500 gallons, using baghouse dust collector, identified as DC-7 as control.
- (e) One (1) 75 hp Shear Mixer, to be constructed in 2009, identified as E-75, with a maximum capacity of 500 gallons, using baghouse dust collector, identified as DC-7 as control.
- (f) One (1) Ross process vessel, to be constructed in 2009, identified as E-20, with a maximum capacity of 150 gallons, using baghouse dust collector, identified as DC-7 as control.

- (g) One (1) Ross process vessel, to be constructed in 2009, identified as E-10, with a maximum capacity of 40 gallons, using baghouse dust collector, identified as DC-7 as control.
- (h) One (1) process vessel, to be constructed in 2009, identified as R-1, with a maximum capacity of 1,000 gallons, using baghouse dust collector, identified as DC-7 as control.
- (i) One (1) process vessel, to be constructed in 2009, identified as R-2, with a maximum capacity of 1,000 gallons, using baghouse dust collector, identified as DC-7 as control.
- (j) One (1) process vessel, to be constructed in 2009, identified as R-3, with a maximum capacity of 50 gallons, using baghouse dust collector, identified as DC-7 as control.
- (k) One (1) process vessel, to be constructed in 2009, identified as R-4, with a maximum capacity of 250 gallons, using baghouse dust collector, identified as DC-7 as control.
- (l) One (1) process vessel, to be constructed in 2009, identified as R-5, with a maximum capacity of 250 gallons, using baghouse dust collector, identified as DC-7 as control.
- (m) One (1) process vessel, to be constructed in 2009, identified as R-7, with a maximum capacity of 750 gallons, using baghouse dust collector, identified as DC-7 as control.
- (n) One (1) process vessel, to be constructed in 2009, identified as R-8, with a maximum capacity of 250 gallons, using baghouse dust collector, identified as DC-7 as control.
- (o) One (1) process vessel, to be constructed in 2009, identified as R-9, with a maximum capacity of 1,000 gallons, using baghouse dust collector, identified as DC-7 as control.

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

### **Emission Limitations and Standards [326 IAC 2-7-5(1)]**

#### **D.1.1 VOC Reduction Minor Limit [326 IAC 8-1-6]**

- (a) Each sealant and adhesive churn shall not exceed the corresponding number of daily batches and nitrogen purge times listed in the table below. Compliance with these limits shall ensure the VOC emissions from each churn do not exceed twenty-five (25) tons per year each, rendering the requirements of 326 IAC 8-1-6 (BACT) not applicable to the five (5) sealant churns and the thirteen (13) adhesive churns listed in the table below.

Emission Unit	Batches Per Day	Purge Time (Min)	VOC Emission Factor (lb/hr of purge)
<b>Sealant Churns</b>			
CH-7	1	45	13.93
CH-8	1	45	13.93
CH-9	1	45	13.93
CH-10	1	45	13.93
CH-53	1	45	13.93
<b>Adhesive Churns</b>			
CH-1	1	10	61.65
CH-2	1	10	61.65
CH-22	1	55	61.65
CH-25	6	9.5	61.65
CH-26	6	9.5	61.65
CH-27	1	45	61.65
CH-28	1	45	61.65
CH-29	1	45	61.65
CH-40	1	45	61.65
CH-41	6	14	61.65
CH-54	1	10	61.65
CH-55	6	9.5	61.65
CH-56	6	9.5	61.65

- (b) VOC input to each of the five and three gallon adhesive canning process shall be limited to less than 19,111 tons of VOC per 12 consecutive month period. This VOC input limitation will limit VOC emissions from the five and three gallon adhesive canning line to less than 25 tons per 12 consecutive month period rendering the requirements of 326 IAC 8-1-6 not applicable.

**D.1.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

A Preventive Maintenance Plan (PMP) is required for this unit and its control device. Section B - Preventive Maintenance Plan contains the Permittee's obligations with regard to the preventive maintenance plan required by this condition.

**Compliance Determination Requirements [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]**

**D.1.3 Volatile Organic Compound (VOC) Control**

In order to ensure compliance with Condition D.1.1, the nitrogen purging systems, which are integral to the process and provide enclosure during the churning process, except during intermittent periods of nitrogen purging, and the condensers for the solvent churns shall be in operation and control emissions from the solvent-based production processes at all times the solvent-based production processes are in operation.

**D.1.4 Volatile Organic Compounds (VOC) [326 IAC 8-1-4][326 IAC 8-1-2(a)]**

Compliance with the VOC content and usage limitations contained in Condition D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied", or Material Safety Data Sheets (MSDS), and "as applied" VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using

Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

#### D.1.5 Solvent-based Churns

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Adhesive churns CH-1, CH-2, CH-22, CH-25, CH-26, CH-27, CH-28, CH-29, CH-40, CH-41, CH-54, CH55, CH-56, and solvent-based sealant churns CH-9, CH-10, CH-7, CH-8, CH-53, each of which contain a nitrogen blanket purging system which is integral to the mixing process, have applicable compliance monitoring conditions as specified below:

- (a) Once each calendar year, the source shall observe and record the number of minutes during an entire cycle of mixing that each adhesive churn and each sealant churn purges when mixing a worst-case formula for that churn.
- (b) Such records shall include identification of the churn, identification of formula, batch size, total number of hours churned, and total number of minutes that purging occurred.

These compliance determination conditions are necessary to ensure that maximum total minutes for batch purging shall not exceed those listed in Condition D.1.1 (a) to ensure the potential VOC emission will remain less than 25 tons/year from each churn and 326 IAC 8-1-6 (BACT) will not apply.

#### D.1.6 Testing Requirements [326 IAC 2-7-6(1)][326 IAC 2-1.1-11]

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Within 180 days of startup of adhesive churn CH-41 and in order to demonstrate compliance with Condition D.1.1(a), the Permittee shall test a worst case adhesive churn and a worst case sealant churn to verify emission factors, utilizing methods as approved by the Commissioner.

This testing shall be conducted utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

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

#### D.1.7 Record Keeping Requirements

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- (a) To document the compliance status with Condition D.1.1, the Permittee shall record the VOC input to the five and three gallon adhesive canning process. Records shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and the VOC emission limits established for the five and three gallon adhesive canning process in Condition D.1.1(b).
- (b) To document the compliance status with Condition D.1.1, the Permittee shall maintain the following records. Records shall be complete and sufficient to establish compliance with the VOC emission limits established for each of the adhesive and sealant churns in Condition D.1.2.
  - (1) The purging time per batch and the number of batches per day for each churn;
  - (2) The number of batches per month for each churn; and
  - (3) Total VOC emissions per month for each churn.
- (c) Section C - General Record Keeping Requirements, contains the Permittee's obligations with regard to the record keeping required by this condition.

#### D.1.8 Reporting Requirements

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A quarterly report summary of the information to document the compliance status with Condition D.1.1 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days following the end of each calendar quarter. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). Section C - General Reporting Requirements contains the Permittee's obligations with regard to the reporting required by this condition.

**SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS**

**Emissions Unit Description [326 IAC 2-7-5(15)]: Insignificant Activities**

- (a) Two (2) natural gas fired boilers, each installed in February 1997, and identified as B-1 and B-2, each rated at 1.68 million British Thermal Units per hour (MMBtu/hr), and exhausting to stacks SB-1 and SB-2, respectively (326 IAC 6-2-4 (Particulate Emissions Limitations for Sources of Indirect Heating)).
- (b) One (1) 550-gallon water-based adhesive mixing churn, identified as W-550, with a maximum capacity of 4,800 pounds of water-based adhesives per hour, constructed in 2008.
- (c) One (1) trash compactor constructed in 2009 is connected to the baghouse dust collector DC-8. The trash compactor is used to compact 1,075 cubic yards of trash annually from the facility. The trash is a mix of paper, cardboard and other non-hazardous solid waste material.

(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.2.1 Particulate Emission Limitations for Facilities Specified in 326 IAC 6-2-1(d) [326 IAC 6-2-4]**

Pursuant to 326 IAC 6-2-4(a), for boilers with a maximum operating capacity rating of less than 10 MMBtu per hour and constructed after September 21, 1983, PM emissions shall not exceed 0.6 pounds per MMBtu heat input. Therefore, the PM emissions from each of the two (2) boilers shall be limited to 0.60 pounds per MMBtu heat input.

**D.2.2 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]**

Pursuant to 326 IAC 6-3-2 the particulate matter (PM) from the water based churn identified as W550, and the trash compactor shall be limited by the following:

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

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

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

Units	Process Wt. Rate (tons/hr)	PTE (PM) (lb/hr)	Allowable PM Emission Rate 326 IAC 6-3-2 (lb/hr) $E = 4.10 P^{0.67}$
W550	0.062	<b>1.235</b>	<b>0.636</b>
Trash Compactor	0.311	<b>0.623</b>	<b>1.88</b>

### SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

#### Emissions Unit Description [326 IAC 2-7-5(15)]: Insignificant Activities

- (a) Part Cleaner (Churn 2, 36x15x10); 20 gallon, constructed after 1980. [326 IAC 8-3-2] [326 IAC 8-3-5];
- (b) Part Cleaner (Churn 8, 36x15x10); 20 gallon, constructed after 1980. [326 IAC 8-3-2] [326 IAC 8-3-5];
- (c) Part Cleaner (Churn 53, 36x15x10); 20 gallon, constructed after 1980. [326 IAC 8-3-2] [326 IAC 8-3-5];
- (d) Part Cleaner (55 Gallon Prosys press, 36x15x10); 20 gallon, constructed after 1980. [326 IAC 8-3-2][326 IAC 8-3-5];
- (e) Part Cleaner (Maintenance Shop, 36x15x10); 20 gallon, constructed after 1980. [326 IAC 8-3-2][326 IAC 8-3-5];
- (f) Part Cleaner (Maintenance Shop, 36x15x10, galvanized finish); 20 gallon, constructed after 1980. [326 IAC 8-3-2][326 IAC 8-3-5]; and
- (g) Part Cleaner (Maintenance Shop, 70x15x10); 40 gallon, constructed after 1980. [326 IAC 8-3-2][326 IAC 8-3-5].

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

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

##### D.3.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2 [326 IAC 8-3-5]

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

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

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

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

- (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
  - (B) The solvent is agitated; or
  - (C) The solvent is heated.
- (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
- (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
- (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
- (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
  - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
  - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
  - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
  - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

**Section E.1 EMISSIONS UNIT OPERATION CONDITIONS**

**Emissions Unit Description [326 IAC 2-7-5(15)]: Process Vessels, Storage Tanks for Feedstocks or Products and Components**

- (a) The following adhesive and sealant churns, each containing a nitrogen blanket purging system which is integral to the churning process, each exhausting to its respective vent and equipped with its respective condenser for VOC control. These emissions units are affected units under 40 CFR 63, Subpart HHHHH:

Churn Content ID	Stack ID	Condenser ID	Installation Date	Volume (gal)
Sealant CH-7	S-7	CE-7	November 96	210
Sealant CH-8	S-8	CE-8	November 96	210
Sealant CH-9	S-9	CE-9	June 98	900
Sealant CH-10	S-10	CE-10	June 98	900
Sealant CH-53	S-53	CE-53	November 96	500
Adhesive CH-1	S-1	CE-1	November 96	330
Adhesive CH-2	S-2	CE-2	November 96	330
Adhesive CH-3	N/A	N/A	November 96	55
Adhesive CH-22	S-22	CE-22	June 98	2,000
Adhesive CH-25	S-25	CE-25	April 99	750
Adhesive CH-26	S-26	CE-26	November 96	1,500
Adhesive CH-27	S-27	CE-27	March 2001	1,522
Adhesive CH-28	S-28	CE-28	April 03	500
Adhesive CH-29	S-29	CE-29	May 2005	3,000
Adhesive CH-40	S-40	CE-40	December 2006	1,000
Adhesive CH-41	S-41	CE-41	2009	2,800
Adhesive CH-54	S-54	CE-54	November 96	550
Adhesive CH-55	S-55	CE-55	November 96	560
Adhesive CH-56	S-56	CE-56	November 1996	600

The following emission units (items (b) – (h)) are subject to the National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing Requirements [40 CFR Part 63, Subpart HHHHH]:

- (b) A five and three gallon adhesive canning line, with a maximum production of 8,291 lb/hr, with no VOC control, constructed in April 1997;
- (c) A one gallon adhesive canning line, with a maximum production of 3,238 lb/hr, with no VOC control, constructed in April 1997;
- (d) Two (2) tube filling systems: a double-head system, and a high-speed-single-head system. These systems have a combined maximum production capacity of 3,627 lbs/hr, with no VOC control;
- (e) A VOL storage tank, identified as ST-11, with a volume of less than 40 cubic meters but greater than 1,000 gallons, erected in 1987 but not yet constructed/used, with pressure venting to the atmosphere and no emission control;
- (f) Two (2) Volatile Organic Liquid (VOL) storage tanks, identified as ST-1 and ST-4, each with a volume of 95 cubic meters and a vapor pressure less than 15.0 kiloPascals, constructed in 1986, with pressure venting to the atmosphere and no emission control;
- (g) Six (6) VOL storage tanks, identified as ST-2, ST-3, ST-5, ST-6, ST-7 and ST-8, each with a volume of 57 cubic meters, constructed in 1986, with pressure venting to the

atmosphere and no emission control;

- (h) Two (2) VOL storage tanks, identified as ST-9 and ST-10, each with a volume of less than 40 cubic meters but greater than 1,000 gallons, constructed in 1987, with pressure venting to the atmosphere and no emission control;
- (i) Volatile Organic Compound (VOC) and Hazardous Air Pollution (HAP) storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons;
- (j) Any unit emitting greater than 1 pound per day but less than 12.5 pounds per day or 2.5 ton per year of any combination of HAPs, including:

Piping losses using standard SOCOMI factors for non-leaking pipes, valves, and pumps for raw materials in VOL storage tanks: ST-1, ST-4, ST-2, ST-3, ST-5, ST-6, ST-7, ST-8, ST-9, ST-10, ST-11, ST-12 and ST-13, and holding tanks: T1, T2, T3, T4, T5, T7, T9, T10, T11;

- (k) The following adhesive holding tanks, each with the potential to emit (PTE) of less than 1 ton single HAP/year, less than 2.5 tons of a combination of HAPs/year, and less than 10 tons VOC/year, with uncontrolled emissions from conservation vents:

<b>Holding Tank Content, ID</b>	<b>Installation Date</b>	<b>Maximum Capacity (gal)</b>
Adhesive T-1	January 1997	6,000
Adhesive T-2	January 1997	6,000
Adhesive T-3	January 1997	3,000
Adhesive T-4	January 1997	3,000
Adhesive T-5	January 1997	3,000
Adhesive T-9	January 1997	3,000

The adhesive holding tanks have a combined throughput of 11,529 lbs/hr;

- (l) Two (2) sealant holding tanks, identified as T-10 and T-11, each with a volume of 3,000 gallons, each with the potential to emit (PTE) of less than 1 ton single HAP/year, less than 2.5 tons of a combination of HAPs/year, and less than 10 tons VOC/year, which to date have not been installed;
- (m) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment;
- (n) A VOL storage tank, identified as ST-12, with a volume of less than 40 cubic meters but greater than 1,000 gallons, with pressure venting to the atmosphere and no emission control;
- (o) Activities with VOC emissions equal to or less than 3 lbs/hour or 15 lbs/day, including:
  - (1) A manually operated five/fifty-five gallon sealant pail/drum line, with a maximum production capacity of 1,914 lb/hr, constructed in 1997;
  - (2) A manually operated five/fifty-five gallon adhesive pail/drum line, with a maximum production capacity of 1,820 lb/hr, constructed in 1997.
  - (3) Three (3) "post" churns, producing both solvent and adhesive materials, permitted for construction in 2007, identified as W-5, W-20, and W-70A. These churns do not have nitrogen blanket purging systems.

- (4) One (1) 750-gallon water-based adhesive mixing churn, identified as W-750, with a maximum capacity of 6,600 pounds of water-based adhesives per hour, constructed in 2008; and
- (5) One (1) 550-gallon water-based adhesive mixing churn, identified as W-550 with a maximum capacity of 4,800 pounds of water-based adhesives per hour, constructed in 2008.
- (p) One (1) 25 hp Shear Mixer, constructed in 2009, identified as E-25, with a maximum capacity of 150 gallons, using baghouse dust collector, identified as DC-7 as control.
- (q) One (1) 40 hp Shear Mixer, constructed in 2009, identified as E-40, with a maximum capacity of 500 gallons, using baghouse dust collector, identified as DC-7 as control.
- (r) One (1) 75 hp Shear Mixer, constructed in 2009, identified as E-75, with a maximum capacity of 500 gallons, using baghouse dust collector, identified as DC-7 as control.
- (s) One (1) Ross process vessel, constructed in 2009, identified as E-20, with a maximum capacity of 150 gallons, using baghouse dust collector, identified as DC-7 as control.
- (t) One (1) Ross process vessel, constructed in 2009, identified as E-10, with a maximum capacity of 40 gallons, using baghouse dust collector, identified as DC-7 as control.
- (u) One (1) process vessel, constructed in 2009, identified as R-1, with a maximum capacity of 1,000 gallons, using baghouse dust collector, identified as DC-7 as control.
- (v) One (1) process vessel, constructed in 2009, identified as R-2, with a maximum capacity of 1,000 gallons, using baghouse dust collector, identified as DC-7 as control.
- (w) One (1) process vessel, constructed in 2009, identified as R-3, with a maximum capacity of 50 gallons, using baghouse dust collector, identified as DC-7 as control.
- (x) One (1) process vessel, constructed in 2009, identified as R-4, with a maximum capacity of 250 gallons, using baghouse dust collector, identified as DC-7 as control.
- (y) One (1) process vessel, constructed in 2009, identified as R-5, with a maximum capacity of 250 gallons, using baghouse dust collector, identified as DC-7 as control.
- (z) One (1) process vessel, constructed in 2009, identified as R-7, with a maximum capacity of 750 gallons, using baghouse dust collector, identified as DC-7 as control.
- (aa) One (1) process vessel, constructed in 2009, identified as R-8, with a maximum capacity of 250 gallons, using baghouse dust collector, identified as DC-7 as control.
- (bb) One (1) process vessel, constructed in 2009, identified as R-9, with a maximum capacity of 1,000 gallons, using baghouse dust collector, identified as DC-7 as control.
- (cc) Three (3) storage tanks, constructed in 2009, identified as ST-15, ST-16 and ST-17, each with a maximum capacity of 8,000 gallons.
- (dd) Two (2) baghouse dust collectors, identified as DC-7, and DC-8.

(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)]

### E.1.1 General Provisions Relating to NESHAP HHHHH [326 IAC 20-1][40 CFR 63, Subpart A]

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Pursuant to 40 CFR 63.8095, the Permittee shall comply with the general provisions of 40 CFR 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1-1, as specified in Table 10 of 40 CFR 63, Subpart HHHHH, in accordance with the schedule in 40 CFR 63, Subpart HHHHH.

### E.1.2 National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing [40 CFR 63, Subpart HHHHH]

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The Permittee which operates a stationary sealant and adhesive manufacturing plant, shall comply with the following provisions of 40 CFR 63, Subpart HHHHH (included as Attachment A of this permit), with a compliance date of December 11, 2006:

- (1) 40 CFR 63.7980
- (2) 40 CFR 63.7985(a)
- (3) 40 CFR 63.7985(a)(1)
- (4) 40 CFR 63.7985(a)(2)
- (5) 40 CFR 63.7985(a)(3)
- (6) 40 CFR 63.7985(a)(4)
- (7) 40 CFR 63.7985(b)
- (8) 40 CFR 63.7985(b)(1)
- (9) 40 CFR 63.7985(b)(2)
- (10) 40 CFR 63.7985(b)(3)
- (11) 40 CFR 63.7985(c)
- (12) 40 CFR 63.7985(d)(3)
- (13) 40 CFR 63.7990(a)
- (14) 40 CFR 63.7990(b)
- (15) 40 CFR 63.7995(b)
- (16) 40 CFR 63.7995(d)
- (17) 40 CFR 63.8000(a)
- (18) 40 CFR 63.8000(b)(1)
- (19) 40 CFR 63.8000(b)(2)
- (20) 40 CFR 63.8000(d)(1)
- (21) 40 CFR 63.8000(d)(6)
- (22) 40 CFR 63.8000(d)(7)
- (23) 40 CFR 63.8005(a)
- (24) 40 CFR 63.8005(c)
- (25) 40 CFR 63.8005(d)(1)
- (26) 40 CFR 63.8005(d)(2)
- (27) 40 CFR 63.8005(d)(3)
- (28) 40 CFR 63.8005(d)(4)
- (29) 40 CFR 63.8005(e)(1)
- (30) 40 CFR 63.8005(e)(2)
- (31) 40 CFR 63.8005(f)
- (32) 40 CFR 63.8010(a)
- (33) 40 CFR 63.8010(b)(1)
- (34) 40 CFR 63.8010(b)(2)
- (35) 40 CFR 63.8010(c)
- (36) 40 CFR 63.8010(d)
- (37) 40 CFR 63.8010(d)(1)
- (38) 40 CFR 63.8010(d)(2)
- (39) 40 CFR 63.8015(a)
- (40) 40 CFR 63.8015(d)

- (41) 40 CFR 63.8050(a)
- (42) 40 CFR 63.8050(b)(1)
- (43) 40 CFR 63.8050(b)(2)
- (44) 40 CFR 63.8050(c)
- (45) 40 CFR 63.8050(c)(1)
- (46) 40 CFR 63.8050(c)(1)(i)
- (47) 40 CFR 63.8050(c)(1)(ii)
- (48) 40 CFR 63.8050(c)(3)
- (49) 40 CFR 63.8050(c)(4)
- (50) 40 CFR 63.8050(d)(1)
- (51) 40 CFR 63.8050(d)(2)
- (52) 40 CFR 63.8050(e)
- (53) 40 CFR 63.8055(a)
- (54) 40 CFR 63.8055(b)
- (55) 40 CFR 63.8055(b)(1)
- (56) 40 CFR 63.8055(b)(2)
- (57) 40 CFR 63.8055(b)(3)
- (58) 40 CFR 63.8055(b)(4)
- (59) 40 CFR 63.8070(a)
- (60) 40 CFR 63.8070(b)(1)
- (61) 40 CFR 63.8070(c)
- (62) 40 CFR 63.8075(a)
- (63) 40 CFR 63.8075(b)
- (64) 40 CFR 63.8075(c)
- (65) 40 CFR 63.8075(d)(1)
- (66) 40 CFR 63.8075(d)(2)
- (67) 40 CFR 63.8075(d)(2)(i)
- (68) 40 CFR 63.8075(d)(2)(ii)
- (69) 40 CFR 63.8075(d)(2)(iii)
- (70) 40 CFR 63.8075(d)(2)(iv)
- (71) 40 CFR 63.8075(d)(2)(v)
- (72) 40 CFR 63.8075(e)(except for (e)(7))
- (73) 40 CFR 63.8080(a)
- (74) 40 CFR 63.8080(b)
- (75) 40 CFR 63.8080(c)
- (76) 40 CFR 63.8080(d)
- (77) 40 CFR 63.8080(f)
- (78) 40 CFR 63.8080(g)
- (79) 40 CFR 63.8095
- (80) 40 CFR 63.8100
- (81) 40 CFR 63.8105
- (82) Table 1- (2)(b)(iii)
- (83) Table 2- Group 1a (1)(a) and (1)(b)
- (84) Table 3- (1)(a), (1)(b), or (1)(c)
- (85) Table 9
- (86) Table 10

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE AND ENFORCEMENT BRANCH  
PART 70 OPERATING PERMIT  
CERTIFICATION**

Source Name: Royal Adhesives and Sealants, L.L.C.  
Source Address: 2001 West Washington Street, Indiana 46628-2032  
Part 70 Permit No.: T141-30439-00146

**This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.**

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify)
- Report (specify)
- Notification (specify)
- Affidavit (specify)
- Other (specify)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**  
**OFFICE OF AIR QUALITY**  
**COMPLIANCE AND ENFORCEMENT BRANCH**  
**100 North Senate Avenue**  
**MC 61-53 IGCN 1003**  
**Indianapolis, Indiana 46204-2251**  
**Phone: (317) 233-0178**  
**Fax: (317) 233-6865**

**PART 70 OPERATING PERMIT**  
**EMERGENCY OCCURRENCE REPORT**

Source Name: Royal Adhesives and Sealants, L.L.C.  
Source Address: 2001 West Washington Street,, Indiana 46628-2032  
Part 70 Permit No.: T141-30439-00146

**This form consists of 2 pages**

**Page 1 of 2**

- This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), no later than four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
  - The Permittee must submit notice in writing or by facsimile no later than two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

**Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency?    Y    N
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Date: \_\_\_\_\_

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

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

**Part 70 Quarterly Report**

Source Name: Royal Adhesives and Sealants, L.L.C.  
Source Address: 2001 West Washington Street,, Indiana 46628-2032  
Part 70 Permit No.: T141-30439-00146  
Facility: Five and three gallon adhesive canning line  
Parameter: VOC input  
Limit: VOC input to the five and three gallon adhesive canning process shall be limited to less than 19,111 tons each per 12 consecutive month period, with compliance determined at the end of each month.

QUARTER :

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.  
Deviation has been reported on:

Submitted by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF AIR QUALITY  
 COMPLIANCE AND ENFORCEMENT BRANCH  
 PART 70 OPERATING PERMIT  
 QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Royal Adhesives and Sealants, L.L.C.  
 Source Address: 2001 West Washington Street,, Indiana 46628-2032  
 Part 70 Permit No.: T141-30439-00146

**Months: \_\_\_\_\_ to \_\_\_\_\_ Year: \_\_\_\_\_**

<p>This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
<b>Permit Requirement (specify permit condition #)</b>	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement (specify permit condition #)</b>	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

Form Completed by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Date: \_\_\_\_\_

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

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

**Attachment A - 40 CFR 63, Subpart HHHHH**

**National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing**

<b>Source Description and Location</b>
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Source Name:	Royal Adhesives and Sealants, L.L.C.
Source Location:	2001 West Washington Street South Bend, Indiana 46628
County:	St. Joseph
SIC Code:	2891
Permit Renewal No.:	T 141-30439-00146
Permit Reviewer:	Anh Nguyen

<b>Complete Text of 40 CFR 63, Subpart HHHHH</b>
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**Subpart HHHHH—**

**National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing**

**Source:** 68 FR 69185, Dec. 11, 2003, unless otherwise noted.

**What This Subpart Covers**

**§ 63.7980 What is the purpose of this subpart?**

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for miscellaneous coating manufacturing. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limits, operating limits, and work practice standards.

**§ 63.7985 Am I subject to the requirements in this subpart?**

- (a) You are subject to the requirements in this subpart if you own or operate miscellaneous coating manufacturing operations, as defined in paragraph (b) of this section, that meet the conditions specified in paragraphs (a)(1) through (4) of this section.
  - (1) Are located at or are part of a major source of hazardous air pollutants (HAP) emissions, as defined in section 112(a) of the Clean Air Act (CAA).
  - (2) Manufacture coatings as defined in §63.8105.
  - (3) Process, use, or produce HAP.
  - (4) Are not part of an affected source under another subpart of this part 63.
- (b) Miscellaneous coating manufacturing operations include the facilitywide collection of equipment described in paragraphs (b)(1) through (4) of this section that is used to manufacture coatings as defined in §63.8105. Miscellaneous coating manufacturing operations also include cleaning operations.
  - (1) Process vessels.

- (2) Storage tanks for feedstocks and products.
  - (3) Components such as pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, and instrumentation systems.
  - (4) Wastewater tanks and transfer racks.
- (c) If the predominant use of a transfer rack loading arm or storage tank (including storage tanks in series) is associated with miscellaneous coating manufacturing, and the loading arm or storage tank is not part of an affected source under a subpart of this part 63, then you must assign the loading arm or storage tank to the miscellaneous coating manufacturing operations. If the predominant use cannot be determined, and the loading arm or storage tank is not part of an affected source under a subpart of this part 63, then you must assign the loading arm or storage tank to the miscellaneous coating manufacturing operations. If the use varies from year to year, then you must base the determination on the utilization that occurred during the year preceding December 11, 2003 or, if the loading arm or storage tank was not in operation during that year, you must base the use on the expected use for the first 5-year period after startup. You must include the determination in the notification of compliance status report specified in §63.8075(d). You must redetermine the predominant use at least once every 5 years after the compliance date.
- (d) The requirements for miscellaneous coating manufacturing sources in this subpart do not apply to operations described in paragraphs (d)(1) through (5) of this section.
- (1) Research and development facilities, as defined in section 112(c)(7) of the CAA.
  - (2) The affiliated operations located at an affected source under subparts GG (National Emission Standards for Aerospace Manufacturing and Rework Facilities), KK (National Emission Standards for the Printing and Publishing Industry), JJJJ (NESHAP: Paper and Other Web Coating), future MMMM (National Emission Standards for Miscellaneous Metal Parts and Products Surface Coating Operations) and SSSS (NESHAP: Surface Coating of Metal Coil) of 40 CFR part 63. Affiliated operations include, but are not limited to, mixing or dissolving of coating ingredients; coating mixing for viscosity adjustment, color tint or additive blending, or pH adjustment; cleaning of coating lines and coating line parts; handling and storage of coatings and solvent; and conveyance and treatment of wastewater.
  - (3) Ancillary equipment such as boilers and incinerators (only those not used to comply with the emission limits in Tables 1 through 5 to this subpart), chillers and refrigeration systems, and other equipment that is not directly involved in the manufacturing of a coating ( i.e., it operates as a closed system, and materials are not combined with materials used to manufacture the coating).
  - (4) Quality assurance/quality control laboratories.
  - (5) Modifying a purchased coating in preparation for application at the purchasing facility.

[68 FR 69185, Dec. 11, 2003, as amended at 71 FR 58503, Oct. 4, 2006]

**§ 63.7990 What parts of my plant does this subpart cover?**

- (a) This subpart applies to each miscellaneous coating manufacturing affected source as defined in §63.7985(a).
- (b) The miscellaneous coating manufacturing affected source is the miscellaneous coating manufacturing operations as defined in §63.7985(b).
- (c) An affected source is a new affected source if you commenced construction or reconstruction after April 4, 2002, and you met the applicability criteria at the time you commenced construction or reconstruction.

