



**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR RESOURCES**

**OPERATING PERMIT**

*Stanley Fastening Systems, L.P.*

**PERMIT NO. RI-30-08(R2)**

(Renewal date: September 19, 2008)  
(Expiration date: September 19, 2013)

**Pursuant to the provisions of Air Pollution Control Regulation No. 29, this operating permit is issued to:**

Stanley Fastening Systems, L.P.  
2 Briggs Drive  
East Greenwich, RI 02818 - 9949

**This permit shall be effective from the date of its issuance. All terms and conditions of the permit are enforceable by the USEPA and citizens under the federal Clean Air Act, 42 U.S.C. 7401, et seq., unless specifically designated as not federally enforceable.**

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Douglas L. McVay, Acting Chief  
Office of Air Resources

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Date of revision: 1/04/2010

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## SECTION I. SOURCE SPECIFIC CONDITIONS

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### A. Requirements for Emissions Units B001 and B002

The following requirements are applicable to:

- Emission units B001 and B002, each of which are 19.78 MMBTU/hr Preferred Utilities boiler, Model No. BHE 103A4, capable of burning #6 fuel oil and natural gas.

#### 1. **Emission Limitations**

##### a. **Particulates**

The permittee shall not cause or permit the emissions of particulate matter in excess of 0.1 pounds per million BTU actual heat input. [13.2.1]

##### b. **Opacity**

The permittee shall not emit into the atmosphere, any air contaminant, for a period or periods aggregating more than three minutes in any one hour, which is greater than or equal to 20 percent opacity. [1.2] Where the presence of uncombined water is the only reason for failure to meet this requirement, such failure shall not be a violation of this permit. [1.4]

##### c. **Sulfur Oxides**

Unless the Director declares in writing after hearing that a shortage of low sulfur fuel exists, the permittee shall not use or store fuel oil with a sulfur content greater than 1.0% by weight. [8.2]

#### 2. **Operating Requirements**

- a. The permittee shall tune B001 and B002 at least once per year of operation, in accordance with the procedure described in Appendix A of APC Regulation No. 27. [27.4.2(c)]

#### 3. **Monitoring Requirements**

##### a. **Opacity**

Emission units B001 and B002 shall be equipped with an opacity monitor with audio alarm. [6.2.2(a)] The opacity monitoring devices shall be calibrated to sound the alarm at 20 percent opacity and shall be operated continuously during the combustion of oil. The audio alarm must be located in an area where it will be heard by the operator or other person responsible

for the units. [6.2.3, 29.6.3(b)]

#### 4. Testing Requirements

##### a. Particulates

Compliance with the particulate emissions limitations contained in Condition I.A.1.a of this permit, shall be determined by emission testing conducted by the permittee according to Method 5 of 40 CFR 60, Appendix A, or another method approved by the Office of Air Resources and the USEPA, shall be used. [13.3.1]

The requirements of particulate emissions testing may be waived if the Director and the USEPA:

- (1) Specifies or approves, in a specific case, the use of reference method with minor changes in methodology; or
- (2) Approves the use of an equivalent or alternative method the results of which he has determined to be adequate for indicating whether the permittee is in compliance; or
- (3) Finds that the permittee has demonstrated by other means to the Director's and USEPA's satisfaction that the source is in compliance with the relevant emissions standards. [13.3.3]

In the absence of data from particulate emissions testing, the Director and USEPA may determine that an emissions unit is or is not in compliance with the emission limitations of Condition I.A.1.a of this permit based on available information including, but not limited to, type of fuel burned, design of unit, efficiency of air pollution control systems, operating and maintenance procedures, and emission test results on similar units. [13.3.2]

##### b. Opacity

Test for determining compliance with the opacity emissions limitations specified in Condition I.A.1.b of this permit shall be performed as per 40 CFR 60, Appendix A, Method 9. Additionally, all observers must qualify as per 40 CFR 60, Appendix A, Method 9. [1.3.1, 1.3.2]

##### c. Sulfur Oxides

Compliance with the sulfur limitations contained in Condition I.A.1.c of this permit shall be determined by the procedures referenced in Condition II.U.2 of this permit. [29.6.3(b)]

**5. Recordkeeping Requirements**

- a. The permittee shall record the monthly fuel usage for B001 and B002 [27.6.3(a)]
- b. The permittee shall maintain records verifying that a tune-up has been performed in accordance with Condition I.A.2.a of this permit. These records shall include the following information:
  - (1) The date the tune-up was performed,
  - (2) The name of the person who performed the tune-up
  - (3) The final excess oxygen setting, and
  - (4) The O<sub>2</sub>/CO curve or O<sub>2</sub>/smoke curve that has been developed as part of the tune-up procedure. [27.6.8, 29.6.3(b)]

**B. Requirements for Emissions Unit B003**

The following requirements are applicable to:

- Emission unit B003, which is a 8.37 MMBTU/hr Kewanee Boiler Co., Model No. L3S-250-G06, capable of burning #6 fuel oil and natural gas.

**1. Emission Limitations**

- a. Natural Gas Firing

- (1) Nitrogen Oxides

The emission rate of nitrogen oxides discharged to the atmosphere from B003 shall not exceed 0.10 lbs. per million BTU heat input or 0.84 lbs./hr, whichever is more stringent. [Approval No. 1291(A)(1)(a)]

- (2) Carbon Monoxide

The emission rate of carbon monoxide discharged to the atmosphere from B003 shall not exceed 0.015 lbs. per million BTU heat input or 0.13 lbs./hr, whichever is more stringent. [Approval No. 1291(A)(1)(b)]

(3) Total Nonmethane Hydrocarbons

The emission rate of total nonmethane hydrocarbons discharged to the atmosphere from B003 shall not exceed 0.004 lbs. per million BTU heat input or 0.03 lbs./hr, whichever is more stringent. [Approval No. 1291(A)(1)(c)]

(4) Particulates

The permittee shall not cause or permit the emissions of particulate matter in excess of 0.1 pounds per million BTU actual heat input. [13.2.1]

b. Oil Firing

(1) Nitrogen Oxides

The emission rate of nitrogen oxides discharged to the atmosphere from B003 shall not exceed 0.60 lbs. per million BTU heat input or 5.02 lbs./hr, whichever is more stringent. [Approval No. 1291(A)(2)(a)]

(2) Carbon Monoxide

The emission rate of carbon monoxide discharged to the atmosphere from B003 shall not exceed 0.015 lbs. per million BTU heat input or 0.13 lbs./hr, whichever is more stringent. [Approval No. 1291(A)(2)(b)]

(3) Sulfur Oxides

(a) All fuel burned in B003 shall contain no more than 1.0 percent sulfur by weight. [Approval No. 1291(A)(2)(c)(i), 8.2]

(b) The emission rate of sulfur dioxide discharged to the atmosphere from B003 shall not exceed 9.2 lbs./hr. [Approval No. 1291(A)(2)(c)(ii)]

(4) Particulates

The emission rate of particulate matter discharged to the atmosphere from B003 shall not exceed 0.10 lbs. per million BTU heat input or 0.84 lbs./hr whichever is more stringent. [Approval No. 1291(A)(2)(d), 13.2.1]

(5) Total Nonmethane Hydrocarbons

The emission rate of total nonmethane hydrocarbons discharged to the atmosphere from B003 shall not exceed 0.004 lbs. per million BTU heat input or 0.03 lbs./hr, which ever is more stringent. [Approval No. 1291(A)(2)(e)]

c. Opacity

Visible emissions from B003 shall not exceed 10 % opacity (six-minute average). [1.2, Approval No. 1291(A)(3)] Where the presence of uncombined water is the only reason for failure to meet this requirement, such failure shall not be a violation of this permit. [1.4]

**2. Operating Requirement**

- a. The maximum actual heat input capacity of B003 shall not exceed 8,370,000 BTU/hr. [Approval No. 1291(E)(3)]
- b. The permittee shall tune B003 at least once per year of operation, in accordance with the procedure described in Appendix A of APC Regulation No. 27. [27.4.2(c)]

**3. Testing Requirements**

a. Particulates

Compliance with the particulate emissions limitations contained in Conditions I.B.1.a(4) and I.B.1.b(4) of this permit, shall be determined by emission testing conducted by the permittee according to Method 5 of 40 CFR 60, Appendix A, or another method approved by the Office of Air Resources and the USEPA, shall be used. [13.3.1]

The requirements of particulate emissions testing may be waived if the Director and the USEPA:

- (1) Specifies or approves, in a specific case, the use of reference method with minor changes in methodology; or
- (2) Approves the use of an equivalent or alternative method the results of which he has determined to be adequate for indicating whether the permittee is in compliance; or
- (3) Finds that the permittee has demonstrated by other means to the Director's and USEPA's satisfaction that the source is in compliance with the relevant emissions standards. [13.3.3]

In the absence of data from particulate emissions testing, the Director and USEPA may determine that an emissions unit is or is not in compliance with the emission limitations of Conditions I.B.1.a(4) and I.B.1.b(4) of this permit based on available information including, but not limited to, type of fuel burned, design of unit, efficiency of air pollution control systems, operating and maintenance procedures, and emission test results on similar units. [13.3.2]

b. Opacity

Test for determining compliance with the opacity emissions limitations specified in Condition I.B.1.c of this permit shall be performed as per 40 CFR 60, Appendix A, Method 9. Additionally, all observers must qualify as per 40 CFR 60, Appendix A, Method 9. [1.3.1, 1.3.2]

c. Sulfur Oxides

(1) Each fuel supplier certification or each fuel oil analysis must demonstrate that the oil contains 1.0 percent sulfur by weight or less. [Approval No. 1291(C)(4)]

(2) Compliance with the sulfur limitations contained in Condition I.B.1.b(3)(a) of this permit shall be determined by the procedures referenced in Condition II.U.2 of this permit. [29.6.3(b)]

**4. Monitoring Requirements**

a. Opacity

Continuous emission monitoring equipment shall be operated and maintained for opacity when B003 is operating on fuel oil. [Approval No. 1291(B)(1), 6.2.1, 29.6.3(b)]

**5. Recordkeeping Requirements**

a. The permittee shall record and maintain records of the amounts of each fuel combusted during each day. [Approval No. 1291(D)(3)]

b. The permittee shall maintain records verifying that a tune-up has been performed in accordance with Condition I.B.2.b of this permit. These records shall include the following information:

(1) The date the tune-up was performed,

(2) The name of the person who performed the tune-up

- (3) The final excess oxygen setting, and
- (4) The O<sub>2</sub>/CO curve or O<sub>2</sub>/smoke curve that has been developed as part of the tune-up procedure. [27.6.8, 29.6.3(b)]

## 6. Reporting Requirements

- a. The permittee shall submit copies of all fuel supplier certifications or fuel oil analyses to the Office of Air Resources for each calendar quarter. This quarterly submittal shall include a certified statement, signed by the permittee, that the records of fuel supplier certifications or fuel oil analyses submitted represent all of the fuel combusted during the quarter. Each quarterly report shall be postmarked by the 30<sup>th</sup> day following the end of the calendar quarter. [Approval No. 1291(D)(4)]
- b. The permittee shall notify the Office of Air Resources of any anticipated noncompliance with the terms of Section I.B. of this permit or any other applicable air pollution control rules and regulations. [Approval No.1291(D)(5)]

## 7. Other Requirements

- a. To the extent consistent with the requirements of Section I.B. of this permit and applicable federal and state laws, the equipment shall be operated in accordance with the representation of the equipment in the preconstruction permit application. [Approval No.1291(E)(1)]

## C. Requirements for Emission Units P008, P009, P010, P011 and P012

The following requirements are applicable to:

- Emission units P008 – P012, which consists of the Bandlines and associated drying ovens.
- Emission units P008 – P012 are associated with C001, which is a 17.0 MMBTU/hr (max) REECO – Research Cottrell Thermal Oxidizer, Model No. Re – Therm VFW Afterburner, which burns natural gas.

### 1. Emission Limitations

- a. Bandlines (P008, P009, P010, P011 and P012)
  - (1) The overall control efficiency of C001 shall be at least 93 percent. This is to be achieved through a combination of 98 percent capture of the VOC generated by P008 – P012 and a 95 percent destruction of

this VOC in C001. [Approval Nos. 899, 1400 - 1404(A)(2)(a), 19.3.2(a)]

- (2) The VOC content of all coatings used on P008-P012 shall not exceed 3.0 lbs of VOC per gallon coating (minus water). [Approval Nos. 899, 1400 - 1404(A)(2)(b), 19.3.1]
- b. The total, combined quantity of VOC emissions from P008, P009, P010, P011 and P012 shall not exceed 8,500 lbs per month (12 month rolling average). [Approval Nos. 899, 1400 - 1404(A)(3)]
- c. The permittee shall demonstrate that, based on the coatings, thinners and/or other additives and cleaning materials used in the coating operations on P008 – P012, the organic HAP emission rate for the coating operations is less than or equal to 2.6 lbs of HAP per gallon of coating solids, calculated as a rolling 12-month emission rate and determined on a monthly basis. [40 CFR 63.3890(b)(1), 40 CFR 63.3900(a)(1), 40 CFR 63.3891(b)]

## 2. Operating Requirements

- a. The operating temperature of C001 shall be maintained at or above 1500°F whenever VOC is being discharged to C001. [Approval Nos. 899, 1400 - 1404(B)(1), 29.6.3(a), 40 CFR 64]
- b. C001 shall be equipped with an interlock to prevent operation of the process equipment if the operating temperature of C001 is less than 1500°F. [Approval Nos. 899, 1400 - 1404(B)(2), 29.6.3(a), 40 CFR 64]
- c. All cleaning of emission units P008 – P012 with VOC containing material shall be conducted with the emission capture system operating. VOC emissions generated during cleaning shall be captured and contained and discharged through C001 for destruction. [Approval Nos. 899, 1400 - 1404(B)(3)]
- d. Operation of P008-P012 shall be governed by an electronic control system that regulates the hourly hydrocarbon loading to C001. The electronic control system shall ensure that the quantity of hydrocarbons discharged to C001 will not exceed 500 pounds per hour. The electronic control system shall operate consistent with the representation provided to the Office of Air Resources on June 19, 2002. [Approval Nos. 899, 1400, 1404(B)(4)]
- e. The total airflow from P008 – P012 shall not exceed C001 inlet design capacity of 30,000 scfm. [Approval Nos. 899, 1400 - 1404(B)(5)]

- f. Operation of P008-P012 shall be governed by an electronic control system that regulates total air flow discharged to C001. The electronic control system shall ensure that the total air flow discharged to C001 will not exceed 30,000 scfm. The electronic control system shall operate consistent with the representation provided to the Office of Air Resources on June 19, 2002. [Approval Nos. 899, 1400 - 1404(B)(6)]
- g. C001 shall be operated and maintained according to its design specifications and in a manner consistent with good air pollution control practices for minimizing emissions. [16.2]
- h. The permittee shall shut down P008-P012 in the event of a malfunction of C001 that results in, or that could result in, emissions in excess of the permit limits. The unit(s) shall remain shutdown until the malfunction has been identified and corrected. [Approval Nos. 899, 1400 - 1404(F)(2)]
- i. There shall be no by passing of C001 during times when VOC is being discharged to the device. [Approval Nos. 899, 1400 - 1404(F)(3)]
- j. At least 93% and 98% of the toluene emissions associated with adhesives used on the wire wheels and bandlines, respectively, shall be captured and directed to a thermal oxidizer and reduced by at least 95% before being discharged to the atmosphere. [Air Toxics Approval No. 1438/03(B)(7)(8)]  
**Not Federally Enforceable**
- k. The emission characteristics of all sources of listed air toxics from this facility shall be consistent with the parameters used in the air quality modeling to determine the increase in the ground level ambient concentration of those pollutants.

A summary of these emission characteristics is as follows:

Pollutant emissions from C001 are discharged through a stack with a height of 40 feet above grade, an exit diameter of 42 inches, a flow rate of 20,000 to 30,000 cfm (maximum), and an exit temperature that is approximately 285°F. [Air Toxics Approval No. 1438/03(B)(13)] **Not Federally Enforceable**

- l. A minimum airflow of 6,000 scfm shall be directed to C001 whenever it is operating with process equipment discharging VOC in the operating mode. [Approval Nos. 899, 1400 - 1404(B)(7)]

m. Malfunctions

- (1) Malfunction means a sudden and unavoidable breakdown of process or control equipment. In the case of a malfunction of C001, all reasonable measures shall be taken to assure resumption of the designed control efficiency as soon as possible. In the event that the malfunction of C001 is expected or may reasonably be expected to continue for longer than 24 hours and if the permittee wishes to operate P008-P012 on which it is installed at any time beyond that period, the Director shall be petitioned for a variance under Section 23-23-15 of the General Laws of Rhode Island, as amended. Such petition shall include, but is not limited to, the following: [16.3, Approval Nos. 899, 1400 - 1404(G)(1)]
  - (a) Identification of the specific air pollution control system (i.e. C001) and source on which it is installed (i.e. P008-P012); [16.3(a), Approval Nos. 899, 1400 - 1404(G)(1)(a)]
  - (b) The expected period of time that the air pollution control system will be malfunctioning or out of service; [16.3(b), Approval Nos. 899, 1400 - 1404(G)(1)(b)]
  - (c) The nature and quantity of air contaminants likely to be emitted during said period; [16.3(c), Approval Nos. 899, 1400 - 1404(G)(1)(c)]
  - (d) Measures that will be taken to minimize the length of said period; [16.3(d), Approval Nos. 899, 1400 - 1404(G)(1)(d)]
  - (e) The reasons that it would be impossible or impractical to cease the source operation during said period. [16.3(e), Approval Nos. 899, 1400 - 1404(G)(1)(e)]
- (2) The permittee may seek to establish that a malfunction of C001 that would result in noncompliance with any terms of Section I.D. of this permit or any other applicable air pollution control rules and regulations was due to unavoidable increases in emissions attributable to the malfunction. To do so, the permittee must demonstrate to the Office of Air Resources that: [Approval Nos. 899, 1400 - 1404(G)(2)]
  - (a) The malfunction was not attributable to improper designed of C001, lack of preventative maintenance, careless or improper operation, or operator error; [Approval Nos. 899, 1400 - 1404(G)(2)(a)]

- (b) The malfunction was not part of a recurring pattern indicative of inadequate design, operation, or maintenance; [Approval Nos. 899, 1400 - 1404(G)(2)(b)]
- (c) Repairs were performed in an expeditious fashion. Off-shift labor and overtime should be utilized, to the extent practicable, to ensure that such repairs were completed as expeditiously as practicable. [Approval Nos. 899, 1400 - 1404(G)(2)(c)]
- (d) All possible steps were taken to minimize emissions during the period of time that the repairs were performed. [Approval Nos. 899, 1400 - 1404(G)(2)(d)]
- (e) Emissions during the period of time that the repairs were performed will not: [Approval Nos. 899, 1400 - 1404(G)(2)(e)]
  - (i) Cause an increase in the ground level ambient concentration at or beyond the property line in excess of that allowed by Air Pollution Control Regulation No. 22 and any Calculated Acceptable Ambient Levels; and [Approval Nos. 899, 1400 - 1404(G)(2)(e)(1)]
  - (ii) Cause or contribute to air pollution in violation of any applicable state or national ambient air quality standard. [Approval Nos. 899, 1400 - 1404(G)(2)(e)(2)]
- (f) The reasons that it would be impossible or impractical to cease the source operation during said period. [Approval Nos. 899, 1400 - 1404(G)(2)(f)]
- (g) The permittee's actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence. [Approval Nos. 899, 1400 - 1404(G)(2)(g)]

This demonstration must be provided to the Office of Air Resources, in writing, within two working days of the time when the malfunction occurred and contain a description of the malfunction, any steps taken to minimize emissions and corrective actions taken.