**Compliance Dates**

**§ 63.7995 When do I have to comply with this subpart?**

Except as specified in §63.8090, you must comply with this subpart according to the requirements of this section.

- (a) If you have a new affected source, you must comply with this subpart according to the requirements in paragraphs (a)(1) and (2) of this section.
  - (1) If you start up your new affected source before December 11, 2003, then you must comply with the requirements for new sources in this subpart no later than December 11, 2003.
  - (2) If you start up your new affected source after December 11, 2003, then you must comply with the requirements for new sources in this subpart upon startup of your affected source.
- (b) If you have an existing affected source on December 11, 2003, then you must comply with the requirements for existing sources in this subpart no later than December 11, 2006.
- (c) [Reserved]
- (d) You must meet the notification requirements in §63.8070 according to the schedule in §63.8070 and in 40 CFR part 63, subpart A. Some of the notifications must be submitted before you are required to comply with the emission limits, operating limits, and work practice standards in this subpart.

[68 FR 69185, Dec. 11, 2003; 68 FR 75033, Dec. 29, 2003, as amended at 70 FR 25681, May 13, 2005; 71 FR 58503, Oct. 4, 2006]

**Emission Limits, Work Practice Standards, and Compliance Requirements**

**§ 63.8000 What are my general requirements for complying with this subpart?**

- (a) You must be in compliance with the emission limits and work practice standards in Tables 1 through 5 to this subpart at all times, except during periods of startup, shutdown, and malfunction. You must meet the requirements specified in paragraphs (b) and (c) of this section. You must meet the requirements specified in §§63.8005 through 63.8025 (or the alternative means of compliance in §63.8050), except as specified in paragraph (d) of this section. You must meet the notification, reporting, and recordkeeping requirements specified in §§63.8070, 63.8075, and 63.8080.

- (b) General requirements.
- (1) If an emission stream contains halogen atoms, and you use a combustion-based control device (excluding a flare) to meet an organic HAP emission limit, you must determine whether the emission stream meets the definition of a halogenated stream by calculating the concentration of each organic compound that contains halogen atoms using the procedures specified in §63.115(d)(2)(v), multiplying each concentration by the number of halogen atoms in the organic compound, and summing the resulting halogen atom concentrations for all of the organic compounds in the emission stream. Alternatively, you may elect to designate the emission stream as halogenated.
  - (2) Opening of a safety device, as defined in §63.8105, is allowed at any time conditions require it to avoid unsafe conditions.
- (c) Compliance requirements for closed vent systems and control devices. If you use a control device to comply with an emission limit in Table 1, 2, or 5 to this subpart, you must comply with the requirements in subpart SS of 40 CFR part 63 as specified in paragraphs (c)(1) through (3) of this section, except as specified in paragraph (d) of this section.
- (1) If you reduce organic HAP emissions by venting emissions through a closed-vent system to any combination of control devices (except a flare), you must meet the requirements of §63.982(c) and the requirements referenced therein.
  - (2) If you reduce organic HAP emissions by venting emissions through a closed-vent system to a flare, you must meet the requirements of §63.982(b) and the requirements referenced therein. You may not use a flare to control halogenated vent streams or hydrogen halide and halogen HAP emissions.
  - (3) If you use a halogen reduction device to reduce hydrogen halide and halogen HAP emissions that are generated by combusting halogenated vent streams, you must meet the requirements of §63.994 and the requirements referenced therein. If you use a halogen reduction device before a combustion device, you must determine the halogen atom emission rate prior to the combustion device according to the procedures in §63.115(d)(2)(v).
- (d) Exceptions to the requirements specified in other subparts of this part 63 —
- (1) Requirements for performance tests. The requirements specified in paragraphs (d)(1)(i) through (v) of this section apply instead of or in addition to the requirements for performance testing of control devices as specified in subpart SS of 40 CFR part 63.
    - (i) Conduct gas molecular weight analysis using Method 3, 3A, or 3B in appendix A to 40 CFR part 60.
    - (ii) Measure moisture content of the stack gas using Method 4 in appendix A to 40 CFR part 60.
    - (iii) As an alternative to using Method 18, Method 25/25A, or Method 26/26A of 40 CFR part 60, appendix A, to comply with any of the emission limits specified in Tables 1 through 6 to this subpart, you may use Method 320 of 40 CFR part 60, appendix A. When using Method 320, you must follow the analyte spiking procedures of section 13 of Method 320, unless you demonstrate that the complete spiking procedure has been conducted at a similar source.

- (iv) Section 63.997(c)(1) does not apply. For the purposes of this subpart, results of all initial compliance demonstrations must be included in the notification of compliance status report, which is due 150 days after the compliance date, as specified in §63.8075(d)(1).
  - (v) If you do not have a closed-vent system as defined in §63.981, you must determine capture efficiency using Method 204 of appendix M to 40 CFR part 51 for all stationary process vessels subject to requirements of Table 1 to this subpart.
- (2) Design evaluation. To determine the percent reduction of a small control device, you may elect to conduct a design evaluation as specified in §63.1257(a)(1) instead of a performance test as specified in subpart SS of 40 CFR part 63. You must establish the value(s) and basis for the operating limits as part of the design evaluation.
- (3) Periodic verification. For a control device with total inlet HAP emissions less than 1 ton per year (tpy), you must establish an operating limit(s) for a parameter(s) that you will measure and record at least once per averaging period ( i.e., daily or block) to verify that the control device is operating properly. You may elect to measure the same parameter(s) that is required for control devices that control inlet HAP emissions equal to or greater than 1 tpy. If the parameter will not be measured continuously, you must request approval of your proposed procedure in the precompliance report. You must identify the operating limit(s) and the measurement frequency, and you must provide rationale to support how these measurements demonstrate the control device is operating properly.
- (4) Continuous emissions monitoring systems. Each continuous emissions monitoring system (CEMS) must be installed, operated, and maintained according to the requirements in §63.8 and paragraphs (d)(4)(i) through (iv) of this section.
- (i) Each CEMS must be installed, operated, and maintained according to the applicable Performance Specification of 40 CFR part 60, appendix B, and according to paragraph (d)(4)(ii) of this section, except as specified in paragraph (d)(4)(i)(A) of this section. For any CEMS meeting Performance Specification 8, you must also comply with appendix F, procedure 1 of 40 CFR part 60.
    - (A) If you wish to use a CEMS other than a Fourier Transform Infrared Spectroscopy (FTIR) meeting the requirements of Performance Specification 15 to measure hydrogen halide and halogen HAP before we promulgate a Performance Specification for such CEMS, you must prepare a monitoring plan and submit it for approval in accordance with the procedures specified in §63.8.
    - (B) [Reserved]
  - (ii) You must determine the calibration gases and reporting units for TOC CEMS in accordance with paragraph (d)(4)(ii)(A), (B), or (C) of this section.
    - (A) For CEMS meeting Performance Specification 9 or 15 requirements, determine the target analyte(s) for calibration using either process knowledge of the control device inlet stream or the screening procedures of Method 18 on the control device inlet stream.
    - (B) For CEMS meeting Performance Specification 8 used to monitor performance of a combustion device, calibrate the instrument on the predominant organic HAP and report the results as carbon (C<sub>1</sub>), and use

Method 25A or any approved alternative as the reference method for the relative accuracy tests.

- (C) For CEMS meeting Performance Specification 8 used to monitor performance of a noncombustion device, determine the predominant organic HAP using either process knowledge or the screening procedures of Method 18 on the control device inlet stream, calibrate the monitor on the predominant organic HAP, and report the results as  $C_1$ . Use Method 18, ASTM D6420–99, or any approved alternative as the reference method for the relative accuracy tests, and report the results as  $C_1$ .
- (iii) You must conduct a performance evaluation of each CEMS according to the requirements in 40 CFR 63.8 and according to the applicable Performance Specification of 40 CFR part 60, appendix B, except that the schedule in §63.8(e)(4) does not apply, and the results of the performance evaluation must be included in the notification of compliance status report.
- (iv) The CEMS data must be reduced to operating day or operating block averages computed using valid data consistent with the data availability requirements specified in §63.999(c)(6)(i)(B) through (D), except monitoring data also are sufficient to constitute a valid hour of data if measured values are available for at least two of the 15-minute periods during an hour when calibration, quality assurance, or maintenance activities are being performed. An operating block is a period of time from the beginning to end of batch operations in the manufacturing of a coating. Operating block averages may be used only for process vessel data.
- (5) Continuous parameter monitoring. The provisions in paragraphs (d)(5)(i) through (iii) of this section apply in addition to the requirements for continuous parameter monitoring system (CPMS) in subpart SS of 40 CFR part 63.
- (i) You must record the results of each calibration check and all maintenance performed on the CPMS as specified in §63.998(c)(1)(ii)(A).
- (ii) When subpart SS of 40 CFR part 63 uses the term a range or operating range of a monitored parameter, it means an operating limit for a monitored parameter for the purposes of this subpart.
- (iii) As an alternative to measuring pH as specified in §63.994(c)(1)(i), you may elect to continuously monitor the caustic strength of the scrubber effluent.
- (6) Startup, shutdown, and malfunction. Sections 63.998(b)(2)(iii) and (b)(6)(i)(A), which apply to the exclusion of monitoring data collected during periods of startup, shutdown, and malfunction (SSM) from daily averages, do not apply for the purposes of this subpart.
- (7) Reporting.
- (i) When §§63.8005 through 63.8025 reference other subparts in this part 63 that use the term periodic report, it means compliance report for the purposes of this subpart.
- (ii) When there are conflicts between this subpart and referenced subparts for the due dates of reports required by this subpart, reports must be submitted according to the due dates presented in this subpart.

- (iii) Excused excursions, as defined in subpart SS of 40 CFR part 63, are not allowed.

[68 FR 69185, Dec. 11, 2003, as amended at 70 FR 25681, May 13, 2005]

### **§ 63.8005 What requirements apply to my process vessels?**

(a) General.

- (1) You must meet each emission limit and work practice standard in Table 1 to this subpart that applies to you, and you must meet each applicable requirement specified in §63.8000(b), except as specified in paragraphs (a)(1)(i) and (ii) of this section.
  - (i) You are not required to meet the emission limits and work practice standards in Table 1 to this subpart if you comply with §63.8050 or §63.8055.
  - (ii) You must meet the emission limits and work practice standards in Table 1 to this subpart for emissions from automatic cleaning operations. You are not required to meet the emission limits and work practice standards in Table 1 to this subpart for emissions from cleaning operations that are conducted manually.
- (2) For each control device used to comply with Table 1 to this subpart, you must comply with subpart SS of this part 63 as specified in §63.8000(c), except as specified in §63.8000(d) and paragraphs (b) through (g) of this section.

(b) When subpart SS of this part 63 refers to process vents, it means process vessel vents for the purposes of this section.

(c) Process condensers, as defined in §63.1251, are not considered to be control devices for process vessels.

(d) Initial compliance.

- (1) To demonstrate initial compliance with a percent reduction emission limit in Table 1 to this subpart, you must conduct the performance test or design evaluation under conditions as specified in §63.7(e)(1), except that the performance test or design evaluation must be conducted under worst-case conditions. Also, the performance test for a control device used to control emissions from process vessels must be conducted according to §63.1257(b)(8), including the submittal of a site-specific test plan for approval prior to testing. The requirements in §63.997(e)(1)(i) and (iii) also do not apply for performance tests conducted to determine compliance with the emission limits for process vessels.
- (2) For the initial compliance demonstration for condensers, you must determine uncontrolled emissions using the procedures specified in §63.1257(d)(2), and you must determine controlled emissions using the procedures specified in §63.1257(d)(3)(i)(B) and (iii).
- (3) You must demonstrate that each process condenser is properly operated according to the procedures specified in §63.1257(d)(2)(i)(C)(4)(ii) and (d)(3)(iii)(B). The reference in §63.1257(d)(3)(iii)(B) to the alternative standard in §63.1254(c) does not apply for the purposes of this subpart. As an alternative to measuring the exhaust gas temperature, as required by §63.1257(d)(3)(iii)(B), you may elect to measure the liquid temperature in the receiver.

- (4) You must conduct a performance test or compliance demonstration equivalent to an initial compliance demonstration within 360 hours of a change in operating conditions that are not considered to be within the previously established worst-case conditions.
- (e) Establishing operating limits. You must establish operating limits under the conditions required for your initial compliance demonstration, except you may elect to establish operating limit(s) for conditions other than those under which a performance test was conducted as specified in paragraph (e)(1) of this section and, if applicable, paragraph (e)(2) of this section.
  - (1) The operating limits may be based on the results of the performance test and supplementary information such as engineering assessments and manufacturer's recommendations. These limits may be established for conditions as unique as individual emission episodes. You must provide rationale in the precompliance report for the specific level for each operating limit, including any data and calculations used to develop the limit and a description of why the limit indicates proper operation of the control device. The procedures provided in this paragraph (e)(1) have not been approved by the Administrator and determination of the operating limit using these procedures is subject to review and approval by the Administrator.
  - (2) If you elect to establish separate operating limits for different emission episodes, you must maintain records as specified in §63.8085(g) of each point at which you change from one operating limit to another, even if the duration of the monitoring for an operating limit is less than 15 minutes.
- (f) Averaging periods. If you elect to establish separate operating limits for different emission episodes, you may elect to determine operating block averages instead of the daily averages specified in §63.998(b)(3). An operating block is a period of time that is equal to the time from the beginning to end of an emission episode or sequence of emission episodes.
- (g) Flow indicators. If flow to a control device could be intermittent, you must install, calibrate, and operate a flow indicator at the inlet or outlet of the control device to identify periods of no flow. Periods of no flow may not be used in daily or block averages, and it may not be used in fulfilling a minimum data availability requirement.

[68 FR 69185, Dec. 11, 2003, as amended at 70 FR 25681, May 13, 2005]

**§ 63.8010 What requirements apply to my storage tanks?**

- (a) You must meet each emission limit in Table 2 to this subpart that applies to your storage tanks, and you must meet each applicable requirement specified in §63.8000(b). For each control device used to comply with Table 2 to this subpart, you must comply with subpart SS of this part 63 as specified in §63.8000(c), except as specified in §63.8000(d) and paragraphs (b) through (d) of this section.
- (b) Exceptions to subparts SS and WW of this part 63.
  - (1) If you conduct a performance test or design evaluation for a control device used to control emissions only from storage tanks, you must establish operating limits, conduct monitoring, and keep records using the same procedures as required in subpart SS of this part 63 for control devices used to reduce emissions from process vents instead of the procedures specified in §§63.985(c), 63.998(d)(2)(i), and 63.999(b)(2).
  - (2) When the term storage vessel is used in subparts SS and WW of this part 63, the term storage tank, as defined in §63.8105 applies for the purposes of this subpart.

- (c) Planned routine maintenance. The emission limits in Table 2 to this subpart for control devices used to control emissions from storage tanks do not apply during periods of planned routine maintenance. Periods of planned routine maintenance of each control device, during which the control device does not meet the emission limit specified in Table 2 to this subpart, must not exceed 240 hours per year (hr/yr). You may submit an application to the Administrator requesting an extension of this time limit to a total of 360 hr/yr. The application must explain why the extension is needed, it must indicate that no material will be added to the storage tank between the time the 240 hr/yr limit is exceeded and the control device is again operational, and it must be submitted at least 60 days before the 240 hr/yr limit will be exceeded.
- (d) Vapor balancing alternative. As an alternative to the emission limits specified in Table 2 to this subpart, you may elect to implement vapor balancing in accordance with §63.1253(f), except as specified in paragraphs (d)(1) and (2) of this section.
  - (1) To comply with §63.1253(f)(6)(i), the owner or operator of an offsite cleaning and reloading facility must comply with §§63.7995 through 63.8105 instead of complying with §63.1253(f)(7)(ii).
  - (2) You may elect to set a pressure relief device to a value less than the 2.5 psig required in §63.1253(f)(5) if you provide rationale in your notification of compliance status report explaining why the alternative value is sufficient to prevent breathing losses at all times.

**§ 63.8015 What requirements apply to my equipment leaks?**

- (a) You must meet each requirement in Table 3 to this subpart that applies to your equipment leaks, except as specified in paragraphs (b) through (d) of this section.
- (b) Exceptions to requirements in §63.424(a).
  - (1) When §63.424(a) refers to “a bulk gasoline terminal or pipeline breakout station subject to the provisions of this subpart,” the phrase “a miscellaneous coating manufacturing affected source subject to 40 CFR part 63, subpart HHHHH” shall apply for the purposes of this subpart.
  - (2) When §63.424(a) refers to “equipment in gasoline service,” the phrase “equipment in organic HAP service” shall apply for the purposes of this subpart.
  - (3) When §63.424(a) specifies that “each piece of equipment shall be inspected during loading of a gasoline cargo tank,” the phrase “each piece of equipment must be inspected when it is operating in organic HAP service” shall apply for the purposes of this subpart.
  - (4) Equipment in service less than 300 hours per year, equipment in vacuum service, or equipment contacting non-process fluids is excluded from this section.
- (c) When §63.1036 refers to batch processes, any part of the miscellaneous coating manufacturing operations applies for the purposes of this subpart.
- (d) For the purposes of this subpart, pressure testing for leaks in accordance with §63.1036(b) is not required after reconfiguration of an equipment train if flexible hose connections are the only disturbed equipment.

[68 FR 69185, Dec. 11, 2003, as amended at 70 FR 25681, May 13, 2005]

**§ 63.8020 What requirements apply to my wastewater streams?**

- (a) You must meet each requirement in Table 4 to this subpart that applies to your wastewater streams, and you must meet each applicable requirement specified in §63.8000 and paragraphs (b) through (d) of this section.
- (b) For each wastewater stream that you generate, you must either designate the wastewater stream as a Group 1 wastewater stream according to the procedures in paragraph (b)(1) of this section, or you must determine whether the wastewater stream is a Group 1 wastewater stream according to the procedures in paragraph (b)(2) of this section.
  - (1) You may designate any wastewater stream as a Group 1 wastewater stream. You do not have to determine the concentration for any designated Group 1 wastewater stream.
  - (2) For wastewater streams that you do not designate as Group 1 wastewater streams, you must use the procedures specified in §63.144(b) to establish the concentrations, except as specified in paragraphs (b)(2)(i) and (ii) of this section.
    - (i) References to Table 8 compounds in §63.144 do not apply for the purposes of this subpart.
    - (ii) Alternative test methods.
      - (A) As an alternative to the test methods specified in §63.144(b)(5)(i), you may use Method 8260 or 8270 as specified in §63.1257(b)(10)(iii).
      - (B) As an alternative to using the methods specified in §63.144(b)(5)(i), you may conduct wastewater analyses using Method 1666 or 1671 of 40 CFR part 136, appendix A, and comply with the sampling protocol requirements specified in §63.144(b)(5)(ii). The validation requirements specified in §63.144(b)(5)(iii) do not apply if you use Method 1666 or 1671 of 40 CFR part 136, appendix A.
- (c) For each enhanced biological treatment unit used to comply with the requirements in Table 4 to this subpart, you must monitor total suspended solids (TSS), biological oxygen demand (BOD), and the biomass concentration. In the precompliance report you must identify and provide rationale for proposed operating limits for these parameters, methods for monitoring, the frequency of monitoring, and recordkeeping and reporting procedures that will demonstrate proper operation of the enhanced biological treatment unit. Alternatively, you may use the precompliance report to request to monitor other parameters, and you must include a description of planned reporting and recordkeeping procedures and the basis for the selected monitoring frequencies and the methods that will be used.
- (d) If you transfer the wastewater offsite for enhanced biological treatment, you must obtain written certification from the offsite facility stating that the offsite facility will comply with the requirements of this subpart. The certifying entity may revoke the certification by providing 90 days notice. Upon expiration of the notice period, you may not transfer wastewater to that treatment facility.

**§ 63.8025 What requirements apply to my transfer operations?**

- (a) You must comply with each emission limit and work practice standard in Table 5 to this subpart that applies to your transfer operations, and you must meet all applicable requirements specified in §63.8000(b). For each control device used to comply with Table 5 to this subpart, you must comply with subpart SS of this part 63 as specified in §63.8000(c), except as specified in §63.8000(d) and paragraph (b) of this section.

- (b) If you have Group 1 transfer operations, as defined in §63.8105, then all transfer racks used for bulk loading coatings must meet the requirements for high throughput transfer racks in subpart SS of this part.

**§ 63.8030 What requirements apply to my heat exchange systems?**

- (a) You must comply with the requirements specified in Table 6 to this subpart that apply to your heat exchange systems, except as specified in paragraphs (b) through (e) of this section.
- (b) The phrase a chemical manufacturing process unit meeting the conditions of §63.100(b)(1) through (b)(3) of this section in §63.104(a) means the miscellaneous coating manufacturing operations defined in §63.7985(b) for the purposes of this subpart.
- (c) The reference to §63.100(c) in §63.104(a) does not apply for the purposes of this subpart.
- (d) The reference to §63.103(c)(1) in §63.104(f)(1) does not apply. For the purposes of this subpart, records must be retained as specified in §63.10(b)(1).
- (e) The reference to the periodic report required by §63.152(c) of subpart G of this part means the compliance report required by §63.8075(e) for the purposes of this subpart.

**Alternative Means of Compliance**

**§ 63.8050 How do I comply with emissions averaging for stationary process vessels at existing sources?**

- (a) As an alternative to complying with the requirements in Table 1 to this subpart for each individual stationary process vessel, you may elect to comply with emissions averaging for stationary process vessels greater than or equal to 250 gallons (gal) at your existing affected source as specified in paragraphs (b) through (e) of this section.
- (b) General requirements.
- (1) A State may prohibit averaging of HAP emissions and require the owner or operator of an existing affected source to comply with the emission limits and work practice standards in Table 1 to this subpart.
- (2) All stationary process vessels in an emissions averaging group must be equipped with a tightly-fitting vented cover.
- (c) Initial compliance. To demonstrate initial compliance with the emissions averaging alternative, you must comply with the provisions in paragraphs (c)(1) through (4) of this section.
- (1) Estimate uncontrolled emissions from each affected stationary process vessel in pounds per batch using the procedures specified in §63.1257(d)(2), except as specified in paragraphs (c)(1)(i) and (ii) of this section. For the purposes of this section, uncontrolled emissions means the emissions from the vessel if it were equipped only with a tightly-fitting vented cover. You must identify the range of typical operating parameters and perform the calculation using the values that result in the highest emissions, and you must document the operating parameters and resulting emissions calculations in the precompliance report.
- (i) When you are required to calculate uncontrolled emissions from heating, you may not calculate emissions using Equation 13 of subpart GGG of this part 63.

- (ii) The statement in §63.1257(d)(2)(i)(B) that “the partial pressure of HAP shall be assumed to be 25 percent of the saturated value if the purge flow rate is greater than 100 scfm” does not apply. For the purposes of this subpart, multiply the HAP partial pressure in Equation 12 of 40 CFR part 63, subpart GGG by a HAP-specific saturation factor determined in accordance with Equations 1 through 3 of this section. Solve equation 1 of this section iteratively beginning with saturation factors (in the right-hand side of the equation) of 1.0 for each condensable compound. Stop iterating when the calculated saturation factors for all compounds are the same to two significant figures for subsequent iterations. Note that for multi-component emission streams, saturation factors must be calculated for all condensable compounds, not just the HAP.

$$S_i = \frac{K_i A}{K_i A + V + \sum_{i=1}^n S_i V_i^{sat}} \quad Eq. 1$$

$$V_i^{sat} = \frac{VP_i}{\left( P_T - \sum_{i=1}^n P_i \right)} \quad Eq. 2$$

$$K_i = K_o \left( \frac{M_o}{M_i} \right)^{1/3} \quad Eq. 3$$

where:

- $S_i$  = saturation factor for individual condensable compounds in the emission stream  
 $P_i$  = partial pressure of individual condensable compounds in the emission stream calculated using Raoult's Law or other appropriate methods  
 $P_T$  = pressure of the vessel vapor space  
 $A$  = surface area of liquid  
 $V$  = purge flow rate as used in Equation 12 of 40 CFR part 63, subpart GGG  
 $V_i^{sat}$  = volumetric flowrate of condensable compounds in the emission stream  
 $K_i$  = mass transfer coefficient of individual condensable compounds in the emission stream  
 $K_o$  = mass transfer coefficient of a reference compound (e.g., 0.83 cm/s for water)  
 $M_o$  = molecular weight of reference compound (e.g., 18.02 for water)  
 $M_i$  = molecular weight of individual condensable compounds in the emission stream  
 $n$  = number of condensable compounds in the emission stream

- (2) Estimate controlled emissions in pounds per batch for each vessel as specified in paragraphs (c)(2)(i) through (iii) of this section.
- (i) Except as specified in paragraphs (c)(2)(ii) and (iii) of this section, estimate controlled emissions as if the vessel were controlled in compliance with entry 2.b.i. in Table 1 to this subpart.
- (ii) Estimate the controlled emissions using the control level achieved on November 15, 1990 if that value is greater than the applicable control level required by entry 2.b.i in Table 1 to this subpart.

- (iii) Estimate the controlled emissions using the control level required to comply with a State or Federal rule other than this subpart if that level is greater than the applicable control level required by entry 2.b.i in Table 1 to this subpart and the other rule was in effect before the date when you request approval to comply with emissions averaging.
  - (3) Determine actual emissions in pounds per batch for each vessel in accordance with paragraph (c)(3)(i), (ii), or (iii) of this section, as applicable.
  - (4) Provide rationale in the precompliance report for why the sum of the actual emissions will be less than the sum of emissions from the vessels if they had been controlled in accordance with Table 1 to this subpart. The approved actual emissions calculated according to paragraph (c)(3) of this section are emission limits that must be incorporated into your operating permit.
- (d) Continuous compliance.
- (1) Maintain a monthly log of the number of batches produced that can be correlated with the emissions estimates per batch developed in accordance with paragraph (c) of this section.
  - (2) Sum the actual emissions for all of the process vessels in the emissions averaging group every three months, with the first 3-month period beginning on the compliance date, and compare the resulting total with the total emissions for the vessels calculated in accordance with paragraph (c)(2) of this section. Compliance is demonstrated if the sum of the actual emissions is less than the emissions estimated in accordance with paragraph (c)(2) of this section.
  - (3) For control devices, establish operating limits and monitor as specified in §63.8000.
- (e) Recordkeeping and reporting. Comply with §§63.8070, 63.8075, and 63.8080.

[68 FR 69185, Dec. 11, 2003, as amended at 70 FR 25682, May 13, 2005]

**§ 63.8055 How do I comply with a weight percent HAP limit in coating products?**

- (a) As an alternative to complying with the requirements in Table 1 to this subpart for each individual stationary process vessel at an existing source, you may elect to comply with a 5 weight percent HAP limit for process vessels at your affected source that are used to manufacture coatings with a HAP content of less than 0.05 kg per kg product as specified in paragraph (b) of this section.
- (b) You may only comply with the alternative during the production of coatings that contain less than 5 weight percent HAP, as determined using any of the procedures specified in paragraphs (b)(1) through (4) of this section.
  - (1) Method 311 (appendix A to 40 CFR part 63).
  - (2) Method 24 (appendix A to 40 CFR part 60). You may use Method 24 to determine the mass fraction of volatile matter and use that value as a substitute for the mass fraction of HAP.
  - (3) You may use an alternative test method for determining mass fraction of HAP if you obtain prior approval by the Administrator. You must follow the procedure in §63.7(f) to submit an alternative test method for approval.

- (4) You may rely on formulation data from raw material suppliers if it represents each organic HAP that is present at 0.1 percent by mass or more for OSHA-defined carcinogens, as specified in 29 CFR 1910.1200(d)(4), and at 1.0 percent by mass or more for other compounds. If the HAP weight percent estimated based on formulation data conflicts with the results of a test conducted according to paragraphs (b)(1) through (3) of this section, then there is a rebuttal presumption that the test results are accurate unless, after consultation, you demonstrate to the satisfaction of the permitting authority that the test results are not accurate and that the formulation data are more appropriate.

[68 FR 69185, Dec. 11, 2003, as amended at 70 FR 25682, May 13, 2005; 70 FR 75927, Dec. 21, 2005]

## **Notification, Reports, and Records**

### **§ 63.8070 What notifications must I submit and when?**

- (a) You must submit all of the notifications in §§63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e), (f)(4) and (6), 63.9(b) through (h) that apply to you by the dates specified.
- (b) Initial notification.
  - (1) As specified in §63.9(b)(2), if you have an existing affected source on December 11, 2003, you must submit an initial notification not later than 120 calendar days after December 11, 2003.
  - (2) As specified in §63.9(b)(3), if you start up your new affected source on or after December 11, 2003, you must submit an initial notification not later than 120 calendar days after you become subject to this subpart.
- (c) Notification of performance test. If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in §63.7(b)(1). For any performance test required as part of the initial compliance procedures for process vessels in Table 1 to this subpart, you must also submit the test plan required by §63.7(c) and the emission profile with the notification of the performance test.

### **§ 63.8075 What reports must I submit and when?**

- (a) You must submit each report in Table 9 to this subpart that applies to you.
- (b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report as specified in Table 9 to this subpart and paragraphs (b)(1) and (2) of this section.
  - (1) The compliance reports must be submitted semiannually. The first report must be submitted no later than 240 days after the applicable compliance date and shall cover the 6-month period beginning on the compliance date. Each subsequent compliance report must cover the 6-month period following the preceding period.
  - (2) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in Table 9.