The permittee shall have the burden of proof in seeking to establish that noncompliance was due to unavoidable increases in emissions attributable to the malfunction. [Approval Nos. 899, 1400 - 1404(G)(2)]

### **3. Monitoring Requirements**

- a. The operating temperature of C001 shall be continuously monitored. The equipment to continuously monitor the operating temperature of C001 must have an accuracy of  $\pm 0.75$  percent of the temperature being monitored in degrees Fahrenheit or  $\pm 4^{\circ}$  Fahrenheit, whichever is greater.

The equipment to continuously monitor the operating temperature of C001 must be calibrated and maintained according to the manufacturers specifications. The calibration of the data logger or temperature indicator must be verified once per year or the, data logger or temperature indicator must be replaced. [Approval Nos. 899, 1400 - 1404(C)(1), 29.6.3(a), 40 CFR 64]

- b. The motor current, in percent of maximum, for the ID fan located downstream of C001 shall be continuously monitored. [Approval Nos. 899, 1400 - 1404(C)(2), 29.6.3(a), 40 CFR 64]
- c. The enclosure shall be inspected semi-annually to demonstrate that the configuration of the enclosure remains identical to the configuration of the most recent test conducted to measure capture efficiency and is in good physical condition. [29.6.3(a), 40 CFR 64]
- d. Emission units P008, P009, P010, P011 and P012 shall each be equipped with an interlock to prevent operation of P008, P009, P010, P011 and P012 if a positive static pressure is detected.
- e. The permittee shall ensure on a monthly basis, the pressure sensing devices sending the interlock controller electrical signals of the differential pressure within each enclosure are properly maintained and functioning as designed unless the process is shut down. [29.6.3(a), 40 CFR 64]

### **4. Compliance Determination**

- a. Control efficiency of C001 will be determined using USEPA Reference Method 25 or other methods approved by the Director and USEPA. Continuous compliance will be maintained at all times. Compliance averaging times will be three hours. Once the control efficiency has been determined by Reference Method 25, or any alternative method approved by

the Office of Air Resources and USEPA, compliance shall be determined on an instantaneous basis time period (e.g. determined control efficiency shall be used to calculate whether samples from the process meet the applicable emissions limit.) [19.7.3]

- b. The permittee shall, on a monthly basis demonstrate continuous compliance with the emission standard in Condition I.C.1.d of this permit by following the conditions specified in Conditions I.C.4.b(1-7) of this permit. [40 CFR 63.3952(a)]
- (1) Follow the procedures specified below to determine the mass fraction of organic HAP for material applied during the compliance period by using on of the following options. [40 CFR 63.3951(a), 40 CFR 63.3941(a)]
- (a) *Method 311 (appendix A to 40 CFR part 63)*. The permittee can use Method 311 for determining the mass fraction of organic HAP. Use the procedures specified in the paragraphs below when performing a Method 311 test. [40 CFR 63.3941(a)(1)]
- (i) Count each organic HAP that is measured to be present at 0.1 percent by mass or more for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is measured to be 0.5 percent of the material by mass, you do not have to count it. Express the mass fraction of each organic HAP you count as a value truncated to four places after the decimal point (e.g., 0.3791). [40 CFR 63.3941(a)(1)(i)]
- (ii) Calculate the total mass fraction of organic HAP in the test material by adding up the individual organic HAP mass fractions and truncating the result to three places after the decimal point ( e.g., 0.763). [40 CFR 63.3941(a)(1)(ii)]
- (b) *Method 24 (appendix A to 40 CFR part 60)*. For coatings, the permittee can use Method 24 to determine the mass fraction of nonaqueous volatile matter and use that value as a substitute for mass fraction of organic HAP. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, you may use the

alternative method contained in appendix A of this permit, rather than Method 24. The permittee can use the volatile fraction that is emitted, as measured by the alternative method in appendix A of this permit, as a substitute for the mass fraction of organic HAP. [40 CFR 63.3941(a)(2)]

- (c) *Alternative method.* The permittee can use an alternative test method for determining the mass fraction of organic HAP once the Administrator has approved it. The permittee shall follow the procedure in §63.7(f) to submit an alternative test method for approval. [40 CFR 63.3941(a)(3)]
- (d) *Information from the supplier or manufacturer of the material.* The permittee can rely on information other than that generated by the test methods specified in Conditions I.C.4.b(1)(a-c) of this permit, such as manufacturer's formulation data, 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. For example, if toluene (not an OSHA carcinogen) is 0.5 percent of the material by mass, you do not have to count it. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, you may rely on manufacturer's data that expressly states the organic HAP or volatile matter mass fraction emitted. If there is a disagreement between such information and results of a test conducted according to Conditions I.C.4.b(1)(a-c) of this permit, then the test method results will take precedence unless, after consultation, you demonstrate to the satisfaction of the Office of Air Resources and USEPA that the formulation data are correct. [40 CFR 63.3941(a)(4)]
- (e) *Solvent blends.* Solvent blends may be listed as single components for some materials in data provided by manufacturers or suppliers. Solvent blends may contain organic HAP which must be counted toward the total organic HAP mass fraction of the materials. When test data and manufacturer's data for solvent blends are not available, the permittee can use the default values for the mass fraction of organic HAP in these solvent blends listed in Appendix C or D of this permit. If the permittee uses the tables, the permittee shall use the values in Appendix C for all solvent blends that match Appendix C entries according

to the instructions for Appendix C, and the permittee may use Appendix D only if the solvent blends in the materials do not match any of the solvent blends in Appendix C and you know only whether the blend is aliphatic or aromatic. However, if the results of a Method 311 (appendix A to 40 CFR part 63) test indicate higher values than those listed on Appendix C or D of this permit, the Method 311 results will take precedence unless, after consultation, you demonstrate to the satisfaction of the Office of Air Resources and USEPA that the formulation data are correct. [40 CFR 63.3941(a)(5)]

- (2) *Determine the volume fraction of coating solids for each coating.* The permittee shall determine the volume fraction of coating solids (liters (gal) of coating solids per liter (gal) of coating) for each coating used during the compliance period by a test, by information provided by the supplier or the manufacturer of the material, or by calculation, as specified in paragraphs (2)(a) through (d) of this section. If test results obtained according to paragraph (2)(a) of this section do not agree with the information obtained under paragraph (2)(c) or (d) of this section, the test results will take precedence unless, after consultation, you demonstrate to the satisfaction of the Office of Air Resources and USEPA that the formulation data are correct. [40 CFR 63.3951(b), 40 CFR 63.3941(b)]
  - (a) *ASTM Method D2697–86 (Reapproved 1998) or ASTM Method D6093–97 (Reapproved 2003).* The permittee may use ASTM Method D2697–86 (Reapproved 1998), “Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings” (incorporated by reference, see §63.14), or ASTM Method D6093–97 (Reapproved 2003), “Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer” (incorporated by reference, see §63.14), to determine the volume fraction of coating solids for each coating. Divide the nonvolatile volume percent obtained with the methods by 100 to calculate volume fraction of coating solids. [40 CFR 63.3941(b)(1)]
  - (b) *Alternative method.* The permittee may use an alternative test method for determining the solids content of each coating once the Administrator has approved it. The permittee must follow the procedure in 40 CFR 63.7(f) to submit an alternative test method for approval. [40 CFR 63.3941(b)(2)]

- (c) *Information from the supplier or manufacturer of the material.* The permittee may obtain the volume fraction of coating solids for each coating from the supplier or manufacturer. [40 CFR 63.3941(b)(3)]
- (d) *Calculation of volume fraction of coating solids.* The permittee may determine the volume fraction of coating solids using Equation 4 of this section:

$$V_s = 1 - \frac{m_{\text{volatiles}}}{D_{\text{avg}}} \quad (\text{Equation 4})$$

Where:

$V_s$  = Volume fraction of coating solids, liters (gal) coating solids per liter (gal) coating.

$m_{\text{volatiles}}$  = Total volatile matter content of the coating, including HAP, volatile organic compounds (VOC), water, and exempt compounds, determined according to Method 24 in appendix A of 40 CFR part 60, grams volatile matter per liter coating.

$D_{\text{avg}}$  = Average density of volatile matter in the coating, grams volatile matter per liter volatile matter, determined from test results using ASTM Method D1475–98, “Standard Test Method for Density of Liquid Coatings, Inks, and Related Products” (incorporated by reference, see §63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM Method D1475–98 test results and other information sources, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of the Office of Air Resources and USEPA that the formulation data are correct. [40 CFR 63.3941(b)(4)]

- (3) *Determine the density of each material.* The permittee shall determine the density of each liquid coating, thinner and/or other additive, and cleaning material used during each month from test results using ASTM Method D1475–98, “Standard Test Method for Density of Liquid Coatings, Inks, and Related Products” (incorporated by reference, see §63.14), information from the supplier or manufacturer of the material, or reference sources

providing density or specific gravity data for pure materials. If you are including powder coatings in the compliance determination, determine the density of powder coatings, using ASTM Method D5965–02, “Standard Test Methods for Specific Gravity of Coating Powders” (incorporated by reference, see §63.14), or information from the supplier. If there is disagreement between ASTM Method D1475–98 or ASTM Method D5965–02 test results and other such information sources, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of the Office of Air Resources and USEPA that the formulation data are correct. If you purchase materials or monitor consumption by weight instead of volume, you do not need to determine material density. Instead, you may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, 1C, and 2 of this section. [40 CFR 63.3951(c)]

- (4) *Determine the volume of each material used.* The permittee shall determine the volume (liters) of each coating, thinner and/or other additive, and cleaning material used during each month by measurement or usage records. If you purchase materials or monitor consumption by weight instead of volume, you do not need to determine the volume of each material used. Instead, you may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, and 1C of this section. [40 CFR 63.3951(d)]
- (5) *Calculate the mass of organic HAP emissions.* The mass of organic HAP emissions is the combined mass of organic HAP contained in all coatings, thinners and/or other additives, and cleaning materials used during each month minus the organic HAP in certain waste materials. Calculate the mass of organic HAP emissions using Equation 1 of this permit. [40 CFR 63.3951(e)]

$$H_e = A + B + C - R_w \quad (\text{Equation 1})$$

Where:

$H_e$  = Total mass of organic HAP emissions during the month, kg.

A = Total mass of organic HAP in the coatings used during the month, kg, as calculated in Equation 1A of this section.

B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg, as calculated in Equation 1B of this section.

C = Total mass of organic HAP in the cleaning materials used during the month, kg, as calculated in Equation 1C of this section.

R<sub>w</sub> = Total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the month, kg, determined according to Condition I.C.4.b(5)(d) of this permit. (You may assign a value of zero to R<sub>w</sub> if you do not wish to use this allowance.)

- (a) Calculate the kg organic HAP in the coatings used during the month using Equation 1A of this permit: [40 CFR 63.3951(e)(1)]

$$A = \sum_{i=1}^m (Vol_{c,i})(D_{c,i})(W_{c,i}) \quad (\text{Equation 1A})$$

Where:

A = Total mass of organic HAP in the coatings used during the month, kg.

Vol<sub>c,i</sub> = Total volume of coating, i, used during the month, liters.

D<sub>c,i</sub> = Density of coating, i, kg coating per liter coating.

W<sub>c,i</sub> = Mass fraction of organic HAP in coating, i, kg organic HAP per kg coating. For reactive adhesives as defined in §63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A of this permit.

m = Number of different coatings used during the month.

- (b) Calculate the kg of organic HAP in the thinners and/or other additives used during the month using Equation 1B of this permit: [40 CFR 63.3951(e)(2)]

$$B = \sum_{j=1}^n (Vol_{t,j})(D_{t,j})(W_{t,j}) \quad (\text{Equation 1B})$$

Where:

B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg.

Vol<sub>t,j</sub> = Total volume of thinner and/or other additive, j, used during the month, liters.

D<sub>t,j</sub> = Density of thinner and/or other additive, j, kg per liter.

W<sub>t,j</sub> = Mass fraction of organic HAP in thinner and/or other additive, j, kg organic HAP per kg thinner and/or other additive. For reactive adhesives as defined in §63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A of this permit.

n = Number of different thinners and/or other additives used during the month.

- (c) Calculate the kg organic HAP in the cleaning materials used during the month using Equation 1C of this permit: [40 CFR 63.3951(e)(3)]

$$C = \sum_{k=1}^p (Vol_{s,k}) (D_{s,k}) (W_{s,k}) \quad (\text{Equation 1C})$$

Where:

C = Total mass of organic HAP in the cleaning materials used during the month, kg.

Vol<sub>s,k</sub> = Total volume of cleaning material, k, used during the month, liters.

D<sub>s,k</sub> = Density of cleaning material, k, kg per liter.

W<sub>s,k</sub> = Mass fraction of organic HAP in cleaning material, k, kg organic HAP per kg material.

p = Number of different cleaning materials used during the month.

- (d) If the permittee chooses to account for the mass of organic HAP contained in waste materials sent or designated for shipment to a hazardous waste TSDF in Equation 1 of this permit, then you must determine the mass according to the following requirements. [40 CFR 63.3951(e)(4)]
- (i) The permittee may only include waste materials in the determination that are generated by coating operations for which you use Equation 1 of this permit and that will be treated or disposed of by a facility that is regulated as a TSDF under 40 CFR part 262, 264, 265, or 266. The TSDF may be either off-site or on-site. The permittee may not include organic HAP contained in wastewater. [40 CFR 63.3951(e)(4)(i)]
  - (ii) The permittee must determine either the amount of the waste materials sent to a TSDF during the month or the amount collected and stored during the month and designated for future transport to a TSDF. Do not include in your determination any waste materials sent to a TSDF during a month if you have already included them in the amount collected and stored during that month or a previous month. [40 CFR 63.3951(e)(4)(ii)]
  - (iii) Determine the total mass of organic HAP contained in the waste materials specified in Condition I.C.4.b(5)(d)(ii) of this permit. [40 CFR 63.3951(e)(4)(iii)]
  - (iv) The permittee must document the methodology use to determine the amount of waste materials and the total mass of organic HAP they contain, as required in Condition I.C.5.a(19) of this permit. If waste manifests include this information, they may be used as part of the documentation of the amount of waste materials and mass of organic HAP contained in them. [40 CFR 63.3951(e)(4)(iv)]
- (6) *Calculate the total volume of coating solids used.* The permittee shall determine the total volume of coating solids used, liters, which is the combined volume of coating solids for all the coatings used during each month, using Equation 2 of this permit: [40 CFR 63.3951(f)]

$$V_{st} = \sum_{i=1}^m (Vol_{c,i})(V_{s,i}) \quad (\text{Equation 2})$$

Where:

$V_{st}$  = Total volume of coating solids used during the month, liters.

$Vol_{c,i}$  = Total volume of coating, i, used during the month, liters.

$V_{s,i}$  = Volume fraction of coating solids for coating, i, liter solids per liter coating, determined according to §63.3941(b).

m = Number of coatings used during the month.

- (7) *Calculate the organic HAP emission rate.* Calculate the organic HAP emission rate for the compliance period, kg (lb) organic HAP emitted per liter (gal) coating solids used, using Equation 3 of this permit: [40 CFR 63.3951(g)]

$$H_{yr} = \frac{\sum_{y=1}^n H_e}{\sum_{y=1}^n V_{st}} \quad (\text{Equation 3})$$

Where:

$H_{yr}$  = Average organic HAP emission rate for the compliance period, kg organic HAP emitted per liter coating solids used.

$H_e$  = Total mass of organic HAP emissions from all materials used during month, y, kg, as calculated by Equation 1 of this section.

$V_{st}$  = Total volume of coating solids used during month, y, liters, as calculated by Equation 2 of this section.

y = Identifier for months.

n = Number of full or partial months in the compliance period (for the initial compliance period, n equals 12 if the compliance date falls on the first day of a month; otherwise n equals 13; for all following compliance periods, n equals 12).

- c. If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit specified in Condition I.C.1.d of this permit, this is a deviation from the emission limitation for that compliance period and must be reported as specified in I.C.6.l(7) of this permit. [40 CFR 63.3952(b)]
- d. As part of each semiannual compliance report required by Condition I.C.6.k of this permit, the permittee must identify the coating operation(s) for which you used the emission rate without add-on controls option. If there were no deviations from the emission limitations, the permittee shall submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit specified in I.C.1d of this permit, determined according to Conditions I.C.4.b of this permit. [40 CFR 63.3952(c)]
- e. The permittee shall maintain records as specified in Condition I.C.5.a(10-19) and II.Z.2 of this permit. [40 CFR 63.3952(d)]

## **5. Recordkeeping Requirements**

- a. The permittee shall collect, record and maintain the following information each month for P008 – P012 and C001:
  - (1) The name and identification number of each coating used on P008 – P012, [19.5.4(c)(1), Approval Nos. 899, 1400 - 1404(E)(1)(a)]
  - (2) The mass of VOC per unit volume of coating solids, as applied the volume solids content, as applied, of each coatings used on P008 – P012, [19.5.4(c)(3)(i), Approval Nos. 899, 1400 - 1404(E)(1)(b)]
  - (3) The type and amount of solvent used for diluents and clean up operations, [19.5.4(c)(4), Approval Nos. 899, 1400 - 1404(E)(1)(c)]
  - (4) The average daily adhesive usage for P008 – P012 (daily adhesive usage to be back-calculated based on monthly usage), [Approval Nos. 899, 1400 - 1404(E)(1)(d)]
  - (5) A log of operating time for the capture system, C001, monitoring equipment and P008 – P012, [19.5.4(c)(5), Approval Nos. 899, 1400 - 1404(E)(1)(e), 29.6.3(a), 40 CFR 64]

- (6) A maintenance log for the capture system, C001, and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages, [19.5.4(c)(6), Approval Nos. 899, 1400 - 1404(E)(1)(f), 29.6.3(a), 40 CFR 64]
- (7) All 3-hour periods of operation in which the average combustion temperature was more than 50°F below the average combustion temperature during the most recent performance test that demonstrated that the facility was in compliance, and [19.4.5(c)(7)(i), Approval Nos. 899, 1400 - 1404(E)(1)(g)]
- (8) Twice-a-day readings of the ID fan motor current, and the number of staple wire wheels and bandlines that were in operation at the time of the reading. [Approval Nos. 899, 1400 - 1404(E)(1)(h):(C)(1), 29.6.3(a), 40 CFR 64]
- (9) The operating temperature of C001 shall be continuously recorded. [19.5.4(c)(7)(ii), Approval Nos. 899, 1400 - 1404(E)(1)(h):(C)(1), 29.6.3(a), 40 CFR 64]
- (10) A copy of each notification and report that is submitted to comply with 40 CFR 63 Subpart M, and the documentation supporting each notification and report. [40 CFR 63.3930(a)]
- (11) A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data or test data used to determine the mass fraction of organic HAP and density for each coating, thinner and/or other additive, and cleaning material, and volume fraction of coating solids. If the permittee conducted testing to determine mass fraction of organic HAP, density, or volume fraction of coating solids, the permittee shall keep a copy of the complete test report. If the permittee used information provided by the manufacturer or supplier of the material that was based on testing, the permittee shall keep the summary sheet of results provided by the manufacturer or supplier. The permittee is not required to obtain the test report or other supporting documentation from the manufacturer or supplier. [40 CFR 63.3930(b)]
- (12) A record of the coating operations on which each compliance option was used and the time periods (beginning and ending dates and times) for each option used. [40 CFR 63.3930(c)(1)]
- (13) A record of the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and

cleaning materials used each month using Equations 1, 1A through 1C, and 2 of this section; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to §63.3951(e)(4); the calculation of the total volume of coating solids used each month using Equation 2 of this section; and the calculation of each 12-month organic HAP emission rate using Equation 3 of this section. [40 CFR 63.3930(c)(3)]

- (14) A record of the name and volume of each coating, thinner and/or other additive, and cleaning material used during each compliance period. [40 CFR 63.3930(d)]
- (15) A record of the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each compliance period unless the material is tracked by weight. [40 CFR 63.3930(e)]
- (16) A record of the volume fraction of coating solids for each coating used during each compliance period. [40 CFR 63.3930(f)]
- (17) The density for each coating, thinner and/or other additive, and cleaning material used during each compliance period. [40 CFR 63.3930(g)]
- (18) A record of the date, time, and duration of each deviation. [40 CFR 63.3930(j)]
- (19) If an allowance is used in Equation 1 of this section for organic HAP contained in waste materials sent to or designated for shipment to a treatment, storage, and disposal facility (TSDF) according to Condition I.C.4.b(5)(d) of this permit, the permittee shall keep the following records: [40 CFR 63.3930(h)]
  - (a) The name and address of each TSDF to which the waste materials was sent for which an allowance is used in Equation 1 of this section; a statement of which subparts under 40 CFR parts 262, 264, 265, and 266 apply to the facility; and the date of each shipment. [40 CFR 63.3930(h)(1)]
  - (b) Identification of the coating operations producing waste materials included in each shipment and the month or months in which an allowance was used for these materials in Equation 1 this section. [40 CFR 63.3930(h)(2)]

- (c) The methodology used in accordance with Condition I.C.4.b(5)(d) of this permit, to determine the total amount of waste materials sent to or the amount collected, stored, and designated for transport to a TSDF each month; and the methodology to determine the mass of organic HAP contained in these waste materials. This must include the sources for all data used in the determination, methods used to generate the data, frequency of testing or monitoring, and supporting calculations and documentation, including the waste manifest for each shipment. [40 CFR 63.3930(h)(3)]
- (20) The permittee shall maintain a record of all measurements, performance evaluations, calibration checks and maintenance or adjustments for each continuous monitor. [29.6.3(a), 40 CFR 64]
- b. The permittee shall record the date of the inspection of the interlock controller and the maintenance status of the exhaust systems conditions. [29.6.3(a), 40 CFR 64]

## **6. Reporting Requirements**

- a. The permittee shall notify the Director of any record showing noncompliance with the applicable requirements for C001 by sending a copy of such record to the Director within 30 calendar days following that use. [19.5.4(d)(1)]
- b. The permittee shall, before changing the method of compliance from control devices to daily-weighted averaging or complying coatings, shall submit a Compliance Certification Plan to the Office of Air Resources for review and approval. Such plan shall include: [Approval Nos. 899, 1400 - 1404(E)(9)]
  - (1) The name and location of the facility; [19.5.2(a)(1), 19.5.3(a)(1), Approval Nos. 899, 1400 - 1404(E)(9)(a)]
  - (2) The name, address and telephone number of the person responsible for the facility; [19.5.2(a)(2), 19.5.3(a)(2), Approval Nos. 899, 1400 - 1404(E)(9)(b)]
  - (3) The name and identification number of each coating, as applied, on each coating line or operation; [19.5.2(a)(4), 19.5.3(a)(4), Approval Nos. 899, 1400 - 1404(E)(9)(c)]

- (4) For daily-weighted averaging:
    - (a) The instrument or method by which the permittee will accurately measure or calculate the volume of each coating (excluding water), as applied, used each day on each emission unit; [19.5.2(a)(5), Approval Nos. 899, 1400 - 1404(E)(9)(d)(1)]
    - (b) The method by which the permittee will create and maintain records each day as required by Subsection 19.5.2(c) of APC Regulation 19; and [19.5.2(a)(6), Approval Nos. 899, 1400 - 1404(E)(9)(d)(2)]
    - (c) The time at which the facility's day begins if a time other than midnight local time is used to define a day. [19.5.2(a)(7), Approval Nos. 899, 1400 - 1404(E)(9)(d)(3)]
  - (5) For complying coatings
    - (a) The name and identification number of each coating, as applied, on each coating line or operation; [19.5.3(a)(4), Approval Nos. 899, 1400 - 1404(E)(9)(e)(1)]
    - (b) The mass of VOC per volume coating (excluding water) and the volume of each coating (excluding water), as applied, and [19.5.3(a)(5), Approval Nos. 899, 1400 - 1404(E)(9)(e)(2)]
  - (6) Information describing the effect of the change on the emissions of any air contaminant. [9.2.1, Approval Nos. 899, 1400 - 1404(E)(9)(f)]
  - (7) A demonstration that emissions from the stationary source will not cause an increase in the ground level ambient concentration at or beyond the property line in excess of that allowed by APC Regulation No. 22. [22.3.3(a), Approval Nos. 899, 1400 - 1404(E)(9)(g)]
- c. The permittee shall notify the Office of Air Resources no latter than 24 hours after an exceedance of any emission limitation is discovered. Notification shall include: [Approval Nos. 899, 1400-1404(E)(6)]
- (1) Identification of the emission exceeded
  - (2) Suspected reason for the exceedance

- (3) Corrective action taken or to be taken
  - (4) Anticipated length of the exceedance.
- d. The permittee shall, on a monthly basis, no later than 10 days after the first day of each succeeding month, determine the total, combined quantity of VOC emissions from P008 – P012 for the previous 12 months and determine the lbs of VOC emitted per month (12 month rolling average). The permittee shall keep records of this determination and provide such records to the Office of Air Resources upon request. [Approval Nos. 899, 1400 - 1404(E)(2)]
  - e. The permittee shall notify the Office of Air Resources, within 5 business days, whenever the total, combined quantity of VOC emissions from the P008 – P012 exceeds 8,500 lbs per month (12 month rolling average). [Approval Nos. 899, 1400 - 1404(E)(3)]
  - f. The permittee shall notify the Office of Air Resources, within 5 business days of discovery, whenever the total airflow discharged to C001, as reviewed on a monthly basis, exceeds 30,000 scfm. [Approval Nos. 899, 1400 – 1404(E)(4)]
  - g. The permittee shall notify the Office of Air Resources, within 5 business days of discovery, whenever the total quantity of hydrocarbons discharged to C001, as reviewed on a monthly basis, exceeds 500 lbs per hour. [Approval Nos. 899, 1400 - 1404(E)(5)]
  - h. The permittee shall notify the Office of Air Resources of any anticipated noncompliance with the terms of Section I.D. of this permit or any other applicable air pollution control rules and regulations. [Approval Nos. 899, 1400-1404(E)(7)]
  - i. The permittee shall notify the Office of Air Resources in writing of the date of actual start-up of any new bandline and removal of the existing wire wheels no later than 15 days after such date. [Approval Nos. 899, 1400 - 1404(E)(8)]
  - j. The permittee shall notify the Office of Air Resources of all periods of operation in which the operating temperature of C001 was less than 1500°F. This notification shall be provided in the semi-annual monitoring report required in condition II.AA.2. [29.6.3(a), 40 CFR 64]
  - k. The permittee shall submit semiannual compliance reports to the Office of Air Resources and USEPA. [40 CFR 63.3920(a)(1)(i)]

- (1) Each compliance report must cover the applicable semiannual reporting period from January 1 through June 30 or July 1 through December 31. [40 CFR 63.3920(a)(1)(ii), 40 CFR 63.3920(a)(1)(iv)]
  - (2) Each compliance report must be postmarked or delivered no later than 45 calendar days after the end of the semiannual reporting period. [40 CFR 63.3920(a)(1)(iii), 29.6.4(b)(1), 40 CFR 63.3920(a)(1)(iv), 40 CFR 63.3920(a)(2)]
1. The semiannual compliance report must include the following information: [40 CFR 63.3920(a)(3)]
- (1) Company name and address. [40 CFR 63.3920(a)(3)(i)]
  - (2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. [40 CFR 63.3920(a)(3)(ii)]
  - (3) Date of report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31. Note that the information reported for each of the 6 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation. [40 CFR 63.3920(a)(3)(iii)]
  - (4) Identification of the compliance option used on P008 – P012 during the reporting period. If you switched between compliance options during the reporting period, you must report the beginning and ending dates for each option you used. [40 CFR 63.3920(a)(3)(iv)]
  - (5) The calculation results for each rolling 12-month organic HAP emission rate during the 6-month reporting period. [40 CFR 63.3920(a)(3)(v)]
  - (6) If there were no deviations from the emission limitations in specified in Condition I.C.1.d of this permit, the semiannual compliance report must include a statement that there were no deviations from the emission limitations during the reporting period. [40 CFR 63.3920(a)(4)]
  - (7) If there was a deviation from the applicable emission limit specified in Condition I.C.1.d of this permit, the semiannual compliance report must contain the following information: [40 CFR 63.3920(a)(6)]

- (a) The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit specified in Condition I.C.1.d of this permit, and [40 CFR 63.3920(a)(6)(i)]
  - (a) The calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred. The permittee shall submit the calculations for Equations 1, 1A through 1C, 2, and 3 of this section; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to Condition I.C.4.b(5)(d) of this permit. The permittee is not required to submit background data supporting these calculations (*e.g.*, information provided by materials suppliers or manufacturers, or test reports), and [40 CFR 63.3920(a)(6)(ii)]
  - (d) A statement of the cause of each deviation. [40 CFR 63.3920(a)(6)(iii)]
- m. The permittee shall notify the Office of Air Resources whenever the fan motor current in percent of maximum for P008-P012 does not correspond with the number of staple wire wheels and bandlines machines that are in operation at any given time. This notification shall be provided in the semi-annual monitoring report required by condition II.AA.2.

## 7. Other Requirements

- a. To the extent consistent with the requirements of Section I.C. of this permit and applicable federal and state laws, the equipment shall be operated in accordance with the representation of the equipment in the preconstruction permit application. [Approval Nos. 899, 1400 - 1404(F)(1)]
- b. At all times, including periods of startup, shutdown and malfunction, the permittee shall, to the extent practicable, maintain and operate the facility in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Office of Air Resources which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the source. [Approval Nos. 899, 1400 - 1404(F)(5)]

**D. Requirements for Emission Unit T004**

The following requirements are applicable to:

- Emission unit T004, which consists of several remote reservoir degreasers, Model No. 34 or equivalent.

**1. Operating Requirements**

- a. Equipment covers and dipping or rotating baskets shall be constructed of nonporous or nonabsorbent material. Covers must form a tight seal with the sides of T004 and have no gaps or holes. [36.4.1]
- b. When the cover of T004 is open, drafts at the same elevation as the tanks lip must not be greater than 40 m/min. (130 ft/min.) when measured 1 to 2 meters (3 to 7 feet) upwind. [36.4.2]
- c. Leaks shall be repaired immediately or T004 shall be shut down [36.4.3]
- d. Equipment used in T004 shall display a conspicuous summary of proper operating procedures consistent with minimizing emissions of organic solvents. [36.4.4]
- e. Any solvent spray must be a solid, fluid stream which is delivered at a pressure no greater than 10 pounds per square inch (psi) and which does not cause excessive splashing. No solvent spray shall be atomized or shower spray. [36.4.5]
- f. Spills shall be wiped up immediately. The wipe rags shall be stored in covered containers meeting the specification in Condition I.D.1.k of this permit. [36.4.6]
- g. No porous or absorbent materials, such as sponges, fabrics, wood, or paper products, shall not be placed in T004. [36.4.7]
- h. Parts baskets or parts shall be drained under the cover and shall not be removed from T004 for at least 15 seconds or until dripping ceases and the pieces are visually dry, whichever is longer. [36.4.8]
- i. Parts with cavities or blind holes shall be tipped or rotated while draining before removed from the vapor zone and shall be oriented for best drainage. [36.4.9]
- j. All parts shall be oriented for best drainage. [36.4.10]

- k. When solvent is added to or drained from T004, the solvent shall be transferred using threaded or other leakproof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface. [36.4.11]
- l. Solvent, waste solvent, still bottoms, and sump bottoms shall be stored in covered containers and waste solvent transferal or disposal shall not allow greater than 20 percent of the waste solvent (by weight) to evaporate into the atmosphere. The closed containers may contain a device that allows for pressure relief, providing that the device does not allow liquid solvent to drain from the container [36.4.12]
- m. T004 shall be maintained as recommended by the manufacturer of the equipment. [36.4.13]
- n. Operators must receive training in proper solvent cleaning procedures and, if requested by representatives of the Office or the USEPA during an inspection, shall complete and pass the applicable sections of the test on those procedures as shown in Appendix A of APC Regulation No. 36. [36.4.14]
- o. No work area fans shall be located and positioned so that they blow across the opening of T004. [36.4.15]
- p. T004 shall be located and positioned so that ventilation from an open window does not blow across the opening of T004. [36.4.16]
- q. Operators must receive training in proper solvent cleaning procedures and, if requested by representatives of the Office of Air Resources or the USEPA during an inspection, shall complete and pass the applicable sections of the test on those procedures as shown in Appendix A of APC Regulation No. 36. [36.4.14]
- r. T004 shall be equipped with an attached cover that can be operated easily with one hand. The covers shall be closed at all times except during parts entry and removal. [36.5.1]
- s. T004 shall be equipped with a tight fitting cover that is kept closed at all times except during the cleaning of parts. [36.5.2]
- t. A freeboard ratio greater than or equal to 0.75 shall be used to control solvent emissions from T004. [36.5.3]
- u. If a flexible hose or flushing device is used, flushing shall be performed only within the freeboard zone of T004. [36.5.4]

- v. T004 shall not use any solvent with a vapor pressure equal to or greater than 1.0 millimeters of mercury (mm Hg), measured at 20°C (68°F). The following are exempt from this requirement: [36.5.7]
- (1) A cold cleaning unit with an internal volume of 1 liter or less; [36.5.7(a)]
  - (2) A cold cleaning unit used for special and extreme solvent cleaning, as defined in APC Regulation 36 Subsection 36.1.27, with the Director's approval; [36.5.7(b)]
  - (3) A cold cleaning unit which cannot be operated safely using a solvent that complies with the vapor pressure limit in APC Regulation 36 Subsection 36.1.27, with the Director's approval; [36.5.7(c)]
  - (4) A cold cleaning unit operated in a permanent total enclosure equipped with an air pollution control system with an overall VOC removal efficiency of 90% or greater, with the Director's approval. [36.5.7(d)]

## **2. Recordkeeping Requirements**

- a. The permittee shall maintain the following records:
- (1) Training provided to operators of T004 for the lifetime of the units, [36.10.4, 29.6.3(b)]
  - (2) The amount and type of solvent used in T004 for each year, and [36.10.4(a), 29.6.3(b)]
  - (3) The date and type of each equipment malfunction or leak and the date the malfunction or leak is repaired. [36.10.4(b), 29.6.3(b)]

## **E. Requirements for Emission Units T005**

The following requirements are applicable to:

- Emission unit T005, which consist of batch cold cleaning units using aqueous based cleaner.

## 1. Operating Requirements

- a. Equipment covers and dipping or rotating baskets shall be constructed of nonporous or nonabsorbent material. Covers must form a tight seal with the sides of T005 and have no gaps or holes. [36.4.1]
- b. When the cover of T005 is open, drafts at the same elevation as the tanks lip must not be greater than 40 m/min. (130 ft/min.) when measured 1 to 2 meters (3 to 7 feet) upwind. [36.4.2]
- c. Leaks shall be repaired immediately or T005 shall be shut down [36.4.3]
- d. Equipment used in T005 shall display a conspicuous summary of proper operating procedures consistent with minimizing emissions of organic solvents. [36.4.4]
- e. Spills shall be wiped up immediately. The wipe rags shall be stored in covered containers meeting the specification in Condition I.E.1.k of this permit. [36.4.6]
- f. No porous or absorbent materials, such as sponges, fabrics, wood, or paper products, shall not be cleaned in T005. [36.4.7]
- g. Parts baskets or parts shall be drained under the cover and shall not be removed from T005 for at least 15 seconds or until dripping ceases and the pieces are visually dry, whichever is longer. [36.4.8]
- h. Parts with cavities or blind holes shall be tipped or rotated while draining before removed from the vapor zone and shall be oriented for best drainage. [36.4.9]
- i. All parts shall be oriented for best drainage. [36.4.10]
- j. When solvent is added to or drained from T005, the solvent shall be transferred using threaded or other leakproof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface. [36.4.11]
- k. Solvent, waste solvent, still bottoms, and sump bottoms shall be stored in covered containers and waste solvent transferal or disposal shall not allow greater than 20 percent of the waste solvent (by weight) to evaporate into the atmosphere. The closed containers may contain a device that allows for pressure relief, providing that the device does not allow liquid solvent to drain from the container. [36.4.12]

- l. T005 shall be maintained as recommended by the manufacturer of the equipment. [36.4.13]
- m. Operators must receive training in proper solvent cleaning procedures and, if requested by representatives of the Office of Air Resources or the USEPA during an inspection, shall complete and pass the applicable sections of the test on those procedures as shown in Appendix A of APC Regulation No. 36. [36.4.14]
- n. No work area fans shall be located and positioned so that they blow across the opening of T005. [36.4.15]
- o. T005 shall be located and positioned so that ventilation from an open window does not blow across the opening of T005. [36.4.16]
- p. T005 shall be equipped with an attached cover that can be operated easily with one hand. The covers shall be closed at all times except during parts entry and removal. [36.5.1]
- q. T005 shall be equipped with a tight fitting cover that is kept closed at all times except during the cleaning of parts. [36.5.2]
- r. The permittee has demonstrated equivalent control to the 0.75 freeboard requirement contained in APC Regulation No. 36 through the use of an aqueous based cleaning solution. [36.5.3(c), Letter dated 25 March 2002 from Donald Whitaker Office of Air Resources to James Erasmus Stanley Fastening Systems]
- s. If a flexible hose or flushing device is used, flushing shall be performed only within the freeboard zone of T005. [36.5.4]
- t. When an air or pump-agitated solvent bath is used, the agitator shall be operated so that a rolling motion of the solvent is produced and splashing against the tank or parts being cleaned does not occur. [36.5.5]
- u. The height of the solvent in T005 shall not exceed the manufacturer's fill-line for that machine. [36.5.6]
- v. T005 shall not use any solvent with a vapor pressure equal to or greater than 1.0 millimeters of mercury (mm Hg), measured at 20°C (68°F). The following are exempt from this requirement: [36.5.7]
  - (1) A cold cleaning unit with an internal volume of 1 liter or less; [36.5.7(a)]

- (2) A cold cleaning unit used for special and extreme solvent cleaning, as defined in APC Regulation 36 Subsection 36.1.27, with the Director's approval; [36.5.7(b)]
- (3) A cold cleaning unit which cannot be operated safely using a solvent that complies with the vapor pressure limit in APC Regulation 36 Subsection 36.1.27, with the Director's approval; [36.5.7(c)]
- (4) A cold cleaning unit operated in a permanent total enclosure equipped with an air pollution control system with an overall VOC removal efficiency of 90% or greater, with the Director's approval. [36.5.7(d)]

## **2. Recordkeeping Requirements**

- a. The permittee shall maintain the following records:
  - (1) Training provided to operators of T005 for the lifetime of the units, [36.10.4, 29.6.3(b)]
  - (2) The amount and type of solvent used in T005 for each year, and [36.10.4(a), 29.6.3(b)]
  - (3) The date and type of each equipment malfunction or leak and the date the malfunction or leak is repaired. [36.10.4(b), 29.6.3(b)]

## **F. Requirements for Emission Units P013-P041 and P046-P070**

The following requirements are applicable to:

- Emission units P013-P041 which consists of 18 coil welders and 11 stick collators. Nails are formed from wire using press machines. The nails are then collated on a track and welded together using wire into coils or sticks, the welding wire is incorporated as part of the product to hold the nails in place. Following collating and welding the nails are coated.
- Emission Units P046-P070 which consists of 25 coil welders and/or stick collators. Nails are formed from wire using press machines. The nails are then collated on a track and welded together using wire into coils or sticks, the welding wire is incorporated as part of the product to hold the nails in place. Following collating and welding the nails are coated.