- (c) Precompliance report. You must submit a precompliance report to request approval of any of the information in paragraphs (c)(1) through (4) of this section. We will either approve or disapprove the report within 90 days after we receive it. If we disapprove the report, you must still be in compliance with the emission limitations and work practice standards in this subpart by the compliance date.
- (1) Requests for approval to set operating limits for parameters other than those specified in §§63.8005 through 63.8025, including parameters for enhanced biological treatment units. Alternatively, you may make these requests according to §63.8(f).
  - (2) Descriptions of daily or per batch demonstrations to verify that control devices subject to §63.8000(d)(3) are operating as designed.
  - (3) A description of the test conditions, data, calculations, and other information used to establish operating limits according to §63.8005(e)(1).
  - (4) If you comply with emissions averaging in §63.8050, the data and results of emission calculations as specified in §63.8050(c)(1) through (3), and rationale for why the sum of actual emissions will be less than the sum of emissions if the process vessels were controlled in accordance with Table 1 to this subpart as specified in §63.8050(c)(4).
- (d) Notification of compliance status report. You must submit a notification of compliance status report according to the schedule in paragraph (d)(2) of this section, and the notification of compliance status report must include the information specified in paragraph (d)(2) of this section.
- (1) You must submit the notification of compliance status report no later than 150 days after the applicable compliance date specified in §63.7995.
  - (2) The notification of compliance status report must include the information in paragraphs (d)(3)(i) through (vi) of this section.
    - (i) The results of any applicability determinations (e.g., HAP content of coating products; halogenated vent stream determinations; group determinations for storage tanks, wastewater, and transfer operations; and equipment that is in organic HAP service).
    - (ii) The results of performance tests, engineering analyses, design evaluations, flare compliance assessments, inspections and repairs, and calculations used to demonstrate initial compliance according to §§63.8005 through 63.8025 and 63.8055. For performance tests, results must include descriptions of sampling and analysis procedures and quality assurance procedures.
    - (iii) Descriptions of monitoring devices, monitoring frequencies, and the operating limits established during the initial compliance demonstrations, including data and calculations to support the levels you establish.
    - (iv) Identification of parts of the affected source that are subject to overlapping requirements described in §63.8090 and the authority under which you will comply.
    - (v) Identify storage tanks for which you are complying with the vapor balancing alternative in §63.8010(e).
    - (vi) If you transfer Group 1 wastewater stream to an offsite facility for treatment, include the name and location of the transferee and a description of the Group 1 wastewater stream that is sent to the treatment facility. If the offsite facility

provides enhanced biological treatment, also include the certification required by §63.8020(d) that the offsite facility will comply with the requirements of this subpart.

- (e) Compliance report. The compliance report must contain the information specified in paragraphs (e)(1) through (8) of this section.
  - (1) Company name and address.
  - (2) Statement by a responsible official with that official's name, title, and signature, certifying the accuracy of the content of the report.
  - (3) Date of report and beginning and ending dates of the reporting period.
  - (4) Applicable records and information for periodic reports as specified in referenced subparts F, SS, TT, UU, and WW of this part 63.
  - (5) For each SSM during which excess emissions occur, the compliance report must include the information specified in paragraphs (e)(5)(i) and (ii) of this section.
    - (i) Records that the procedures specified in your startup, shutdown, and malfunction plan (SSMP) were followed or documentation of actions taken that are not consistent with the SSMP.
    - (ii) A description of each malfunction.
  - (6) The compliance report must contain the information on deviations, as defined in §63.8105, according to paragraphs (e)(6)(i), (ii), and (iii) of this section.
    - (i) If there are no deviations from any emission limit, operating limit, or work practice standard specified in this subpart, include a statement that there were no deviations from the emission limits, operating limits, or work practice standards during the reporting period.
    - (ii) For each deviation from an emission limit, operating limit, and work practice standard that occurs at an affected source where you are not using a continuous monitoring system (CMS) to comply with the emission limit or work practice standards in this subpart, you must include the information in paragraphs (e)(6)(ii)(A) through (C) of this section.
      - (A) The total operating time of each affected source during the reporting period.
      - (B) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
      - (C) Operating logs for the day(s) during which the deviation occurred, except operating logs are not required for deviations of the work practice standards for equipment leaks.
    - (iii) For each deviation from an emission limit or operating limit occurring at an affected source where you are using a CMS to comply with the emission limit in this subpart, you must include the information in paragraphs (e)(6)(iii)(A) through (K) of this section. This includes periods of SSM.

- (A) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.
  - (B) The date, time, and duration that each CEMS was out-of-control, including the information in §63.8(c)(8).
  - (C) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.
  - (D) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.
  - (E) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
  - (F) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.
  - (G) An identification of each HAP that is known to be in the emission stream or wastewater stream, as applicable.
  - (H) A description of the product being produced.
  - (I) Identification of the CMS.
  - (J) The date of the latest CMS certification or audit.
  - (K) The operating day or operating block average values of monitored parameters for each day(s) during which the deviation occurred.
- (7) If you use a CEMS, and there were no periods during which it was out-of-control as specified in §63.8(c)(7), include a statement that there were no periods during which the CEMS was out-of-control during the reporting period.
- (8) Notification of process change.
- (i) Except as specified in paragraph (e)(8)(ii) of this section, whenever you change any of the information submitted in either the notification of compliance status report or any previously reported change to the notification of compliance status report, you must document the change in your compliance report. The notification must include all of the information in paragraphs (e)(8)(i)(A) and (B) of this section.
    - (A) Revisions to any of the information reported in the original notification of compliance status report under paragraph (d) of this section.
    - (B) Information required by the notification of compliance status report under paragraph (d) of this section for changes involving the addition of processes or equipment at the affected source.

- (ii) You must submit a report 60 days before the scheduled implementation date of any of the changes identified in paragraphs (e)(8)(ii)(A), (B), or (C) of this section.
  - (A) Any change to the information contained in either the precompliance report or any previously reported change to the precompliance report.
  - (B) A change in the status of a control device from small to large.
  - (C) A change in compliance status.

**§ 63.8080 What records must I keep?**

You must keep the records specified in paragraphs (a) through (g) of this section.

- (a) Each applicable record required by subpart A of this part 63 and in referenced subparts SS, TT, UU, and WW of this part 63.
- (b) If complying with emissions averaging, records of the monthly number of batches for each process vessel, the quarterly actual emissions for each process vessel, the quarterly estimated emissions for each process vessel if it had been controlled as specified in Table 1 to this subpart, and comparison of the sums of the quarterly actual and estimated emissions as specified in §63.8050(d).
- (c) A record of each time a safety device is opened to avoid unsafe conditions in accordance with §63.8000(b)(2).
- (d) Records of the results of each CPMS calibration check and the maintenance performed, as specified in §63.8000(d)(5).
- (e) For each CEMS, you must keep the records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.
- (f) In the SSMP required by §63.6(e)(3), you are not required to include Group 2 or non-affected emission points. For equipment leaks only, the SSMP requirement is limited to control devices and is optional for other equipment.
- (g) If you establish separate operating limits as allowed in §63.8005(e), you must maintain a log of operation or a daily schedule indicating the time when you change from one operating limit to another.

**Other Requirements and Information**

**§ 63.8090 What compliance options do I have if part of my plant is subject to both this subpart and another subpart?**

- (a) Compliance with 40 CFR parts 264 and 265, subparts AA, BB, and/or CC.
  - (1) After the compliance dates specified in §63.7995, if a control device that you use to comply with this subpart is also subject to monitoring, recordkeeping, and reporting requirements in 40 CFR part 264, subpart AA, BB, or CC; or the monitoring and recordkeeping requirements in 40 CFR part 265, subpart AA, BB, or CC; and you comply with the periodic reporting requirements under 40 CFR part 264, subpart AA, BB, or CC that would apply to the device if your facility had final-permitted status, you may elect to comply either with the monitoring, recordkeeping, and reporting requirements of this subpart; or with the monitoring and recordkeeping requirements in 40 CFR part 264 or

265 and the reporting requirements in 40 CFR part 264, as described in this paragraph (a), which constitute compliance with the monitoring, recordkeeping, and reporting requirements of this subpart. If you elect to comply with the monitoring, recordkeeping, and reporting requirements in 40 CFR parts 264 and/or 265, you must report the information required for the compliance report in §63.8075(e), and you must identify in the notification of compliance status report required by §63.8075(d) the monitoring, recordkeeping, and reporting authority under which you will comply.

- (2) After the compliance dates specified in this section, if any equipment at an affected source that is subject to this subpart is also subject to 40 CFR part 264, subpart BB or to 40 CFR part 265, subpart BB, then compliance with the recordkeeping and reporting requirements of 40 CFR part 264 and/or 265 may be used to comply with the recordkeeping and reporting requirements of §63.1255, to the extent that the requirements of 40 CFR part 264 and/or 265 duplicate the requirements of this subpart. You must identify in the notification of compliance status report required by §63.8075(d) if you will comply with the recordkeeping and reporting authority under 40 CFR part 264 and/or 265.
- (b) Compliance with 40 CFR part 60, subpart Kb. After the compliance dates specified in §63.7995, you are in compliance with this subpart for any storage tank that is assigned to miscellaneous coating manufacturing operations and that is both controlled with a floating roof and in compliance with the provisions of 40 CFR part 60, subpart Kb. You are in compliance with this subpart if you have a storage tank with a fixed roof, closed-vent system, and control device in compliance with 40 CFR part 60, subpart Kb, you must comply with the monitoring, recordkeeping, and reporting requirements in this subpart. You must also identify in your notification of compliance status report required by §63.8075(d) which storage tanks are in compliance with 40 CFR part 60, subpart Kb.
- (c) Compliance with 40 CFR part 63, subpart FFFF. After the compliance dates specified in §63.7995, an affected source under this subpart HHHHH that includes equipment that is also part of an affected source under 40 CFR part 63, subpart FFFF is deemed in compliance with this subpart HHHHH if all of the conditions specified in paragraphs (c)(1) through (5) of this section are met.
  - (1) Equipment used for both miscellaneous coating manufacturing operations and as part of a miscellaneous organic chemical manufacturing process unit (MCPU), as defined in §63.2435, must be part of a process unit group developed in accordance with the provisions in §63.2535(l).
  - (2) For the purposes of complying with §63.2535(l), a miscellaneous coating manufacturing “process unit” consists of all coating manufacturing equipment that is also part of an MCPU in the process unit group. All miscellaneous coating manufacturing operations that are not part of a process unit group must comply with the requirements of this subpart HHHHH.
  - (3) The primary product for a process unit group that includes miscellaneous coating manufacturing equipment must be organic chemicals as described in §63.2435(b)(1).
  - (4) The process unit group must be in compliance with the requirements in 40 CFR part 63, subpart FFFF as specified in §63.2535(l)(3)(i) no later than the applicable compliance dates specified in §63.2445.
  - (5) You must include in the notification of compliance status report required in §63.8070(d) the records as specified in §63.2535(l)(1) through (3).

**§ 63.8095 What parts of the General Provisions apply to me?**

Table 10 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

**§ 63.8100 Who implements and enforces this subpart?**

- (a) This subpart can be implemented and enforced by us, the U.S. Environmental Protection Agency (U.S. EPA), or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency also has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.
- (b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraphs (b)(1) through (4) of this section are retained by the Administrator of U.S. EPA and are not delegated to the State, local, or tribal agency.
  - (1) Approval of alternatives to the non-opacity emission limits and work practice standards in §63.8000(a) under §63.6(g).
  - (2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.
  - (3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.
  - (4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

**§ 63.8105 What definitions apply to this subpart?**

- (a) For an affected source complying with the requirements in subpart SS of this part 63, the terms used in this subpart and in subpart SS of this part 63 have the meaning given them in §63.981, except as specified in §§63.8000(d)(5)(ii) and (7), 63.8010(c)(2), 63.8025(b), and paragraph (g) of this section.
- (b) For an affected source complying with the requirements in subpart TT of this part 63, the terms used in this subpart and in subpart TT of this part 63 have the meaning given them in §63.1001.
- (c) For an affected source complying with the requirements in subpart UU of this part 63, the terms used in this subpart and in subpart UU of this part 63 have the meaning given them in §63.1020.
- (d) For an affected source complying with the requirements in subpart WW of this part 63, the terms used in this subpart and subpart WW of this part 63 have the meaning given them in §63.1061, except as specified in §§63.8000(d)(7), 63.8010(c)(2), and paragraph (g) of this section.
- (e) For an affected source complying with requirements in §§63.1253, 63.1257, and 63.1258, the terms used in this subpart and in §§63.1253, 63.1257, and 63.1258 have the meaning given them in §63.1251, except as specified in §63.8000(d)(7) and paragraph (g) of this section.
- (f) For an affected source complying with the requirements of §63.104, the terms used in this subpart and in §63.104 have the meaning given them in §63.101, except as specified in §63.8000(d)(7) and paragraph (g) of this section.

- (g) All other terms used in this subpart are defined in the CAA, in 40 CFR 63.2, and in this paragraph (g). If a term is defined in §63.2, §63.981, §63.1001, §63.1020, §63.1061, or §63.1251 and in this paragraph (g), the definition in this paragraph (g) applies for the purposes of this subpart.

**Bulk loading** means the loading, into a tank truck or rail car, of liquid coating products that contain one or more of the organic HAP, as defined in section 112 of the CAA, from a loading rack. A loading rack is the system used to fill tank trucks and railcars at a single geographic site.

**Coating** means a material such as paint, ink, or adhesive that is intended to be applied to a substrate and consists of a mixture of resins, pigments, solvents, and/or other additives, where the material is produced by a manufacturing operation where materials are blended, mixed, diluted, or otherwise formulated. Coating does not include materials made in processes where a formulation component is synthesized by chemical reaction or separation activity and then transferred to another vessel where it is formulated to produce a material used as a coating, where the synthesized or separated component is not stored prior to formulation. Typically, coatings include products described by the following North American Industry Classification System (NAICS) codes, code 325510, Paint and Coating Manufacturing, code 325520, Adhesive and Sealant Manufacturing, and code 325910, Ink Manufacturing.

**Construction** means the onsite fabrication, erection, or installation of an affected source. Addition of new equipment to an affected source does not constitute construction, but it may constitute reconstruction of the affected source if it satisfies the definition of reconstruction in §63.2.

**Deviation** means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

- (1) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limit, operating limit, or work practice standard;
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or
- (3) Fails to meet any emission limit, operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

**Enhanced biological treatment system** means an aerated, thoroughly mixed treatment unit(s) that contains biomass suspended in water followed by a clarifier that removes biomass from the treated water and recycles recovered biomass to the aeration unit. The mixed liquor volatile suspended solids (biomass) is greater than 1 kilogram per cubic meter throughout each aeration unit. The biomass is suspended and aerated in the water of the aeration unit(s) either by submerged air flow or mechanical agitation. A thoroughly mixed treatment unit is a unit that is designed and operated to approach or achieve uniform biomass distribution and organic compound concentration throughout the aeration unit by quickly dispersing the recycled biomass and the wastewater entering the unit.

**Excess emissions** means emissions greater than those allowed by the emission limit.

**Group 1a storage tank** means a storage tank at an existing source with a capacity greater than or equal to 20,000 gal storing material that has a maximum true vapor pressure of total organic HAP greater than or equal to 1.9 pounds per square inch, absolute (psia). Group 1a storage tank also means a storage tank at a new source with either a capacity greater than or equal to 25,000 gal storing material that has a maximum true vapor pressure of total HAP greater than or equal to 0.1 psia or a capacity greater than or equal to 20,000 gal and less than 25,000 gal storing material that has a maximum true vapor pressure of total HAP greater than or equal to 1.5 psia.

**Group 1b storage tank** means a storage tank at a new source that has a capacity greater than or equal to 10,000 gal, stores material that has a maximum true vapor pressure of total organic HAP greater than or equal to 0.02 psia, and is not a Group 1a storage tank.

**Group 2 storage tank** means a storage tank that does not meet the definition of a Group 1a or Group 1b storage tank.

**Group 1 transfer operations** means all bulk loading of coating products if the coatings contain greater than or equal to 3.0 million gallons per year (gal/yr) of HAP with a weighted average HAP partial pressure greater than or equal to 1.5 psia.

**Group 2 transfer operations** means bulk loading of coating products that does not meet the definition of Group 1 transfer operations, and all loading of coating products from a loading rack to other types of containers such as cans, drums, and totes.

**Group 1 wastewater stream** means a wastewater stream that contains total partially soluble and soluble HAP at an annual average concentration greater than or equal to 4,000 parts per million by weight (ppmw) and load greater than or equal to 750 pounds per year (lb/yr) at an existing source or greater than or equal to 1,600 ppmw and any partially soluble and soluble HAP load at a new source.

**Group 2 wastewater stream** means a wastewater stream that does not meet the definition of a Group 1 wastewater stream.

**Halogenated vent stream** means a vent stream determined to contain halogen atoms in organic compounds at a concentration greater than or equal to 20 ppmv as determined by the procedures specified in §63.8000(b).

**Hydrogen halide and halogen HAP** means hydrogen chloride, chlorine, and hydrogen fluoride.

**In organic HAP service** means that a piece of equipment either contains or contacts a fluid (liquid or gas) that is at least 5 percent by weight of total organic HAP as determined according to the provisions of §63.180(d). The provisions of §63.180(d) also specify how to determine that a piece of equipment is not in organic HAP service.

**Large control device** means a control device that controls total HAP emissions of greater than or equal to 10 tpy, before control.

**Maximum true vapor pressure** means the equilibrium partial pressure exerted by the total organic HAP in the stored or transferred liquid at the temperature equal to the highest calendar-month average of the liquid storage or transfer temperature for liquids stored or transferred above or below the ambient temperature or at the local maximum monthly average temperature as reported by the National Weather Service for liquids stored or transferred at the ambient temperature, as determined:

- (1) In accordance with methods described in American Petroleum Institute Publication 2517, Evaporative Loss From External Floating-Roof Tanks (incorporated by reference as specified in §63.14 of subpart A of this part 63); or
- (2) As obtained from standard reference texts; or
- (3) As determined by the American Society for Testing and Materials Method D2879-83 (incorporated by reference as specified in §63.14 of subpart A of this part); or
- (4) Any other method approved by the Administrator.

**Partially soluble HAP** means HAP listed in Table 7 of this subpart.

**Point of determination (POD)** means each point where process wastewater exits the miscellaneous coating operations.

Note to definition for point of determination: The regulation allows determination of the characteristics of a wastewater stream at the point of determination or downstream of the point of determination if corrections are made for changes in flow rate and annual average concentration of partially soluble and soluble HAP compounds as determined in §63.144. Such changes include losses by air emissions; reduction of annual average concentration or changes in flow rate by mixing with other water or wastewater streams; and reduction in flow rate or annual average concentration by treating or otherwise handling the wastewater stream to remove or destroy HAP.

**Process vessel** means any stationary or portable tank or other vessel with a capacity greater than or equal to 250 gal and in which mixing, blending, diluting, dissolving, temporary holding, and other processing steps occur in the manufacturing of a coating.

**Process vessel vent** means a vent from a process vessel or vents from multiple process vessels that are manifolded together into a common header, through which a HAP-containing gas stream is, or has the potential to be, released to the atmosphere. Emission streams that are undiluted and uncontrolled containing less than 50 ppmv HAP, as determined through process knowledge that no HAP are present in the emission stream or using an engineering assessment as discussed in §63.1257(d)(2)(ii), test data using Method 18 of 40 CFR part 60, appendix A, or any other test method that has been validated according to the procedures in Method 301 of appendix A of this part, are not considered process vessel vents. Flexible elephant trunk systems when used with closed vent systems and drawing ambient air ( i.e., the system is not ducted, piped, or otherwise connected to the unit operations) away from operators when vessels are opened are not process vessel vents. Process vessel vents do not include vents on storage tanks, wastewater emission sources, or pieces of equipment subject to the requirements in Table 3 of this subpart. A gas stream going to a fuel gas system is not a process vessel vent. A gas stream routed to a process for a process purpose is not a process vessel vent.

**Recovery device, as used in the wastewater provisions,** means an individual unit of equipment used for the purpose of recovering chemicals for fuel value ( i.e., net positive heating value), use, reuse, or for sale for fuel value, use, or reuse. Examples of equipment that may be recovery devices include organic removal devices such as decanters, strippers, or thin-film evaporation units. To be a recovery device, a decanter and any other equipment based on the operating principle of gravity separation must receive only multi-phase liquid streams. A recovery device is considered part of the miscellaneous coating manufacturing operations.

**Responsible official** means responsible official as defined in 40 CFR 70.2.

**Safety device** means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device which functions exclusively to prevent physical damage or permanent deformation to a unit or its air emission control equipment by venting gases or vapors directly to the atmosphere during unsafe conditions resulting from an unplanned, accidental, or emergency event. For the purposes of this subpart, a safety device is not used for routine venting of gases or vapors from the vapor headspace underneath a cover such as during filling of the unit or to adjust the pressure in response to normal daily diurnal ambient temperature fluctuations. A safety device is designed to remain in a closed position during normal operations and open only when the internal pressure, or another relevant parameter, exceeds the device threshold setting applicable to the air emission control equipment as determined by the owner or operator based on manufacturer recommendations, applicable regulations, fire protection and prevention codes and practices, or other requirements for the safe handling of flammable, combustible, explosive, reactive, or hazardous materials.

**Shutdown** means the cessation of operation of an affected source, any process vessels within an affected source, or equipment required or used to comply with this subpart if steps taken to cease operation differ from those under routine procedures for removing the vessel or equipment from service. Shutdown also applies to the emptying and degassing of storage tanks.

**Small control device** means a control device that controls total HAP emissions of less than 10 tpy, before control.

**Soluble HAP** means the HAP listed in Table 8 of this subpart.

**Startup** means the setting in operation of a new affected source. For new equipment added to an affected source, including equipment required or used to comply with this subpart, startup means the first time the equipment is put into operation. Startup includes the setting in operation of equipment any time the steps taken differ from routine procedures for putting the equipment into operation.

**Storage tank** means a tank or other vessel that is used to store organic liquids that contain one or more HAP as raw material feedstocks or products. The following are not considered storage tanks for the purposes of this subpart:

- (1) Vessels permanently attached to motor vehicles such as trucks, railcars, barges, or ships;
- (2) Pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere;
- (3) Vessels storing organic liquids that contain HAP only as impurities;
- (4) Wastewater storage tanks; and
- (5) Process vessels.

**Total organic compounds or (TOC)** means the total gaseous organic compounds (minus methane and ethane) in a vent stream.

**Wastewater storage tank** means a stationary structure that is designed to contain an accumulation of wastewater and is constructed primarily of nonearthen materials ( e.g., wood, concrete, steel, plastic) which provide structural support.

**Wastewater stream** means water that is discarded from miscellaneous coating manufacturing operations through a POD, and that contains an annual average concentration of total partially soluble and soluble HAP compounds of at least 1,600 ppmw at any flow rate. For the purposes of this subpart, noncontact cooling water is not considered a wastewater stream.

**Work practice standard** means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the Clean Air Act.

[68 FR 69185, Dec. 11, 2003, as amended at 70 FR 25682, May 13, 2005; 71 FR 58503, Oct. 4, 2006]

**Table 1 to Subpart HHHHH of Part 63—  
Emission Limits and Work Practice Standards for Process Vessels**

As required in §63.8005, you must meet each emission limit and work practice standard in the following table that applies to your process vessels.

For each . . .	You must . . .	And you must . . .
1. Portable process vessel at an existing source	a. Equip the vessel with a cover or lid that must be in place at all times when the vessel contains a HAP,	Nonapplicable.

	except for material additions and sampling	
2. Stationary process vessel at an existing source	a. Equip the vessel with a cover or lid that must be in place at all times when the vessel contains a HAP, except for material additions and sampling; or	i. Considering both capture and any combination of control (except a flare), reduce emissions of organic HAP with a vapor existing pressure $\geq 0.6$ kPa by $\geq 75$ percent by weight, and reduce emissions of organic HAP with a vapor pressure $< 0.6$ kPa by $\geq 60$ percent by weight.
	b. Equip the vessel with a tightly fitting vented cover or lid that must be closed at all times when the vessel contains HAP, except for material additions and sampling	<p>i. Reduce emissions of organic HAP with a vapor pressure <math>\geq 0.6</math> kPa by <math>\geq 75</math> percent by weight, and reduce emissions of organic HAP with a vapor pressure <math>&lt; 0.6</math> kPa by <math>\geq 60</math> percent by weight, by venting emissions through a closed-vent system to any combination of control devices (except a flare); or</p> <p>ii. Reduce emissions of total organic HAP by venting emissions from a non-halogenated vent stream through a closed-vent system to a flare; or</p> <p>iii. Reduce emissions of total organic HAP by venting emissions through a closed-vent system to a condenser that reduces the outlet gas temperature to:</p>
		$< 10$ °C if the process vessel contains HAP with a partial pressure $< 0.6$ kPa, or
		$< 2$ °C if the process vessel contains HAP with a partial pressure $\geq 0.6$ kPa and $< 17.2$ kPa, or
		$< -5$ °C if the process vessel contains HAP with a partial pressure $\geq 17.2$ kPa.
3. Portable and stationary process vessel at a new source	a. Equip the vessel with a tightly fitting vented cover or lid that must be closed at all times when the vessel contains HAP, except for material additions and sampling	<p>i. Reduce emissions of total organic HAP by <math>\geq 95</math> percent by weight by venting emissions through a closed-vent system to any combination of control devices (except a flare); or</p> <p>ii. Reduce emissions of total organic HAP by venting emissions from a non-halogenated vent stream through a closed-vent system to a flare; or</p>

		iii. Reduce emissions of total organic HAP by venting emissions through a closed-vent system to a condenser that reduces the outlet gas temperature to: < -4 °C if the process vessel contains HAP with a partial pressure < 0.7 kPa, or
		< -20 °C if the process vessel contains HAP with a partial pressure ≥ 0.7 kPa and < 17.2 kPa, or
		< -30 °C if the process vessel contains HAP with a partial pressure ≥ 17.2 kPa.
4. Halogenated vent steam from a process vessel subject to the requirements of item 2 or 3 of this table for which you use a combustion control device to control organic HAP emissions	a. Use a halogen reduction device after the combustion control device; or	i. Reduce overall emissions of hydrogen halide and halogen HAP by ≥ 95 percent; or ii. Reduce overall emissions of hydrogen halide and halogen HAP to ≤ 0.45 kilogram per hour (kg/hr).
	b. Use a halogen reduction device before the combustion control device	Reduce the halogen atom mass emission rate to ≤ 0.45 kg/hr.

[68 FR 69185, Dec. 11, 2003, as amended at 70 FR 25682, May 13, 2005]

**Table 2 to Subpart HHHHH of Part 63—Emission Limits for Storage Tanks**

As required in §63.8010, you must meet each emission limit in the following table that applies to your storage tanks.

For each . . .	Then you must . . .
1. Group 1a storage tank	a. Comply with the requirements of subpart WW of this part, except as specified in §63.8010(b); or
	b. Reduce total organic HAP emissions from the storage tank by ≥ 90 percent by weight by venting emissions through a closed-vent system to any combination of control devices (excluding a flare); or
	c. Reduce total organic HAP emissions from the storage tank by venting emissions from a non-halogenated vent stream through a closed-vent system to a flare.
2. Group 1b storage tank	a. Comply with the requirements of subpart WW of this part, except as specified in §63.8010(b); or
	b. Reduce total organic HAP emissions from the storage tank by ≥ 80 percent by weight by venting emissions through a closed-vent system to any combination of control devices (excluding a flare); or

	c. Reduce total organic HAP emissions from the storage tank by venting emissions from a non-halogenated vent stream through a closed-vent system to a flare.
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**Table 3 to Subpart HHHHH of Part 63—Requirements for Equipment Leaks**

As required in §63.8015, you must meet each requirement in the following table that applies to your equipment leaks.

For all . . .	You must . . .
1. Equipment that is in organic HAP service at an existing source	a. Comply with the requirements in §§63.424(a) through (d) and 63.428(e), (f), and (h)(4), except as specified in §63.8015(b); or b. Comply with the requirements of subpart TT of this part; or
	c. Comply with the requirements of subpart UU of this part, except as specified in §63.8015(c) and (d).
2. Equipment that is in organic HAP service at a new source	a. Comply with the requirements of subpart TT of this part; or b. Comply with the requirements of subpart UU of this part, except as specified in §63.8015(c) and (d).

[68 FR 58190, Oct. 8, 2003, as amended at 71 FR 69021, Nov. 29, 2006]

**Table 4 to Subpart HHHHH of Part 63—  
Emission Limits and Work Practice Standards for Wastewater Streams**

As required in §63.8020, you must meet each emission limit and work practice standard in the following table that applies to your wastewater streams.

For each . . .	You must . . .
1. Wastewater tank used to store a Group 1 wastewater stream	Maintain a fixed roof, which may have openings necessary for proper venting of the tank, such as pressure/vacuum vent or j-pipe vent.
2. Group 1 wastewater stream	a. Convey using hard-piping and treat the wastewater as a hazardous waste in accordance with 40 CFR part 264, 265, or 266 either onsite or offsite; or
	b. If the wastewater contains < 50 ppmw of partially soluble HAP, you may elect to treat the wastewater in an enhanced biological treatment system that is located either onsite or offsite.

**Table 5 to Subpart HHHHH of Part 63—  
Emission Limits and Work Practice Standards for Transfer Operations**

As required in §63.8025, you must meet each emission limit and work practice standard in the following table that applies to your transfer operations.

For each . . .	You must. . .
1. Group 1 transfer operation vent stream	a. Reduce emissions of total organic HAP by $\geq$ 75 percent by weight by venting emissions through a closed-vent system to any combination of control devices (except a flare); or
	b. Reduce emissions of total organic HAP by venting emissions from a non-halogenated vent stream through a closed-vent system to a flare; or

	c. Use a vapor balancing system designed and operated to collect organic HAP vapors displaced from tank trucks and railcars during loading and route the collected HAP vapors to the storage tank from which the liquid being loaded originated or to another storage tank connected by a common header.
2. Halogenated Group 1 transfer operation vent stream for which you use a combustion device to control organic HAP emissions	<p>a. Use a halogen reduction device after the combustion device to reduce emissions of hydrogen halide and halogen HAP by <math>\geq 95</math> percent by weight or to <math>\leq 0.45</math> kg/hr; or</p> <p>b. Use a halogen reduction device before the combustion device to reduce the halogen atom mass emission rate to <math>\leq 0.45</math> kg/hr.</p>

**Table 6 to Subpart HHHHH of Part 63—Requirements for Heat Exchange Systems**

As required in §63.8030, you must meet each requirement in the following table that applies to your heat exchange systems.

For each . . .	You must . . .
Heat exchange system, as defined in §63.101	Comply with the requirements in §63.104, except as specified in §63.8030.