## 1. Emission Limitations

- a. The VOC content of all coatings used on P013-P041 and P046-P070 shall not exceed 3.0 lbs of VOC per gallon of coating (minus water). [Approval Nos. 1613-1641(A)(1), 19.3.1, 19.3.2(b), Approval Nos. 1925-1949(A)(1)(a)]
- b. The total, combined quantity of VOC emissions from P013-P041 and P046-P070 shall not exceed 2690 lbs per month (12 month rolling average). [Approval Nos. 1613-1641(A)(2), Approval Nos. 1925-1949(A)(1)(b)]
- c. The permittee shall demonstrate that, based on the coatings, thinners and/or other additives and cleaning materials used in the coating operations on P013-P041 and P046-P070, the organic HAP emission rate for the coating operations is less than or equal to 2.6 lbs of HAP per gallon of coating solids, calculated as a rolling 12-month emission rate and determined on a monthly basis. [Approval Nos. 1925-1949(A)(2)(a), 40 CFR 63.3890(b)(1), 40 CFR 63.3900(a)(1), 40 CFR 63.3891(b)]
- d. The total quantity of ammonia emissions discharged to the atmosphere from P046-P070 shall not exceed:
  - (1) 0.36 pounds per hour; and,
  - (2) 3,164 pounds in any consecutive 12-month period.

The Office of Air Resources may revise conditions I.F.1.e.(1) and (2), if, after completion of the review of the facility's Air Toxics Operating Permit application, it is determined that the emission limitations must be revised to ensure compliance with Air Pollution Control Regulation No. 22. [Approval Nos. 1925-1949(A)(3)(a)]

## 2. Compliance Determination

- a. Compliance with the coating emission limitations contained in Condition I.F.1.a of this permit shall be demonstrated in accordance with 40 CFR 60, Appendix A, Methods 24, 24A as amended or any other USEPA approved method which has been accepted by the Director. A one-hour bake time shall be used for Methods 24 and 24A, which apply to multi-component coatings. [Approval Nos. 1613-1641(B)(1), 19.7.1, Approval Nos. 1925-1949 (B)(1)]
- b. The permittee shall, on a monthly basis demonstrate continuous compliance with the emission standard in Condition I.F.1.c of this permit by following

the conditions specified in Conditions I.F.2.b(1-7) of this permit. [40 CFR 63.3952(a)]

- (1) Follow the procedures specified below to determine the mass fraction of organic HAP for material applied during the compliance period by using one of the following options. [40 CFR 63.3951(a), 40 CFR 63.3941(a)]
  - (a) *Method 311 (appendix A to 40 CFR part 63)*. The permittee can use Method 311 for determining the mass fraction of organic HAP. Use the procedures specified in the paragraphs below when performing a Method 311 test. [40 CFR 63.3941(a)(1)]
    - (i) Count each organic HAP that is measured to be present at 0.1 percent by mass or more for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is measured to be 0.5 percent of the material by mass, you do not have to count it. Express the mass fraction of each organic HAP you count as a value truncated to four places after the decimal point (*e.g.*, 0.3791). [40 CFR 63.3941(a)(1)(i)]
    - (ii) Calculate the total mass fraction of organic HAP in the test material by adding up the individual organic HAP mass fractions and truncating the result to three places after the decimal point (*e.g.*, 0.763). [40 CFR 63.3941(a)(1)(ii)]
  - (b) *Method 24 (appendix A to 40 CFR part 60)*. For coatings, the permittee can use Method 24 to determine the mass fraction of nonaqueous volatile matter and use that value as a substitute for mass fraction of organic HAP. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, you may use the alternative method contained in appendix A of this permit, rather than Method 24. The permittee can use the volatile fraction that is emitted, as measured by the alternative method in appendix A of this permit, as a substitute for the mass fraction of organic HAP. [40 CFR 63.3941(a)(2)]

- (c) *Alternative method.* The permittee can use an alternative test method for determining the mass fraction of organic HAP once the Administrator has approved it. The permittee shall follow the procedure in §63.7(f) to submit an alternative test method for approval. [40 CFR 63.3941(a)(3)]
- (d) *Information from the supplier or manufacturer of the material.* The permittee can rely on information other than that generated by the test methods specified in Conditions I.F.2.b(1)(a-c) of this permit, such as manufacturer's formulation data, 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. For example, if toluene (not an OSHA carcinogen) is 0.5 percent of the material by mass, you do not have to count it. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, you may rely on manufacturer's data that expressly states the organic HAP or volatile matter mass fraction emitted. If there is a disagreement between such information and results of a test conducted according to Conditions I.F.2.b(1)(a-c) of this permit, then the test method results will take precedence unless, after consultation, you demonstrate to the satisfaction of the Office of Air Resources and USEPA that the formulation data are correct. [40 CFR 63.3941(a)(4)]
- (e) *Solvent blends.* Solvent blends may be listed as single components for some materials in data provided by manufacturers or suppliers. Solvent blends may contain organic HAP which must be counted toward the total organic HAP mass fraction of the materials. When test data and manufacturer's data for solvent blends are not available, the permittee can use the default values for the mass fraction of organic HAP in these solvent blends listed in Appendix C or D of this permit. If the permittee uses the tables, the permittee shall use the values in Appendix C for all solvent blends that match Appendix C entries according to the instructions for Appendix C, and the permittee may use Appendix D only if the solvent blends in the materials do not match any of the solvent blends in Appendix C and you know only whether the blend is aliphatic or aromatic. However, if the results of a Method 311 (appendix A to 40 CFR part 63) test indicate higher values than those listed on

Appendix C or D of this permit, the Method 311 results will take precedence unless, after consultation, you demonstrate to the satisfaction of the Office of Air Resources and USEPA that the formulation data are correct. [40 CFR 63.3941(a)(5)]

- (2) *Determine the volume fraction of coating solids for each coating.* The permittee shall determine the volume fraction of coating solids (liters (gal) of coating solids per liter (gal) of coating) for each coating used during the compliance period by a test, by information provided by the supplier or the manufacturer of the material, or by calculation, as specified in paragraphs (2)(a) through (d) of this section. If test results obtained according to paragraph (2)(a) of this section do not agree with the information obtained under paragraph (2)(c) or (d) of this section, the test results will take precedence unless, after consultation, you demonstrate to the satisfaction of the Office of Air Resources and USEPA that the formulation data are correct. [40 CFR 63.3951(b), 40 CFR 63.3941(b)]
- (a) *ASTM Method D2697–86 (Reapproved 1998) or ASTM Method D6093–97 (Reapproved 2003).* The permittee may use ASTM Method D2697–86 (Reapproved 1998), “Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings” (incorporated by reference, see §63.14), or ASTM Method D6093–97 (Reapproved 2003), “Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer” (incorporated by reference, see §63.14), to determine the volume fraction of coating solids for each coating. Divide the nonvolatile volume percent obtained with the methods by 100 to calculate volume fraction of coating solids. [40 CFR 63.3941(b)(1)]
- (b) *Alternative method.* The permittee may use an alternative test method for determining the solids content of each coating once the Administrator has approved it. The permittee must follow the procedure in 40 CFR 63.7(f) to submit an alternative test method for approval. [40 CFR 63.3941(b)(2)]
- (c) *Information from the supplier or manufacturer of the material.* The permittee may obtain the volume fraction of coating solids for each coating from the supplier or manufacturer. [40 CFR 63.3941(b)(3)]

- (d) *Calculation of volume fraction of coating solids.* The permittee may determine the volume fraction of coating solids using Equation 4 of this section:

$$V_s = 1 - \frac{m_{\text{volatiles}}}{D_{\text{avg}}} \quad (\text{Equation 4})$$

Where:

$V_s$  = Volume fraction of coating solids, liters (gal) coating solids per liter (gal) coating.

$m_{\text{volatiles}}$  = Total volatile matter content of the coating, including HAP, volatile organic compounds (VOC), water, and exempt compounds, determined according to Method 24 in appendix A of 40 CFR part 60, grams volatile matter per liter coating.

$D_{\text{avg}}$  = Average density of volatile matter in the coating, grams volatile matter per liter volatile matter, determined from test results using ASTM Method D1475-98, "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products" (incorporated by reference, see §63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM Method D1475-98 test results and other information sources, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of the Office of Air Resources and USEPA that the formulation data are correct. [40 CFR 63.3941(b)(4)]

- (3) *Determine the density of each material.* The permittee shall determine the density of each liquid coating, thinner and/or other additive, and cleaning material used during each month from test results using ASTM Method D1475-98, "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products" (incorporated by reference, see §63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If you are including powder coatings in the compliance determination, determine the density of powder coatings, using ASTM Method D5965-02, "Standard Test Methods for Specific Gravity of Coating Powders" (incorporated by reference, see §63.14), or information from the supplier. If there is disagreement

between ASTM Method D1475–98 or ASTM Method D5965–02 test results and other such information sources, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of the Office of Air Resources and USUSEPA that the formulation data are correct. If you purchase materials or monitor consumption by weight instead of volume, you do not need to determine material density. Instead, you may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, 1C, and 2 of this section. [40 CFR 63.3951(c)]

- (4) *Determine the volume of each material used.* The permittee shall determine the volume (liters) of each coating, thinner and/or other additive, and cleaning material used during each month by measurement or usage records. If you purchase materials or monitor consumption by weight instead of volume, you do not need to determine the volume of each material used. Instead, you may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, and 1C of this section. [40 CFR 63.3951(d)]
- (5) *Calculate the mass of organic HAP emissions.* The mass of organic HAP emissions is the combined mass of organic HAP contained in all coatings, thinners and/or other additives, and cleaning materials used during each month minus the organic HAP in certain waste materials. Calculate the mass of organic HAP emissions using Equation 1 of this permit. [40 CFR 63.3951(e)]

$$H_e = A + B + C - R_w \quad (\text{Equation 1})$$

Where:

$H_e$  = Total mass of organic HAP emissions during the month, kg.

A = Total mass of organic HAP in the coatings used during the month, kg, as calculated in Equation 1A of this section.

B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg, as calculated in Equation 1B of this section.

C = Total mass of organic HAP in the cleaning materials used during the month, kg, as calculated in Equation 1C of this section.

$R_w$  = Total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the month, kg, determined according to Condition I.F.2.b(5)(d) of this permit. (You may assign a value of zero to  $R_w$  if you do not wish to use this allowance.)

- (a) Calculate the kg organic HAP in the coatings used during the month using Equation 1A of this permit: [40 CFR 63.3951(e)(1)]

$$A = \sum_{i=1}^m (Vol_{c,i}) (D_{c,i}) (W_{c,i}) \quad \text{(Equation 1A)}$$

Where:

A = Total mass of organic HAP in the coatings used during the month, kg.

$Vol_{c,i}$  = Total volume of coating, i, used during the month, liters.

$D_{c,i}$  = Density of coating, i, kg coating per liter coating.

$W_{c,i}$  = Mass fraction of organic HAP in coating, i, kg organic HAP per kg coating. For reactive adhesives as defined in §63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A of this permit.

m = Number of different coatings used during the month.

- (b) Calculate the kg of organic HAP in the thinners and/or other additives used during the month using Equation 1B of this permit: [40 CFR 63.3951(e)(2)]

$$B = \sum_{j=1}^n (Vol_{t,j}) (D_{t,j}) (W_{t,j}) \quad \text{(Equation 1B)}$$

Where:

B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg.

$Vol_{t,j}$  = Total volume of thinner and/or other additive, j, used during the month, liters.

$D_{t,j}$  = Density of thinner and/or other additive, j, kg per liter.

$W_{t,j}$  = Mass fraction of organic HAP in thinner and/or other additive, j, kg organic HAP per kg thinner and/or other additive. For reactive adhesives as defined in §63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A of this permit.

n = Number of different thinners and/or other additives used during the month.

- (c) Calculate the kg organic HAP in the cleaning materials used during the month using Equation 1C of this permit: [40 CFR 63.3951(e)(3)]

$$C = \sum_{k=1}^p (Vol_{s,k}) (D_{s,k}) (W_{s,k}) \quad \text{(Equation 1C)}$$

Where:

C = Total mass of organic HAP in the cleaning materials used during the month, kg.

$Vol_{s,k}$  = Total volume of cleaning material, k, used during the month, liters.

$D_{s,k}$  = Density of cleaning material, k, kg per liter.

$W_{s,k}$  = Mass fraction of organic HAP in cleaning material, k, kg organic HAP per kg material.

p = Number of different cleaning materials used during the month.

- (d) If the permittee chooses to account for the mass of organic HAP contained in waste materials sent or designated for shipment to a hazardous waste TSD in Equation 1 of this permit, then you must determine the mass according to the following requirements. [40 CFR 63.3951(e)(4)]

- (i) The permittee may only include waste materials in the determination that are generated by coating operations for which you use Equation 1 of this permit and that will be treated or disposed of by a facility that is regulated as a TSDF under 40 CFR part 262, 264, 265, or 266. The TSDF may be either off-site or on-site. The permittee may not include organic HAP contained in wastewater. [40 CFR 63.3951(e)(4)(i)]
  - (ii) The permittee must determine either the amount of the waste materials sent to a TSDF during the month or the amount collected and stored during the month and designated for future transport to a TSDF. Do not include in your determination any waste materials sent to a TSDF during a month if you have already included them in the amount collected and stored during that month or a previous month. [40 CFR 63.3951(e)(4)(ii)]
  - (iii) Determine the total mass of organic HAP contained in the waste materials specified in Condition I.F.2.b(5)(d)(ii) of this permit. [40 CFR 63.3951(e)(4)(iii)]
  - (iv) The permittee must document the methodology used to determine the amount of waste materials and the total mass of organic HAP they contain, as required in Condition I.F.3.a(15) of this permit. If waste manifests include this information, they may be used as part of the documentation of the amount of waste materials and mass of organic HAP contained in them. [40 CFR 63.3951(e)(4)(iv)]
- (6) *Calculate the total volume of coating solids used.* The permittee shall determine the total volume of coating solids used, liters, which is the combined volume of coating solids for all the coatings used during each month, using Equation 2 of this permit: [40 CFR 63.3951(f)]

$$V_{st} = \sum_{i=1}^m (Vol_{c,i}) (V_{s,i}) \quad (\text{Equation 2})$$

Where:

$V_{st}$  = Total volume of coating solids used during the month, liters.

$Vol_{c,i}$  = Total volume of coating, i, used during the month, liters.

$V_{s,i}$  = Volume fraction of coating solids for coating, i, liter solids per liter coating, determined according to §63.3941(b).

m = Number of coatings used during the month.

- (7) *Calculate the organic HAP emission rate.* Calculate the organic HAP emission rate for the compliance period, kg (lb) organic HAP emitted per liter (gal) coating solids used, using Equation 3 of this permit: [40 CFR 63.3951(g)]

$$H_{yr} = \frac{\sum_{y=1}^n H_e}{\sum_{y=1}^n V_{st}} \quad (\text{Equation 3})$$

Where:

$H_{yr}$  = Average organic HAP emission rate for the compliance period, kg organic HAP emitted per liter coating solids used.

$H_e$  = Total mass of organic HAP emissions from all materials used during month, y, kg, as calculated by Equation 1 of this section.

$V_{st}$  = Total volume of coating solids used during month, y, liters, as calculated by Equation 2 of this section.

y = Identifier for months.

n = Number of full or partial months in the compliance period (for the initial compliance period, n equals 12 if the compliance date falls on the first day of a month; otherwise n equals 13; for all following compliance periods, n equals 12).

- c. If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit specified in Condition I.F.1.c of this permit, this is a deviation from the emission limitation for that compliance period and must be reported as specified in I.F.4.d(7) of this permit. [40 CFR 63.3952(b)]
- d. As part of each semiannual compliance report required by Condition I.F.4.g of this permit, the permittee must identify the coating operation(s) for which you used the emission rate without add-on controls option. If there were no deviations from the emission limitations, the permittee shall submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit specified in I.F.1.c of this permit, determined according to Conditions I.F.2.b of this permit. [40 CFR 63.3952(c)]
- e. You must maintain records as specified in Condition I.F.3.a(6-15) and II.Z.2 of this permit. [40 CFR 63.3952(d)]

### **3. Recordkeeping Requirements**

- a. The permittee shall collect, record and maintain the following information each month for P013-P041 and P046-P070: [Approval Nos. 1613-1641(C)(1), 19.5.3(c), Approval Nos. 1925-1949(c)(1), 29.6.3(b)]
  - (1) The name and identification number of each coating, as applied, on P013-P041 and P046-P070. [Approval Nos. 1613-1641(C)(1)(a), 19.5.3(c)(1), Approval Nos. 1925-1949(C)(1)(a), 29.6.3(b)]
  - (2) The mass of VOC per volume of the coating (excluding water and exempt compounds), as applied, used each month on P013-P041 and P046-P070. [Approval Nos. 1613-1641(C)(1)(b), 19.5.3(c)(2), Approval Nos. 1925-1949(C)(1)(b), 29.6.3(b)]
  - (3) The mass of HAP per volume of coating solids, as applied, used each month on P013-P041 and P046-P070. [Approval Nos. 1925-1949(C)(1)(c), 29.6.3(b)]
  - (4) The mass of any listed toxic air contaminant per volume of the coating, as applied, used each month on P013-P041 and P046-P070. [Approval Nos. 1925-1949 (C)(1)(d), 29.6.3(b)]

- (5) The type and amount of solvent used for diluents and clean up operations. [Approval Nos. 1613-1641(C)(1)(c), 19.5.3(c)(3), Approval Nos. 1925-1949(C)(1)(e), 29.6.3(b)]
- (6) A copy of each notification and report that is submitted to comply with 40 CFR 63 Subpart M, and the documentation supporting each notification and report. [40 CFR 63.3930(a)]
- (7) A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data or test data used to determine the mass fraction of organic HAP and density for each coating, thinner and/or other additive, and cleaning material, and volume fraction of coating solids. If the permittee conducted testing to determine mass fraction of organic HAP, density, or volume fraction of coating solids, the permittee shall keep a copy of the complete test report. If the permittee used information provided by the manufacturer or supplier of the material that was based on testing, the permittee shall keep the summary sheet of results provided by the manufacturer or supplier. The permittee is not required to obtain the test report or other supporting documentation from the manufacturer or supplier. [40 CFR 63.3930(b)]
- (8) A record of the coating operations on which each compliance option was used and the time periods (beginning and ending dates and times) for each option used. [40 CFR 63.3930(c)(1)]
- (9) A record of the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1, 1A through 1C, and 2 of this section; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to §63.3951(e)(4); the calculation of the total volume of coating solids used each month using Equation 2 of this section; and the calculation of each 12-month organic HAP emission rate using Equation 3 of this section. [40 CFR 63.3930(c)(3)]
- (10) A record of the name and volume of each coating, thinner and/or other additive, and cleaning material used during each compliance period. [40 CFR 63.3930(d)]
- (11) A record of the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each compliance period unless the material is tracked by weight. [40 CFR 63.3930(e)]

- (12) A record of the volume fraction of coating solids for each coating used during each compliance period. [40 CFR 63.3930(f)]
  - (13) The density for each coating, thinner and/or other additive, and cleaning material used during each compliance period. [40 CFR 63.3930(g)]
  - (14) A record of the date, time, and duration of each deviation. [40 CFR 63.3930(j)]
  - (15) If an allowance is used in Equation 1 of this section for organic HAP contained in waste materials sent to or designated for shipment to a treatment, storage, and disposal facility (TSDF) according to Condition I.F.2.b(5)(d) of this permit, the permittee shall keep the following records: [40 CFR 63.3930(h)]
    - (a) The name and address of each TSDF to which the waste materials was sent for which an allowance is used in Equation 1 of this section; a statement of which subparts under 40 CFR parts 262, 264, 265, and 266 apply to the facility; and the date of each shipment. [40 CFR 63.3930(h)(1)]
    - (b) Identification of the coating operations producing waste materials included in each shipment and the month or months in which an allowance was used for these materials in Equation 1 this section. [40 CFR 63.3930(h)(2)]
    - (c) The methodology used in accordance with Condition I.F.2.b(5)(d) of this permit, to determine the total amount of waste materials sent to or the amount collected, stored, and designated for transport to a TSDF each month; and the methodology to determine the mass of organic HAP contained in these waste materials. This must include the sources for all data used in the determination, methods used to generate the data, frequency of testing or monitoring, and supporting calculations and documentation, including the waste manifest for each shipment. [40 CFR 63.3930(h)(3)]
- b. The permittee shall, on a monthly basis, no later than 10 days after the first day of each succeeding month, determine the total, combined quantity of VOC emissions from P013-P041 and P046-P070 for the previous 12 months and determine the lbs of VOC emitted per month (12 month rolling average). The permittee shall keep records of this determination

and provide such records to the Office of Air Resources upon request. [Approval Nos. 1613-1641(C)(2), Approval Nos. 1925-1949(C)(2), 29.6.3(b)]

- c. The permittee shall, on a monthly basis, no later than 10 business days after the first of the month, determine the total quantity of ammonia discharged to the atmosphere from P013-P041 and P046-P070. The permittee shall keep records of this determination and provide such records to the Office of Air Resources upon request. [Approval Nos. 1925-1949(C)(4), 29.6.3(b)]

#### **4. Reporting Requirements**

- a. The permittee shall notify the Director of any record showing use of any non-complying coatings by sending a copy of such record to the Director within 30 calendar days following that use. [19.5.3(d)(1)]
- b. The permittee, before changing the method of compliance from complying coatings to daily weighted averaging or control devices, shall submit a Compliance Certification Plan to the Office of Air Resources for review and approval. Such plan shall include: [Approval Nos. 1613-1641(C)(7), 1925-1949(C)(8)]
  - (1) The name and location of the facility; [Approval Nos. 1613-1641(C)(7)(a), 19.5.2(a)(1), 19.5.4(a)(1), Approval Nos. 1925-1949(C)(8)(a)]
  - (2) The name, address, telephone number of the person responsible for the facility; [Approval Nos. 1613-1641(C)(7)(b), 19.5.2(a)(2), 19.5.4(a)(2), Approval Nos. 1925-1949(C)(8)(b)]
  - (3) The name and identification number of the emission units which will comply by means of daily-weighted averaging or control device; [Approval Nos. 1613-1641(C)(7)(c), 19.5.2(a)(4), 19.5.4(a)(4), Approval Nos. 1925-1949(C)(8)(c)]
  - (4) For daily-weighted averaging:
    - (a) The instrument or method by which the permittee will accurately measure or calculate the volume of each coating (excluding water), as applied, used each day on each emission unit; [Approval Nos. 1613-1641(C)(7)(d)(1), 19.5.2(a)(5), Approval Nos. 1925-1949(C)(8)(d)(1)]

- (b) The method by which the permittee will create and maintain records each day as required by Subsection 19.5.2(c) of APC Regulation No. 19; [Approval Nos. 1613-1641(C)(7)(d)(2), 19.5.2(a)(6), Approval Nos. 1925-1949(C)(8)(d)(2)]
  - (c) The time at which the facility's day begins if a time other than midnight local time is used to define a day; [Approval Nos. 1613-1641(C)(7)(d)(3), 19.5.2(a)(7), Approval Nos. 1925-1949(C)(8)(d)(3)]
- (5) For control devices:
- (a) The name and identification number of each coating, as applied, on each coating line or operation; [Approval Nos. 1613-1641(C)(7)(e)(1), 19.5.4(a)(4), Approval Nos. 1925-1949(C)(8)(e)(1)]
  - (b) The mass of VOC per volume coating solids applied and the gallons of solids of each coating applied; [Approval Nos. 1613-1641(C)(7)(e)(2), 19.5.4(a)(5), Approval Nos. 1925-1949(C)(8)(e)(2)]
  - (c) Identification of each control device which will be or has been installed and date of installation; [Approval Nos. 1613-1641(C)(7)(e)(3), 19.5.4(a)(6), Approval Nos. 1925-1949(C)(8)(e)(3)]
  - (d) Identification of coating lines which will be controlled by each control device and documentation of expected capture and destruction efficiency or reduction efficiency; [Approval Nos. 1613-1641(C)(7)(e)(4), 19.5.4(a)(7), Approval Nos. 1925-1949(C)(8)(e)(4)]
  - (e) Control device design information; [Approval Nos. 1613-1641(C)(7)(e)(5)]
    - (i) For thermal incinerators-design combustion temperature (°F) [Approval Nos. 1613-1641(C)(7)(e)(5)(a), 19.5.4(a)(8)(i), Approval Nos. 1925-1949(C)(8)(e)(5)(a)];
    - (ii) For catalytic incinerators - design exhaust gas temperature (°F), design temperature rise across catalyst bed (°F), anticipated frequency of catalyst

change, and catalyst changes; [Approval Nos. 1613-1641(C)(7)(e)(5)(b), 19.5.4(a)(8)(ii), Approval Nos. 1925-1949(C)(8)(e)(5)(b)]

- (iii) For condensers - design inlet temperature of cooling medium (°F), design exhaust gas temperature (°F); [Approval Nos. 1613-1641(C)(7)(e)(5)(c), 19.5.4(a)(8)(iii), Approval Nos. 1925-1949(C)(8)(e)(5)(c)]
  - (iv) For carbon adsorbers - design pressure drop across the adsorber, VOC concentration at breakthrough. [Approval Nos. 1613-1641(C)(7)(e)(5)(d), 19.5.4(a)(8)(iv), Approval Nos. 1925-1949(C)(8)(e)(5)(d)]
- (6) Information describing the effect of the change on the emissions of any air contaminant. [Approval Nos. 1613-1641(C)(7)(f), 9.2.1, Approval Nos. 1925-1949(C)(8)(f)]
- (7) A demonstration that emissions from the stationary source will not cause an increase in the ground level ambient concentration at or beyond the property line in excess of that allowed by APC Regulation No. 22. [Approval Nos. 1613-1641(C)(7)(g), 22.3.3(a), Approval Nos. 1925-1949(C)(8)(g)]
- c. The permittee shall notify the Office of Air Resources in writing, within 15 days, whenever the total combined quantity of VOC emissions from P013-P041 and P046-P070, including thinners, additives and cleaners exceeds 2690 lbs per month (12 month rolling average). [Approval Nos. 1613-1641(C)(3), Approval Nos. 1925-1949(C)(3)]
- f. The permittee shall notify the Office of Air Resources in writing, within 15 days, whenever the total quantity of ammonia discharged to the atmosphere from P046-P070 exceeds: [Approval Nos. 1925-1949(C)(5)]
- (1) 0.36 pounds per hour; or,
  - (2) 3,164 pounds in any consecutive 12-month period.
- e. The permittee must notify the Office of Air Resources no later than 24 hours after any exceedance of any emission limitation is discovered for emission units P013-P041. Notification shall include: [Approval Nos. 1613-1641(C)(4)]

- (1) Identification of the emission exceeded.
  - (2) Suspected reason for the exceedance.
  - (3) Corrective action taken or to be taken.
  - (4) Anticipated length of the exceedance.
- f. The permittee shall notify the Office of Air Resources of any anticipated noncompliance with the terms of Section I.F. of this permit or any other applicable air pollution control rules and regulations. [Approval Nos. 1613-1641(C)(5), Approval Nos. 1925-1949(C)(6)]
- g. The permittee shall submit semiannual compliance reports to the Office of Air Resources and USEPA. [40 CFR 63.3920(a)(1)(i)]
- (1) Each compliance report must cover the applicable semiannual reporting period from January 1 through June 30 or July 1 through December 31. [40 CFR 63.3920(a)(1)(ii), 40 CFR 63.3920(a)(1)(iv)]
  - (2) Each compliance report must be postmarked or delivered no later than 45 calendar days after the end of the semiannual reporting period. [40 CFR 63.3920(a)(1)(iii), 29.6.4(b)(1), 40 CFR 63.3920(a)(1)(iv), 40 CFR 63.3920(a)(2)]
- h. The compliance report must include the following information: [40 CFR 63.3920(a)(3)]
- (1) Company name and address. [40 CFR 63.3920(a)(3)(i)]
  - (2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. [40 CFR 63.3920(a)(3)(ii)]
  - (3) Date of report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31. Note that the information reported for each of the 6 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation. [40 CFR 63.3920(a)(3)(iii)]
  - (4) Identification of the compliance option used on P013-P041 and P046-P070 during the reporting period. If you switched between compliance options during the reporting period, you must report

the beginning and ending dates for each option you used. [40 CFR 63.3920(a)(3)(iv)]

- (5) The calculation results for each rolling 12-month organic HAP emission rate during the 6-month reporting period. [40 CFR 63.3920(a)(3)(v)]
- (6) If there were no deviations from the emission limitations in specified in Condition I.F.1.c of this permit, the semiannual compliance report must include a statement that there were no deviations from the emission limitations during the reporting period. [40 CFR 63.3920(a)(4)]
- (7) If there was a deviation from the applicable emission limit specified in Condition I.F.1.c of this permit, the semiannual compliance report must contain the following information: [40 CFR 63.3920(a)(6)]
  - (a) The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit specified in Condition I.F.1.c of this permit, and [40 CFR 63.3920(a)(6)(i)]
  - (b) The calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred. The permittee shall submit the calculations for Equations 1, 1A through 1C, 2, and 3 of this section; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to Condition I.F.2.b(5)(d) of this permit. The permittee is not required to submit background data supporting these calculations (*e.g.*, information provided by materials suppliers or manufacturers, or test reports), and [40 CFR 63.3920(a)(6)(ii)]
  - (c) A statement of the cause of each deviation. [40 CFR 63.3920(a)(6)(iii)]

## 5. Other Requirements

- a. To the extent consistent with the requirements of Section I.F. of this permit and applicable federal and state laws, the facility shall be operated in accordance with the representation of the facility in the preconstruction permit application. [Approval Nos. 1613-1641(D)(1), Approval Nos. 1925-1949(D)(1)]

- b. At all times, including periods of startup, shutdown and malfunction, the permittee shall, to the extent practicable, maintain and operate the facility in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Office of Air Resources, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [Approval Nos. 1925-1949(D)(4)]
- c. The emission and dispersion characteristics of all sources of any listed toxic air contaminant at the facility shall be consistent with the parameters used in the air quality modeling to demonstrate that the emissions do not cause an impact, at or beyond the property line of the facility, which exceeds the Acceptable Ambient Level for that substance. The Office of Air Resources, in its sole discretion, may reopen this minor source permit if it determines that the emission and dispersion characteristics have changed significantly and that emission limitations must be revised and/or added to this permit to ensure compliance with Air Pollution Control Regulation No. 22. [Approval Nos. 1925-1949(D)(5)]

**G. Requirements for Emission Unit D001**

The following requirements are applicable to:

- Emission unit D001, which is a Finishing Equipment Inc., vapor degreaser, Model No. AF-2D-SP.

**1. Emission Limitations**

- a. The use of methylene chloride as an organic solvent cleaner in the equipment shall not exceed 2,875 lbs. per month (12 month rolling average). [Approval No. 1128(1), Air Toxics Permit Approval No. 1438/03(B)(2)]

**2. Operating Requirements**

a. General Requirements

- (1) Equipment covers and dipping or rotating baskets shall be constructed of nonporous or nonabsorbent material. Covers must form a tight seal with the sides of D001 and have no gaps or holes. [36.4.1]
- (2) When the cover of D001 is open, drafts at the same elevation as the tanks lip must not be greater than 40 m/min. (130 ft/min.) when measured 1 to 2 meters (3 to 7 feet) upwind. [36.4.2]

- (3) Leaks shall be repaired immediately or D001 shall be shut down [36.4.3]
- (4) Equipment used in D001 shall display a conspicuous summary of proper operating procedures consistent with minimizing emissions of organic solvents. [36.4.4]
- (5) Spills shall be wiped up immediately. The wipe rags shall be stored in covered containers meeting the specifications in Condition I.G.2.a(10). [36.4.6]
- (6) No porous or absorbent materials, such as sponges, fabrics, wood or paper products, shall be placed in D001. [36.4.7, 40 CFR 63.463(d)(12)]
- (7) Parts baskets or parts shall be drained under the cover and shall not be removed from D001 for at least the minimum dwell time determined according to the specifications of the manufacturer of the control equipment. [36.4.8, 40 CFR 63.463(d)(5), 63.463(e)(2)(vi)(C)]
- (8) Parts shall be oriented so that the solvent drains from them freely. Parts shall be oriented for best drainage and parts with cavities or blind holes shall be tipped or rotated while draining before being removed from the vapor zone. [36.4.9, 36.4.10, 40 CFR 63.463(d)(4)]
- (9) When solvent is added to or drained from D001, the solvent shall be transferred using threaded or other leakproof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface. [36.4.11, 40 CFR 63.463(d)(8)]
- (10) Solvent, waste solvent, still bottoms, and sump bottoms shall be stored in covered containers and waste solvent transferal or disposal shall not allow greater than 20 percent of the waste solvent (by weight) to evaporate into the atmosphere. The closed containers may contain a device that allows for pressure relief, providing that the device does not allow liquid solvent to drain from the container. [36.4.12, 40 CFR 63.463(d)(11)]
- (11) D001 shall be maintained as recommended by the manufacturer. [36.4.13, 40 CFR 63.463(d)(9)]
- (12) Operators must receive training in proper solvent cleaning procedures and, if requested by representatives of the Office of Air

Resources or the USEPA during an inspection, must complete and pass the applicable sections of the test on those procedures in Appendix A of APC Regulation No. 36. [36.4.14, 40 CFR 63.463(d)(10)]

- (13) No work area fans shall be located and positioned so that they blow across the opening of D001. [36.4.15]
- (14) D001 shall be located and positioned so that ventilation from an open window does not blow across the opening of D001. [36.4.16]

b. Work and Operational Practices

- (1) Methylene chloride shall be used only in D001. [Air Toxics Operating Permit Approval No. 1438/03(B)(1)] **Not Federally Enforceable**
- (2) D001 shall be operated with the following control combination: Freeboard ratio of 1.0, reduced room draft and a superheated vapor system. [36.6.7(c), 36.6.5, 40 CFR 63.463(a)(1)(ii), 40 CFR 63.463(a)(2), 40 CFR 63.463(b)(2)(i), 40 CFR 63.463(d)(1)(ii), Letter Dated March 4, 1997 from Daniel Wise of RIDEM/OAR to Alan Cantara of Stanley Bostitch]
- (3) D001 shall be equipped with a cover that can be easily operated without disturbing the vapor zone and that is attached to D001. Covers must be closed at all times except during parts entry and removal. [36.6.1, 40 CFR 63.463(d)(1)(i)]
- (4) D001 shall be equipped with a primary condenser. [36.6.2, 40 CFR 63.463(a)(6)]
- (5) D001 shall be equipped with an automated parts handling system, such as, but not limited to, a hoist or conveyor, that maintains a vertical conveyor speed of less than 2 inches per second (10 feet per minute). [36.6.3, 36.6.17, 40 CFR 63.463(a)(3)]
- (6) D001 shall be equipped with the following safety switches:
  - (a) A condenser flow switch and thermostat to shut off the heat to the solvent if the condenser coolant is not circulating, [36.6.4(a)]
  - (b) A vapor level control thermostat to shut off the heat when the vapor level rises above the height of the primary cooling coils, and [36.6.4(b), 40 CFR 63.463(a)(5)]

- (c) A low solvent level safety switch to shut off the heating element if it should become exposed. [36.6.4(d), 40 CFR 63.463(a)(4)]
- (7) Pieces shall be held in the vapor zone for at least 30 seconds or until condensation ceases, whichever is longer. [36.6.8]
- (8) The workload shall not occupy more than half of D001's open top area. [36.6.9, 40 CFR 63.463(d)(2)]
- (9) The vapor level shall not rise or drop more than 4 inches (10 cm) when the workload enters or is removed from the vapor zone. [36.6.10]
- (10) D001 shall be operated so that water cannot be visually detected in the solvent exiting the water separator. [36.6.12]
- (11) The exhaust ventilation rate shall not exceed 20 m<sup>3</sup>/min per m<sup>2</sup> (65 cfm per ft<sup>2</sup>) of solvent/air interface, unless necessary to meet OSHA requirements. [36.6.14]
- (12) During startup of D001, the primary condenser shall be turned on before the sump heater. [36.6.15, 40 CFR 63.463(d)(6)]
- (13) During shutdown of D001, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off. [36.6.16, 40 CFR 63.463(d)(7)]
- (14) The permittee shall insure that all methylene chloride emissions generated from D001 are exhausted through the proposed exhaust system. [Approval No. 1128(2)]
- (15) The permittee shall comply with the following requirements: [40 CFR 63.463(e)(2)(vi)]
  - (a) Ensure that the temperature of the solvent vapor at the center of the superheated vapor zone is at least 10°F above the boiling point, [36.9.4, 40 CFR 63.463(e)(2)(vi)(A)]
  - (b) Ensure that the manufacturer's specifications for determining the minimum proper dwell time within the superheated vapor system is followed, and [40 CFR 63.463(e)(2)(vi)(B)]

- (c) Ensure that parts remain within the superheated vapor for at least the minimum proper dwell time. [40 CFR 63.463(e)(2)(vi)(C)]
- (16) The permittee shall comply with the following requirements:
- (a) Ensure that the flow or movement of air within D001's enclosure does not exceed 50 feet per minute at any time as measured using the procedures in Condition I.G.3.f. [40 CFR 63.463(e)(2)(ii)(A)]
  - (b) Establish and maintain the operating conditions under which the wind speed was demonstrated to be 50 feet per minute or less as described in Condition I.G.3.f [40 CFR 63.463(e)(2)(ii)(B)]
- c. The emission characteristics of all sources of listed air toxics from this facility shall be consistent with the parameters used in the air quality modeling to determine the increase in the ground level ambient concentration of those pollutants.