**Table 7 to Subpart HHHHH of Part 63—Partially Soluble Hazardous Air Pollutants**

As specified in §63.8020, the partially soluble HAP in wastewater that are subject to management and treatment requirements in this subpart are listed in the following table:

Chemical name . . .	CAS No.
1. 1,1,1-Trichloroethane (methyl chloroform)	71556
2. 1,1,2,2-Tetrachloroethane	79345
3. 1,1,2-Trichloroethane	79005
4. 1,1-Dichloroethylene (vinylidene chloride)	75354
5. 1,2-Dibromoethane	106934
6. 1,2-Dichloroethane (ethylene dichloride)	107062
7. 1,2-Dichloropropane	78875
8. 1,3-Dichloropropene	542756
9. 2,4,5-Trichlorophenol	95954
10. 2-Butanone (MEK)	78933
11. 1,4-Dichlorobenzene	106467
12. 2-Nitropropane	79469
13. 4-Methyl-2-pentanone (MIBK)	108101
14. Acetaldehyde	75070
15. Acrolein	107028
16. Acrylonitrile	107131

<b>Chemical name . . .</b>	<b>CAS No.</b>
17. Allyl chloride	107051
18. Benzene	71432
19. Benzyl chloride	100447
20. Biphenyl	92524
21. Bromoform (tribromomethane)	75252
22. Bromomethane	74839
23. Butadiene	106990
24. Carbon disulfide	75150
25. Chlorobenzene	108907
26. Chloroethane (ethyl chloride)	75003
27. Chloroform	67663
28. Chloromethane	74873
29. Chloroprene	126998
30. Cumene	98828
31. Dichloroethyl ether	111444
32. Dinitrophenol	51285
33. Epichlorohydrin	106898
34. Ethyl acrylate	140885
35. Ethylbenzene	100414
36. Ethylene oxide	75218
37. Ethylidene dichloride	75343
38. Hexachlorobenzene	118741
39. Hexachlorobutadiene	87683
40. Hexachloroethane	67721
41. Methyl methacrylate	80626
42. Methyl-t-butyl ether	1634044
43. Methylene chloride	75092
44. N-hexane	110543
45. N,N-dimethylaniline	121697
46. Naphthalene	91203
47. Phosgene	75445
48. Propionaldehyde	123386
49. Propylene oxide	75569

Chemical name . . .	CAS No.
50. Styrene	100425
51. Tetrachloroethylene (perchloroethylene)	127184
52. Tetrachloromethane (carbon tetrachloride)	56235
53. Toluene	108883
54. Trichlorobenzene (1,2,4-)	120821
55. Trichloroethylene	79016
56. Trimethylpentane	540841
57. Vinyl acetate	108054
58. Vinyl chloride	75014
59. Xylene (m)	108383
60. Xylene (o)	95476
61. Xylene (p)	106423

[68 FR 69185, Dec. 11, 2003, as amended at 70 FR 25683, May 13, 2005]

**Table 8 to Subpart FFFF of Part 63—Soluble Hazardous Air Pollutants**

As specified in §63.8020, the soluble HAP in wastewater that are subject to management and treatment requirements of this subpart are listed in the following table:

Chemical name . . .	CAS No.
1. Acetonitrile	75058
2. Acetophenone	98862
3. Diethyl sulfate	64675
4. Dimethyl hydrazine (1,1)	57147
5. Dimethyl sulfate	77781
6. Dinitrotoluene (2,4)	121142
7. Dioxane (1,4)	123911
8. Ethylene glycol dimethyl ether	110714
9. Ethylene glycol monobutyl ether acetate	112072
10. Ethylene glycol monomethyl ether acetate	110496
11. Isophorone	78591
12. Methanol	67561
13. Nitrobenzene	98953
14. Toluidine (o-)	95534
15. Triethylamine	121448

Royal Adhesives and Sealants, LLC  
South Bend, Indiana  
Permit Reviewer: Anh Nguyen

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[68 FR 69185, Dec. 11, 2003, as amended at 70 FR 25683, May 13, 2005]

**Table 9 to Subpart HHHHH of Part 63—Requirements for Reports**

As required in §63.8075(a) and (b), you must submit each report that applies to you on the schedule shown in the following table:

<b>You must submit a . . .</b>	<b>The report must contain . . .</b>	<b>You must submit the report . . .</b>
1. Precompliance report	The information specified in §63.8075(c)	At least 6 months prior to the compliance date; or for new sources, with the application for approval of construction or reconstruction.
2. Notification of compliance status report	The information specified in §63.8075(d)	No later than 150 days after the compliance date specified in §63.7995.
3. Compliance report	The information specified in §63.8075(e)	Semiannually according to the requirements in §63.8075(b).

**Table 10 to Subpart HHHHH of Part 63—Applicability of General Provisions to Subpart HHHHH**

As specified in §63.8095, the parts of the General Provisions that apply to you are shown in the following table:

<b>Citation</b>	<b>Subject</b>	<b>Explanation</b>
§63.1	Applicability	Yes.
§63.2	Definitions	Yes.
§63.3	Units and Abbreviations	Yes.
§63.4	Prohibited Activities	Yes.
§63.5	Construction/Reconstruction	Yes.
§63.6(a)	Applicability	Yes.
§63.6(b)(1)–(4)	Compliance Dates for New and Reconstructed sources	Yes.
§63.6(b)(5)	Notification	Yes.
§63.6(b)(6)	[Reserved]	
§63.6(b)(7)	Compliance Dates for New and Reconstructed Area Sources That Become Major	Yes.
§63.6(c)(1)–(2)	Compliance Dates for Existing Sources	Yes.
§63.6(c)(3)–(4)	[Reserved]	
§63.6(c)(5)	Compliance Dates for Existing Area Sources That Become Major	Yes.
§63.6(d)	[Reserved]	
§63.6(e)(1)–(2)	Operation & Maintenance	Yes.

Citation	Subject	Explanation
§63.6(e)(3)(i), (ii), and (v) through (viii)	SSMP	Yes, except information regarding Group 2 emission points and equipment leaks is not required in the SSMP, as specified in §63.8080(f).
§63.6(e)(3)(iii) and (iv)	Recordkeeping and Reporting During Startup, Shutdown, and Malfunction (SSM)	No, §§63.998(d)(3) and 63.998(c)(1)(ii)(D) through (G) specify the recordkeeping requirement for SSM events, and §63.8075(e)(5) specifies reporting requirements.
§63.6(e)(3)(ix)	Title V permit	Yes.
§63.6(f)(1)	Compliance Except During SSM	Yes.
§63.6(f)(2)–(3)	Methods for Determining Compliance	Yes.
§63.6(g)(1)–(3)	Alternative Standard	Yes.
§63.6(h)	Opacity/Visible Emission (VE) Standards	Only for flares for which Method 22 observations are required as part of a flare compliance assessment.
§63.6(i)(1)–(14)	Compliance Extension	Yes.
§63.6(j)	Presidential Compliance Exemption	Yes.
§63.7(a)(1)–(2)	Performance Test Dates	Yes, except substitute 150 days for 180 days.
§63.7(a)(3)	CAA Section 114 Authority	Yes, and this paragraph also applies to flare compliance assessments as specified under §63.997(b)(2).
§63.7(b)(1)	Notification of Performance Test	Yes.
§63.7(b)(2)	Notification of Rescheduling	Yes.
§63.7(c)	Quality Assurance/Test Plan	Yes, except the test plan must be submitted with the notification of the performance test if the control device controls process vessels.
§63.7(d)	Testing Facilities	Yes.
§63.7(e)(1)	Conditions for Conducting Performance Tests	Yes, except that performance tests for process vessels must be conducted under worst-case conditions as specified in §63.8005.
§63.7(e)(2)	Conditions for Conducting Performance Tests	Yes.
§63.7(e)(3)	Test Run Duration	Yes.

Citation	Subject	Explanation
§63.7(f)	Alternative Test Method	Yes.
§63.7(g)	Performance Test Data Analysis	Yes.
§63.7(h)	Waiver of Tests	Yes.
§63.8(a)(1)	Applicability of Monitoring Requirements	Yes.
§63.8(a)(2)	Performance Specifications	Yes.
§63.8(a)(3)	[Reserved]	
§63.8(a)(4)	Monitoring with Flares	Yes.
§63.8(b)(1)	Monitoring	Yes.
§63.8(b)(2)–(3)	Multiple Effluents and Multiple Monitoring Systems	Yes.
§63.8(c)(1)	Monitoring System Operation and Maintenance	Yes.
§63.8(c)(1)(i)	Maintain and operate CMS	Yes.
§63.8(c)(1)(ii)	Routine repairs	Yes.
§63.8(c)(1)(iii)	SSMP for CMS	Yes.
§63.8(c)(2)–(3)	Monitoring System Installation	Yes.
§63.8(c)(4)	Requirements	Only for CEMS; requirements for CPMS are specified in referenced subpart SS of 40 CFR part 63. This subpart does not contain requirements for continuous opacity monitoring systems (COMS).
§63.8(c)(4)(i)	CMS Requirements	No. This subpart does not require COMS.
§63.8(c)(4)(ii)	CMS requirements	Yes.
§63.8(c)(5)	COMS Minimum Procedures	No. This subpart does not contain opacity or VE limits.
§63.8(c)(6)	CMS Requirements	Only for CEMS; requirements for CPMS are specified in referenced subpart SS of 40 CFR part 63.
§63.8(c)(7)–(8)	CMS Requirements	Only for CEMS. Requirements for CPMS are specified in referenced subpart SS of 40 CFR part 63.
§63.8(d)	CMS Quality Control	Only for CEMS; requirements for CPMS are specified in referenced subpart SS of 40 CFR part 63.
§63.8(e)	CMS Performance Evaluation	Section 63.8(e)(6)(ii) does not apply because this subpart does not require

Citation	Subject	Explanation
		COMS. Other sections apply only for CEMS; requirements for CPMS are specified in referenced subpart SS of 40 CFR part 63.
§63.8(f)(1)–(5)	Alternative Monitoring Method	Yes, except you may also request approval using the precompliance report.
§63.8(f)(6)	Alternative to Relative Accuracy Test	Only for CEMS.
§63.8(g)(1)–(4)	Data Reduction	Only when using CEMS, except §63.8(g)(2) does not apply because data reduction requirements for CEMS are specified in §63.8000(d)(4)(iv).
		The requirements for COMS do not apply because this subpart has no opacity or VE limits.
§63.8(g)(5)	Data Reduction	No. Requirements for CEMS are specified in §63.8000(d)(4).
		Requirements for CPMS are specified in referenced subpart SS of 40 CFR part 63.
§63.9(a)	Notification Requirements	Yes.
§63.9(b)(1)–(5)	Initial Notifications	Yes.
§63.9(c)	Request for Compliance Extension	Yes.
§63.9(d)	Notification of Special Compliance Requirements for New Source	Yes.
§63.9(e)	Notification of Performance Test	Yes.
§63.9(f)	Notification of VE/Opacity Test	No. This subpart does not contain opacity or VE limits.
§63.9(g)	Additional Notifications When Using CMS	Only for CEMS; requirements for CPMS are specified in referenced subpart SS of 40 CFR part 63.
§63.9(h)(1)–(6)	Notification of Compliance Status	Yes, except this subpart has no opacity or VE limits, and §63.9(h)(2) does not apply because §63.8075(d) specifies the required contents and due date of the notification of compliance status report.
§63.9(i)	Adjustment of Submittal Deadlines	Yes.
§63.9(j)	Change in Previous Information	No, §63.8075(e)(8) specifies reporting requirements for process changes.
§63.10(a)	Recordkeeping/Reporting	Yes.

Citation	Subject	Explanation
§63.10(b)(1)	Recordkeeping/Reporting	Yes.
§63.10(b)(2)(i)–(iv)	Records related to SSM	No, §§63.998(d)(3) and 63.998(c)(1)(ii)(D) through (G) specify recordkeeping requirements for periods of SSM.
§63.10(b)(2)(iii)	Records related to maintenance of air pollution control equipment	Yes.
§63.10(b)(2)(vi), (x), and (xi)	CMS Records	Only for CEMS; requirements for CPMS are specified in referenced subpart SS of 40 CFR part 63.
§63.10(b)(2)(vii)–(ix)	Records	Yes.
§63.10(b)(2)(xii)	Records	Yes.
§63.10(b)(2)(xiii)	Records	Yes.
§63.10(b)(2)(xiv)	Records	Yes.
§63.10(b)(3)	Records	Yes.
§63.10(c)(1)–(6),(9)–(15)	Records	Only for CEMS; requirements for CPMS are specified in referenced subpart SS of 40 CFR part 63.
§63.10(c)(7)–(8)	Records	No. Recordkeeping requirements are specified in §63.8080.
§63.10(d)(1)	General Reporting Requirements	Yes.
§63.10(d)(2)	Report of Performance Test Results	Yes.
§63.10(d)(3)	Reporting Opacity or VE Observations	No. This subpart does not contain opacity or VE limits.
§63.10(d)(4)	Progress Reports	Yes.
§63.10(d)(5)(i)	SSM Reports	No, §63.8075(e)(5) and (6) specify the SSM reporting requirements.
§63.10(d)(5)(ii)	Immediate SSM reports	No.
§63.10(e)(1)–(2)	Additional CMS Reports	Only for CEMS, but §63.10(e)(2)(ii) does not apply because this subpart does not require COMS.
§63.10(e)(3)	Reports	No. Reporting requirements are specified in §63.8075.
§63.10(e)(3)(i)–(iii)	Reports	No. Reporting requirements are specified in §63.8075.
§63.10(e)(3)(iv)–(v)	Excess Emissions Reports	No. Reporting requirements are specified in §63.8075.

Citation	Subject	Explanation
§63.10(e)(3)(vi-viii)	Excess Emissions Report and Summary Report	No. Reporting requirements are specified in §63.8075.
§63.10(e)(4)	Reporting COMS data	No. This subpart does not contain opacity or VE limits.
§63.10(f)	Waiver for Recordkeeping/Reporting	Yes.
§63.11	Flares	Yes.
§63.12	Delegation	Yes.
§63.13	Addresses	Yes.
§63.14	Incorporation by Reference	Yes.
§63.15	Availability of Information	Yes.

[68 FR 69185, Dec. 11, 2003, as amended at 71 FR 20468, Apr. 20, 2006]

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

**Addendum to the Technical Support Document (ATSD)  
for a Part 70 Operating Permit Renewal**

**Source Description and Location**

Source Name:	Royal Adhesives and Sealants, L.L.C.
Source Location:	2001 West Washington Street
County:	St. Joseph
SIC Code:	2891
Permit Renewal No.:	T 141-30439-00146
Permit Reviewer:	Anh Nguyen

The Office of Air Quality (OAQ) has reviewed Part 70 Operating Permit for a Renewal permit application, submitted by Royal Adhesives and Sealants, L.L.C. on April 08, 2011, relating to the operation of a stationary carbon dioxide processing plant.

**Public Notice Information**

On November 2 , 2011, the Office of Air Quality (OAQ) had a notice published in the South Bend Tribune in St. Joseph County stating that Royal Adhesives and Sealants, L.L.C. has applied for a Renewal Permit of their Part 70 Operating Permit issued on January 18, 2007. The notice also stated that the OAQ proposed to issue a Part 70 Operating Permit Renewal for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

No changes have been made to the TSD because the OAQ prefers that the Technical Support Document reflects the permit that was on public notice. Changes that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result, ensuring that these types of concerns are documented and part of the record regarding this permit decision.

**Comments and IDEM's Responses**

Upon further review, the OAQ has decided to make the following revisions to the permit

The changes listed below have been made to Part 70 Operating Permit No. T 141-30309-00548 Deleted language appears as ~~strike throughs~~ and new language appears in **bold**:

1. The phrase has been updated as follows throughout the permit

**Part 70 Operating Permit Renewal**  
~~Part 70 Operating Renewal Administrative Permit~~

**IDEM Contact**

Questions regarding this proposed permit can be directed to:

Anh Nguyen  
Indiana Department Environmental Management  
Office of Air Quality  
100 North Senate Avenue  
MC 61-53, Room 1003

Indianapolis, Indiana 46204-2251  
Toll free (within Indiana): 1-800-451-6027 extension (3-5334)  
Or dial directly: (317) 233-5334  
[pnguyen@idem.in.gov](mailto:pnguyen@idem.in.gov)

Please reference permit number T141-30439-00146 in all correspondence.

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

Technical Support Document (TSD) for a Part 70 Operating Permit Renewal

**Source Background and Description**

Source Name:	Royal Adhesives and Sealants, LLC
Source Location:	2001 West Washington Street, South Bend, IN, 46628
County:	St. Joseph
SIC Code:	2891
Permit Renewal No.:	T 141-30439-00146
Permit Reviewer:	Anh Nguyen

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Royal Adhesives and Sealants, LLC relating to the operation of a stationary sealant and adhesive manufacturing plant. On April 8, 2011, Royal Adhesives and Sealants, LLC submitted an application to the OAQ requesting to renew its operating permit. Royal Adhesives and Sealants, LLC was issued its first Part 70 Operating Permit Renewal T 141-19496-00146 on January 18, 2007.

**Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units:

- (a) The following adhesive and sealant churns, each containing a nitrogen blanket purging system which is integral to the churning process, each exhausting to its respective vent and equipped with its respective condenser for VOC control. These emissions units are affected units under 40 CFR 63, Subpart HHHHH: The sealant churns below have a combined maximum production capacity of 1,230 lbs/hr, and the adhesive churns have a combined maximum production capacity of 11,833 lbs/hr. The source will utilize a cartridge type dust collector, identified as DC-3, with 18 cartridges to control PM emissions from sealant churns CH-7, CH-8, and adhesive churns CH-1, CH-2, CH-3, CH-22, CH25, CH-26, CH-40, CH-41, CH-54, CH-55, and CH-56. The dust collector flowrate is 12,000 cubic feet per minute (cfm).

Churn Content ID	Stack ID	Condenser ID	Installation Date	Volume (gal)
Sealant CH-7	S-7	CE-7	November 1996	210
Sealant CH-8	S-8	CE-8	November 1996	210
Sealant CH-9	S-9	CE-9	June 1998	900
Sealant CH-10	S-10	CE-10	June 1998	900
Sealant CH-53	S-53	CE-53	November 1996	500
Adhesive CH-1	S-1	CE-1	November 1996	330
Adhesive CH-2	S-2	CE-2	November 1996	330
Adhesive CH-3	N/A	N/A	November 1996	55
Adhesive CH-22	S-22	CE-22	June 1998	2,000
Adhesive CH-25	S-25	CE-25	April 1999	750
Adhesive CH-26	S-26	CE-26	November 1996	1,500
Adhesive CH-27	S-27	CE-27	March 2001	1,522
Adhesive CH-28	S-28	CE-28	April 2003	500
Adhesive CH-29	S-29	CE-29	May 2005	3,000
Adhesive CH-40	S-40	CE-40	December 2006	1,000
Adhesive CH-41	S-41	CE-41	2009	2,800

<b>Churn Content ID</b>	<b>Stack ID</b>	<b>Condenser ID</b>	<b>Installation Date</b>	<b>Volume (gal)</b>
Adhesive CH-54	S-54	CE-54	November 1996	550
Adhesive CH-55	S-55	CE-55	November 1996	560
Adhesive CH-56	S-56	CE-56	November 1996	600

The following emission units (items (b) – (h)) and (i) - (x) are subject to the National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing Requirements [40 CFR Part 63, Subpart HHHHH]:

- (b) A five and three gallon adhesive canning line, with a maximum production of 8,291 lb/hr, with no VOC control, constructed in April 1997;
- (c) A one gallon adhesive canning line, with a maximum production of 3,238 lb/hr, with no VOC control, constructed in April 1997;
- (d) Two (2) tube filling systems: a double-head system, and a high-speed-single-head system. These systems have a combined maximum production capacity of 3,627 lbs/hr, with no VOC control constructed in February 1997;
- (e) A VOL storage tank, identified as ST-11, with a volume of less than 40 cubic meters but greater than 1,000 gallons, erected in 1987 but not yet constructed/used, with pressure venting to the atmosphere and no emission control;
- (f) Two (2) Volatile Organic Liquid (VOL) storage tanks, identified as ST-1 and ST-4, each with a volume of 95 cubic meters and a vapor pressure less than 15.0 kiloPascals, constructed in 1986, with pressure venting to the atmosphere and no emission control;
- (g) Six (6) VOL storage tanks, identified as ST-2, ST-3, ST-5, ST-6, ST-7 and ST-8, each with a volume of 57 cubic meters, constructed in 1986, with pressure venting to the atmosphere and no emission control;
- (h) Two (2) VOL storage tanks, identified as ST-9 and ST-10, each with a volume of less than 40 cubic meters but greater than 1,000 gallons, constructed in 1987, with pressure venting to the atmosphere and no emission control;

The following conditions from previous approvals have been determined to be no longer applicable. Therefore, they were not incorporated into this Part 70 Permit. Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. NSPS (40 CFR 60, Subpart Kb)

- 1. The requirements of 40 CFR 60.116b(a) and (b) have been incorporated into the state rules. Therefore, these tanks are no longer subject to the recordkeeping requirements of 40 CFR 60, Subpart Kb because pursuant to 40 CFR 60.110b(b), as amended in the October 15, 2003 Federal Register, these tanks are not subject to this rule. Therefore, all conditions in permit for the storage tanks have not been incorporated into this permit
- (i) Three (3) baghouse dust collectors, identified as DC-1, DC-2, and DC-3, designed to control particulate matter emissions from all facilities except for VOL storage tanks ST-1 through ST-11.
- (j) One (1) 25 hp Shear Mixer, constructed in 2009, identified as E-25, with a maximum capacity of 150 gallons, using baghouse dust collector, identified as DC-7 as control.

- (k) One (1) 40 hp Shear Mixer, constructed in 2009, identified as E-40, with a maximum capacity of 500 gallons, using baghouse dust collector, identified as DC-7 as control.
- (l) One (1) 75 hp Shear Mixer, constructed in 2009, identified as E-75, with a maximum capacity of 500 gallons, using baghouse dust collector, identified as DC-7 as control.
- (m) One (1) Ross process vessel, constructed in 2009, identified as E-20, with a maximum capacity of 150 gallons, using baghouse dust collector, identified as DC-7 as control.
- (n) One (1) Ross process vessel, constructed in 2009, identified as E-10, with a maximum capacity of 40 gallons, using baghouse dust collector, identified as DC-7 as control.
- (o) One (1) process vessel, constructed in 2009, identified as R-1, with a maximum capacity of 1,000 gallons, using baghouse dust collector, identified as DC-7 as control.
- (p) One (1) process vessel, constructed in 2009, identified as R-2, with a maximum capacity of 1,000 gallons, using baghouse dust collector, identified as DC-7 as control.
- (q) One (1) process vessel, constructed in 2009, identified as R-3, with a maximum capacity of 50 gallons, using baghouse dust collector, identified as DC-7 as control.
- (r) One (1) process vessel, constructed in 2009, identified as R-4, with a maximum capacity of 250 gallons, using baghouse dust collector, identified as DC-7 as control.
- (s) One (1) process vessel, constructed in 2009, identified as R-5, with a maximum capacity of 250 gallons, using baghouse dust collector, identified as DC-7 as control.
- (t) One (1) process vessel, constructed in 2009, identified as R-7, with a maximum capacity of 750 gallons, using baghouse dust collector, identified as DC-7 as control.
- (u) One (1) process vessel, constructed in 2009, identified as R-8, with a maximum capacity of 250 gallons, using baghouse dust collector, identified as DC-7 as control.
- (v) One (1) process vessel, constructed in 2009, identified as R-9, with a maximum capacity of 1,000 gallons, using baghouse dust collector, identified as DC-7 as control.
- (w) Three (3) storage tanks, constructed in 2009, identified as ST-15, ST-16, and ST- 17, each with a maximum capacity of 8,000 gallons.
- (x) Two (2) baghouse dust collectors, identified as DC-7, and DC-8.

<b>Emission Units and Pollution Control Equipment Constructed and/or Operated without a Permit</b>
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There are no unpermitted emission units operating at this source during this review process.

<b>Emission Units and Pollution Control Equipment Removed From the Source</b>
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There are no emission units removed from the source during this review

<b>Insignificant Activities</b>
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This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Two (2) natural gas fired boilers, each installed in February 1997, and identified as B-1 and B-2, each rated at 1.68 million British Thermal Units per hour (MMBtu/hr), and exhausting to stacks SB-1 and SB-2, respectively. [326 IAC 6-2-4];
- (b) Part Cleaner (Churn 2, 36x15x10); 20 gallon, constructed after 1980. [326 IAC 8-3-2][326 IAC 8-3-5];
- (c) Part Cleaner (Churn 8, 36x15x10); 20 gallon, constructed after 1980. [326 IAC 8-3-2][326 IAC 8-3-5];
- (d) Part Cleaner (Churn 53, 36x15x10); 20 gallon, constructed after 1980. [326 IAC 8-3-2][326 IAC 8-3-5];
- (e) Part Cleaner (55 Gallon Prosys press, 36x15x10); 20 gallon, constructed after 1980. [326 IAC 8-3-2][326 IAC 8-3-5];
- (f) Part Cleaner (Maintenance Shop, 36x15x10); 20 gallon, constructed after 1980. [326 IAC 8-3-2][326 IAC 8-3-5];
- (g) Part Cleaner (Maintenance Shop, 36x15x10, galvanized finish); 20 gallon, constructed after 1980. [326 IAC 8-3-2][326 IAC 8-3-5]; and
- (h) Part Cleaner (Maintenance Shop, 70x15x10); 40 gallon, constructed after 1980. [326 IAC 8-3-2][326 IAC 8-3-5].

The following insignificant activities (items (i) – (o)) are subject to the National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing Requirements [40 CFR Part 63, Subpart HHHHH]:

- (i) Volatile Organic Compound (VOC) and Hazardous Air Pollution (HAP) storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons;
- (j) Any unit emitting greater than 1 pound per day but less than 12.5 pounds per day or 2.5 ton per year of any combination of HAPs, including:  
  
Piping losses using standard SOCOMI factors for non-leaking pipes, valves, and pumps for raw materials in VOL storage tanks: ST-1, ST-4, ST-2, ST-3, ST-5, ST-6, ST-7, ST-8, ST-9, ST-10, ST-11, ST-12 and ST-13, and holding tanks: T1, T2, T3, T4, T5, T7, T9, T10, T11;
- (k) The following adhesive holding tanks, each with the potential to emit (PTE) of less than 1 ton single HAP/year, less than 2.5 tons of a combination of HAPs/year, and less than 10 tons VOC/year, with uncontrolled emissions from conservation vents:

<b>Holding Tank Content, ID</b>	<b>Installation Date</b>	<b>Maximum Capacity (gal)</b>
Adhesive T-1	January 1997	6,000
Adhesive T-2	January 1997	6,000
Adhesive T-3	January 1997	3,000
Adhesive T-4	January 1997	3,000
Adhesive T-5	January 1997	3,000
Adhesive T-9	January 1997	3,000

The adhesive holding tanks have a combined throughput of 11,529 lbs/hr;

- (l) Two (2) sealant holding tanks, identified as T-10 and T-11, each with a volume of 3,000 gallons, each with the potential to emit (PTE) of less than 1 ton single HAP/year, less than 2.5 tons of a combination of HAPs/year, and less than 10 tons VOC/year, which to date have not been installed;
- (m) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment;
- (n) A VOL storage tank, identified as ST-12, with a volume of less than 40 cubic meters but greater than 1,000 gallons, with pressure venting to the atmosphere and no emission control;
- (o) Activities with VOC emissions equal to or less than 3 lbs/hour or 15 lbs/day, including:
  - (1) A manually operated five/fifty-five gallon sealant pail/drum line, with a maximum production capacity of 1,914 lb/hr, constructed in 1997;
  - (2) A manually operated five/fifty-five gallon adhesive pail/drum line, with a maximum production capacity of 1,820 lb/hr, constructed in 1997.
  - (3) Three (3) "post" churns, producing both solvent and adhesive materials, permitted for construction in 2007, identified as W-5, W-20, and W-70A. These churns do not have nitrogen blanket purging systems.
  - (4) One (1) 750-gallon water-based adhesive mixing churn, identified as W-750, with a maximum capacity of 6,600 pounds of water-based adhesives per hour, constructed in 2008; and
  - (5) One (1) 550-gallon water-based adhesive mixing churn, identified as W-550, with a maximum capacity of 4,800 pounds of water-based adhesives per hour, constructed in 2008.
- (p) Natural gas-fired combustion sources with heat input equal to or less than ten (10) MMBtu/hr, including:
  - (1) Two air make-up units identified as AMU-1 & 2, each rated at 1.69 MMBtu/hr and exhausting to separate stacks; and
  - (2) Twenty-five natural gas fired forced air heating units, each rated at 0.4 MMBtu/hr.
- (q) Application of oils, greases, lubricants or other non-volatile materials applied as temporary protective coating;
- (r) Closed loop heating and cooling systems;
- (s) Solvent recycling systems with batch capacity less than or equal to 100 gallons;
- (t) Water based adhesives that are less than or equal to 5% by volume of VOCs excluding HAPs;
- (u) Heat exchanger cleaning and repair;
- (v) Process vessel degassing and cleaning to prepare for internal repairs;
- (w) Paved and unpaved roads and parking lots with public access;[326 IAC 6-4]

- (x) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower;
- (y) A laboratory as defined in 326 IAC 2-7-1(20)(C);
- (z) A one-gallon, water-based sealant canning line, constructed in March 1997, with a PTE of less than 5 tons PM (particulate matter)/year;
- (aa) A 465 gallon water-based adhesive mixing churn, identified as W200, with a PTE of less than 5 tons PM (particulate matter)/year, constructed in 1997.
- (bb) A 1050 gallon water-based adhesive mixing churn, identified as W300, with a PTE of less than 5 tons PM (particulate matter)/year, constructed in 1997.
- (cc) A 500 gallon Non-Solvent, Liquid Rubber Sealant Mixing Churn, identified as CH-52, constructed in 1997.
- (dd) One (1) 350-gallon water-based adhesive mixing churn, identified as W-400, with a maximum capacity of 560 pounds of water-based adhesives per hour. The PTE is less than 5 tons PM (particulate matter)/year, constructed in 2001 .
- (ee) One (1) parachlorobenzotrifluoride (PCBTF) storage tank, approved for construction in 2009, identified as ST-13, with a maximum storage capacity of 20,000 gallons, emissions are uncontrolled.
- (ff) One (1) tert-butyl acetate storage tank, approved for construction in 2009, identified as ST-14, with a maximum storage capacity of 35,000 gallons, emissions are uncontrolled.
- (gg) Two (2) solvent recovery stills, approved for construction in 2009.