A summary of these emission characteristics is as follows:

Emissions from D001 are discharged through a stack with a height of 48 feet above grade, an exit diameter of 14 inches, a flow rate of 2,600 cfm and an exit temperature that is approximately ambient temperature. [Air Toxics Approval No. 1438/03(B)(13)] **Not Federally Enforceable**

- d. At all times, including periods of startup, shutdown, and malfunction, the permittee shall operate and maintain D001 in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this permit. [40 CFR 63.6(e)(1)(i)]
- e. Malfunctions shall be corrected as soon as practicable after their occurrence [40 CFR 63.6(e)(1)(ii)]

### 3. Monitoring Requirements

The permittee shall monitor the following parameters:

- a. The cover of D001 shall be visually inspected monthly to confirm that it is opening and closing properly, that it completely covers D001's openings when closed and that it is free of cracks, holes and other defects. [36.9.1, 40 CFR 63.466(b)(1)]

- b. The speed of the automated parts handling system shall be monitored according to the following specifications: [36.9.2, 40 CFR 63.466(c)]
- (1) Determine the speed by measuring the time it takes for the conveyor to travel a measured distance. The speed is the distance in inches divided by the time in seconds, or the distance in feet divided by the time in minutes, [36.9.2(a), 40 CFR 63.466(c)(1)]
  - (2) Monitoring shall be performed on a monthly basis. If no exceedance of the speed requirements specified in Condition I.G.2.b(5) occur in a year, then future hoist speed monitoring may be conducted on a quarterly basis, [36.9.2(b), 40 CFR 63.466(c)(2)]
  - (3) If a speed greater than that specified in Condition I.G.2.b(5) is measured, the automated parts handling system must be adjusted so that this specification is met, and [36.9.2(c)]
  - (4) If a speed greater than that specified in Condition I.G.2.b(5) is measured while monitoring is being conducted on a quarterly basis, then monthly monitoring must be resumed until another year passes without any exceedance. [36.9.2(d), 40 CFR 63.466(c)(3)]
- c. The temperature of the solvent vapor at the centroid of the superheated vapor zone shall be monitored weekly according to the following specifications:
- (1) The temperature shall be monitored while D001 is operating in the idling mode, [36.9.4(a), 40 CFR 63.466(a)(2)]
  - (2) A thermometer or thermocouple shall be used to measure the temperature at the centroid of the superheated solvent vapor zone, and [36.9.4(b), 40 CFR 63.466(a)(2)]
  - (3) If the temperature at the centroid of the air blanket is less than 10°F above the solvent's boiling point, the system shall be adjusted so that this specification is met. [36.9.4(c)]
- d. On a monthly basis, the actual dwell time that parts are held in the freeboard zone above the vapor zone shall be measured. The actual dwell time shall not exceed the minimum dwell time. The minimum dwell time for D001 shall be determined according to the specifications of the manufacturer of the control equipment. [36.9.6, 36.9.6(b), 36.9.6(c), 40 CFR 63.466(b)(2)]
- e. If the actual dwell time is less than the minimum dwell time determined

using the applicable procedures in Condition I.G.3.d in this permit for particular part or parts basket, the automatic parts handling system must be adjusted so that this specification is met. [36.9.6(d)]

- f. The permittee shall conduct a monthly visual inspection of the enclosure to determine if it is free of cracks, holes and other defects. The permittee shall also conduct a monthly monitoring test of the wind speed within the enclosure using the following procedures: [40 CFR 63.466(d)(2)]
  - (1) Determine the direction of the wind current in the enclosure by slowly rotating a velometer inside the entrance to the enclosure until the maximum speed is located, and [40 CFR 63.466(d)(2)(i)]
  - (2) Record the maximum wind speed. [40 CFR 63.466(d)(2)(ii)]
- g. Alternative monitoring procedures may be used if approved by the Director and the USEPA. [36.9.8, 40 CFR 63.466(g)]
- h. Safety switches must be tested semi-annually. [36.9.7]
- i. Monitoring performed pursuant to section I.G.3 of this permit shall be conducted as set forth in 40 CFR 63.8 and this section [40 CFR 63.8].

#### **4. Recordkeeping Requirements**

- a. The permittee shall maintain the following records in written or electronic form for the lifetime of the unit: [36.10.1, 40 CFR 63.467(a)]
  - (1) Owner's manuals or written maintenance and operating procedures for D001, [36.10.1(a), 40 CFR 63.467(a)(1)]
  - (2) Date of installation of D001 and its control devices, and [36.10.1(b), 40 CFR 63.47(a)(2)]
  - (3) Records of the content of each solvent used in D001, [36.10.1(c) [40 CFR 63.467(a)(5)]
  - (4) The minimum dwell times for D001 determined according to the specifications of the manufacturer of the control equipment. [36.10.1(d)]
  - (5) Records of training provided to operators of D001. [36.10.1(e)]
- b. The permittee shall maintain the following records in electronic or written form for a period of 5 years: [36.10.2, 40 CFR 63.467(b)]

- (1) Amount and type of solvent used in D001 each year, [36.10.2(a), 40 CFR 63.467(b)(3)]
  - (2) The results of the monitoring required under Condition I.G.3 of this permit, [36.10.2(b), 40 CFR 63.467(b)(1)]
  - (3) Information on the actions taken to comply with, Sections I.G.3.b(3), I.G.3.c(3) and I.G.3.e of this permit. This includes records of written or verbal orders for replacement parts, a description of the repairs made and the additional monitoring conducted to demonstrate that monitored parameters have returned to acceptable levels, [36.10.2(c), 40 CFR 63.467(b)(2)]
  - (4) The date and type of each equipment malfunction (or leak) and the date it is repaired, [36.10.2(f)]
  - (5) If safety switches are activated, the date and reason why the switch was triggered, and [36.10.2(g)]
  - (6) The results of semiannual safety switch test. [36.10.2(h)]
- c. The permittee shall, on a monthly basis, no later than five days after the first of each month, determine its methylene chloride usage from the facility. The permittee shall maintain records of this determination and provide such records to the Office of Air Resources upon request. [Approval No. 1128(4)]
- d. The permittee shall record the amount of methylene chloride that is purchased and the amount that is used, on a monthly basis, in D001. [Air Toxics Operating Permit Approval No. 1438/03(C)(1)(a)] **Not Federally Enforceable**
- e. The permittee shall estimate, on an annual basis, the amount of methylene chloride that is emitted into the atmosphere. [Air Toxics Operating Permit Approval No. 1438/03(C)(3)] **Not Federally Enforceable**

## 5. Reporting Requirements

- a. Exceedances and Exceedance Reports
- (1) The following occurrences are considered exceedance and must be reported on the facility's Exceedance report: [36.11.3(a)]
    - (a) An exceedance has occurred if the requirements in conditions I.G.2.b(5), I.G.2.b(16)(a), I.G.2.b(17)(a) or I.H.3.a have not been met and not corrected within 10 working days of

detection. Once adjustments or repairs have been made, parameters must be re-measured to demonstrate that the parameter is within the acceptable limit. [40 CFR 63.463(e)(3)(ii), 36.11.3(a)(2)]

- (b) An exceedance has occurred if the requirements in conditions I.G.2.a(7), I.G.2.b(16)(b), I.G.2.b(16)(c) or I.G.2.b(17)(b) have not been met. [40 CFR 63.463(e)(3)(i)]
- (2) The permittee shall report all exceedances and all corrections and adjustments made to avoid an exceedance as specified in Condition I.G.5.a(5). [40 CFR 63.463(e)(4)]
  - (3) The permittee shall initially submit Exceedance reports semiannually, except when the Office of Air Resources or USEPA determines on a case – by – case basis that more or less frequent reporting is necessary. If an exceedance occurs, Exceedance reports must be submitted quarterly until a request to reduce the reporting frequency as specified in Condition I.G.5.a(6) of this permit has been approved. [36.11.3(b – c), 40 CFR 63.468(h)]
  - (4) The Exceedance report shall be received by the thirtieth day following the end of each exceedance reporting period. Initial reporting periods are January 1 – June 30 and July 1 – December 31. [36.11.3(d), 40 CFR 63.468(h)]
  - (5) Exceedance reports shall include the following information for actions taken to comply with Conditions I.G.2.a(7), I.G.2.b(5), I.G.2.b(16)(a), (b) or (c), I.G.2.b(17)(a) or (b) or I.G.3.a of this permit: [36.11.3(e), 40 CFR 63.468(h)]
    - (a) Records of written or verbal orders for replacement parts, a description of the repairs made, additional monitoring to demonstrate that monitored parameters have returned to acceptable levels, [36.11.3(e)(1), 40 CFR 63.468(h)(1)]
    - (b) If an exceedance has occurred, the reason for the exceedance and a description of the actions taken to correct the exceedance, [36.11.3(e)(2), 40 CFR 63.468(h)(2)]
    - (c) If an exceedance has occurred, the dates the cleaning machine or control equipment was repaired, retested and returned to service, and [36.11.3(e)(3)]

- (d) If an exceedance has not occurred or the cleaning and control equipment has not been inoperative, repaired or adjusted, this information must be stated in the report. [36.11.3(e)(4), 40 CFR 63.468(h)(3)]
- (6) If the permittee is required to submit Exceedance Reports on a quarterly (or more frequent) basis, the submittal frequency may be reduced to semiannual with the Director's approval, if the following requirements are achieved: [36.11.3(f), 40 CFR 63.468(i)]
  - (a) The permittee has demonstrated a full year of compliance without an exceedance, and [36.11.3(f)(1), 40 CFR 63.468(i)(1)]
  - (b) The permittee continues to comply with the recordkeeping and monitoring requirements specified in this permit for emission unit D001. [36.11.3(f)(2), 40 CFR 63.468(i)(2)]
  - (c) The USEPA does not object to a reduced frequency of reporting for the permittee as provided in paragraph (e)(3)(iii) of 40 CFR 63, Subpart A (General Provisions). [40 CFR 63.468(i)(3)]

b. Annual Compliance Reports

- (1) The permittee shall submit an annual report to the Office of Air Resources and USEPA by February 1 of each year for the previous calendar year. This report shall include the following: [36.11.4, 40 CFR 63.468(f)]
  - (a) A signed statement from the permittee stating that, "All operators of D001 have received training on the proper operation of D001 and their control devices sufficient to pass the test required in Appendix A" of APC Regulation No. 36, and [36.11.4(a), 40 CFR 63.468(f)(1)]
  - (b) An estimate of solvent consumption for D001 during the reporting period. [36.11.4(b), 40 CFR 63.468(f)(2)]
- (2) The permittee shall submit the annual methylene chloride emissions, as part of its annual air pollution inventory report. [Air Toxics Operating Permit Approval No. 1438/03(D)(1)] **Not Federally Enforceable**

- (3) The permittee shall notify the Office of Air Resources whenever its methylene chloride usage should equal or exceed 2,875 lbs. per month. [Approval No. 1128(5)]

**6. Other Requirements**

- a. Emission unit D001 is subject to the requirements of 40 CFR 63.1-15, Subpart A, "General Provisions as indicated in Appendix C to Subpart T of 40 CFR 63." Compliance with all applicable provisions therein is required, unless otherwise stated in this permit.
- b. Operation and maintenance requirements are enforceable independent of emissions limitations or other requirements in this section. [40 CFR 63.6(e)(1)(iii)]
- c. Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Office of Air Resources and the USEPA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6(e)(2)]
- d. The Office of Air Resources and the USEPA will determine compliance with the emission limitations in this section by evaluation of the permittee's conformance with operation and maintenance requirements, including the evaluation of monitoring data, as specified in this section. [40 CFR 63.6(f)(ii)]
- e. The Office of Air Resources and the USEPA will determine compliance with design, equipment, work practice, or operational emissions standards in this section by review of records, evaluation of the permittee's conformance with operation and maintenance requirements, inspection of the source, and other procedures specified in this section. [40 CFR 63.6(f)(2)(iv)]

**H. Requirements for Emission Units G001 and G002**

The following Requirements are applicable to:

- Emission unit G001, which is a 428 HP Caterpillar, Model No. 3406, which burns diesel fuel.
- Emission unit G002, which is a 268 HP Caterpillar, Model No. CD-200, which burns diesel fuel. Emission units G001 and G002 are emergency/standby unit.

**1. Emission Limitations**

a. Opacity

The permittee shall not emit into the atmosphere any air contaminant for a period or periods aggregating more than three minutes in any one hour, which is greater than or equal to 20 percent opacity. [1.2] Where the presence of uncombined water is the only reason for failure to meet this requirement, such failure shall not be a violation of this permit. [1.4]

b. Sulfur oxides

Unless the Director declares in writing after a hearing that a shortage of low sulfur fuel oil exists, the permittee shall not use or store fuel oil with a sulfur content greater than 1.0% by weight. [8.2]

**2. Operating Requirements**

a. G001 and G002 shall be operated only as a mechanical or electrical power source when the primary power source has been rendered inoperable. This does not include power interruptions pursuant to an interruptible power service agreement. [27.1.8]

b. G001 and G002 shall be operated less than 500 hours each, during any consecutive twelve (12) month period. If the hours of operation for either G001 or G002 exceed 500 hours in any 12 month period, that unit shall immediately be in compliance with RACT as specified in APC Regulation No. 27. [27.2.3]

**3. Monitoring Requirements**

a. The permittee shall maintain a non-resettable elapsed time meter on G001 and G002 to indicate, in cumulative hours, the elapsed engine operating time. [27.6.10(b)]

**4. Testing Requirements**

a. Opacity

Tests for determining compliance with the opacity emission limitations specified in Condition I.H.1.a of this permit shall be performed per 40 CFR 60, Appendix A, Method 9. Additionally, all observers must qualify as per 40 CFR 60, Appendix A, Method 9. [1.3.1, 1.3.2]

b. Sulfur oxides

Compliance with the sulfur limitations contained in Condition I.H.1.b of this permit shall be determined by the procedures referenced in Condition II.U.2 of this permit. [29.6.3(b)]

**5. Recordkeeping Requirements**

- a. The permittee shall on a monthly basis, no later than five (5) days after the first of each month, determine and record the hours of operation for G001 and G002 for the previous twelve (12) month period. [27.6.10(c)]

**6. Reporting Requirements**

- a. The permittee shall notify the Office of Air Resources, in writing, whenever the hours of operation in any twelve (12) month period exceeds 500 hours for G001 or G002. [27.6.10(d)]

**I. Requirements for Emissions Unit T001**

The following Requirements are applicable to:

- Emission unit T001, is a 25,000 gallon Residual Oil Storage Tank. T001 is equipped with a Horizontal Fixed Roof

There are no specific requirements for T001. This does not relieve the permittee from compliance with the General Provisions, outlined in Section II of this permit, as they apply to T001.

**J. Requirements for Emission Units P042-P045**

The following requirements are applicable to:

- Emission units P042-P045, which are nail machines that form nails from wire using press machines. The nails are strung together using various assembling methods that may include plastic line and bead welding or mylar-coated paper tape. After being strung together, the nails are coated.

**1. Emission Limitations**

- a. The VOC content of all coatings used on emission units P042-P045 shall not exceed 3.0 lbs of VOC per gallon of coating (minus water). [19.3.1, 19.3.2(b), Approval Nos. 2071 – 2079(A)(1)(a)]

- b. The permittee shall demonstrate that, based on the coatings, thinners and/or other additives and cleaning materials used in the coating operations on P042-P045, the organic HAP emission rate for the coating operations is less than or equal to 2.6 lbs of HAP per gallon of coating solids, calculated as a rolling 12-month emission rate and determined on a monthly basis. [40 CFR 63.3890(b)(1), 40 CFR 63.3900(a)(1), 40 CFR 63.3891(b), Approval Nos. 2071 – 2079(A)(2)(a)]
- c. The total quantity of ethylene glycol monobutyl ether emitted to the atmosphere from P042-P045 shall not exceed: [Approval Nos. 2071 – 2079(A)(3)(a)(1-2)]
  - (1) 1.4 pounds per hour; and
  - (2) 11,951 pounds in any consecutive 12 – month period.

## 2. Compliance Determination

- a. Compliance with the emission limitations contained in Condition I.J.1.a of this permit shall be demonstrated in accordance with 40 CFR 60, Appendix A, Methods 24, 24A as amended or any other USEPA approved method which has been accepted by the Director. A one hour bake time shall be used for Methods 24 and 24A, which apply to multi-component coatings. [19.7.1, Approval Nos. 2071 – 2079(B)(1)]
- b. The permittee shall, on a monthly basis demonstrate continuous compliance with the emission standard in Condition I.J.1.b of this permit by following the conditions specified in Conditions I.J.2.b(1-7) of this permit. [40 CFR 63.3952(a), Approval Nos. 2071 – 2079(B)(2)]
  - (1) Follow the procedures specified below to determine the mass fraction of organic HAP for material applied during the compliance period by using one of the following options. [40 CFR 63.3951(a), 40 CFR 63.3941(a), Approval Nos. 2071 – 2079(B)(2)(a)]
    - (a) *Method 311 (appendix A to 40 CFR part 63)*. The permittee can use Method 311 for determining the mass fraction of organic HAP. Use the procedures specified in the paragraphs below when performing a Method 311 test. [40 CFR 63.3941(a)(1), Approval Nos. 2071 – 2079(B)(2)(a)(1)]
      - (i) Count each organic HAP that is measured to be present at 0.1 percent by mass or more for Occupational Safety and Health Administration

(OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is measured to be 0.5 percent of the material by mass, you do not have to count it. Express the mass fraction of each organic HAP you count as a value truncated to four places after the decimal point (*e.g.*, 0.3791). [40 CFR 63.3941(a)(1)(i), Approval Nos. 2071 – 2079(B)(2)(a)(1)(a)]

- (ii) Calculate the total mass fraction of organic HAP in the test material by adding up the individual organic HAP mass fractions and truncating the result to three places after the decimal point ( *e.g.*, 0.763). [40 CFR 63.3941(a)(1)(ii), Approval Nos. 2071 – 2079(B)(2)(a)(1)(b)]
  
- (b) *Method 24 (appendix A to 40 CFR part 60)*. For coatings, the permittee can use Method 24 to determine the mass fraction of nonaqueous volatile matter and use that value as a substitute for mass fraction of organic HAP. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, you may use the alternative method contained in appendix A of this permit, rather than Method 24. The permittee can use the volatile fraction that is emitted, as measured by the alternative method in appendix A of this permit, as a substitute for the mass fraction of organic HAP. [40 CFR 63.3941(a)(2), Approval Nos. 2071 – 2079(B)(2)(a)(2)]
  
- (c) *Alternative method*. The permittee can use an alternative test method for determining the mass fraction of organic HAP once the Administrator has approved it. The permittee shall follow the procedure in §63.7(f) to submit an alternative test method for approval. [40 CFR 63.3941(a)(3), Approval Nos. 2071 – 2079(B)(2)(a)(3)]
  
- (d) *Information from the supplier or manufacturer of the material*. The permittee can rely on information other than that generated by the test methods specified in Conditions I.J.2.b(1)(a-c) of this permit, such as manufacturer's formulation data, 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. For

example, if toluene (not an OSHA carcinogen) is 0.5 percent of the material by mass, you do not have to count it. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, you may rely on manufacturer's data that expressly states the organic HAP or volatile matter mass fraction emitted. If there is a disagreement between such information and results of a test conducted according to Conditions I.J.2.b(1)(a-c) of this permit, then the test method results will take precedence unless, after consultation, you demonstrate to the satisfaction of the Office of Air Resources and USEPA that the formulation data are correct. [40 CFR 63.3941(a)(4), Approval Nos. 2071 – 2079(B)(2)(a)(4)]

- (e) *Solvent blends.* Solvent blends may be listed as single components for some materials in data provided by manufacturers or suppliers. Solvent blends may contain organic HAP which must be counted toward the total organic HAP mass fraction of the materials. When test data and manufacturer's data for solvent blends are not available, the permittee can use the default values for the mass fraction of organic HAP in these solvent blends listed in Appendix C or D of this permit. If the permittee uses the tables, the permittee shall use the values in Appendix C for all solvent blends that match Appendix C entries according to the instructions for Appendix C, and the permittee may use Appendix D only if the solvent blends in the materials do not match any of the solvent blends in Appendix C and you know only whether the blend is aliphatic or aromatic. However, if the results of a Method 311 (appendix A to 40 CFR part 63) test indicate higher values than those listed on Appendix C or D of this permit, the Method 311 results will take precedence unless, after consultation, you demonstrate to the satisfaction of the Office of Air Resources and USEPA that the formulation data are correct. [40 CFR 63.3941(a)(5), Approval Nos. 2071 – 2079(B)(2)(a)(5)]

- (2) *Determine the volume fraction of coating solids for each coating.* The permittee shall determine the volume fraction of coating solids (liters (gal) of coating solids per liter (gal) of coating) for each coating used during the compliance period by a test, by information provided by the supplier or the manufacturer of the material, or by calculation, as specified in paragraphs (2)(a) through (d) of this section. If test results obtained according to

paragraph (2)(a) of this section do not agree with the information obtained under paragraph (2)(c) or (d) of this section, the test results will take precedence unless, after consultation, you demonstrate to the satisfaction of the Office of Air Resources and USEPA that the formulation data are correct. [40 CFR 63.3951(b), 40 CFR 63.3941(b), Approval Nos. 2071 – 2079(B)(2)(b)]

- (a) *ASTM Method D2697–86 (Reapproved 1998) or ASTM Method D6093–97 (Reapproved 2003).* The permittee may use ASTM Method D2697–86 (Reapproved 1998), “Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings” (incorporated by reference, see §63.14), or ASTM Method D6093–97 (Reapproved 2003), “Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer” (incorporated by reference, see §63.14), to determine the volume fraction of coating solids for each coating. Divide the nonvolatile volume percent obtained with the methods by 100 to calculate volume fraction of coating solids. [40 CFR 63.3941(b)(1), Approval Nos. 2071 – 2079(B)(2)(b)(1)]
- (b) *Alternative method.* The permittee may use an alternative test method for determining the solids content of each coating once the Administrator has approved it. The permittee must follow the procedure in 40 CFR 63.7(f) to submit an alternative test method for approval. [40 CFR 63.3941(b)(2), Approval Nos. 2071 – 2079(B)(2)(b)(2)]
- (c) *Information from the supplier or manufacturer of the material.* The permittee may obtain the volume fraction of coating solids for each coating from the supplier or manufacturer. [40 CFR 63.3941(b)(3), Approval Nos. 2071 – 2079(B)(2)(b)(3)]
- (d) *Calculation of volume fraction of coating solids.* The permittee may determine the volume fraction of coating solids using Equation 4 of this section:

$$V_s = 1 - \frac{m_{\text{volatiles}}}{D_{\text{avg}}} \quad \text{(Equation 4)}$$

Where:

$V_s$  = Volume fraction of coating solids, liters (gal) coating solids per liter (gal) coating.