Tert-butyl acetate and PCBTF are exempt VOCs and do not contribute to VOC / HAP emissions. ST-13, ST-14 and the solvent recovery still are insignificant activities without applicable rule and will not be incorporated into the Part 70 Operating Permit.

- (hh) One (1) trash compactor constructed in 2009 is connected to the baghouse dust collector DC-8. The trash compactor is used to compact 1,075 cubic yards of trash annually from the facility. The trash is a mix of paper, cardboard and other non-hazardous solid waste material.
- (ii) The following thirteen (13) adhesive and sealant churns, installed in 2006, used to produce water based materials. Each churn will run a maximum of one (1) batch per day.

Churn ID	Stack ID	Volume (gal)
W-100	EF-3	334
W-500	EF-3	979
W-600	EF-3	1014
W-700	EF-3	1500
W-800	EF-3	2000
W-900	EF-3	1650
W-1100 (Casein - 2)	EF-3	1100
W-5 (Air Mixers)	EF-3	61
W-10 (10 HP Post)	EF-3	55
W-15 (15 HP Post)	EF-3	300

Churn ID	Stack ID	Volume (gal)
W-30 (30 HP Post)	EF-3	500
W-45 (Hochmeyer)	EF-3	45
W-55 (55 Drum)	EF-3	55

### Existing Approvals

The source was issued Part 70 Operating Permit Number T 141-19496-00146 on January 18, 2007. The source has since received the following approvals:

- (a) First Administrative Amendment Number 141-23920-00146, issued on March 15, 2007;
- (b) Second Administrative Amendment Number 141-24774-00146, issued on November 7, 2007;
- (c) First Minor Source Modification Number 141-26264-00146, issued on April 7, 2008;
- (d) First Minor Permit Modification Number 141-26286-00146, issued on June 3, 2008;
- (e) Second Minor Source Modification Number 141-27147-00146 issued on January 7, 2009;
- (f) Significant Permit Modification Number 141-27159-00146, issued on March 5, 2009;  
and
- (g) Third Administrative Amendment 141-27818-00146, issued on June 4, 2009.

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 registrations and permits are superseded by this permit.

### Air Pollution Control Justification as an Integral Part of the Process

Integral determinations from Part 70 Operating Permit Number T 141-9909-00146, issued on March 16, 2000 and Part 70 Operating Permit Number T 141-19496-00146, issued on January 18, 2007, found the use of a nitrogen blanket in the churns is an integral part of the process. The justification for this determination included the following:

- (a) The "nitrogen blanket," which is released over solvent-based sealants and adhesives in the churns during the churning process, is integral to the mixing process due to the high explosive risk posed by oxygen levels if the nitrogen blanket were not used.
- (b) During the mixing process, VOC, HAP and PM are emitted only during intermittent nitrogen purges of the churns.

IDEM, OAQ has evaluated the information submitted and agrees that the nitrogen blanket will be considered as an integral part of the churning process. Therefore, the permitting level will be determined using the potential to emit based on the purging time of the nitrogen blanket. Operating conditions in the proposed permit will specify that this nitrogen blanket shall operate at all times the churning operation is in operation.

The nitrogen blanket is a process feature necessary for the facility to produce its normal product and not a control device.

**Enforcement Issue**

There are no enforcement actions pending.

**Emission Calculations**

See Appendix A of this document for detailed emission calculations.

**County Attainment Status**

The source is located in St. Joseph County.

Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O <sub>3</sub>	Attainment effective July 19, 2007, for the 8-hour ozone standard. <sup>1</sup>
PM <sub>10</sub>	Unclassifiable effective November 15, 1990.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Not designated.

<sup>1</sup>Attainment effective October 18, 2000, for the 1-hour ozone standard for the South Bend-Elkhart area, including St. Joseph County, and is a maintenance area for the 1-hour ozone National Ambient Air Quality Standards (NAAQS) for purposes of 40 CFR 51, Subpart X\*. The 1-hour standard was revoked effective June 15, 2005.  
 Unclassifiable or attainment effective April 5, 2005, for PM<sub>2.5</sub>.

- (a) **Ozone Standards**  
 Volatile organic compounds (VOC) and Nitrogen Oxides (NO<sub>x</sub>) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to ozone. St. Joseph County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) **PM<sub>2.5</sub>**  
 St. Joseph County has been classified as attainment for PM<sub>2.5</sub>. On May 8, 2008, U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM<sub>2.5</sub> emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct PM<sub>2.5</sub> significant level at ten (10) tons per year. This rule became effective, June 28, 2011.. Therefore, direct PM<sub>2.5</sub> and SO<sub>2</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.
- (c) **Other Criteria Pollutants**  
 St. Joseph County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

**Fugitive Emissions**

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

**Unrestricted Potential Emissions**

This table reflects the unrestricted potential emissions of the source.

Unrestricted Potential Emissions	
Pollutant	Tons/year
PM	188.94
PM <sub>10</sub>	189.25
PM <sub>2.5</sub>	189.25
SO <sub>2</sub>	0.04
VOC	649.83
CO	6.16
NO <sub>x</sub>	7.34
GHGs	8799
Single HAP	13.04
Total HAP	479.37

Appendix A of this TSD reflects the unrestricted potential emissions of the source.

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM, VOC and HAP is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7 and will be issued a Part 70 Operating Permit Renewal.
- (b) Potential to emit of CO<sub>2</sub>e is less than 100,000 tons per year.
- (c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is equal to or greater than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is equal to or greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (d) The potential to emit of VOCs are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (e) The potential to emit of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit of any combination of HAPs is equal to or greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

**Part 70 Permit Conditions**

This source is subject to the requirements of 326 IAC 2-7, because the source met 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.

**Potential to Emit After Issuance**

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any new control equipment is considered federally enforceable only after issuance of this Part 70 permit renewal, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)								
	PM	PM <sub>10</sub> */ PM <sub>2.5</sub> **	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	GHGs	Total HAPs	Worst Single HAP
<b>Solvent Based Churns</b>									
E-25	0.06	0.06	0.00	0.01	0.00	0.00	0.00	0.01	0
E-40	0.18	0.02	0.00	0.01	0.00	0.00	0.00	0.01	0
E-75	0.18	0.18	0.00	0.01	0.00	0.00	0.00	0.01	0
E-20	0.06	0.06	0.00	0.01	0.00	0.00	0.00	0.01	0.00
E-10	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.01	0.00
R-1	0.37	0.37	0.00	0.01	0.00	0.00	0.00	0.01	0.00
R-2	0.37	0.37	0.00	0.01	0.00	0.00	0.00	0.01	0.00
R-3	0.02	0.02	0.00	0.01	0.00	0.00	0.00	0.01	0.00
R-4	0.09	0.09	0.00	0.01	0.00	0.00	0.00	0.01	0.00
R-5	0.09	0.09	0.00	0.01	0.00	0.00	0.00	0.01	0.00
R-7	0.28	0.28	0.00	0.01	0.00	0.00	0.00	0.01	0.00
R-8	0.09	0.09	0.00	0.01	0.00	0.00	0.00	0.01	0.00
R-9	0.37	0.37	0.00	0.01	0.00	0.00	0.00	0.01	0.00
<b>Insignificant Activities</b>									
ST-1	negl.	0.00	0.00	0.46	0.00	0.00	0.00	0.46	0.46
ST-2	negl.	0.00	0.00	1.51	0.00	0.00	0.00	1.51	1.51
ST-3	negl.	0.00	0.00	0.046	0.00	0.00	0.00	0.046	0.046
ST-4	negl.	0.00	0.00	0.29	0.00	0.00	0.00	0.29	0.29
ST-5	negl.	0.00	0.00	0.22	0.00	0.00	0.00	0.22	0.22
ST-6	negl.	0.00	0.00	1.04	0.00	0.00	0.00	1.04	1.04

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)								
	PM	PM <sub>10</sub> */ PM <sub>2.5</sub> **	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	GHGs	Total HAPs	Worst Single HAP
ST-7	negl.	0.00	0.00	0.22	0.00	0.00	0.00	0.22	0.22
ST-8	negl.	0.00	0.00	0.67	0.00	0.00	0.00	0.67	negl
ST-10	negl.	0.00	0.00	0.06	0.00	0.00	0.00	0.06	0.06
ST-11	negl.	0.00	0.00	0.07	0.00	0.00	0.00	0.07	0.07
ST-12	negl.	0.00	0.00	0.37	0.00	0.00	0.00	0.37	0.37
ST-13	negl.	negl.	negl.	negl.	negl.	negl.	negl.	negl.	negl.
ST-14	negl.	negl.	negl.	negl.	negl.	negl.	negl.	negl.	negl.
Double+High Speed Single Head Tube Fillers	negl.	0.00	0.00	8.26	0.00	0.00	0.00	8.26	8.26
1 gal. Adhesive Canning Line	negl.	0.00	0.00	6.2	0.00	0.00	0.00	6.2	n/a
5 and 3 gal. Adhesive Canning Lines*	negl.	0.00	0.00	33.73	0.00	0.00	0.00	33.73	n/a
Water based churns W-200	negl.	0.00	0.00	negl.	0.00	0.00	0.00	negl.	negl
Water based churns W-300	negl.	0.00	0.00	negl.	0.00	0.00	0.00	negl.	negl
Water based churns W-400	negl.	0.00	0.00	negl.	0.00	0.00	0.00	negl.	negl
<b>13 churns installed in 2006</b>									
W-100	0.85	0.85	0.00	0.00	0.00	0.00	0.00	negl.	negl.
W-500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	negl.	negl.
W-600	0.00	0.00	0.00	1.05	0.00	0.00	0.00	negl.	negl.
W-700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	negl.	negl.
W-800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	negl.	negl.
W-900	0.00	0.00	0.00	0.00	0.00	0.00	0.00	negl.	negl.
W-1100 (Casein - 2)	3.29	3.29	0.00	0.00	0.00	0.00	0.00	negl.	negl.
W-5 (Air Mixers)	0.00	0.00	0.00	0.18	0.00	0.00	0.00	negl.	negl.
W-10 (10 HP Post)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	negl.	negl.
W-15 (15 HP Post)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	negl.	negl.
W-30 (30 HP Post)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	negl.	negl.

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)								
	PM	PM <sub>10</sub> */ PM <sub>2.5</sub> **	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	GHGs	Total HAPs	Worst Single HAP
W-45 (Hochmeyer)	0.05	0.05	0.00	0.00	0.00	0.00	0.00	negl.	negl.
W-55 (55 Drum)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	negl.	negl.
<b>Small Industrial boilers</b>									
5/55-gal. Adhesive Pail/Drum Line	negl.	0.00	0.00	7.4	0.00	0.00	0.00	7.4	n/a
5/55-gal. Sealant Pail/Drum Line	negl.	0.00	0.00	5.71	0.00	0.00	0.00	5.71	n/a
Post W-5	0.70	0.70	0.00	1.95	0.00	0.00	0.00	0.12	0.12
Post W-20	0.70	0.70	0.00	1.95	0.00	0.00	0.00	0.12	0.12
Post W-70A	0.70	0.70	0.00	1.95	0.00	0.00	0.00	0.12	0.12
Water based churns W750	2.93	2.93	0.00	0	0.00	0.00	0.00	0	0.01
Water based churns W550	5.41	5.41	0.00	0	0.00	0.00	0.00	0.00	0.00
ST-15	0.00	0.00	0.00	3.77	0.00	0.00	0.00	0.01	0.00
ST-16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
ST-17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Trash Compactor	2.73	2.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Small Industrial boilers</b>									
Boiler B-1 Potential Emission in tons/yr	0.01	0.06	0	0.04	0.62	0.74	883	0.14	0.13
Boiler B-2 Potential Emission in tons/yr	0.01	0.06	0	0.04	0.62	0.74	883	0.00	0.00
Air Make-up Units AMU-1 & 2 Potential Emission in tons/yr	0.03	0.11	0.01	0.08	1.24	1.48	1777	0.00	0.00
25 Air Heating Units Potential Emission in tons/yr	0.08	0.33	0.03	0.24	3.68	4.38	5256	0.00	0.00
<b>Solvent Based Churns N2 Blanket Purges</b>									
Adhesive CH-1	0.02	0.02	0.00	1.88	0.00	0.00	0.00	1.88	0.00
Adhesive CH-2	0.02	0.02	0.00	1.88	0.00	0.00	0.00	1.88	0.00
Adhesive CH-3*****	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sealant CH-7	0.16	0.16	0.00	1.91	0.00	0.00	0.00	1.91	0.00

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)								
	PM	PM <sub>10</sub> */ PM <sub>2.5</sub> **	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	GHGs	Total HAPs	Worst Single HAP
Sealant CH-8	0.16	0.16	0.00	1.91	0.00	0.00	0.00	1.91	0.00
Sealant CH-9	n/a	n/a	0.00	1.91	0.00	0.00	0.00	1.91	0.00
Sealant CH-10	n/a	n/a	0.00	1.91	0.00	0.00	0.00	1.01	0.00
Adhesive CH-22	n/a	n/a	0.00	10.31	0.00	0.00	0.00	10.31	0.00
Adhesive CH-25	1.15	1.15	0.00	10.69	0.00	0.00	0.00	4.84	0.00
Adhesive CH-26	2.2	2.2	0.00	10.69	0.00	0.00	0.00	6	0.00
Adhesive CH-27	1.21	1.21	0.00	8.44	0.00	0.00	0.00	8.44	0.00
Adhesive CH-28	0.28	0.28	0.00	8.44	0.00	0.00	0.00	8.44	0.00
Adhesive CH-29	1.23	1.23	0.00	8.44	0.00	0.00	0.00	8.44	0.00
Adhesive CH-40	0.06	0.06	0.00	8.44	0.00	0.00	0.00	0.00	0.00
Adhesive CH-41	0.11	0.11	0.00	15.74	0.00	0.00	0.00	0.00	8.84
Sealant CH-53	0.42	0.42	0.00	1.91	0.00	0.00	0.00	1.91	0.00
Adhesive CH-54	0.03	0.03	0.00	1.88	0.00	0.00	0.00	0.00	0.00
Adhesive CH-55	0.51	0.51	0.00	10.69	0.00	0.00	0.00	10.69	0.00
Adhesive CH-56	1.04	1.04	0.00	10.69	0.00	0.00	0.00	10.69	0.00
<b>Total PTE of Entire Source</b>	<b>28.21</b>	<b>25.19</b>	<b>0.04</b>	<b>195.50</b>	<b>6.16</b>	<b>7.34</b>	<b>8799.00</b>	<b>156.02</b>	<b>13.04</b>
Title V Major Source Thresholds	NA	100	100	100	100	100	100,000 CO <sub>2</sub> e	>25	>10
PSD Major Source Thresholds	250	250	250	250	250	250	100,000 CO <sub>2</sub> e	NA	NA
negl. = negligible *Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". **PM <sub>2.5</sub> listed is direct PM <sub>2.5</sub> .									

- (a) This existing stationary source is not major for PSD because the emissions of each regulated pollutant, excluding GHGs, are less than two hundred fifty (<250) tons per year, emissions of GHGs are less than one hundred thousand (<100,000) tons of CO<sub>2</sub> equivalent emissions (CO<sub>2</sub>e) per year, and it is not in one of the twenty-eight (28) listed source categories.

### Federal Rule Applicability

- (a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each existing pollutant-specific emission unit that meets the following criteria:
- (1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;
  - (2) is subject to an emission limitation or standard for that pollutant; and
  - (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

Although this Part 70 Operating Permit does involve pollutant-specific emission units as defined in 40 CFR 64.1, with the potential to emit before controls equal to or greater than 100 ton per The emission units, however does not use a control device, therefore is not subject to an emission limitation or standard.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to any of the existing units or control equipment as part of this Part 70 permit renewal.

### NSPS

- (b) The requirements of New Source Performance Standard, (40 CFR 60.40c, Subpart Dc) Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units are not included in the permit for the two (2) boilers, designated as B-1 and B-2. New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60, Subpart Dc) applies to each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million Btu per hour (MM Btu/hr) or less, but greater than or equal to 2.9 MW (10 MM Btu/hr). Boilers B-1 and B-2, each have a maximum design heat input capacity of less than 10 MM Btu/hr.
- (c) The requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.110b, Subpart Kb) "Standards of Performance for Volatile Organic Liquid Storage Vessels" are not included in the permit for the two (2) volatile organic liquid storage tanks, ST-1 and ST-4 with storage capacity of 95 cubic meters each. Although they were constructed after the July 23, 1984 rule applicability date, and have a storage capacity greater than 75 cubic meters but less than 151 cubic meters each, the volatile organic liquids stored in the tanks has a maximum true vapor pressure of less than 15.0 kPa each. Therefore, pursuant to 40 CFR 60.110b(b), as amended in the October 15, 2003 Federal Register, these tanks are not subject to this rule.
- (d) The requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.110b, Subpart Kb) "Standards of Performance for Volatile Organic Liquid Storage Vessels" are not included in the permit for the nine (9) volatile organic liquid storage tanks, ST-2, ST-3, ST-5, ST-6, ST-7, ST-8, ST-9, ST-10 and ST-11 because each tank has a storage capacity that is less than 75 cubic meters.

### NESHAPs

- (e) The requirements of 40 CFR 63, Subpart HHHHH are applicable to miscellaneous coating manufacturing operations including process vessels greater than or equal to 250 gallons in capacity, storage tanks for feedstocks and products, components such as pumps, compressors, agitators, etc., wastewater tanks and transfer racks, located at a major source of HAPs. The source does not operate any wastewater streams, transfer

operations, or heat exchange systems. The compliance date for this NESHAP is December 11, 2006. The following is a list of the emission units that are subject to this subpart:

- (1) The following adhesive and sealant churns, each containing a nitrogen blanket purging system which is integral to the churning process, each exhausting to its respective vent and equipped with its respective condenser for VOC control:

Churn Content ID	Stack ID	Condenser ID	Installation Date	Volume (gal)
Sealant CH-9	S-9	CE-9	June 1998	900
Sealant CH-10	S-10	CE-10	June 1998	900
Sealant CH-27	S-27	CE-27	March 2001	1,522
Sealant CH-28	S-28	CE-28	April 2003	500
Sealant CH-53	S-53	CE-53	November 1996	500

Churn Content ID	Stack ID	Condenser ID	Installation Date	Volume (gal)
Adhesive CH-1	S-1	CE-1	November 1996	330
Adhesive CH-2	S-2	CE-2	November 1996	330
Adhesive CH-22	S-22	CE-22	June 1998	2,000
Adhesive CH-25	S-25	CE-25	April 1999	750
Adhesive CH-26	S-26	CE-26	November 1996	1,500
Adhesive CH-29	S-29	CE-29	May 2005	3,000
Adhesive CH-40	S-40	CE-40	December 2006	1,000
Adhesive CH-41	S-41	CE-41	2009	2,800
Adhesive CH-54	S-54	CE-54	November 1996	550
Adhesive CH-55	S-55	CE-55	November 1996	560
Adhesive CH-56	S-56	CE-56	November 1996	600

- (2) A five and three gallon adhesive canning line, with a maximum production of 8,291 lb/hr, with no VOC control, constructed in April 1997;
- (3) A one gallon adhesive canning line, with a maximum production of 3,238 lb/hr, with no VOC control, constructed in April 1997;
- (4) Two (2) tube filling systems: a double-head system, and a high-speed-single-head system. These systems have a combined maximum production capacity of 3,627 lbs/hr, with no VOC control;
- (5) A VOL storage tank, identified as ST-11, with a volume of less than 40 cubic meters but greater than 1,000 gallons, erected in 1987 but not yet constructed/used, with pressure venting to the atmosphere and no emission control;
- (6) Two (2) Volatile Organic Liquid (VOL) storage tanks, identified as ST-1 and ST-4, each with a volume of 95 cubic meters and a vapor pressure less than 15.0 kiloPascals, constructed in 1986, with pressure venting to the atmosphere and no emission control;
- (7) Six (6) VOL storage tanks, identified as ST-2, ST-3, ST-5, ST-6, ST-7 and ST-8, each with a volume of 57 cubic meters, constructed in 1986, with pressure venting to the atmosphere and no emission control;
- (8) Two (2) VOL storage tanks, identified as ST-9 and ST-10, each with a volume of less than 40 cubic meters but greater than 1,000 gallons, constructed in 1987,

with pressure venting to the atmosphere and no emission control;

- (9) Volatile Organic Compound (VOC) and Hazardous Air Pollution (HAP) storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons;
- (10) Volatile Organic Compound (VOC) and Hazardous Air Pollution (HAP) storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons;
- (11) Any unit emitting greater than 1 pound per day but less than 12.5 pounds per day or 2.5 ton per year of any combination of HAPs, including:

Piping losses using standard SOCMI factors for non-leaking pipes, valves, and pumps for raw materials in VOL storage tanks: ST-1, ST-4, ST-2, ST-3, ST-5, ST-6, ST-7, ST-8, ST-9, ST-10, ST-11, ST-12 and ST-13, and holding tanks: T1, T2, T3, T4, T5, T7, T9, T10, T11.

- (12) The following adhesive holding tanks, each with the potential to emit (PTE) of less than 1 ton single HAP/year, less than 2.5 tons of a combination of HAPs/year, and less than 10 tons VOC/year, with uncontrolled emissions from conservation vents:

Holding Tank Content, ID	Installation Date	Maximum Capacity (gal)
Adhesive T-1	January 1997	6,000
Adhesive T-2	January 1997	6,000
Adhesive T-3	January 1997	3,000
Adhesive T-4	January 1997	3,000
Adhesive T-5	January 1997	3,000
Adhesive T-9	January 1997	3,000

- (13) Two (2) sealant holding tanks, identified as T-10 and T-11, each with a volume of 3,000 gallons, each with the potential to emit (PTE) of less than 1 ton single HAP/year, less than 2.5 tons of a combination of HAPs/year, and less than 10 tons VOC/year, which to date have not been installed;
- (14) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment;
- (15) A VOL storage tank, identified as ST-12, with a volume of less than 40 cubic meters but greater than 1,000 gallons, with pressure venting to the atmosphere and no emission control; and
- (16) Activities with VOC emissions equal to or less than 3 lbs/hour or 15 lbs/day, including:
  - (i) A manually operated five/fifty-five gallon sealant pail/drum line, with a maximum production capacity of 1,914 lb/hr, constructed in 1997;
  - (ii) A manually operated five/fifty-five gallon adhesive pail/drum line, with a maximum production capacity of 1,820 lb/hr, constructed in 1997.
  - (iii) Three (3) "post" churns, producing both solvent and adhesive materials, permitted for construction in 2007, identified as W-5, W-20, and W-70A.

These churns do not have nitrogen blanket purging systems.

- (iv) One (1) 750-gallon water-based adhesive mixing churn, identified as W-750, with a maximum capacity of 6,600 pounds of water-based adhesives per hour, constructed in 2008; and
- (v) One (1) 550-gallon water-based adhesive mixing churn, identified as W-550, with a maximum capacity of 4,800 pounds of water-based adhesives per hour, constructed in 2008.

When processing HAP containing material, the 13 process vessels (E-25, E-40, E-75, E-20, E-10, R-1, R-2, R-3, R-4, R-5, R-7, R-8, and R-9) are subject to the National Emission Standards for Hazardous Air Pollutants for Miscellaneous Coating Manufacturing (40 CFR 63, Subpart HHHHH), which is incorporated by reference as 326 IAC 20-88. The 13 process vessels subject to this rule include the following:

- (f) One (1) 25 hp Shear Mixer, to be constructed in 2009, identified as E-25, with a maximum capacity of 150 gallons, using baghouse dust collector, identified as DC-7 as control.
- (j) One (1) 40 hp Shear Mixer, to be constructed in 2009, identified as E-40, with a maximum capacity of 500 gallons, using baghouse dust collector, identified as DC-7 as control.
- (h) One (1) 75 hp Shear Mixer, to be constructed in 2009, identified as E-75, with a maximum capacity of 500 gallons, using baghouse dust collector, identified as DC-7 as control.
- (i) One (1) Ross process vessel, to be constructed in 2009, identified as E-20, with a maximum capacity of 150 gallons, using baghouse dust collector, identified as DC-7 as control.
- (j) One (1) Ross process vessel, to be constructed in 2009, identified as E-10, with a maximum capacity of 40 gallons, using baghouse dust collector, identified as DC-7 as control.
- (k) One (1) process vessel, to be constructed in 2009, identified as R-1, with a maximum capacity of 1,000 gallons, using baghouse dust collector, identified as DC-7 as control.
- (l) One (1) process vessel, to be constructed in 2009, identified as R-2, with a maximum capacity of 1,000 gallons, using baghouse dust collector, identified as DC-7 as control.
- (m) One (1) process vessel, to be constructed in 2009, identified as R-3, with a maximum capacity of 50 gallons, using baghouse dust collector, identified as DC-7 as control.
- (n) One (1) process vessel, to be constructed in 2009, identified as R-4, with a maximum capacity of 250 gallons, using baghouse dust collector, identified as DC-7 as control.

- (o) One (1) process vessel, to be constructed in 2009, identified as R-5, with a maximum capacity of 250 gallons, using baghouse dust collector, identified as DC-7 as control.
- (p) One (1) process vessel, to be constructed in 2009, identified as R-7, with a maximum capacity of 750 gallons, using baghouse dust collector, identified as DC-7 as control.
- (q) One (1) process vessel, to be constructed in 2009, identified as R-8, with a maximum capacity of 250 gallons, using baghouse dust collector, identified as DC-7 as control.
- (r) One (1) process vessel, to be constructed in 2009, identified as R-9, with a maximum capacity of 1,000 gallons, using baghouse dust collector, identified as DC-7 as control.

These emission units are subject to the following portions of Subpart HHHHH:

- (1) 40 CFR 63.7980
- (2) 40 CFR 63.7985(a)
- (3) 40 CFR 63.7985(a)(1)
- (4) 40 CFR 63.7985(a)(2)
- (5) 40 CFR 63.7985(a)(3)
- (6) 40 CFR 63.7985(a)(4)
- (7) 40 CFR 63.7985(b)
- (8) 40 CFR 63.7985(b)(1)
- (9) 40 CFR 63.7985(b)(2)
- (10) 40 CFR 63.7985(b)(3)
- (11) 40 CFR 63.7985(c)
- (12) 40 CFR 63.7985(d)(3)
- (13) 40 CFR 63.7990(a)
- (14) 40 CFR 63.7990(b)
- (15) 40 CFR 63.7995(b)
- (16) 40 CFR 63.7995(d)
- (17) 40 CFR 63.8000(a)
- (18) 40 CFR 63.8000(b)(1)
- (19) 40 CFR 63.8000(b)(2)
- (20) 40 CFR 63.8000(d)(1)
- (21) 40 CFR 63.8000(d)(6)
- (22) 40 CFR 63.8000(d)(7)
- (23) 40 CFR 63.8005(a)
- (24) 40 CFR 63.8005(c)
- (25) 40 CFR 63.8005(d)(1)
- (26) 40 CFR 63.8005(d)(2)
- (27) 40 CFR 63.8005(d)(3)
- (28) 40 CFR 63.8005(d)(4)
- (29) 40 CFR 63.8005(e)(1)
- (30) 40 CFR 63.8005(e)(2)
- (31) 40 CFR 63.8005(f)
- (32) 40 CFR 63.8010(a)
- (33) 40 CFR 63.8010(b)(1)
- (34) 40 CFR 63.8010(b)(2)
- (35) 40 CFR 63.8010(c)
- (36) 40 CFR 63.8010(d)
- (37) 40 CFR 63.8010(d)(1)

- (38) 40 CFR 63.8010(d)(2)
- (39) 40 CFR 63.8015(a)
- (40) 40 CFR 63.8015(d)
- (41) 40 CFR 63.8050(a)
- (42) 40 CFR 63.8050(b)(1)
- (43) 40 CFR 63.8050(b)(2)
- (44) 40 CFR 63.8050(c)
- (45) 40 CFR 63.8050(c)(1)
- (46) 40 CFR 63.8050(c)(1)(i)
- (47) 40 CFR 63.8050(c)(1)(ii)
- (48) 40 CFR 63.8050(c)(3)
- (49) 40 CFR 63.8050(c)(4)
- (50) 40 CFR 63.8050(d)(1)
- (51) 40 CFR 63.8050(d)(2)
- (52) 40 CFR 63.8050(e)
- (53) 40 CFR 63.8055(a)
- (54) 40 CFR 63.8055(b)
- (55) 40 CFR 63.8055(b)(1)
- (56) 40 CFR 63.8055(b)(2)
- (57) 40 CFR 63.8055(b)(3)
- (58) 40 CFR 63.8055(b)(4)
- (59) 40 CFR 63.8070(a)
- (60) 40 CFR 63.8070(b)(1)
- (61) 40 CFR 63.8070(c)
- (62) 40 CFR 63.8075(a)
- (63) 40 CFR 63.8075(b)
- (64) 40 CFR 63.8075(c)
- (65) 40 CFR 63.8075(d)(1)
- (66) 40 CFR 63.8075(d)(2)
- (67) 40 CFR 63.8075(d)(2)(i)
- (68) 40 CFR 63.8075(d)(2)(ii)
- (69) 40 CFR 63.8075(d)(2)(iii)
- (70) 40 CFR 63.8075(d)(2)(iv)
- (71) 40 CFR 63.8075(d)(2)(v)
- (72) 40 CFR 63.8075(e)(except for (e)(7))
- (73) 40 CFR 63.8080(a)
- (74) 40 CFR 63.8080(b)
- (75) 40 CFR 63.8080(c)
- (76) 40 CFR 63.8080(d)
- (77) 40 CFR 63.8080(f)
- (78) 40 CFR 63.8080(g)
- (79) 40 CFR 63.8095
- (80) 40 CFR 63.8100
- (81) 40 CFR 63.8105
- (82) Table 1- (2)(b)(iii)
- (83) Table 2- Group 1a (1)(a) and (1)(b)
- (84) Table 3- (1)(a), (1)(b), or (1)(c)
- (85) Table 9
- (86) Table 10

The source does not operate any wastewater streams, transfer operations, or heat exchange systems. As such, the source is not subject to the requirements of 40 CFR 63.8020, 63.8025, or 63.8030.

The provisions of 40 CFR 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 63 Subpart HHHHH.

#### **State Rule Applicability - Entire Source**

**326 IAC 1-6-3 (Preventive Maintenance Plan)**  
The source is subject to 326 IAC 1-6-3.

**326 IAC 1-5-2 (Emergency Reduction Plans)**  
The source is subject to 326 IAC 1-5-2.

**326 IAC 2-2 (PSD)**  
This modification to an existing minor stationary source is not major for PSD because the source wide emissions of all pollutants are less than the PSD major source thresholds. Therefore, pursuant to 326 IAC 2-2, the source is still a minor source for PSD.

**326 IAC 2-6 (Emission Reporting)**  
This source, not located in Lake, Porter, or LaPorte County, is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit pursuant to 326 IAC 2-7 (Part 70). The potential to emit of VOC and PM10 is less than 250 tons per year; and the potential to emit of CO, NOx, and SO2 is less than 2,500 tons per year. Therefore, pursuant to 326 IAC 2-6-3(a)(2), triennial reporting is required. An emission statement shall be submitted in accordance with the compliance schedule in 326 IAC 2-6-3 by July 1, 2013 and every three (3) years thereafter. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

**326 IAC 5-1 (Opacity Limitations)**  
This source is subject to the opacity limitations specified in 326 IAC 5-1-2(2)

**326 IAC 8-6 (Organic Solvent Emission Limitations)**  
This rule applies to sources commencing operation after October 7, 1974 and prior to January 1, 1980 that are located anywhere in the state, with potential VOC emissions of 100 tons per year or more, and not regulated by any other provision of Article 8. This rule is not applicable because the source began operation after January 1, 1980.

#### **State Rule Applicability – Individual Facilities**

**326 IAC 2-4.1-1 (Major Sources of Hazardous Air Pollutants (HAP))**

(a) Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any process or production unit, which in and of itself emits or has the potential to emit (PTE) 10 tons per year of any HAP or 25 tons per year of the combination of HAP, is constructed or reconstructed after July 27, 1997, and is not subject to the requirements of any subpart under NESHAP, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT). Emission units CH-9, CH-10, CH-22, CH-25, CH-27, CH-29, and the five and three gallon canning line were constructed or reconstructed after the July 27, 1997 rule applicability date. Churns CH-9, CH-10, CH-25, Ch-27, and CH-29 have the potential to emit of less than 10 tons per year of a single HAP and less than 25 tons per year of a combination of HAPs; therefore these emission units are not subject to 326 IAC 2-4.1-1. Although CH-22, and the five and three gallon canning line were constructed or reconstructed after the July 27, 1997 rule applicability date and have a potential to emit of more than 10 tons per year of any HAP or 25 tons per year of the combination of HAP, these facilities are subject to NESHAP Subpart HHHHH. Therefore, pursuant to 326 IAC 2-4.1(b)(2) the requirements of 326 IAC 2-4.1 do not apply.

- (b) The operation of the 13 process vessels (E-25, E-40, E-75, E-20, E-10, R-1, R-2, R-3, R-4, R-5, R-7, R-8, and R-9), and three storage tanks ST-15, ST-16 and ST-17, are exempt from the requirements of 326 IAC 2-4.1; because, they are subject to the requirements of 40 CFR 63, Subpart HHHHH.
- (c) The operation of the storage tanks ST-13 and ST-14, and the solvent stills are exempt from the requirements of 326 IAC 2-4.1; because, they are subject to the requirements of 40 CFR 63, Subpart HHHHH.
- (d) The operation of the four (4) water based churns, identified as W200, W300, W400, W-750 and W-550 will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.
- (e) The operation of the three (3) Post churns, identified as W5, W20, W70-A, will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply

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

- (a) The adhesive and sealant churns are not subject to the requirements of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes). These churns are exempt from this rule pursuant to 326 IAC 6-3-1(b)(14) because each of these churns emits less than five hundred fifty-one thousandths (0.551) pounds of particulate per hour.
- (b) The 13 churns identified as W-100, W-500, W-600, W-700, W-800, W-900, W-5 (Air Mixer), W-10 (10 HP Post), W-15(15 HP Post), W-30(30 HP Post), W-55 (55 Drum), W-45 (Hochmeyer), W-1100 (Casein-2), installed in 2006, are not subject to the requirements of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes). These churns are exempt from this rule pursuant to 326 IAC 6-3-1(b)(14) because each of these churns emits less than five hundred fifty-one thousandths (0.551) pounds of particulate per hour.
- (c) The water based churns identified as W200, W300, W400, W750 are not subject to the requirements of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes). These water churns are exempt from this rule pursuant to 326 IAC 6 -3-1(b)(14) because each of these churns emits less than five hundred fifty-one thousandths (0.551) pounds of particulate per hour.
- (d) Pursuant to 326 IAC 6 -3- 2 the particulate matter (PM) from the water based churn identified as W550, and the trash compactor shall be limited by the following:

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

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

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

Units	PRW (tons/hr)	Allowable PM Emission Rate 326 IAC 6-3-2 (lb/hr)
W550	0.062	<b>0.636</b>
Trash Compactor	0.311	<b>1.88</b>

It is not required for the source to connect the baghouse to the trash compactor.

- (d) The operation of the 13 process vessels (E-25, E-40, E-75, E-20, E-10, R-1, R-2, R-3, R-4, R-5, R-7, R-8, and R-9), and three storage tanks ST-15, ST-16 and ST-17, are exempt from the requirements of 326 IAC 6-3-2 because each of these emission units emits less than five hundred fifty-one thousandths (0.551) pounds of particulate per hour.
- (e) The operation of the storage tanks ST-13 and ST-14, and the solvent stills are exempt from the requirements of 326 IAC 6-3-2 because each of these emission units emits less than five hundred fifty-one thousandths (0.551) pounds of particulate per hour.
- (f) The operation of the three (3) Post churns, identified as W5, W20, W70-A, are not subject to the requirements of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes). These churns are exempt from this rule pursuant to 326 IAC 6-3-1(b)(14) because each of these churns emits less than five hundred fifty-one thousandths (0.551) pounds of particulate per hour.

#### **326 IAC 6-2-4 (Particulate Emission Limitations for Facilities Specified in 326 IAC 6-2-1(d))**

The two (2) boilers, identified as B-1 and B-2 are subject to the requirements of 326 IAC 6-2-4 because these boilers were constructed after the September 21, 1983 rule applicability date.

Pursuant to 326 IAC 6-2-4(a), the PM emissions from each of the two boilers based on a heat input rate of 1.68 MMBtu per hour each, shall be limited to 0.6 pounds per MMBtu heat input.

This limitation is based on the following equation:

$$Pt = \frac{1.09}{Q^{0.26}} \quad \text{where: } Pt = \text{Pounds of particulate matter emitted per MMBtu heat input.}$$
$$Q = \text{Total source maximum operating capacity rating in MMBtu per hour.}$$

$$Pt = 1.09/(1.68)^{0.26} = 0.95 \text{ lb/MMBtu}$$

Pursuant to 326 IAC 6-2-4(a), for Q less than 10 MMBtu/hr, Pt shall not exceed 0.6 pound per MMBtu heat input. Therefore, since the allowable PM emission rate specified in 326 IAC 6-2-4(a) is lower than the allowable emission rate calculated above (0.95 pounds per MMBtu) the two (2) boilers are limited to 0.60 pounds of PM per MMBtu heat input each. Based on the potential to emit calculations, the particulate matter emission from each of the two (2) boilers is 0.006 pound per MMBtu heat input (see page 8 of 11, Appendix A). Therefore, the boilers will comply with 326 IAC 6-2-4.

#### **326 IAC 8-1-6 (New Facilities; General Reduction Requirements)**

- (a) This rule applies to facilities located anywhere in the state that were constructed on or after January 1, 1980, which have potential volatile organic compound (VOC) emissions of 25 tons per year or more, and which are not otherwise regulated by another provision of Article 8. The adhesive churns CH-1, CH-2, CH-3, CH-22, CH-25, CH-26, CH-29, CH-54, CH-55, CH-56, and the sealant churns CH-9, CH-10, CH-7, CH-8, CH-28, CH-27, and CH-53, each of which contain a nitrogen blanket purging system which is integral to the mixing process, are not subject to BACT, because each churn has the PTE less than 25 tons VOC/year when worst-case batch purge times are limited to 45 minutes/batch for sealant churns CH-7, CH-8, CH-9, CH-10, CH-27, CH-28 and CH-53, 10 minutes/batch for adhesive churns CH-1, CH-2 and CH-54, 5 minutes/batch for adhesive churn CH-3, 55 minutes/batch for adhesive churn CH-22, 9.5 minutes/batch for adhesive churns CH-25, CH-26, CH-55 and CH-56, and 45 minutes/batch for adhesive churn CH-29, and the maximum number of batches per day is limited to 1 batch per day for sealant churns CH-

7, CH-8, CH-9, CH-10, CH-27, CH-28 and CH-53 and adhesive churns CH-1, CH-2, CH-22, CH-29 and CH-54, 2 batches per day for adhesive churn 3, and 6 batches per day for adhesive churns CH-25, CH-26, CH-55 and CH-56.

Therefore, the maximum amount of time for batch purging shall be limited as specified above for adhesive churns CH-1, CH-2, CH-3, CH-22, CH-25, CH-26, CH-29, CH-54, CH-55, and CH-56, and for sealant churns CH-9, CH-10, CH-7, CH-8, CH-27, CH-28, and CH-53, so that potential VOC emission will remain less than 25 tons/year and the requirements of 326 IAC 8-1-6 (BACT) will not apply.

- (b) The five and three gallon adhesive canning line, with a PTE VOC > 25 tons/year, is potentially subject to the requirements of BACT. The PTE VOC from the five and three gallon adhesive canning line is 33.73 tons/year, as determined below:

PTE VOC (tons/year) = maximum input VOC (tons/year) \* **efficiency factor (%)**

maximum input VOC = max. churned adhesive \* adhesive VOC concentration

maximum churned adhesive = 8291 lbs/hr or 36,315 tons/year

adhesive VOC concentration = 71 %

Therefore: maximum input VOC = 25,784 tons / year

**efficiency factor (%)**, = 0.1308%

(provided by Royal Adhesives and Sealants, L.L.C. through weight loss measurements in the Part 70 Permit No. T141-9909-00146, issued on March 16, 2000 = **0.1308 percent.**)

Therefore: PTE VOC = 25,784 \* 0.1308 % = 33.73 tons/year

VOC input to the five and three gallon adhesive canning process shall be limited to less than 19,111 tons per 12 consecutive month period by the following ratio:

$$\frac{\text{maximum input VOC}}{\text{PTE VOC}} = \frac{\text{limited input VOC}}{\text{limited PTE VOC}}$$

Therefore:  $\frac{25,784 \text{ tons/year}}{33.73 \text{ tons/year}} = \frac{\text{limited input VOC}}{25 \text{ tons/year}}$

Therefore: limited input VOC = 19,111 tons / year  
input VOC limit less than 19,111 tons/consecutive 12 month period

This input VOC limit will render the requirements of 326 IAC 8-1-6 (BACT) not applicable to the five and three gallon adhesive canning line.

### **326 IAC 7-1.1 Sulfur Dioxide Emission Limitations**

Each emission unit is not subject to 326 IAC 326 IAC 7-1.1 because its SO<sub>2</sub> PTE (or limited SO<sub>2</sub> PTE) is less than 25 tons/year or 10 pounds/hour.

### **326 IAC 8-3-2 (Cold Cleaner Operations)**

The part cleaner, identified as churn 2, 8,53, 55 gallon Prosys press, and three (3) maintenance shop, operations are subject to 326 IAC 8-3-2 (Cold Cleaner Operations). This rule applies to cold cleaner type degreasing facilities constructed after January 1, 1980 and before July 1, 1990. The

cold cleaning operations at this source were constructed after 1980: therefore, the requirements of 326 IAC 8-3-2 shall apply to these facilities.

**326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)**

The part cleaner, identified as churn 2, 8,53, 55 gallon Prosys press, and three (3) maintenance shop, operations are subject to 326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control). This rule applies to Part Cleaner type degreasing facilities constructed after July 1, 1990. The Part Cleaners operations at this source were constructed after to 1990, therefore, the source is subject to the requirements of 326 IAC 8-3-5.

**326 IAC 8-4-3 (Petroleum Liquid Storage Facilities)**

- (a) The requirements of 326 IAC 8-4-3 are not included in this permit for the Piping losses using standard SOCOMI factors for non-leaking pipes, valves, and pumps for raw materials in VOL storage tanks: ST-1, ST-4, ST-2, ST-3, ST-5, ST-6, ST-7, ST-8, ST10, ST-11 and ST-12, and holding tanks: T1, T2, T3, T4, T5, T7, T9, T10, T11; because each was constructed prior to the rule applicability date of January 1, 1980, and each has a storage capacity of less than 39,000 gallons.
- (b) The requirements of 326 IAC 8-4-3 are not included in this permit for the three (3) storage tanks constructed in 2009, identified as , ST-15, ST-16, ST17 because this tank has a storage capacity of less than 39,000 gallons

<b>Compliance Determination and Monitoring Requirements</b>
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Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in 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 determination requirements applicable to this source are as follows:

- 1. Adhesive churns CH-1, CH-2, CH-3, CH-4, CH-22, CH-25, CH-26, CH-29, CH-54, CH-55, CH-56, and sealant churns CH-9, CH-10, CH-7, CH-8, CH-27, CH-28, and CH-53, each of which contain a nitrogen blanket purging system which is integral to the mixing process, have applicable compliance monitoring conditions as specified below:
  - (a) Once each calendar year, the source shall observe and record the number of minutes during an entire cycle of mixing that each adhesive churn and each sealant churn purges when mixing a worst-case formula for that churn.
  - (b) Such records shall include identification of the churn, identification of formula, batch size, total number of hours churned, and total number of minutes that

purging occurred. Such records shall remain on site for 5 years from the time of record.

These monitoring conditions are necessary to ensure that maximum time for batch purging time for adhesive churns (CH-1, CH-2, CH-3, CH-4, CH-22, CH-25, CH-26, CH-29, CH-54, CH-55, CH-56,) and for sealant churns (CH-9, CH-10, CH-7, CH-8, CH-27, CH-28, and CH-53), shall be limited in accordance with Condition D.1.2 such that potential VOC emissions from each adhesive and sealant churn will remain less than 25 tons/year and 326 IAC 8-1-6 (BACT) will not apply.

## Summary of Global Permit Changes to Section B, C and D.

**Change 1:** IDEM has made the following changes throughout the permit:

... require ~~the a~~ certification **that meets the requirements of 326 IAC 2-7-6(1)**...

...by ~~the a~~ "responsible official"...

...by ~~the a~~ responsible official...

**Change 2:** IDEM has added clarification to Condition B.15, Permit Term, as follows:

**B.2** Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5] [326 IAC 2-7-4(a)(1)(D)] [IC 13-15-3-6(a)]

(a) ~~This permit~~ **The Part 70 Operating Permit**, T141-30439-00146, is issued for a fixed term of five (5) years ~~from the issuance date of this permit~~, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) ...

**Change 3:** There may be times when it is unnecessary for a responsible official to "certify" additional information requested by IDEM; therefore, paragraph (a) of Condition B.7, Duty to Provide Information, is revised as follows:

**B.7** Duty to Provide Information [326 IAC 2-7-5(6)(E)]

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. ~~The submittal by the Permittee does require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~ Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

(b) ...

**B.8** Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

(a) ~~Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a "responsible official" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.~~

(b) ~~One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.~~

(c) ~~The "responsible official" is defined at 326 IAC 2-7-1(34).~~

- (a) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:**
  - (1) it contains a certification by a "responsible official", as defined by 326 IAC 2-7-1 (34), and**
  - (2) the certification is based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.**
- (b) The Permittee may use the attached Certification Form, or its equivalent, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.**
- (c) A "responsible official" is defined at 326 IAC 2-7-1(34).**

**Change 4:** The Preventive Maintenance Plan requirements have been clarified as follows:

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]  
[326 IAC 1-6-3]

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~~(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) for each facility as described in 326 IAC 1-6-3. At a minimum, the PMP shall include:~~

- (a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:**
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;**
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and**
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.**

**The Permittee shall implement the PMPs.**

- (b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:**
  - (1) Identification of the individual(s) ~~(by job title or description)~~ responsible for inspecting, maintaining, and repairing emission control devices;**
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and**
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.**

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

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

The PMP extension notification does not require ~~the a~~ certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the a~~ "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to ~~a violation of any~~ **an exceedance of any** limitation on emissions for that unit. The PMPs do not require ~~the a~~ certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the a~~ "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

**Change 5:** The emergency provisions requirements have been clarified as follows:

B.11 Emergency Provisions [326 IAC 2-7-16]

(a) (b) ...

(1) - (3) ...

- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, ~~within no later than~~ **within no later than** four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

...

(5) ...

~~within no later than~~ two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) - (C) ...

The notification which shall be submitted by the Permittee does not require ~~the a~~ certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the a~~ "responsible official" as defined by 326 IAC 2-7-1(34).

(6) ...

(c) - (g) ...

(h) ~~— The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.~~

**Change 6:** IDEM has removed the Condition B.15, Deviations from Permit Requirements and Conditions, and moved the requirements to Condition C.21, General Reporting Requirements, as follows:

~~B.15 — Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]~~

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(a) ~~— Deviations from any permit requirements for any deviation for which a report is specifically required under Section D (for emergencies see Section B – Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:~~

~~Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53, IGCN 1003  
Indianapolis, Indiana 46204-2254~~

~~using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. Notwithstanding this condition, a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.~~

~~The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~

(b) ~~— A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.~~

**Change 7:** The General Reporting Requirements have been clarified as follows:

~~C.24C.17~~ General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

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(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent ~~as set out at Condition B.15 — Deviations from Permit Requirements and Conditions.~~ **Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.**

(b) ~~Reports required by conditions in Section D of this permit shall be submitted to~~ **The address for report submittal is:**

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

- (c) Unless otherwise specified in this permit, any notice, report, or other submission 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 on or before the date it is due.
- ~~(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted no later than thirty (30) days after the end of the reporting period. Unless otherwise specified in this permit, all reports required in Section D do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~
- ~~(e)~~(d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

**Change 8:** The Permit Modification, Reopening, Revocation and Reissuance, or Termination provisions have been clarified as follows:

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination  
[326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

---

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require ~~the a~~ certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the a~~ "responsible official" as defined by 326 IAC 2-7-1(34).

...

**Change 9:** The Permit Renewal requirements have been clarified as follows:

B.16 Permit Renewal [326 IAC 2-7-3] [326 IAC 2-7-4] [326 IAC 2-7-8(e)]

---

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require ~~the a~~ certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the a~~ "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) ...

- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the **reasonable** deadline specified, **pursuant to 326 IAC 2-7-4(a)(2)(D)**, in writing by IDEM, OAQ any additional information identified as being needed to process the application.

**Change 10:** The words "or notice" have been added to Condition B.19(a) as follows:

B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)]  
[326 IAC 2-7-12(b)(2)]

---

- (a) No Part 70 permit revision **or notice** shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) ...

**Change 11:** The Operational Flexibility provisions have been clarified as follows:

B.19 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

---

- ...
- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
- (1) A brief description of the change within the source;
  - (2) The date on which the change will occur;
  - (3) Any change in emissions; and
  - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require ~~the~~ **a certification that meets the requirements of 326 IAC 2-7-6(1)** by ~~the a~~ "responsible official" as defined by 326 IAC 2-7-1(34).

...

**Change 12:** The Transfer of Ownership or Operational Control provisions have been clarified as follows:

B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

---

- ...
- (b) ...
- The application which shall be submitted by the Permittee does require ~~the a~~ certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the a~~ "responsible official" as defined by 326 IAC 2-7-1(34).

...

**Change 13:** The Opacity requirements have been clarified as follows:

C.2 Opacity [326 IAC 5-1]

---

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

(a) - (b) ...

**Change 14:** The Incineration requirements have been clarified as follows:

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

---

The Permittee shall not operate an incinerator ~~or incinerate any waste or refuse~~ except as provided in 326 IAC 4-2 ~~and 326 IAC 9-1-2~~ **or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.**

**Change 15:** The Performance Testing requirements have been clarified as follows:

C.7 Performance Testing [326 IAC 3-6]

---

(a) ~~All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.~~

**A-For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:**

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require **a certification that meets the requirements of 326 IAC 2-7-6(1)** by ~~the a~~ "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require **a certification that meets the requirements of 326 IAC 2-7-6(1)** by ~~the a~~ "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period. The extension request submitted by the Permittee does not require **a certification that meets the requirements of 326 IAC 2-7-6(1)** by ~~the a~~ "responsible official" as defined by 326 IAC 2-7-1(34).

**Change 16:** The Compliance Monitoring requirements have been clarified as follows:

C.9 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

~~Unless otherwise specified in this permit, for all monitoring and record keeping requirements not already legally required shall be implemented not later than ninety (90) days after permit issuance. The Permittee shall be responsible for installing any equipment described in Section D and initiating any required monitoring related to that equipment. If due to circumstances beyond its reasonable control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:~~

**Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or of initial start-up, whichever is later, to begin such monitoring. If due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance or the date of initial startup, whichever is later, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:**

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

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require ~~the a~~ certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the a~~ "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

**Change 17:** The general requirements for Monitoring Methods were removed from Section C as follows (This provision will be included as needed in Section D of the permit.):

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

~~Any monitoring or testing required by Section D of this permit shall be performed according to the applicable provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.~~

**Change 18:** IDEM is revising Condition C.15 as follows:

C.13 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

**Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:**

- (a) ~~Upon detecting an excursion or exceedance, the~~ **The Permittee shall take reasonable response steps to** restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing **excess** emissions.

- (b) The response shall include minimizing the period of any startup, shutdown or malfunction ~~and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions).~~ **The response** may include, but ~~are~~ **is** not limited to, the following:
- (1) initial inspection and evaluation;
  - (2) recording that operations returned **or are returning** to normal without operator action (such as through response by a computerized distribution control system); or
  - (3) any necessary follow-up actions to return operation to ~~within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable~~ **normal or usual manner of operation.**
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not **necessarily** limited to, the following:
- (1) - (3) ...
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall ~~maintain the following records:~~ **record the reasonable response steps taken.**
- (1) ~~monitoring data;~~
  - (2) ~~monitor performance data, if applicable; and~~
  - (3) ~~corrective actions taken.~~

**Change 19:** IDEM is revising paragraph (b) of Condition C.16 as follows:

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the ~~Permittee shall take appropriate response actions. The Permittee shall submit a description of these~~ **its** response actions to IDEM, OAQ, no later than ~~thirty (30)~~ **seventy-five (75)** days after receipt ~~the date~~ of the test results. ~~The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.~~
- (b) A retest to demonstrate compliance shall be performed ~~within~~ **no later than** one hundred ~~twenty (120)~~ **eighty (180)** days of receipt **after the date** of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred ~~twenty (120)~~ **eighty (180)** days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) ...

The response action documents submitted pursuant to this condition do require ~~the a~~ certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the a~~ "responsible official" as defined by 326 IAC 2-7-1(34).

**Change 20:** IDEM is revising paragraph (a) of Condition C.17 as follows:

C.15 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)~~ Pursuant to 326 IAC 2-6-3(b)(1), starting in 2004 and every three (3) years thereafter, the Permittee shall submit **by no later than** 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:

~~(1)~~**(a)** Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);

~~(2)~~**(b)** Indicate estimated actual emissions of 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 purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-50, IGCN 1003  
Indianapolis, Indiana 46204-2251

The emission statement does require ~~the a~~ certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the a~~ "responsible official" as defined by 326 IAC 2-7-1(34).

~~(b)~~ The 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 on or before the date it is due.

**Change 21:** The General Record Keeping requirements have been revised as follows:

C.16 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2] [326 IAC 2-3]

~~(a)~~ ...

~~(b)~~ Unless otherwise specified in this permit, **for** all record keeping requirements not already legally required, **the Permittee shall be allowed up to** ~~shall be implemented not later than~~ ninety (90) days ~~after~~ **from the date of** permit issuance **or the date of initial start-up, whichever is later, to begin such record keeping.**

~~(c) - (d)~~ ...

**Change 22:** The Stratospheric Ozone Protection requirements have been revised as follows:

C.18 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with ~~the~~ **applicable** standards for recycling and emissions reduction.

- ~~(a) — Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.~~
- ~~(b) — Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.~~
- ~~(c) — Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.~~

**Change 23:** IDEM agrees to make the following changes throughout Section D of the permit:

~~D.1.32~~ Preventive Maintenance Plan [326 IAC 2-7-5(13)]

---

~~A Preventive Maintenance Plan (PMP), in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this unit and its control device.~~ **A Preventive Maintenance Plan (PMP) is required for this unit and its control device. Section B - Preventive Maintenance Plan contains the Permittee's obligations with regard to the preventive maintenance plan required by this condition.**

**Compliance Determination Requirements [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]**

~~D.1.73~~ Testing Requirements [326 IAC 2-7-6(1)][326 IAC 2-1.1-11]

~~... Testing shall be conducted in accordance with Section C - Performance Testing.~~ **Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligations with regard to the performance testing required by this condition.**

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

~~D.1.87~~ Record Keeping Requirements

---

- (a) To document **the compliance status** with Condition D.1.1(b),, the Permittee shall ...
- (b) ...
- (c) ~~All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligation with regard to the~~ **record keeping required by this condition.**

~~D.1.98~~ Reporting Requirements

---

~~A quarterly summary of the information to document compliance with Condition D.1.1(b) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~

**A quarterly report summary of the information to document the compliance status with Condition D.1.2 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days following the end of each calendar quarter. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). Section C - General Reporting Requirements contains the Permittee's obligations with regard to the reporting required by this condition.**

**Change 24:** The Quarterly Reports have been updated as follows:

### EMERGENCY OCCURRENCE REPORT

...

<input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12). <ul style="list-style-type: none"><li>• The Permittee must notify the Office of Air Quality (OAQ), <del>within</del> <b>no later than four (4) daytime</b> business hours (1-800-451-6027 or 317-233-0178, ask for Compliance and Enforcement Branch); and</li><li>• The Permittee must submit notice in writing or by facsimile <del>within</del> <b>no later than two (2) days</b> (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.</li></ul>
--

...

~~Attach a signed certification to complete this report.~~  
**A certification is not required for this report.**

**Change 25:** The Quarterly Reports have been updated as follows:

### Part 70 Quarterly Report

...

Attach a signed certification **that meets the requirements of 326 IAC 2-7-6(1)** to complete this report.

**Change 26:** The Quarterly Deviation and Compliance Monitoring Report has been updated as follows:

### PART 70 OPERATING PERMIT QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

...

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements <b>of this permit</b> , the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".
---

...

Attach a signed certification **that meets the requirements of 326 IAC 2-7-6(1)** to complete this report.

<b>Recommendation</b>
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The staff recommends to the Commissioner that the Part 70 Operating Permit Renewal be approved. This recommendation is based on the following facts and conditions:

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

An application for the purposes of this review was received on April 12, 2011

### Conclusion

The operation of this stationary sealant and adhesive manufacturing plant. shall be subject to the conditions of the attached Part 70 Operating Permit Renewal No. 141-30439-00146.

### IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Anh Nguyen at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-5334 or toll free at 1-800-451-6027 extension (3-5334).
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: [www.idem.in.gov](http://www.idem.in.gov)

**Appendix A: Emissions Calculations  
Emission Summary**

Company Name: Royal Adhesives and Sealants, L.L.C.  
 Address City IN Zip: 2001 West Washington Street, South Bend, IN 46628-2032  
 Permit Number: T141-30439-00146  
 Plt ID: 141-00146  
 Reviewer: Anh Nguyen  
 Date: 8/30/2011

**Uncontrolled Potential to Emit**

Emission Unit	PM (tons/yr)	PM <sub>10</sub> /PM <sub>2.5</sub> (tons/yr)	SO <sub>2</sub> (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NOx (tons/yr)	CO <sub>2</sub> e (ton/yr)	HAPs Single (tons/yr)	HAPs Total (tons/yr)
<b>Solvent Based Churns</b>									
E-25	0.06	0.06	0.00	0.01	0.00	0.00	0.00	0.00	0.01
E-40	0.18	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.01
E-75	0.18	0.18	0.00	0.01	0.00	0.00	0.00	0.00	0.01
E-20	0.06	0.06	0.00	0.01	0.00	0.00	0.00	0.00	0.01
E-10	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.01
R-1	0.37	0.37	0.00	0.01	0.00	0.00	0.00	0.00	0.01
R-2	0.37	0.37	0.00	0.01	0.00	0.00	0.00	0.00	0.01
R-3	0.02	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.01
R-4	0.09	0.09	0.00	0.01	0.00	0.00	0.00	0.00	0.01
R-5	0.09	0.09	0.00	0.01	0.00	0.00	0.00	0.00	0.01
R-7	0.28	0.28	0.00	0.01	0.00	0.00	0.00	0.00	0.01
R-8	0.09	0.09	0.00	0.01	0.00	0.00	0.00	0.00	0.01
R-9	0.37	0.37	0.00	0.01	0.00	0.00	0.00	0.00	0.01
<b>Insignificant Activities</b>									
ST-1	negl.	negl.	0.00	0.46	0.00	0.00	0.00	0.46	0.46
ST-2	negl.	negl.	0.00	1.51	0.00	0.00	0.00	1.51	1.51
ST-3	negl.	negl.	0.00	0.046	0.00	0.00	0.00	0.046	0.046
ST-4	negl.	negl.	0.00	0.29	0.00	0.00	0.00	0.29	0.29
ST-5	negl.	negl.	0.00	0.22	0.00	0.00	0.00	0.22	0.22
ST-6	negl.	negl.	0.00	1.04	0.00	0.00	0.00	1.04	1.04
ST-7	negl.	negl.	0.00	0.22	0.00	0.00	0.00	0.22	0.22
ST-8	negl.	negl.	0.00	0.67	0.00	0.00	0.00	negl.	0.67
ST-10	negl.	negl.	0.00	0.06	0.00	0.00	0.00	0.06	0.06
ST-11	negl.	negl.	0.00	0.07	0.00	0.00	0.00	0.07	0.07
ST-12	negl.	negl.	0.00	0.37	0.00	0.00	0.00	0.37	0.37
ST-13	negl.	negl.	negl.	negl.	negl.	negl.	negl.	negl.	negl.
ST-14	negl.	negl.	negl.	negl.	negl.	negl.	negl.	negl.	negl.
Double+High Speed Single Head Tube Fillers	negl.	negl.	0.00	8.26	0.00	0.00	0.00	8.26	8.26
1 gal. Adhesive Canning Line	negl.	negl.	0.00	6.2	0.00	0.00	0.00	n/a	6.2
5 and 3 gal. Adhesive Canning Lines*	negl.	negl.	0.00	33.73	0.00	0.00	0.00	n/a	33.73
Water based churns W-200	negl.	negl.	0.00	negl.	0.00	0.00	0.00	negl.	negl.
Water based churns W-300	negl.	negl.	0.00	negl.	0.00	0.00	0.00	negl.	negl.
Water based churns W-400	negl.	negl.	0.00	negl.	0.00	0.00	0.00	negl.	negl.
5/55-gal. Adhesive Pail/Drum Line	negl.	negl.	0.00	7.4	0.00	0.00	0.00	n/a	7.4
5/55-gal. Sealant Pail/Drum Line	negl.	negl.	0.00	5.71	0.00	0.00	0.00	n/a	5.71
Water based churns W750	2.93	2.93	0.00	0	0.00	0.00	0.00	0.00	0.00
Water based churns W550	5.41	5.41	0.00	0	0.00	0.00	0.00	0.00	0.00
<b>13 churns installed in 2006</b>									
W-100	0.85	0.85	0.00	0.00	0.00	0.00	0.00	negl.	negl.
W-500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	negl.	negl.
W-600	0.00	0.00	0.00	1.05	0.00	0.00	0.00	negl.	negl.
W-700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	negl.	negl.
W-800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	negl.	negl.
W-900	0.00	0.00	0.00	0.00	0.00	0.00	0.00	negl.	negl.
W-30 (30 HP Post)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	negl.	negl.
W-15 (15 HP Post)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	negl.	negl.
W-10 (10 HP Post)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	negl.	negl.
W-55 (55 Drum)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	negl.	negl.
W-45 (Hochmeyer)	0.05	0.05	0.00	0.00	0.00	0.00	0.00	negl.	negl.
W-5 (Air Mixers)	0.00	0.00	0.00	0.18	0.00	0.00	0.00	negl.	negl.
W-1100 (Casein - 2)	3.29	3.29	0.00	0.00	0.00	0.00	0.00	negl.	negl.
Post W-5	0.70	0.70	0.00	1.95	0.00	0.00	0.00	0.12	0.12
Post W-20	0.70	0.70	0.00	1.95	0.00	0.00	0.00	0.12	0.12
Post W-70A	0.70	0.70	0.00	1.95	0.00	0.00	0.00	0.12	0.12
ST-15	0.00	0.00	0.00	3.77	0.00	0.00	0.00	0.00	0.01
ST-16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
ST-17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Trash Compactor	2.73	2.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Small Industrial boilers</b>									
Boiler B-1 Potential Emission in tons/yr	0.01	0.06	0	0.04	0.62	0.74	883	0.13	0.14
Boiler B-2 Potential Emission in tons/yr	0.01	0.06	0	0.04	0.62	0.74	883	0	0
Air Make-up Units AMU-1 & 2 Potential Emission in tons/yr	0.03	0.11	0.01	0.08	1.24	1.48	1777	0.00	0.00
25 Air Heating Units Potential Emission in tons/yr	0.08	0.33	0.03	0.24	3.68	4.38	5256	0.00	0.00
<b>Solvent Based Churns N2 Blanket Purges</b>									
Adhesive CH-1	0.6	0.6	0.00	7.94	0.00	0.00	0.00	0.00	7.94
Adhesive CH-2	0.6	0.6	0.00	7.94	0.00	0.00	0.00	0.00	7.94
Adhesive CH-3*****	0.88	0.88	0.00	1.31	0.00	0.00	0.00	0.00	1.31
Sealant CH-7	1.66	1.66	0.00	3.3	0.00	0.00	0.00	0.00	3.3
Sealant CH-8	1.66	1.66	0.00	3.3	0.00	0.00	0.00	0.00	3.3
Sealant CH-9	13.49	13.49	0.00	22.2	0.00	0.00	0.00	0.00	22.2
Sealant CH-10	19.8	19.8	0.00	16.29	0.00	0.00	0.00	0.00	8.65
Adhesive CH-22	15.72	15.72	0.00	23.74	0.00	0.00	0.00	0.00	23.74
Adhesive CH-25	14.49	14.49	0.00	90.45	0.00	0.00	0.00	0.00	40.95
Adhesive CH-26	27.82	27.82	0.00	174.67	0.00	0.00	0.00	0.00	98.02
Adhesive CH-27	18.11	18.11	0.00	17.91	0.00	0.00	0.00	0.00	17.91
Adhesive CH-28	4.49	4.49	0.00	4.45	0.00	0.00	0.00	0.00	4.45
Adhesive CH-29	25.52	25.52	0.00	25.25	0.00	0.00	0.00	0.00	25.25
Adhesive CH-40	0.06	0.06	0.00	8.44	0.00	0.00	0.00	0.00	0
Adhesive CH-41	0.11	0.11	0.00	15.75	0.00	0.00	0.00	0.00	8.84
Sealant CH-53	3.91	3.91	0.00	8.13	0.00	0.00	0.00	0.00	8.13
Adhesive CH-54	0.82	0.82	0.00	10.51	0.00	0.00	0.00	0.00	0
Adhesive CH-55	6.44	6.44	0.00	65.7	0.00	0.00	0.00	0.00	65.7
Adhesive CH-56	13.15	13.15	0.00	64.82	0.00	0.00	0.00	0.00	64.82
<b>Total Emissions</b>	<b>188.98</b>	<b>189.25</b>	<b>0.04</b>	<b>649.82</b>	<b>6.16</b>	<b>7.34</b>	<b>8799.00</b>	<b>13.04</b>	<b>479.37</b>
								Single HAP >10	Combined HAPs > 25

**Appendix A: Emissions Calculations  
Emission Summary**

Company Name: Royal Adhesives and Sealants, L.L.C.  
 Address City IN Zip: 2001 West Washington Street, South Bend, IN 46628-2032  
 Permit Number: T141-30439-00146  
 Pt ID: 141-00146  
 Reviewer: Anh Nguyen  
 Date: 8/30/2011

**Limited Potential to Emit**

Emission Unit	PM (tons/yr)	PM <sub>10</sub> /PM <sub>2.5</sub> (tons/yr)	SO <sub>2</sub> (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NOx (tons/yr)	CO <sub>2</sub> e (ton/yr)	HAPs Single (tons/yr)	HAPs Total (tons/yr)
<b>Solvent Based Churns</b>									
E-25	0.06	0.06	0.00	0.01	0.00	0.00	0.00	0	0.01
E-40	0.18	0.02	0.00	0.01	0.00	0.00	0.00	0	0.01
E-75	0.18	0.18	0.00	0.01	0.00	0.00	0.00	0	0.01
E-20	0.06	0.06	0.00	0.01	0.00	0.00	0.00	0	0.01
E-10	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0	0.01
R-1	0.37	0.37	0.00	0.01	0.00	0.00	0.00	0	0.01
R-2	0.37	0.37	0.00	0.01	0.00	0.00	0.00	0	0.01
R-3	0.02	0.02	0.00	0.01	0.00	0.00	0.00	0	0.01
R-4	0.09	0.09	0.00	0.01	0.00	0.00	0.00	0	0.01
R-5	0.09	0.09	0.00	0.01	0.00	0.00	0.00	0	0.01
R-7	0.28	0.28	0.00	0.01	0.00	0.00	0.00	0	0.01
R-8	0.09	0.09	0.00	0.01	0.00	0.00	0.00	0	0.01
R-9	0.37	0.37	0.00	0.01	0.00	0.00	0.00	0	0.01
<b>Insignificant Activities</b>									
ST-1	negl.	negl.	0.00	0.46	0.00	0.00	0.00	0.46	0.46
ST-2	negl.	negl.	0.00	1.51	0.00	0.00	0.00	1.51	1.51
ST-3	negl.	negl.	0.00	0.046	0.00	0.00	0.00	0.046	0.046
ST-4	negl.	negl.	0.00	0.29	0.00	0.00	0.00	0.29	0.29
ST-5	negl.	negl.	0.00	0.22	0.00	0.00	0.00	0.22	0.22
ST-6	negl.	negl.	0.00	1.04	0.00	0.00	0.00	1.04	1.04
ST-7	negl.	negl.	0.00	0.22	0.00	0.00	0.00	0.22	0.22
ST-8	negl.	negl.	0.00	0.67	0.00	0.00	0.00	negl.	0.67
ST-10	negl.	negl.	0.00	0.06	0.00	0.00	0.00	0.06	0.06
ST-11	negl.	negl.	0.00	0.07	0.00	0.00	0.00	0.07	0.07
ST-12	negl.	negl.	0.00	0.37	0.00	0.00	0.00	0.37	0.37
ST-13	negl.	negl.	negl.	negl.	negl.	negl.	negl.	negl.	negl.
ST-14	negl.	negl.	negl.	negl.	negl.	negl.	negl.	negl.	negl.
Double+High Speed Single Head Tube Fillers	negl.	negl.	0.00	8.26	0.00	0.00	0.00	8.26	8.26
1 gal. Adhesive Canning Line	negl.	negl.	0.00	6.2	0.00	0.00	0.00	n/a	6.2
5 and 3 gal. Adhesive Canning Lines*	negl.	negl.	0.00	33.73	0.00	0.00	0.00	n/a	33.73
Water based churns W-200	negl.	negl.	0.00	negl.	0.00	0.00	0.00	negl.	negl.
Water based churns W-300	negl.	negl.	0.00	negl.	0.00	0.00	0.00	negl.	negl.
Water based churns W-400	negl.	negl.	0.00	negl.	0.00	0.00	0.00	negl.	negl.
5/55-gal. Adhesive Pail/Drum Line	negl.	negl.	0.00	7.4	0.00	0.00	0.00	n/a	7.4
5/55-gal. Sealant Pail/Drum Line	negl.	negl.	0.00	5.71	0.00	0.00	0.00	n/a	5.71
Water based churns W750	2.93	2.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water based churns W550	5.41	5.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>13 churns installed in 2006</b>									
W-100	0.85	0.85	0.00	0.00	0.00	0.00	0.00	negl.	negl.
W-500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	negl.	negl.
W-600	0.00	0.00	0.00	1.05	0.00	0.00	0.00	negl.	negl.
W-700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	negl.	negl.
W-800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	negl.	negl.
W-900	0.00	0.00	0.00	0.00	0.00	0.00	0.00	negl.	negl.
W-30 (30 HP Post)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	negl.	negl.
W-15 (15 HP Post)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	negl.	negl.
W-10 (10 HP Post)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	negl.	negl.
W-55 (55 Drum)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	negl.	negl.
W-45 (Hochmeyer)	0.05	0.05	0.00	0.00	0.00	0.00	0.00	negl.	negl.
W-5 (Air Mixers)	0.00	0.00	0.00	0.18	0.00	0.00	0.00	negl.	negl.
W-1100 (Casein - 2)	3.29	3.29	0.00	0.00	0.00	0.00	0.00	negl.	negl.
Post W-5	0.70	0.70	0.00	1.95	0.00	0.00	0.00	0.12	0.12
Post W-20	0.70	0.70	0.00	1.95	0.00	0.00	0.00	0.12	0.12
Post W-70A	0.70	0.70	0.00	1.95	0.00	0.00	0.00	0.12	0.12
ST-15	0.00	0.00	0.00	3.77	0.00	0.00	0.00	0.00	0.01
ST-16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
ST-17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Trash Compactor	2.73	2.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Small Industrial boilers</b>									
Boiler B-1 Potential Emission in tons/yr	0.01	0.06	0.00	0.04	0.62	0.74	883.00	0.13	0.14
Boiler B-2 Potential Emission in tons/yr	0.01	0.06	0.00	0.04	0.62	0.74	883.00	0.00	0.00
Air Make-up Units AMU-1 & 2 Potential Emission in tons/yr	0.03	0.11	0.01	0.08	1.24	1.48	1777.00	0.00	0.00
25 Air Heating Units Potential Emission in tons/yr	0.08	0.33	0.03	0.24	3.68	4.38	5256.00	0.00	0.00
<b>Solvent Based Churns N2 Blanket Purges</b>									
Adhesive CH-1	0.02	0.02	0.00	1.88	0.00	0.00	0.00	0.00	1.88
Adhesive CH-2	0.02	0.02	0.00	1.88	0.00	0.00	0.00	0.00	1.88
Adhesive CH-3*****			0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sealant CH-7	0.16	0.16	0.00	1.91	0.00	0.00	0.00	0.00	1.91
Sealant CH-8	0.16	0.16	0.00	1.91	0.00	0.00	0.00	0.00	1.91
Sealant CH-9	n/a	n/a	0.00	1.91	0.00	0.00	0.00	0.00	1.91
Sealant CH-10	n/a	n/a	0.00	1.91	0.00	0.00	0.00	0.00	1.01
Adhesive CH-22	n/a	n/a	0.00	10.31	0.00	0.00	0.00	0.00	10.31
Adhesive CH-25	1.15	1.15	0.00	10.69	0.00	0.00	0.00	0.00	4.84
Adhesive CH-26	2.2	2.2	0.00	10.69	0.00	0.00	0.00	0.00	6.00
Adhesive CH-27	1.21	1.21	0.00	8.44	0.00	0.00	0.00	0.00	8.44
Adhesive CH-28	0.28	0.28	0.00	8.44	0.00	0.00	0.00	0.00	8.44
Adhesive CH-29	1.23	1.23	0.00	8.44	0.00	0.00	0.00	0.00	8.44
Adhesive CH-40	0.06	0.06	0.00	8.44	0.00	0.00	0.00	0.00	0.00
Adhesive CH-41	0.11	0.11	0.00	15.75	0.00	0.00	0.00	0.00	8.84
Sealant CH-53	0.42	0.42	0.00	1.91	0.00	0.00	0.00	0.00	1.91
Adhesive CH-54	0.03	0.03	0.00	1.88	0.00	0.00	0.00	0.00	0.00
Adhesive CH-55	0.51	0.51	0.00	10.69	0.00	0.00	0.00	0.00	10.69
Adhesive CH-56	1.04	1.04	0.00	10.69	0.00	0.00	0.00	0.00	10.69
<b>Total Emissions</b>	<b>28.25</b>	<b>28.52</b>	<b>0.04</b>	<b>195.49</b>	<b>6.16</b>	<b>7.34</b>	<b>8799.00</b>	<b>13.04</b>	<b>156.02</b>
								Single HAP >10	Combined HAPs > 25

**Appendix A: Emissions Summary from Storage Tanks, Tube Fillers, Drum and Canning Lines, and Water Based Adhesive Churns  
VOC, HAPs and Particulate**

**Company Name: Royal Adhesives and Sealants, L.L.C.**  
**Address City IN Zip: 2001 West Washington Street, South Bend, IN 46628-2032**  
**Permit Number: T141-30439-00146**  
**Pit ID: 141-00146**  
**Reviewer: Anh Nguyen**  
**Date: 8/30/2011**

Potentials to Emit for Storage Tanks, Tube Fillers, Drum and Canning Lines, and Water Based Adhesive Churns										
Emission Unit	Annual Throughput (gal/yr)	Potential to Emit (tons/year)								Reference
		PM	VOC	Total HAP	Toluene	Hexane	Xylene	MEK	Heptane	
ST-1	5,370,000	negl.	0.46	0.46	0.46	negl.	negl.	negl.	negl.	Part 70 Permit No. T141-9909-00146
ST-2	1,020,540	negl.	1.51	1.51	negl.	1.51	negl.	negl.	negl.	Part 70 Permit No. T141-9909-00146
ST-3	377,160	negl.	0.046	0.046	negl.	negl.	0.046	negl.	negl.	Part 70 Permit No. T141-9909-00146
ST-4	377,160	negl.	0.29	0.29	negl.	negl.	negl.	0.29	negl.	Part 70 Permit No. T141-9909-00146
ST-5	377,160	negl.	0.22	0.22	negl.	negl.	negl.	negl.	0.22	Part 70 Permit No. T141-9909-00146
ST-6	1,020,540	negl.	1.04	1.04	negl.	1.04	negl.	negl.	negl.	Part 70 Permit No. T141-9909-00146
ST-7	377,160	negl.	0.22	0.22	negl.	negl.	negl.	negl.	0.22	Part 70 Permit No. T141-9909-00146
ST-8	377,160	negl.	0.67	0.67	negl.	negl.	negl.	negl.	negl.	Part 70 Permit No. T141-9909-00146
ST-10	179,000	negl.	0.06	0.06	0.06	negl.	negl.	negl.	negl.	Part 70 Permit No. T141-9909-00146
ST-11	224,000	negl.	0.07	0.07	0.07	negl.	negl.	negl.	negl.	Part 70 Permit No. T141-9909-00146
ST-12	192,000	negl.	0.37	0.37	negl.	0.37	negl.	negl.	negl.	Part 70 Permit No. T141-9909-00146
ST-13	20,000	negl.	negl.	negl.	negl.	negl.	negl.	negl.	negl.	Part 70 Permit No. T141-27159-00147
ST-14	35,000	negl.	negl.	negl.	negl.	negl.	negl.	negl.	negl.	Part 70 Permit No. T141-27159-00148
ST-15	102,793	0.00	3.77	0.01	0.00	0.00	0.00	0.00	0.00	Part 70 Permit No. T141-27159-00149
ST-16	102,793	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	Part 70 Permit No. T141-27159-00150
ST-17	102,793	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	Part 70 Permit No. T141-27159-00151
Double+High Speed Single Head Tube Fillers	n/a	negl.	8.26	8.26	8.26	negl.	negl.	negl.	negl.	Part 70 Permit No. T141-9909-00146
1 gal. Adhesive Canning Line	n/a	negl.	6.2	6.2	n/a	n/a	n/a	n/a	n/a	Part 70 Permit No. T141-9909-00146
5 and 3 gal. Adhesive Canning Lines*	n/a	negl.	33.73	33.73	n/a	n/a	n/a	n/a	n/a	Part 70 Permit No. T141-9909-00146
W-200	n/a	negl.	negl.	negl.	negl.	negl.	negl.	negl.	negl.	Part 70 Permit No. T141-9909-00146
W-300	n/a	negl.	negl.	negl.	negl.	negl.	negl.	negl.	negl.	Part 70 Permit No. T141-9909-00146
W-400	n/a	negl.	negl.	negl.	negl.	negl.	negl.	negl.	negl.	Part 70 Permit No. T141-9909-00146
5/55-gal. Adhesive Pail/Drum Line	n/a	negl.	7.4	7.4	n/a	n/a	n/a	n/a	n/a	Part 70 Permit No. T141-9909-00146
5/55-gal. Sealant Pail/Drum Line	n/a	negl.	5.71	5.71	n/a	n/a	n/a	n/a	n/a	Part 70 Permit No. T141-9909-00146
<b>Totals</b>		<b>negl.</b>	<b>70.026</b>	<b>66.286</b>	<b>8.85</b>	<b>2.92</b>	<b>0.046</b>	<b>0.29</b>	<b>0.44</b>	

\*VOC emissions from the five and three gallon adhesive canning line must be limited to less than 25 tons per year to preclude applicability of 326 IAC 8-1-6 (BACT)

**Appendix A: Emissions Summary from the Trash Compactor**

**Company Name:** Royal Adhesives and Sealants, L.L.C.  
**Address City IN Zip:** 2001 West Washington Street, South Bend, IN 46628-2032  
**Permit Number:** T141-30439-00146  
**Pit ID:** 141-00146  
**Reviewer:** Anh Nguyen  
**Date:** 8/30/2011

Trash Throughput =	1075	cu yards/yr
The potential trash throughput for the trash compactor in the worst case is assume to be	2150	cu yards/yr
Density of specialty papers =	94	lb/Ft <sup>3</sup>
1 cu yard =	27	ft <sup>3</sup>
1 ton =	2000	lb
Annual Operation Time =	8760	hrs/ yr

**1. Potential to Emit**

Assume emission factor of paper = 2 lb PM/ton  
 PTE = 2 lb PM/ton \* 0.311455479 = 0.623 lb/ton

**2. 6-3-2 Limit**

Emission Unit (trash Compactor)	Process Weight Rate (ton/hr)	Equation	326 IAC 6-3-2 Limit (lb/hr)	PTE (lb/hr)	Comply 326 IAC 6-3-2 w/o Control
Specialty papers	0.311455479	1	1.88	0.6230	Yes
		ton/yr	8.21927	2.72874	

Equation #1 =  $4.10 \times P^{0.67}$

P fo value less than or equal to 30 ton/hr

Where:

P = Process Weight Rate in ton/hr  
 E = Allowable PM emission rate lb/hr

**Appendix A: Comparisons of Worst Case Potentials to Emit for Solvent Based Churns-AP-42 vs. N2 Blanket Purges  
VOC, HAPs and Particulate**

Company Name: Royal Adhesives and Sealants, L.L.C.  
Address City IN Zip: 2001 West Washington Street, South Bend, IN 46628-2032  
Permit Number: T141-30439-00146  
Plt ID: 141-00146  
Reviewer: Anh Nguyen  
Date: 8/30/2011

Emission Unit	Number of Batches per Day	Solids per Batch (lb)	VOC per Batch (lb)	HAP per Batch (lb)	Potential to Emit - AP-42* (tons/year)			Length of Purging Time per Batch (mts)	Pounds VOC Emitted per Hour of Purging	Total Length of Mixing Time per Batch (mts)	Potential to Emit - N2 blanket purges** (tons/year)			Controlled Potential to Particulates
					Particulates**	VOC	Total HAPs				Particulates***	VOC****	HAPs*****	
CH-1	1	330	2176	2176	0.60	7.94	7.94	10	61.65	360	0.02	1.88	1.88	0.00
CH-2	1	330	2176	2176	0.60	7.94	7.94	10	61.65	360	0.02	1.88	1.88	0.00
CH-3*****	2	n/a	n/a	n/a	0.88	1.31	1.31	5						
CH-7	1	909	905	905	1.66	3.30	3.30	45	13.93	480	0.16	1.91	1.91	0.00
CH-8	1	909	905	905	1.66	3.30	3.30	45	13.93	480	0.16	1.91	1.91	0.00
CH-9	1	n/a	n/a	n/a	13.49	22.2	22.2	45	13.93	n/a	n/a	1.91	1.91	n/a
CH-10	1	n/a	n/a	n/a	19.80	16.29	8.65	45	13.93	n/a	n/a	1.91	1.01	n/a
CH-22	1	n/a	n/a	n/a	15.72	23.74	23.74	55	61.65	n/a	n/a	10.31	10.31	n/a
CH-25	6	1323	4130	1870	14.49	90.45	40.95	9.5	61.65	120	1.15	10.69	4.84	0.00
CH-26	6	2541	7976	4476	27.82	174.67	98.02	9.5	61.65	120	2.20	10.69	6.00	2.20
CH-27	1	9921	4907	4907	18.11	17.91	17.91	45	61.65	675	1.21	8.44	8.44	1.21
CH-28	1	2462	1218	1218	4.49	4.45	4.45	45	61.65	730	0.28	8.44	8.44	0.28
CH-29	1	13984	6917	6917	25.52	25.25	25.25	45	61.65	930	1.23	8.44	8.44	1.23
CH-53	1	2141	2227	2227	3.91	8.13	8.13	45	13.93	420	0.42	1.91	1.91	0.42
CH-54	1	450	2880	0	0.82	10.51	0.00	10	61.65	240	0.03	1.88	0.00	0.00
CH-55	6	588	3000	2999	6.44	65.70	65.68	9.5	61.65	120	0.51	10.69	10.69	0.00
CH-56	6	1201	2960	2960	13.15	64.82	64.82	9.5	61.65	120	1.04	10.69	10.69	0.00
<b>Total</b>					<b>169.16</b>	<b>547.92</b>	<b>403.61</b>				<b>8.42</b>	<b>93.54</b>	<b>80.23</b>	<b>5.34</b>

Note: The above emissions are based on the existing Part 70 Permit No. T141-9909-00146, issued on March 16, 2000.

\*Based on AP-42 Section 6.4.1 (paint manufacturing) 2% of solvent and 1% of particulates will be emitted during the mixing process.

\*\*Based on stack tests results during purging of N2 blanket.

\*\*\*Particulates = Particulates\*\* X Length of Purging Time per Batch/Total Length of Mixing Time per Batch

\*\*\*\*VOC = batches/day X minutes purged/per batch X pounds VOC emitted/hour of purging X 1 hour/60 mts. X 365 days/year X 1 ton/2000 pound:

\*\*\*\*\*Total HAPs from purging were considered to be emitted proportionately to VOC from purging.

HAP Emissions = (VOC Emissions (tons/yr)) \* (Weight of HAPs/Weight of VOCs (lb/batch))

\*\*\*\*\*CH-3 is not equipped with N purging.

\*\*\*\*\*Particulate emissions from churns CH-1, CH-2, CH-3, CH-7, CH-8, CH-25, CH-54, CH-55, and CH-56 are controlled by a cartridge type dust collector with a 99.9 % control efficiency.

**Appendix A: Emissions Calculations**  
**Water based churn W-750 & W-550 (no nitrogen purging)**

**Company Name:** Royal Adhesives and Sealants, L.L.C.  
**Address City IN Zip:** 2001 West Washington Street, South Bend, IN 46628-2032  
**Permit Number:** T141-30439-00146  
**Plt ID:** 141-00146  
**Reviewer:** Anh Nguyen  
**Date:** 8/30/2011

Churn ID	Material	No of Batch/day	Pounds of Solids/batch	Pounds of VOC/batc	Pounds PM/day*	Pounds VOC/day	Particulate s ** (TPY)	TPY VOC	TPY HAPs
W750	Worst Case	1	1606.23	0.00	16.06	0	2.93	0.00	0.00
W550	Worst Case	1	2963.72	0.00	29.64	0	5.41	0.00	0.00
<b>Total Emissions</b>						8.34	0.00		

Unit	Process Wt Rate ton/hr	PTE (PM) lb/hr	Allowable PM Emission Rate IAC 6-3-2 (lb/hr)	Emission Rate E = 4.10 P <sup>0.67</sup>	326
W750	0.033	0.669		<b>0.421</b>	
W550	0.062	1.235		<b>0.635</b>	

E = 4.10 P<sup>0.6</sup> (Particulate [326IAC 6-3-2])  
 P = process weight rate in tons per hour; and  
 E = rate of emission in pound per ho

**Methodology**

Note: The above emissions are based on the existing Part 70 Permit No. T141-9909-00146, issued on March 16, 2000  
 \*Based on AP-42 Section 6.4.1 (paint manufacturing) 2% of solvent and 1% of particulates will be emitted during the mixing process

\*\*Based on stack tests results during purging of N2 blanket  
 \*\*\*Particulates = Particulates\*\* X Length of Purging Time per Batch/Total Length of Mixing Time per Batch  
 \*\*\*\*VOC = batches/day X minutes purged/per batch X pounds VOC emitted/hour of purging X 1 hour/60 mts. X 365 days/year X 1 ton/2000 pound  
 \*\*\*\*\*Total HAPs from purging were considered to be emitted proportionately to VOC from purging  
 Potential to Emit - AP-42\* (tons/year) Potential to Emit - N2 blanket purges\*\* (tons/year)

W-550 and W-750 are not equipped with N purging.

**Worst Case Potentials to Emit for Solvent Based Churns  
VOC and Particulate**

Source Name: Royal Adhesives and Sealants, L.L.C.  
Source Location: 2001 West Washington Street, South Bend, IN 46628-2032  
Permit Number: T141-30439-00146  
Plt ID: 141-00146  
Permit Reviewer: Anh Nguyen  
Date: 8/30/2011

Emission Unit	Number of Batches per Day	Gallons per Unit	Solids per Batch (lb)	VOC per Batch (lb)	Potential to Emit - AP-42* (tons/yr)			PM (tons/yr)	PM <sub>10</sub> (tons/yr)	PM2.5 (tons/yr)	SO <sub>2</sub> (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NOx (tons/yr)	HAPs (tons/yr)	
					Particulates**	VOC/MDI										
E-25	6	150	5.06	13.69	0.06	0.01	E-25	0.06	0.06	0.06	0	0.01	0	0	0.01	
E-40	6	500	16.88	45.63	0.18	0.01	E-40	0.02	0.02	0.02	0	0.01	0	0	0.01	
E-75	6	500	16.88	45.63	0.18	0.01	E-75	0.18	0.18	0.18	0	0.01	0	0	0.01	
E-20	6	150	5.06	13.69	0.06	0.01	E-20	0.06	0.06	0.06	0	0.01	0	0	0.01	
E-10	6	40	1.35	3.65	0.01	0.01	E-10	0.01	0.01	0.01	0	0.01	0	0	0.01	
R-1	6	1000	33.75	91.25	0.37	0.01	R-1	0.37	0.37	0.37	0	0.01	0	0	0.01	
R-2	6	1000	33.75	91.25	0.37	0.01	R-2	0.37	0.37	0.37	0	0.01	0	0	0.01	
R-3	6	50	1.69	4.56	0.02	0.01	R-3	0.02	0.02	0.02	0	0.01	0	0	0.01	
R-4	6	250	8.44	22.81	0.09	0.01	R-4	0.09	0.09	0.09	0	0.01	0	0	0.01	
R-5	6	250	8.44	22.81	0.09	0.01	R-5	0.09	0.09	0.09	0	0.01	0	0	0.01	
R-7	6	750	25.31	68.44	0.28	0.01	R-7	0.28	0.28	0.28	0	0.01	0	0	0.01	
R-8	6	250	8.44	22.81	0.09	0.01	R-8	0.09	0.09	0.09	0	0.01	0	0	0.01	
R-9	6	1000	33.75	91.25	0.37	0.01	R-9	0.37	0.37	0.37	0	0.01	0	0	0.01	
							ST-15	0	0	0	0	3.77	0	0	0.01	
							ST-16	0	0	0	0	0	0	0	0.01	
							ST-17	0	0	0	0	0	0	0	0.01	
<b>Total</b>								Total Emissions	2.01	2.01	2.01	0	3.89	0.0	0.00	Single HAP <10 Combined HAPs < 25

Note: The above emissions are based on the existing Part 70 Permit No. T141-9909-00146, issued on March 16, 2000.