$m_{\text{volatiles}}$  = Total volatile matter content of the coating, including HAP, volatile organic compounds (VOC), water, and exempt compounds, determined according to Method 24 in appendix A of 40 CFR part 60, grams volatile matter per liter coating.

$D_{\text{avg}}$  = Average density of volatile matter in the coating, grams volatile matter per liter volatile matter, determined from test results using ASTM Method D1475-98, "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products" (incorporated by reference, see §63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM Method D1475-98 test results and other information sources, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of the Office of Air Resources and USEPA that the formulation data are correct. [40 CFR 63.3941(b)(4), Approval Nos. 2071 – 2079(B)(2)(b)(4)]

- (3) *Determine the density of each material.* The permittee shall determine the density of each liquid coating, thinner and/or other additive, and cleaning material used during each month from test results using ASTM Method D1475-98, "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products" (incorporated by reference, see §63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If you are including powder coatings in the compliance determination, determine the density of powder coatings, using ASTM Method D5965-02, "Standard Test Methods for Specific Gravity of Coating Powders" (incorporated by reference, see §63.14), or information from the supplier. If there is disagreement between ASTM Method D1475-98 or ASTM Method D5965-02 test results and other such information sources, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of the Office of Air Resources and USUSEPA that the formulation data are correct. If you purchase materials or monitor consumption by weight instead of volume, you do not need to determine material density. Instead, you may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, 1C, and 2 of this section. [40 CFR 63.3951(c), Approval Nos. 2071 – 2079(B)(2)(c)]

- (4) *Determine the volume of each material used.* The permittee shall determine the volume (liters) of each coating, thinner and/or other additive, and cleaning material used during each month by measurement or usage records. If you purchase materials or monitor consumption by weight instead of volume, you do not need to determine the volume of each material used. Instead, you may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, and 1C of this section. [40 CFR 63.3951(d), Approval Nos. 2071 – 2079(B)(2)(d)]
- (5) *Calculate the mass of organic HAP emissions.* The mass of organic HAP emissions is the combined mass of organic HAP contained in all coatings, thinners and/or other additives, and cleaning materials used during each month minus the organic HAP in certain waste materials. Calculate the mass of organic HAP emissions using Equation 1 of this permit. [40 CFR 63.3951(e), Approval Nos. 2071 – 2079(B)(2)(e)]

$$H_e = A + B + C - R_w \quad (\text{Equation 1})$$

Where:

$H_e$  = Total mass of organic HAP emissions during the month, kg.

A = Total mass of organic HAP in the coatings used during the month, kg, as calculated in Equation 1A of this section.

B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg, as calculated in Equation 1B of this section.

C = Total mass of organic HAP in the cleaning materials used during the month, kg, as calculated in Equation 1C of this section.

$R_w$  = Total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the month, kg, determined according to Condition I.J.2.b(5)(d) of this permit. (You may assign a value of zero to  $R_w$  if you do not wish to use this allowance.)

- (a) Calculate the kg organic HAP in the coatings used during the month using Equation 1A of this permit: [40 CFR 63.3951(e)(1), Approval Nos. 2071 – 2079(B)(2)(e)(1)]

$$A = \sum_{i=1}^m (Vol_{c,i})(D_{c,i})(W_{c,i}) \quad (\text{Equation 1A})$$

Where:

A = Total mass of organic HAP in the coatings used during the month, kg.

Vol<sub>c,i</sub> = Total volume of coating, i, used during the month, liters.

D<sub>c,i</sub> = Density of coating, i, kg coating per liter coating.

W<sub>c,i</sub> = Mass fraction of organic HAP in coating, i, kg organic HAP per kg coating. For reactive adhesives as defined in §63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A of this permit.

m = Number of different coatings used during the month.

- (b) Calculate the kg of organic HAP in the thinners and/or other additives used during the month using Equation 1B of this permit: [40 CFR 63.3951(e)(2), Approval Nos. 2071 – 2079(B)(2)(e)(2)]

$$B = \sum_{j=1}^n (Vol_{t,j})(D_{t,j})(W_{t,j}) \quad (\text{Equation 1B})$$

Where:

B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg.

Vol<sub>t,j</sub> = Total volume of thinner and/or other additive, j, used during the month, liters.

D<sub>t,j</sub> = Density of thinner and/or other additive, j, kg per liter.

W<sub>t,j</sub> = Mass fraction of organic HAP in thinner and/or other additive, j, kg organic HAP per kg thinner and/or other additive. For reactive adhesives as defined in

§63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A of this permit.

n = Number of different thinners and/or other additives used during the month.

- (c) Calculate the kg organic HAP in the cleaning materials used during the month using Equation 1C of this permit: [40 CFR 63.3951(e)(3), Approval Nos. 2071 – 2079(B)(2)(e)(3)]

$$C = \sum_{k=1}^p (Vol_{s,k})(D_{s,k})(W_{s,k}) \quad \text{(Equation 1C)}$$

Where:

C = Total mass of organic HAP in the cleaning materials used during the month, kg.

Vol<sub>s,k</sub> = Total volume of cleaning material, k, used during the month, liters.

D<sub>s,k</sub> = Density of cleaning material, k, kg per liter.

W<sub>s,k</sub> = Mass fraction of organic HAP in cleaning material, k, kg organic HAP per kg material.

p = Number of different cleaning materials used during the month.

- (d) If the permittee chooses to account for the mass of organic HAP contained in waste materials sent or designated for shipment to a hazardous waste TSDF in Equation 1 of this permit, then you must determine the mass according to the following requirements. [40 CFR 63.3951(e)(4), Approval Nos. 2071 – 2079(B)(2)(e)(4)]

- (i) The permittee may only include waste materials in the determination that are generated by coating operations for which you use Equation 1 of this permit and that will be treated or disposed of by a facility that is regulated as a TSDF under 40 CFR part 262, 264, 265, or 266. The TSDF may be either off-site or on-site. The permittee may not include

organic HAP contained in wastewater. [40 CFR 63.3951(e)(4)(i), Approval Nos. 2071 – 2079(B)(2)(e)(1)(a)]

- (ii) The permittee must determine either the amount of the waste materials sent to a TSDF during the month or the amount collected and stored during the month and designated for future transport to a TSDF. Do not include in your determination any waste materials sent to a TSDF during a month if you have already included them in the amount collected and stored during that month or a previous month. [40 CFR 63.3951(e)(4)(ii), Approval Nos. 2071 – 2079(B)(2)(e)(1)(b)]
  - (iii) Determine the total mass of organic HAP contained in the waste materials specified in Condition I.J.2.b(5)(d)(ii) of this permit. [40 CFR 63.3951(e)(4)(iii), Approval Nos. 2071 – 2079(B)(2)(e)(1)(c)]
  - (iv) The permittee must document the methodology used to determine the amount of waste materials and the total mass of organic HAP they contain, as required in Condition I.J.3.a(13) of this permit. If waste manifests include this information, they may be used as part of the documentation of the amount of waste materials and mass of organic HAP contained in them. [40 CFR 63.3951(e)(4)(iv), Approval Nos. 2071 – 2079(B)(2)(e)(1)(d)]
- (6) *Calculate the total volume of coating solids used.* The permittee shall determine the total volume of coating solids used, liters, which is the combined volume of coating solids for all the coatings used during each month, using Equation 2 of this permit: [40 CFR 63.3951(f), Approval Nos. 2071 – 2079(B)(2)(f)]

$$V_{st} = \sum_{i=1}^m (Vol_{c,i})(V_{s,i}) \quad \text{(Equation 2)}$$

Where:

$V_{st}$  = Total volume of coating solids used during the month, liters.

$Vol_{c,i}$  = Total volume of coating, i, used during the month, liters.

$V_{s,i}$  = Volume fraction of coating solids for coating,  $i$ , liter solids per liter coating, determined according to §63.3941(b).

$m$  = Number of coatings used during the month.

- (7) Calculate the organic HAP emission rate. Calculate the organic HAP emission rate for the compliance period, kg (lb) organic HAP emitted per liter (gal) coating solids used, using Equation 3 of this permit: [40 CFR 63.3951(g), Approval Nos. 2071 – 2079(B)(2)(g)]

$$H_{yr} = \frac{\sum_{y=1}^n H_e}{\sum_{y=1}^n V_{st}} \quad (\text{Equation 3})$$

Where:

$H_{yr}$  = Average organic HAP emission rate for the compliance period, kg organic HAP emitted per liter coating solids used.

$H_e$  = Total mass of organic HAP emissions from all materials used during month,  $y$ , kg, as calculated by Equation 1 of this section.

$V_{st}$  = Total volume of coating solids used during month,  $y$ , liters, as calculated by Equation 2 of this section.

$y$  = Identifier for months.

$n$  = Number of full or partial months in the compliance period (for the initial compliance period,  $n$  equals 12 if the compliance date falls on the first day of a month; otherwise  $n$  equals 13; for all following compliance periods,  $n$  equals 12).

- c. If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit specified in Condition I.J.1b of this permit, this is a deviation from the emission limitation for that compliance period and must be reported as specified in I.J.4.d(7) of this permit. [40 CFR 63.3952(b), Approval Nos. 2071 – 2079(B)(3)]
- d. As part of each semiannual compliance report required by Condition I.J.4.c of this permit, the permittee must identify the coating operation(s) for which you used the emission rate without add-on controls option. If

there were no deviations from the emission limitations, the permittee shall submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit specified in I.J.1.b of this permit, determined according to Conditions I.J.2.b of this permit. [40 CFR 63.3952(c), Approval Nos. 2071 – 2079(B)(4)]

- e. You must maintain records as specified in Condition I.J.3.a(4-16) and II.Z.2 of this permit. [40 CFR 63.3952(d), Approval Nos. 2071 – 2079(B)(5)]
- f. Compliance with the emission limitations contained in Condition I.J.1.c of this permit shall be demonstrated based on mass balance calculations based on records of material usage and vendor MSDSs. [Approval Nos. 2071 – 2079(B)(6)]

### **3. Recordkeeping Requirements**

- a. The permittee shall collect, record and maintain the following information each month for emission units P042-P045: [29.6.3(b), 19.5.3(c), Approval Nos. 2071 – 2079(C)(1)]
  - (1) The name and identification number of each coating, as applied, on emission units P042-P045; [29.6.3(b), 19.5.3(c)(1), Approval Nos. 2071 – 2079(C)(1)(a)]
  - (2) The mass of VOC per volume of each coating (excluding water), as applied, used each month on emission units P042-P045; [29.6.3(b), 19.5.3(c)(2), Approval Nos. 2071 – 2079(C)(1)(b)]
  - (3) The type and amount of solvent used for diluents and cleanup operations. [29.6.3(b), 19.5.3(c)(3), Approval Nos. 2071 – 2079(C)(1)(e)]
  - (4) A copy of each notification and report that is submitted to comply with 40 CFR 63 Subpart M, and the documentation supporting each notification and report. [40 CFR 63.3930(a), Approval Nos. 2071 – 2079(C)(1)(f)]
  - (5) A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data or test data used to determine the mass fraction of organic HAP and density for each coating, thinner and/or other additive, and cleaning material, and volume fraction of coating solids. If the permittee

conducted testing to determine mass fraction of organic HAP, density, or volume fraction of coating solids, the permittee shall keep a copy of the complete test report. If the permittee used information provided by the manufacturer or supplier of the material that was based on testing, the permittee shall keep the summary sheet of results provided by the manufacturer or supplier. The permittee is not required to obtain the test report or other supporting documentation from the manufacturer or supplier. [40 CFR 63.3930(b), Approval Nos. 2071 – 2079(C)(1)(g)]

- (6) A record of the coating operations on which each compliance option was used and the time periods (beginning and ending dates and times) for each option used. [40 CFR 63.3930(c)(1), Approval Nos. 2071 – 2079(C)(1)(h)]
- (7) A record of the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1, 1A through 1C, and 2 of this section; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to §63.3951(e)(4); the calculation of the total volume of coating solids used each month using Equation 2 of this section; and the calculation of each 12-month organic HAP emission rate using Equation 3 of this section. [40 CFR 63.3930(c)(3), Approval Nos. 2071 – 2079(C)(1)(i)]
- (8) A record of the name and volume of each coating, thinner and/or other additive, and cleaning material used during each compliance period. [40 CFR 63.3930(d), Approval Nos. 2071 – 2079(C)(1)(j)]
- (9) A record of the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each compliance period unless the material is tracked by weight. [40 CFR 63.3930(e), Approval Nos. 2071 – 2079(C)(1)(k)]
- (10) A record of the volume fraction of coating solids for each coating used during each compliance period. [40 CFR 63.3930(f), Approval Nos. 2071 – 2079(C)(1)(l)]
- (11) The density for each coating, thinner and/or other additive, and cleaning material used during each compliance period. [40 CFR 63.3930(g), Approval Nos. 2071 – 2079(C)(1)(m)]
- (12) A record of the date, time, and duration of each deviation. [40 CFR 63.3930(j), Approval Nos. 2071 – 2079(C)(1)(n)]

- (13) If an allowance is used in Equation 1 of this section for organic HAP contained in waste materials sent to or designated for shipment to a treatment, storage, and disposal facility (TSDF) according to Condition I.J.2.b(5)(d) of this permit, the permittee shall keep the following records: [40 CFR 63.3930(h), Approval Nos. 2071 – 2079(C)(1)(o)]
- (a) The name and address of each TSDF to which the waste materials was sent for which an allowance is used in Equation 1 of this section; a statement of which subparts under 40 CFR parts 262, 264, 265, and 266 apply to the facility; and the date of each shipment. [40 CFR 63.3930(h)(1) Approval Nos. 2071 – 2079(C)(1)(o)(1)]
  - (b) Identification of the coating operations producing waste materials included in each shipment and the month or months in which an allowance was used for these materials in Equation 1 this section. [40 CFR 63.3930(h)(2), Approval Nos. 2071 – 2079(C)(1)(o)(2)]
  - (c) The methodology used in accordance with Condition I.J.2.b(5)(d) of this permit, to determine the total amount of waste materials sent to or the amount collected, stored, and designated for transport to a TSDF each month; and the methodology to determine the mass of organic HAP contained in these waste materials. This must include the sources for all data used in the determination, methods used to generate the data, frequency of testing or monitoring, and supporting calculations and documentation, including the waste manifest for each shipment. [40 CFR 63.3930(h)(3), Approval Nos. 2071 – 2079(C)(1)(o)(3)]
- (14) The mass of HAP per volume of coating solids, as applied, used each month on emission units P042-P045. [Approval Nos. 2071 – 2079(C)(1)(c)]
- (15) The mass of any listed air toxic contaminant per volume of coating, as applied, used each month on emission units P042-P045. [Approval Nos. 2071 – 2079(C)(1)(d)]
- b. The permittee shall, on a monthly basis, no later than 15 business days after the first of the month, determine the total quantity of ethylene glycol monobutyl ether discharged to the atmosphere from emission units P042-P045. The permittee shall keep records of this determination and provide such records to the Office of Air Resources upon request. [Approval Nos. 2071 – 2079(C)(2)]

#### 4. Reporting Requirements

- a. The permittee shall notify the Director of any record showing use of any non-complying coatings by sending a copy of such record to the Director within 30 calendar days following that use. [19.5.3(d)(1)]
- b. The permittee, before changing the method of compliance from complying coatings to daily weighted averaging or control devices, shall submit a Compliance Certification Plan to the Office of Air Resources for review and approval. Such plan shall include: [19.5.2(a), 19.5.4(a), Approval Nos. 2071 – 2079(C)(6)]
  - (1) The name and location of the facility; [19.5.2(a)(1), 19.5.4(a)(1), Approval Nos. 2071 – 2079(C)(6)(a)]
  - (2) The name, address, telephone number of the person responsible for the facility; [19.5.2(a)(2), 19.5.4(a)(2), Approval Nos. 2071 – 2079(C)(6)(b)]
  - (3) The name and identification number of each coating, as applied, on each coating line or operation; [19.5.2(a)(4), 19.5.4(a)(4), Approval Nos. 2071 – 2079(C)(6)(c)]
  - (4) For daily-weighted averaging:
    - (a) The instrument or method by which the permittee will accurately measure or calculate the volume of each coating (excluding water), as applied, used each day on each emission unit; [19.5.2(a)(5), Approval Nos. 2071 – 2079(C)(6)(d)(1)]
    - (b) The method by which the permittee will create and maintain records each day as required by Subsection 19.5.2(c) of APC Regulation No. 19; and [19.5.2(a)(6), Approval Nos. 2071 – 2079(C)(6)(d)(2)]
    - (c) The time at which the facility's day begins if a time other than midnight local time is used to define a day. [19.5.2(a)(7), Approval Nos. 2071 – 2079(C)(6)(d)(3)]
  - (5) For control devices:
    - (a) The name and identification number of each coating, as applied, on each coating line or operation; [19.5.4(a)(4),

Approval Nos. 2071 – 2079(C)(6)(e)(1)]

- (b) The mass of VOC per volume coating solids applied and the gallons of solids of each coating applied; [19.5.4(a)(5), Approval Nos. 2071 – 2079(C)(6)(e)(2)]
- (c) Identification of each control device which will be or has been installed and date of installation; [19.5.4(a)(6), Approval Nos. 2071 – 2079(C)(6)(e)(3)]
- (d) Identification of coating lines which will be controlled by each control device and documentation of expected capture and destruction efficiency or reduction efficiency; [19.5.4(a)(7), Approval Nos. 2071 – 2079(C)(6)(e)(4)]
- (e) Control device design information; [19.5.4(a)(8), Approval Nos. 2071 – 2079(C)(6)(e)(5)]
  - (i) For thermal incinerators-design combustion temperature (°F) [19.5.4(a)(8)(i), Approval Nos. 2071 – 2079(C)(6)(e)(5)(a)];
  - (ii) For catalytic incinerators - design exhaust gas temperature (°F), design temperature rise across catalyst bed (°F), anticipated frequency of catalyst change, and catalyst changes; [19.5.4(a)(8)(ii), Nos. 2071 – 2079(C)(6)(e)(5)(b)]
  - (iii) For condensers - design inlet temperature of cooling medium (°F), design exhaust gas temperature (°F); [19.5.4(a)(8)(iii), Nos. 2071 – 2079(C)(6)(e)(5)(c)]
  - (iv) For carbon adsorbers - design pressure drop across the adsorber, VOC concentration at breakthrough. [19.5.4(a)(8)(iv), Nos. 2071 – 2079(C)(6)(e)(5)(d)]
- (6) Information describing the effect of the change on the emissions of any air contaminant. [9.2.1, Nos. 2071 – 2079(C)(6)(f)]
- (7) A demonstration that emissions from the stationary source will not cause an increase in the ground level ambient concentration at or beyond the property line in excess of that allowed by APC Regulation No. 22. [22.3.3(a), Nos. 2071 – 2079(C)(6)(g)]