\*Based on AP-42 Section 6.4.1 (paint manufacturing) 1% of particulates will be emitted during the mixing process. VOC/HAP emissions based on Subpart HHHHH equation.

HAP Emissions = (VOC Emissions (tons/yr)) \* (Weight of HAPs/Weight of VOCs (lb/batch)) control efficiency.

**Appendix A: Worst Case Potentials to Emit for Solvent Based Churns-AP-42  
VOC, HAPs and Particulate**

Company Name:  
Address City IN Zip: Royal Adhesives and Sealants, L.L.C.  
Part 70 Renewal No.: 2001 West Washington Street, South Bend, IN 46628-2032  
Reviewer: T141-30439-00146  
Date: Anh Nguyen  
December 28, 2011

Emission Unit	Number of Batches per Day**	Solids per Batch (lb)	VOC per Batch (lb)	HAP per Batch (lb)	Emit - AP-42* (tons/year)			
					Particulates	VOC	Single HAP - Xylene	Total HAPs
W-5	1.31	294.49	408.83	25.13	0.70	1.95		
W-20	1.31	294.49	408.83	25.13	0.70	1.95	0.12	0.12
W-70A	1.31	294.49	408.83	25.13	0.70	1.95	0.12	0.12
<b>Total</b>					<b>2.11</b>	<b>5.86</b>	0.12	0.12
<b>Total Converted to lbs/hr</b>					<b>0.48</b>	<b>1.34</b>	<b>0.36</b>	<b>0.36</b>
							<b>0.08</b>	<b>0.08</b>

Note: The above emissions are based on the existing Part 70 Permit No. T141-9909-00146, issued on March 16, 2000.

\*Based on AP-42 Section 6.4.1 (paint manufacturing) 2% of solvent and 1% of particulates will be emitted during the mixing process.

\*\*Based on the Material ID with the worst case PTE of VOC.

Material ID	# HAP/Mix	# of Hours	Tons HAP/VOC Throughput per year	Tons HAP/VOC Emitted per year
20042	25	20.5	5.34	0.11
20050	25	10.8	10.14	0.2
20289	25	9.5	11.53	0.23
21012	298.9	33.9	38.62	0.77
20318	47.29	21.25	9.75	0.19
20327	298.9	19	68.9	1.38
20347	25	7.5	14.6	0.29

**Appendix A - Emission Calculations for Adhesive Churn CH-41**

**Company Name : Royal Adhesives and Sealants, LLC**  
**Company Address : 2001 West Washington Street**  
**South Bend, Indiana 46628**

**Part 70 Operating Permit Number : T 141-30439-00146**

**Reviewer : Anh Nguyen**

**Date : 8/31/2011**

Pollutant	Batches / Day	lb Solids / Batch	lb VOC / Batch	lb HAP / Batch	Wt % HAP <sup>(1)</sup>	Batch Purge Time (Min)	Emission Factor	Emission Factor Units	Emissions (ton/yr)
VOC	6.00	2,541.00	7,976.00	4,476.00	56.12%	14.00	61.65	lb VOC / hr of purging <sup>(2)</sup>	15.75
HAP	6.00	2,541.00	7,976.00	4,476.00	56.12%	14.00	34.60	lb HAP / hr of purging <sup>(3)</sup>	8.84
Particulate	6.00	2,541.00	7,976.00	4,476.00	56.12%	14.00	0.438	lb particulate / hr purging <sup>(4)</sup>	0.11

**Notes:**

- 1) HAP emissions were estimated based on the weight percentage of HAP in the batch VOC. Each batch contains 7,979 lbs of VOC and 4,476 lb of HAP. The weight % HAP is calculated as  $(4,476 / 7,976) \times 100\% = 56.12\%$  of VOC is HAP.
- 2) The VOC emission factor was taken from a stack test performed on February 19, 1999.
- 3) The HAP emission factor was estimated at 56.12% of the VOC emission factor. It is assumed the emission of HAP will be proportional to the HAP wt% composition of VOC in the batch. The calculation is shown below.
- 4) The PM emission factor was taken from a stack test performed February 19, 1999.
- 5) The mixing churns are total enclosed vessels and emissions occur only when the raw materials are charged to the vessel and a nitrogen purge cycle begins. The nitrogen purge system was determined to be integral to the process by IDEM in T141-9909-00146. Churn CH-41 is similar in design to adhesive churns CH-25 and CH-26.

**Methodology:**

- 1) Emissions (ton/yr) =  $\frac{(\text{Batches / day}) \times (\text{Batch Purge Time (min)}) \times 365 \text{ days/yr} \times \text{emission factor (lb/hr)}}{(60 \text{ min/hr}) \times (2,000 \text{ lb/ton})}$

**Appendix A - Emission Calculations for Adhesive Churn CH-40**

**Company Name : Royal Adhesives and Sealants, LLC**  
**Company Address : 2001 West Washington Street**  
**South Bend, Indiana 46628**

**Part 70 Operating Permit Number : T 141-30439-00146**

**Reviewer : Anh Nguyen**

**Date : 8/31/2011**

Unit ID	Pollutants	Method	Max Capacity (lb/day)	No. Batch/day	VOC (% Wt).- PM (% Wt)	VOC % Emitted - PM % Emitted	Purge Time (min)	** VOC - **PM (lb/hr)	VOC - PM (TPY)
CH-40	VOC	Source Emission Test	5648.1	1	89.97	2	45	61.65	8.44
CH-40	PM	Source Emission Test	5648.1	1	10.03	1	45	0.438	0.06

**Methodology**

CH-40 can produce a maximum of one (10 batch per day(based on average batch process time) and is processed with a nitrogen blanket.

the nitrogen blanket is considered an integral part of the CH-40 churning process by IDEM

\*\*Based on stack test results during purging of the nitrogen blanket.

Based on AP-42 Section 6.4.1 Paint manufacturing emission factors are:

VOC -2% VOC emitted

PM- 1% PM emitted

VOC Emission (Ap-42 [TPY] = Max. (lb/batch) \* #( batch/day) \* VOC (%Wt) \* VOC (% Emitted) \* 365 (days/yr) \* (1/2000 (TPY)

VOC Emission (Source) [TPY] = #( batch/day) \* Purge Time(min/batch) \* Emission (lb/hr) \* 1/60 (hr/mins) \* 365 (days/yr) \* (1/2000 (TPY)

PM Emission (Ap-42 [TPY] = Max. (lb/batch) \* #( batch/day) \* PM (%Wt) \* PM (% Emitted) \* 365 (days/yr) \* (1/2000 (TPY)

PM Emission (Source) [TPY] = #( batch/day) \* Purge Time(min/batch) \* Emission (lb/hr) \* 1/60 (hr/mins) \* 365 (days/yr) \* (1/2000 (TPY)



**Appendix A: Emissions Calculations**

**Natural Gas Combustion Only  
MM BTU/HR <100  
Small Industrial Boilers and Miscellaneous Combustion Sources  
HAPs Emissions**

**Company Name:** Royal Adhesives and Sealants, L.L.C.  
**Address City IN Zip:** 2001 West Washington Street, South Bend, IN 46628-2032  
**Permit Number:** T141-30439-00146  
**Plt ID:** 141-00146  
**Reviewer:** Anh Nguyen  
**Date:** 8/30/2011

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	1.540E-04	8.799E-05	5.499E-03	1.320E-01	2.493E-04

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel	Total (ton/yr)
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	4.034E-05	8.875E-05	1.130E-04	3.066E-05	1.694E-04	<b>1.384E-01</b>

Methodology is the same as page 11.

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

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

**Appendix A: Emissions Calculations**

**Natural Gas Combustion Only**

**MM BTU/HR <100**

**Greenhouse Gas Emissions**

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	8,799	0.0	0.0
Summed Potential Emissions in tons/yr	8,799		
CO2e Total in tons/yr	8,799		

	CO2e tons/yr
Boiler B-1	883.01
Boiler B-2	883.01
Air Make-up Units AMU-1 & 2	1776.53
25 Air Heating U	5256.00
<b>Total</b>	<b>8798.54</b>

**Methodology**

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.  
Emission

Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

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

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission

SKU	Description	# of 2008 Batch es	Prod'n Line	Largest Tank diameter (in)	Largest Vessel Size (gal)	Raw Material Code	Raw Material Description	CAS No.	Lbs Raw Mat'l Produced	Vapor Pressure @ 25C (mmHg)	Boiling Point (°F)	Molecular Weight (lb/lb-mol)	Vacuum Purge Time (hrs)	Vessel Pressure (mmHg)	Temp (T) (°F)	4.4-MDI % in RH	4.4-MDI % in FG	Partial Pressure (P) @ T (mmHg)	Purge flow @ T & P (cfm)	Initial Air space MDI Loss (lbs)	Purge flow of MDI in saturate d (V <sub>0</sub> ) <sup>1/2</sup> cfm	Vessel Cross-section (A) (ft <sup>2</sup> )	Saturati on index (S <sub>i</sub> ) of purge flow	Purge emission per batch (E) (lbs)	Total loss per batch (lbs)	2008 process losses (lbs)	
04001#0	INTERMEDIATE 4001	0	3	65.375	1000	'08-020	PAPI 94@LUPRANATE 234@	9016-87-9	27.70	0.0001	410	500	0.00	760	170	55-67	17%	4.19E-04	0	3.2E-05	0.000	23.31	1	0	3.2E-05	0.0E+00	
04003#0	INTERMEDIATE 4003	2	73	3	65.375	1000	'08-001	DESMODUR W	6124-30-1	28.87	1.5E-05	262	0.00	760	195	55-67	10%	0.00E+00	0	0.0E+00	0.000	23.31	1	0	0.0E+00	0.0E+00	
04006#0	INTERMEDIATE 4006	0	3	65.375	1000	'08-032	MONDUR ML @	26447-40-5	28.43	0.0003	410	250	0.00	760	185	50-60	16%	6.11E-04	0	6.3E-05	0.000	23.31	1	0	6.3E-05	0.0E+00	
04007#0	INTERMEDIATE 4007	0	2	65.375	1000	'08-032	MONDUR ML @	26447-40-5	13.78	0.0003	410	250	0.00	760	175	50-60	8%	2.41E-04	0	1.9E-05	0.000	23.31	1	0	1.9E-05	0.0E+00	
12166-1	KALEX 12166 PART A	3	14,800	3	65.375	1000	'08-004	PAPI 901=LUPRANATE M-10	9016-87-9	7.00	0.00005	410	280	0.33	5	215	55-67	4%	8.77E-04	709	6.8E-05	0.124	23.31	0.022	1.76E-04	2.4E-04	7.3E-04
13361-1	KALEX 13361 PART A	0	1	65.375	1000	'08-004	PAPI 901=LUPRANATE M-10	9016-87-9	80.80	0.00005	410	280	0.00	760	195	55-67	46%	4.11E-03	0	3.2E-04	0.000	23.31	1	0	3.2E-04	0.0E+00	
14536-1	KALEX 14536 PART A	0	1	65.375	1000	'08-020	PAPI 94@LUPRANATE 234@	9016-87-9	100.00	0.0001	410	500	0.00	760	77	55-67	81%	6.24E-06	0	4.8E-07	0.000	23.31	1	0	4.8E-07	0.0E+00	
15036#1	KALEX 15036 PART A	12	12,354	1	65.375	1000	'08-002	ISONATE 143L @	26447-40-5	62.00	0.0003	597	250	0.50	5	195	55-67	61%	0.02E+00	689	0.0E+00	0.000	23.31	0.022	0.0E+00	0.0E+00	
15036#1	KALEX 15036 PART A	2	343	1	65.375	1000	'08-004	PAPI 901=LUPRANATE M-10	9016-87-9	55.50	0.00005	410	280	0.50	5	195	55-67	34%	2.62E-03	689	2.2E-04	0.388	23.31	0.022	8.74E-04	1.1E-03	2.2E-03
15036#1	KALEX 15036 PART A	0	2	65.375	1000	'08-005	TOI (MONDUR TD-90 GRADE A	26471-62-6	14.82	0.025	487	174	0.00	760	220	55-67	36%	7.44E-03	0	5.7E-06	0.000	23.31	1	0	5.7E-06	0.0E+00	
15042#1	KALEX 15042 INTERMEDIATE	0	2	65.375	1000	'08-004	PAPI 901=LUPRANATE M-10	9016-87-9	59.37	0.00005	410	280	0.00	760	215	55-67	36%	7.44E-03	0	5.7E-06	0.000	23.31	1	0	5.7E-06	0.0E+00	
16099-1	KALEX 16099 PART A	3	609	1	65.375	1000	'08-019	ISOPHORONE DIISOCYANATE (	25471-62-5	7.29	0.025	487	174	0.33	5	215	55-67	4%	8.77E-04	709	6.8E-05	0.124	23.31	0.022	1.76E-04	2.4E-04	7.3E-04
16308#1	KALEX 16308 PART A	3	609	3	65.375	1000	'08-005	TOI (MONDUR TD-90 GRADE A	26471-62-6	14.82	0.025	487	174	0.00	760	215	55-67	36%	7.44E-03	0	5.7E-06	0.000	23.31	1	0	5.7E-06	0.0E+00
16324-1	KALEX 16324 PART A	1	516	1	65.375	1000	'08-017	MONDUR MRS-4=LUPRANATE 24	9016-87-9	65.23	0.0001	406	500	0.00	760	195	15-20	11%	6.50E-04	0	7.3E-05	0.000	23.31	1	0	7.3E-05	7.3E-05
16443-1	KALEX 16443 PART A	30	11,400	1	65.375	1000	'08-017	MONDUR MRS-4=LUPRANATE 24	9016-87-9	100.00	0.0001	406	500	0.00	760	177	15-20	18%	1.78E-08	0	1.4E-07	0.000	23.31	1	0	1.4E-07	4.1E-06
16552-1	SAME AS KALEX 16443 A	0	1	65.375	1000	'08-017	MONDUR MRS-4=LUPRANATE 24	9016-87-9	100.00	0.0001	406	500	0.00	760	77	15-20	18%	1.78E-08	0	1.4E-07	0.000	23.31	1	0	1.4E-07	0.0E+00	
16588-1	KALEX XL 16588 PART A	6	5,000	1	65.375	1000	'08-021	MONDUR MRL-L = PAPI 27	9016-87-9	100.00	0.0001	410	500	0.00	760	77	42-45	44%	4.45E-08	0	3.4E-07	0.000	23.31	1	0	3.4E-07	2.1E-06
16605-1	KALEX 16605 PART A	18	#####	1	65.375	1000	'08-004	PAPI 901=LUPRANATE M-10	9016-87-9	78.18	0.00005	410	280	0.33	5	195	55-67	48%	3.87E-03	688	3.1E-04	0.546	23.31	0.022	8.23E-04	1.1E-03	2.0E-02
16605-1	KALEX 16605 PART A	0	2	65.375	1000	'08-023	RUBINATE 1680 (LF-168) @	70.50	0.0003	597	250	0.50	5	195	205	55-67	4%	0.00E+00	0	0.0E+00	0.000	23.31	1	0	0.0E+00	0.0E+00	
16722-1	KALEX 16722 PART A	0	2	65.375	1000	'08-002	ISONATE 143L @	26447-40-5	66.77	0.0003	597	250	0.50	5	195	205	55-67	4%	0.00E+00	0	0.0E+00	0.000	23.31	1	0	0.0E+00	0.0E+00
16786-1	KALEX 16786 PART A	4	14,083	2	65.375	1000	'08-002	ISONATE 143L @	26447-40-5	72.50	0.0003	597	250	0.33	5	205	55-67	37%	2.45E-03	0	1.9E-04	0.000	23.31	1	0	1.9E-04	0.0E+00
16816-1	KALEX 16816 PART A	0	2	65.375	1000	'08-020	PAPI 94@LUPRANATE 234@	9016-87-9	61.00	0.0001	410	500	0.00	760	180	55-67	37%	2.45E-03	0	1.9E-04	0.000	23.31	1	0	1.9E-04	0.0E+00	
16828-1	KALEX 16828 PART A	0	1	65.375	1000	'08-022	DESMODUR ET44	26447-40-5	102.00	0.0003	410	250	0.00	760	180	55-67	9%	3.95E-04	0	2.8E-05	0.000	23.31	1	0	2.8E-05	0.0E+00	
16867-1	KALEX 16867 PART A	0	2	65.375	1000	'08-004	PAPI 901=LUPRANATE M-10	9016-87-9	14.40	0.00005	410	280	0.00	760	180	50-60	30%	1.21E-03	0	9.3E-05	0.000	23.31	1	0	9.3E-05	0.0E+00	
16867-1	KALEX 16867 PART A	0	3	65.375	1000	'08-032	MONDUR ML @	26447-40-5	54.00	0.0003	567	250	0.00	760	210	50-60	30%	1.21E-03	0	9.3E-05	0.000	23.31	1	0	9.3E-05	0.0E+00	
17474-1	KALEX 17474 PART A	0	3	65.375	1000	'08-002	ISONATE 143L @	26447-40-5	7.00	0.0003	567	250	0.00	760	210	50-60	30%	1.21E-03	0	9.3E-05	0.000	23.31	1	0	9.3E-05	0.0E+00	
17530-1	KALEX 17530 PART A	0	2	65.375	1000	'08-004	PAPI 901=LUPRANATE M-10	9016-87-9	59.37	0.00005	410	280	0.00	760	215	55-67	36%	7.44E-03	0	5.7E-04	0.000	23.31	1	0	5.7E-04	0.0E+00	
17533-1	SAME AS KALEX 19104 PART A	0	1	65.375	1000	'08-021	MONDUR MRL-L = PAPI 27	9016-87-9	100.00	0.0001	410	500	0.00	760	77	42-45	44%	4.45E-08	0	3.4E-07	0.000	23.31	1	0	3.4E-07	0.0E+00	
17580-1	KALEX 17580 PART A	0	2	65.375	1000	'08-023	RUBINATE 1680 (LF-168) @	70.50	0.0003	597	250	0.50	5	195	205	55-67	4%	0.00E+00	0	0.0E+00	0.000	23.31	1	0	0.0E+00	0.0E+00	
17621-1	KALEX 17621 PART A	0	1	65.375	1000	'08-020	PAPI 94@LUPRANATE 234@	9016-87-9	69.99	0.0001	410	500	0.00	760	190	55-67	43%	1.74E-03	0	1.3E-04	0.000	23.31	1	0	1.3E-04	0.0E+00	
17631-1	KALEX 17631 PART A	0	1	65.375	1000	'08-025	MONDUR CD (ONLY) @	25866-28-6	79.00	0.0003	302	250	0.00	760	195	70-80	57%	4.74E-03	0	3.7E-04	0.000	23.31	1	0	3.7E-04	0.0E+00	
17638-1	KALEX 17638 PART A	0	1	65.375	1000	'08-001	DESMODUR W	6124-30-1	65.00	1.5E-05	262	262	0.00	760	230	55-67	10%	0.00E+00	0	0.0E+00	0.000	23.31	1	0	0.0E+00	0.0E+00	
18637-1	KALEX 18637 PART A	0	3	65.375	1000	'08-001	PAPI 901=LUPRANATE M-10	9016-87-9	7.00	0.00005	410	280	0.00	760	77	42-45	44%	4.45E-08	0	3.4E-07	0.000	23.31	1	0	3.4E-07	2.1E-06	
19104-1	KALEX 19104 PART A	1	82	1	65.375	1000	'08-021	MONDUR MRL-L = PAPI 27	9016-87-9	100.00	0.0001	410	500	0.00	760	115	55-67	4%	8.77E-04	0	6.8E-05	0.000	23.31	1	0	6.8E-05	0.0E+00
19406-1	KALEX 19406 PART A	0	1	65.375	1000	'08-002	ISONATE 143L @	26447-40-5	63.00	0.0003	597	250	0.00	760	215	42-45	44%	4.45E-08	0	3.4E-07	0.000	23.31	1	0	3.4E-07	2.1E-06	
19413-1	KALEX 19413 PART A	0	2	65.375	1000	'08-020	PAPI 94@LUPRANATE 234@	9016-87-9	73.00	0.0001	410	500	0.00	760	215	55-67	40%	1.60E-02	7.8E-04	1.427	23.31	0.022	1.23E-02	1.6E-02	0.0E+00		
19417-1	KALEX 19417 PART A	2	737	1	65.375	1000	'08-025	MONDUR CD (ONLY) @	25866-28-6	21.00	0.0003	302	250	0.00	760	200	70-80	16%	1.65E-03	693	1.9E-04	0.229	23.31	0.022	4.05E-03	4.2E-03	8.4E-03
19417-1	KALEX 19417 PART A	2	737	4	65.375	1000	'08-025	MONDUR CD (ONLY) @	25866-28-6	15.00	0.0003	302	250	0.00	760	200	70-80	12%	1.25E-03	693	9.7E-05	0.173	23.31	0.022	3.07E-03	3.2E-03	5.3E-03
19417-1	KALEX 19417 PART A	2	737	5	65.375	1000	'08-032	MONDUR ML @	26447-40-5	14.56	0.0003	250	4.00	5	200												

Emission Summary  
**Sample Calculation: Vacuum**

Company Name: Royal Adhesives and Sealants, L.L.C.  
 Address City IN Zip: 2001 West Washington Street, South Bend, IN 46628-2032  
 Permit Number: T141-30439-00146  
 Plt ID: 141-00146  
 Reviewer: Anh Nguyen  
 Date: 8/30/2011

**U-55 Reactor Room Production Batches**

Assumption: Full vacuum is 5 mmHg absolute.

T = 25 °C  
 P = 5 mm Hg  
 P<sup>v</sup> = mm Hg for resins  
 t = hours (may vary depending on product)  
 MW = lbs/lbmol for epoxy resin  
 SG = 7.32 lbs/gal (use conservative estimate of specific gravity)

2440 lbs total production = total lbs charged to tank (use "per pound of production basis")  
 333.3333 gallons of material in tank  
 V<sub>vessel</sub> = 1000 vessel volume (gallons) - Assume headspace volume is twice the batch volume, or total reactor volume is three times the batch volume.

La = W + w where La = total air leak rate in the system, lb/hr  
 W = air leakage resulting from metal porosities and cracks along weld lines, lb/hr  
 w = acceptable air leakage rate assigned to each system component, lb/yr

W = 0.026 P<sup>0.34</sup> V<sup>0.60</sup> (for 1<=P<=10 mmHg)  
 W = 0.848 lb/hr <----- Leak rate into vessel  
 w = πDθP<sup>0.34</sup> (for 1<=P<=10 mmHg)

where D = sealed diameter, in  
 θ = specific leakage rate for components, lb/hr/in

Specific leakage rates: (lb/hr/in)

Mechanical seals (rotary): 0.100  
 Threaded connections: 0.015  
 Access ports: 0.020  
 Viewing windows: 0.015  
 Ball valves: 0.020  
 Throttle valves: 0.250 (valves used to throttle control gas into vacuum system)

Component count:

Mechanical seals (rotary): 1  
 Threaded connections: 36  
 Access ports: 8  
 Viewing windows: 3  
 Ball valves: 7  
 Throttle valves: 0

D = 2.9 in  
 w = 15.511 lb/hr <----- Leak rate due to pipes & fittings  
 La = 16.358 lb/hr <----- Total leak rate, vessel + pipes & fittings

P=5 for all vacuuming steps; 5 mm Hg is best vacuum achievable with our vacuum pumps & vessels.

**Notes**

Specific leakage rates obtained from EPA-450/R-94-020 (ACT Information Document), Feb. 1994, Table A-5

	Actual	R-1	R-2	R-4	R-5	R-7	R-9
Mechanical seals (rotary):	1	1	1	1	1	1	1
Threaded connections:	36	36	32	25	30	29	35
Access ports:	8	6	5	5	5	7	8
Viewing windows:	3	2	3	2	2	2	2
Ball valves:	7	7	5	5	4	6	7
Throttle valves:	0	0	0	0	0	0	0

Reactor	Flange Sizes					Average
	1.5	2	3	4	6	
R-1	1	2	1		1	2.9
R-2	1	3				1.875
R-3						
R-4						
R-5						
R-7			4		2	2.666667
R-9			6		1	2.571429
						2.9

## Appendix A: Emissions Summary from the Trash Compactor

Company Name: Royal Adhesives and Sealants, L.L.C.  
Address City IN Zip: 2001 West Washington Street, South Bend, IN 46628-2032  
Permit Number: T141-30439-00146  
Plt ID: 141-00146  
Reviewer: Anh Nguyen  
Date: 8/30/2011

Emissions Calculations for Water Based Adhesives and Sealants									
Churn ID	Maximum Capacity (lbs/day)	Weight % Solids	No. of Batches per day	Pound of Solids / Batch	Weight % VOC	Pounds PM/day	Pounds VOC/day	PM (TPY)	VOC (TPY)
W-100	3099.52	15	1	464.93	0.00	4.65	0.00	0.85	0.00
W-200	4550	0	1	0.00	1.93	0.00	1.76	0.00	0.32
W-300	9288.48	0.34	1	31.58	0.00	0.32	0.00	0.06	0.00
W-400	2639	0	1	0.00	1.89	0.00	1.00	0.00	0.18
W-500	8918.69	0	1	0.00	0.00	0.00	0.00	0.00	0.00
W-600	8679.84	0	1	0.00	3.31	0.00	5.75	0.00	1.05
W-700	13110	0	1	0.00	0.00	0.00	0.00	0.00	0.00
W-800	17060	0	1	0.00	0.00	0.00	0.00	0.00	0.00
W-900	14025	0	1	0.00	0.00	0.00	0.00	0.00	0.00
						0.00			
W-30 (30HP_Post)	4160	0	1	0.00	0.00	0.00	0.00	0.00	0.00
W-15 (15HP_Post)	2616	0	1	0.00	0.00	0.00	0.00	0.00	0.00
W-10 (10HP_Post)	489.5	0	1	0.00	4.90	0.00	0.48	0.00	0.09
W-55 (55_Drum)	491.7	0	1	0.00	0.00	0.00	0.00	0.00	0.00
W-45 (Hochmeyer)	388.8	6.89	1	26.79	0.00	0.27	0.00	0.05	0.00
W-5 (Air Mixer)	610	0	1	0.00	8.20	0.00	1.00	0.00	0.18
W-1100 (Casein-2)	9636	18.68	1	1800.00	0.00	18.00	0.00	3.29	0.00
<b>TOTAL</b>	<b>99762.53</b>					<b>23.24</b>	<b>9.98</b>	<b>4.21</b>	<b>1.82</b>

Methodology

Using AP-42 Section 6.4.1 Paint Manufacturing;  
Emission Factors from operation are 2% VOC emitted, 1% PM emitted  
Each Churn can produce a maximum of one (1) batch per day

PM Emission (lb/day) = (max. cap. lbs/day) x (weight % solids) x (1%PM emitted)  
VOC Emission (lbs/day) = (max. cap. lbs/day) x (weight % VOC) x (2% VOC emitted)  
Emission (TPY) = (Pollutant lb/day) x (365 days/yr) x (1 ton/2000 lb)

Unit	Process Wt. Rate ton/hr	PTE (PM) (ton/hr)	Allowable PM Emission Rate 326 IAC 6-3-2 (lb/hr) E = 4.10 P <sup>0.67</sup>
W-100	0.19	0.065	0.654
W-300	0.01	0.194	1.364
W-45 (Hochmeyer)	0.01	0.008	0.163
W-1100 (Casein-2)	0.75	0.201	1.398



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*  
**Governor**

*Thomas W. Easterly*  
**Commissioner**

100 North Senate Avenue  
Indianapolis, Indiana 46204  
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## **SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED**

**TO:** Larry Witges  
Royal Adhesives and Sealants, LLC  
2001 W Washington Street  
South Bend, IN 46628

**DATE:** December 28, 2011

**FROM:** Matt Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

**SUBJECT:** Final Decision  
Part 70 Operating Permit Renewal  
141-30439-00146

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:  
Randy Greenlee - VP  
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at [jbrush@idem.IN.gov](mailto:jbrush@idem.IN.gov).

Final Applicant Cover letter.dot 11/30/07



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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[www.idem.IN.gov](http://www.idem.IN.gov)

December 28, 2011

TO: St. Joseph County Public Library

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

Subject: **Important Information for Display Regarding a Final Determination**

**Applicant Name: Royal Adhesives and Sealants, LLC**  
**Permit Number: 141-30439-00146**

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures  
Final Library.dot 11/30/07

# Mail Code 61-53

IDEM Staff	GHOTOPP 12/28/2011 Royal Adhesives and Sealants, L.L.C. 141-30439-00146 Final		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING	
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2		Randy Greenlee VP Royal Adhesives and Sealants, L.L.C. 2001 W Washington St South Bend IN 46628 (RO CAATS)										
3		Mr. Charles L. Berger Berger & Berger, Attorneys at Law 313 Main Street Evansville IN 47700 (Affected Party)										
4		Laurence A. McHugh Barnes & Thornburg 100 North Michigan South Bend IN 46601-1632 (Affected Party)										
5		Mr. Wayne Falda South Bend Tribune 255 W Colfax Ave South Bend IN 46626 (Affected Party)										
6		South Bend City Council / Mayors Office 227 W. Jefferson Blvd. South Bend IN 46601 (Local Official)										
7		St. Joseph County Board of Commissioners 227 West Jefferson Blvd, South Bend IN 46601 (Local Official)										
8		St. Joseph County Health Department 227 W Jefferson Blvd, Room 825 South Bend IN 46601-1870 (Health Department)										
9		Mark Zeltwanger 26545 CR 52 Nappanee IN 46550 (Affected Party)										
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