- c. The permittee shall submit semiannual compliance reports to the Office of Air Resources and USEPA. [40 CFR 63.3920(a)(1)(i), Approval Nos. 2071 – 2079(C)(7)]
- (1) Each compliance report must cover the applicable semiannual reporting period from January 1 through June 30 or July 1 through December 31. [40 CFR 63.3920(a)(1)(ii), 40 CFR 63.3920(a)(1)(iv), Approval Nos. 2071 – 2079(C)(7)(a)]
  - (2) Each compliance report must be postmarked or delivered no later than 45 calendar days after the end of the semiannual reporting period. [40 CFR 63.3920(a)(1)(iii), 29.6.4(b)(1), 40 CFR 63.3920(a)(1)(iv), 40 CFR 63.3920(a)(2), Approval Nos. 2071 – 2079(C)(7)(b)]
- d. The compliance report must include the following information: [40 CFR 63.3920(a)(3), Approval Nos. 2071 – 2079(C)(8)]
- (1) Company name and address. [40 CFR 63.3920(a)(3)(i), Approval Nos. 2071 – 2079(C)(8)(a)]
  - (2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. [40 CFR 63.3920(a)(3)(ii), Approval Nos. 2071 – 2079(C)(8)(b)]
  - (3) Date of report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31. Note that the information reported for each of the 6 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation. [40 CFR 63.3920(a)(3)(iii), Approval Nos. 2071 – 2079(C)(8)(c)]
  - (4) Identification of the compliance option used on P042-P045 during the reporting period. If you switched between compliance options during the reporting period, you must report the beginning and ending dates for each option you used. [40 CFR 63.3920(a)(3)(iv), Approval Nos. 2071 – 2079(C)(8)(d)]
  - (5) The calculation results for each rolling 12-month organic HAP emission rate during the 6-month reporting period. [40 CFR 63.3920(a)(3)(v), Approval Nos. 2071 – 2079(C)(8)(e)]
  - (6) If there were no deviations from the emission limitations in specified in Condition I.J.1.b of this permit, the semiannual compliance report must include a statement that there were no

deviations from the emission limitations during the reporting period. [40 CFR 63.3920(a)(4), Approval Nos. 2071 – 2079(C)(8)(f)]

- (7) If there was a deviation from the applicable emission limit specified in Condition I.J.1.b of this permit, the semiannual compliance report must contain the following information: [40 CFR 63.3920(a)(6), Approval Nos. 2071 – 2079(C)(8)(g)]
- (a) The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit specified in Condition I.J.1.b of this permit, and [40 CFR 63.3920(a)(6)(i), Approval Nos. 2071 – 2079(C)(8)(g)(1)]
  - (b) The calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred. The permittee shall submit the calculations for Equations 1, 1A through 1C, 2, and 3 of this section; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to Condition I.J.2.b(5)(d) of this permit. The permittee is not required to submit background data supporting these calculations (*e.g.*, information provided by materials suppliers or manufacturers, or test reports), and [40 CFR 63.3920(a)(6)(ii), Approval Nos. 2071 – 2079(C)(8)(g)(2)]
  - (c) A statement of the cause of each deviation. [40 CFR 63.3920(a)(6)(iii), Approval Nos. 2071 – 2079(C)(8)(g)(3)]
- e. The permittee shall notify the Office of Air Resources in writing, within 15 days, whenever the total quantity of ethylene glycol monobutyl ether discharged to the atmosphere from emission units P042-P045 exceeds: [Approval Nos. 2071 – 2079(C)(3)(a-b)]
- (1) 1.4 pounds per hour; or,
  - (2) 11,951 pounds in any consecutive 12-month period.
- f. The permittee shall notify the Office of Air Resources of any anticipated noncompliance with the terms of Section I.J of this permit or any other applicable air pollution control rules and regulations. [Approval Nos. 2071 – 2079(C)(4)]

## 5. Other Requirements

- a. To the extent consistent with the requirements of Section I.J of this permit and applicable federal and state laws, the facility shall be operated in accordance with the representation of the facility in the permit application. [Approval Nos. 2071 – 2079(D)(1)]
- b. The facility is subject to the requirements of 40 CFR 63.1-15, Subpart A, “General Provisions” (as indicated in Table 2 to Subpart Mmmm of 40 CFR 63) and 40 CFR 63, Subpart Mmmm, National Emission Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products. Compliance with all applicable provisions therein is required, unless otherwise stated in this permit. [40 CFR 63.3901, Approval Nos. 2071 – 2079(D)(2)]
- c. At all times, including periods of startup, shutdown and malfunction, the permittee shall, to the extent practicable, maintain and operate the facility in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Office of Air Resources, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [Approval Nos. 2071 – 2079(D)(4)]
- d. The emission and dispersion characteristics of all sources of any listed toxic air contaminant at the facility shall be consistent with the parameters used in the air quality modeling to demonstrate that the emissions do not cause an impact, at or beyond the property line of the facility, which exceeds the Acceptable Ambient Level for that substance. The Office of Air Resources, in its sole discretion, may reopen this minor source permit if it determines that the emission and dispersion characteristics have changed significantly and that emission limitations must be revised and/or added to this permit to ensure compliance with Air Pollution Control Regulation No. 22 [Approval Nos. 2071 – 2079(D)(5)]

## **K. Requirements for Emission Units P071 – P077**

The following requirements are applicable to:

- Emission units P071 – P074, which consists of four (4) Bright Basic wire draw machines that convert steel rods into finer diameter wire. Emission units P071 – P074 are associated with air pollution control devices C002 – C005.
- Emission units P075 – P077, which consists for three (3) Rod Breakdown wire draw

machines. These units convert steel rods into finer diameter wire. Emission units P075 – P077 are associated with air pollution control device C006.

- Air pollution control device C002, C003 and C004 each of which is a Torit dust collector Model No. DFT 3-12.
- Air pollution control device C005 which is a Torit dust collector Model No. DFT 4-16.
- Air pollution control device C006 which is a Torit dust collectors Model No. DFT 4-112.

**1. Emission Limitations**

a. Hazardous Air Pollutant (HAP) and Air Toxic Emission Limitations

The emissions of listed toxic air contaminants discharged to the atmosphere from P071 – P077 shall not exceed the limitations in Table 1 of this Section. These limitations were established to ensure that emissions from this facility do not exceed any of the Acceptable Ambient Levels (AALs) listed in Air Pollution Control Regulation No. 22. The limitations shown in pounds per year are calculated on a 12-month rolling average basis. [Approval Nos. 2061 – 2067(A)(1)]

**Table 1. Emission Limitations**

Pollutant	Limitation		
	pound/hour	pound/day	pound/year
Manganese		0.098	35.7
Vanadium	8.12E-05		
Sulfates <sup>1</sup>	0.029		252.6

<sup>1</sup> Includes ammonium bisulfate [(NH<sub>4</sub>) HSO<sub>4</sub>, CAS 7803-63-6], ammonium sulfate [(NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>, CAS7783-20-2], ferric sulfate [Fe(SO<sub>4</sub>)<sub>3</sub>, CAS 10028-22-5] and sodium sulfate [Na<sub>2</sub>SO<sub>4</sub>, CAS 7757-82-6]

## 2. Operating Requirements

- a. Particulate matter generated from P071, P072, P073, P074, P075, P076 and/or P077 shall be captured, contained, and routed to a dust collector for treatment prior to discharge. [Approval Nos. 2061 – 2067(B)(1)]
- b. The filter cartridges used in C002, C003, C004, C005 and/or C006 shall be Torit-Built<sup>®</sup> Ultra-Web filters or its equivalent in terms of filtration efficiency. [Approval Nos. 2061 – 2067(B)(2)]
- c. All reasonable precautions shall be taken to prevent visible fugitive emissions from P071 – P077. [Approval Nos. 2061 – 2067(B)(3)]
- d. C002 – C006 shall be operated according to good engineering practice and design specifications whenever P071 – P077 are emitting air contaminants. [Approval Nos. 2061 – 2067(B)(4) 16.2]
- e. All access doors and hatches on the shrouded enclosures shall be closed during routine operation to maintain a negative pressure within the enclosures. Brief, occasional openings of doors and hatches to allow for access and inspection are acceptable. [Approval Nos. 2061 – 2067(B)(5)]
- f. An air intake plenum located above emission units P071 – P077 shall be operated whenever emission units P071 – P077 are in operation, and shall draw workroom air into C006. [Approval Nos. 2061 – 2067(B)(6)]
- g. The overhead roll-up doors and interior passageways to the manufacturing room containing emission units P071 – P077 shall be equipped with plastic stripping and/or laminar flow blowers. All doorways shall be closed when not in use. [Approval Nos. 2061 – 2067(B)(7)]
- h. There shall be no bypassing of C002, C003, C004, C005 and/or C006 at any time. [Approval Nos. 2061 – 2067(E)(2)]
- i. Malfunction means a sudden and unavoidable breakdown of process or control equipment. In the case of a malfunction of C002, C003, C004, C005 and/or C006 all reasonable measures shall be taken to assure resumption of the designed control efficiency as soon as possible. In the event that the malfunction of C002, C003, C004, C005 and/or C006 is expected or may reasonably be expected to continue for longer than 24 hours and if the permittee wishes to operate P071 – P077 at any time beyond that period, the Director shall be petitioned for a variance under Section 23-23-15 of the General Laws of Rhode Island, as amended. Such petition shall include, but is not limited to, the following: [Approval Nos. 2061 – 2067(F)(1), 16.3]

- (1) Identification of the specific air pollution control system and source on which it is installed; [Approval Nos. 2061 – 2067(F)(1)(a), 16.3(a)]
  - (2) The expected period of time that the air pollution control system will be malfunctioning or out of service; [Approval Nos. 2061 – 2067(F)(1)(b), 16.3(b)]
  - (3) The nature and quantity of air contaminants likely to be emitted during said period; [Approval Nos. 2061 – 2067(F)(1)(c), 16.3(c)]
  - (4) Measures that will be taken to minimize the length of said period;
  - (5) The reasons that it would be impossible or impractical to cease the source operation during said period. [Approval Nos. 2061 – 2067(F)(1)(a), 16.3(d)]
- j. The permittee may seek to establish that a malfunction of any air pollution control system that would result in noncompliance with any of the terms of this permit or any other applicable air pollution control rules and regulations was due to unavoidable increases in emissions attributable to the malfunction. To do so, the owner/operator must demonstrate to the Office of Air Resources that: [Approval Nos. 2061 – 2067(F)(2)]
- (1) The malfunction was not attributable to improperly designed air pollution control equipment, lack of preventative maintenance, careless or improper operation, or operator error; [Approval Nos. 2061 – 2067(F)(2)(a)]
  - (2) The malfunction was not part of a recurring pattern indicative of inadequate design, operation, or maintenance; [Approval Nos. 2061 – 2067(F)(2)(b)]
  - (3) Repairs were performed in an expeditious fashion. Off-shift labor and overtime should be utilized, to the extent practicable, to ensure that such repairs were completed as expeditiously as practicable. [Approval Nos. 2061 – 2067(F)(2)(c)]
  - (4) All possible steps were taken to minimize emissions during the period of time that the repairs were performed. [Approval Nos. 2061 – 2067(F)(2)(d)]
  - (5) Emissions during the period of time that the repairs were performed will not: [Approval Nos. 2061 – 2067(F)(2)(e)]

- (i) Cause an increase in the ground level ambient concentration at or beyond the property line in excess of that allowed by Air Pollution Control Regulation No. 22 and any Calculated Acceptable Ambient Levels; and [Approval Nos. 2061 – 2067(F)(2)(e)(1)]
  - (ii) Cause or contribute to air pollution in violation of any applicable state or national ambient air quality standard. [Approval Nos. 2061 – 2067(F)(2)(e)(2)]
- (6) The reasons that it would be impossible or impractical to cease the source operation during said period. [Approval Nos. 2061 – 2067(F)(2)(f)]
- (7) The permittee's action in response to the excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence. [Approval Nos. 2061 – 2067(F)(2)(g)]

This demonstration must be provided to the Office of Air Resources, in writing, within two working days of the time when the malfunction occurred and contain a description of the malfunction, any steps taken to minimize emissions and corrective actions taken. [Approval Nos. 2061 – 2067(F)(2)]

The permittee shall have the burden of proof in seeking to establish that noncompliance was due to unavoidable increases in emissions attributable to the malfunction. [Approval Nos. 2061 – 2067(F)(2)]

### **3. Monitoring Requirements**

- a. The pressure drop across C002, C003, C004, C005 and/or C006 shall be monitored continuously and checked a minimum of once per day and the date, time and measurement shall be recorded. [Approval Nos. 2061 – 2067(C)(1)]
- b. On a quarterly basis, the permittee shall obtain a composite sample of the dust captured by C002 – C006 that is collected in receiving drums and analyze the dust for the three toxic air contaminants listed in Table 1 of this Section. Upon consultation with and approval by the Office of Air Resources, the frequency of analysis of the dust may be lessened to semi-annually based on analysis of the previous year's analytical results. [Approval Nos. 2061 – 2067(C)(2)]
- c. The permittee shall determine the quantity of dust captured by C002, C003, C004, C005 and/or C006 that is collected in receiving drums on a monthly basis. [Approval Nos. 2061 – 2067(C)(3)]

#### 4. Recordkeeping Requirements

- a. The permittee shall maintain records of the analytical results of composite samples of dust captured by C002 - C006. [Approval Nos. 2061 – 2067(D)(1)]
- b. The permittee shall maintain records of the quantity of dust captured by C002, C003, C004, C005 and/or C006. [Approval Nos. 2061 – 2067(D)(2)]
- c. The permittee shall maintain records of the quantity of steel rod processed for P071, P072, P073 and P074 and the quantity of steel rod processed for P075, P076 and P077 on a monthly basis. [Approval Nos. 2061 – 2067(D)(3)]
- d. The permittee shall maintain records of the daily pressure drop measurement of C002, C003, C004, C005 and/or C006. [Approval Nos. 2061 – 2067(D)(4)]
- e. The permittee shall calculate the total quantity of each listed toxic air contaminant in Table 1 of this Section discharged to the atmosphere from P071 – P077. The permittee shall keep records of this determination and provide such records to the Office of Air Resources upon request. [Approval Nos. 2061 – 2067(D)(6)]

Emissions of listed toxic air contaminants from the P071 – P077 shall be calculated based on a mass balance calculation using the overall dust collection system control efficiency and analysis of a representative composite sample of the dust captured by C002 – C006. As part of the calculation the permittee shall determine that the amount of dust captured during the representative time period correlates to the amount of steel rod processed to document that the dust collection system is operating properly and capturing the expected amount of particulate matter generated by P071 – P077.

- (1) For pollutants with a pound/hour or pound/day limitation – calculate emissions on a monthly basis, no later than 10 days after the first of the month, by back-calculation using the most recent records of analytical results and quantity of dust collected. [Approval Nos. 2061 – 2067(D)(6)(a)]

- (2) For pollutants with a pound/year limitation – calculate emissions on a monthly basis, no later than 10 days after the first of the month, using the most recent records of analytical results and quantity of dust collected. Monthly and 12-month rolling averages shall be calculated and used for comparison with emission limitations. [Approval Nos. 2061 – 2067(D)(6)(b)]

## 5. Reporting Requirements

- a. The permittee shall notify the Office of Air Resources in writing whenever the total quantity of a listed toxic air contaminant, discharged to the atmosphere from P071 – P077, exceeds the limitations in Table 1 of this Section. For the purposes of the Table 1 listed toxic air contaminants, the following notification timelines apply: [Approval Nos. 2061 – 2067(D)(7)]
  - (1) For pollutants with a pound/hour or pound/day limitation – written notification is required within 24 hours. [Approval Nos. 2061 – 2067(D)(7)(a)]
  - (2) For pollutants with a pound/year limitation – written notification is required within 15 days. [Approval Nos. 2061 – 2067(D)(7)(b)]
- b. The permittee shall notify the Office of Air Resources of any new sources of emissions of the three toxic air contaminants listed in Table 1 of this Section (excluding emissions from the combustion of fuel oil, propane or natural gas in fuel burning equipment). Any such new source shall have the approval of the Director prior to installation. [Approval Nos. 2061 – 2067(D)(8)]
- c. The permittee shall notify the Office of Air Resources of any anticipated noncompliance with the terms of Section I.K of this permit or any other air pollution control rules and regulations applicable to P071 – P077. [Approval Nos. 2061 – 2067(D)(9)]
- d. The permittee shall notify the Office of Air Resources of any record showing noncompliance with the terms of Section I.K of this permit or any other air pollution control rule or regulation applicable to the wire draw machines by sending a copy of the record to the Office of Air Resources within 30 days following the occurrence. [Approval Nos. 2061 – 2067(D)(10)]
- f. The permittee shall notify the Office of Air Resources in writing of the date of actual start-up of each of wire draw machine and each dust collector no later than fifteen (15) days after such date. [Approval Nos. 2061 – 2067(D)(5)]

## 6. Other Requirements

- a. To the extent consistent with the requirements of Section I.K. of this permit and applicable federal and state laws, the facility shall be designed, constructed and operated in accordance with the representation of the facility in the permit application. [Approval Nos. 2061 – 2067(E)(1)]
- b. At all times, including periods of startup, shutdown and malfunction, the permittee shall, to the extent practicable, maintain and operate the facility in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Office of Air Resources, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [Approval Nos. 2061 – 2067(E)(4)]
- c. The emission and dispersion characteristics of the listed toxic air contaminants in Table I of this Section shall be consistent with the parameters used in the air quality modeling to demonstrate that the emissions from the wire draw machines do not cause an impact, at or beyond the property line of the facility, which exceeds the Acceptable Ambient Level for that substance. The Office of Air Resources, in its sole discretion, may reopen this minor source permit if it determines that the emission and dispersion characteristics have changed significantly and that emission limitations must be revised and/or added to this permit to ensure compliance with Air Pollution Control Regulation No. 22. [Approval Nos. 2061 – 2067(E)(5)]

## L. Facility-wide Requirements

### 1. Emission Limitations

- a. Toluene emissions shall be limited to 3,850 pounds per day and 1,100,000 pounds per year. [Air Toxics Operating Permit Approval No. 1438/030(B)(4)] **Not Federally Enforceable**
- b. Dioctyl phthalate emissions shall be limited to 410 pounds per day and 2,330 pounds per year. [Air Toxics Operating Permit Approval No. 1438/03(B)(6)] **Not Federally Enforceable**
- c. Xylene emissions shall be limited to 10,000 pounds per year. [Air Toxics Operating Permit Approval No. 1438/03(B)(10)] **Not Federally Enforceable**

- d. Styrene emissions shall be limited to 10,000 pounds per year. [Air Toxics Operating Permit Approval No. 1438/03(B)(12)] **Not Federally Enforceable**
- e. Facility wide emissions of HAPs from organic solvent cleaning operations shall not exceed 1,500 pounds of any one (1) HAP or 4,000 pounds of any combination of HAPs per calendar month, based upon a 12 month rolling average unless a greater quantity of HAP emissions is allowed by an operating permit issued pursuant to Air Pollution Control Regulation No. 29. In no case shall emissions exceed the facility wide emission limits specified in 40 CFR Part 63.471. [36.4.17]

## 2. Operating Requirements

- a. Toluene shall be used only in painting and metal processing. [Air Toxics Operating Permit Approval No. 1438/03(B)(3)] **Not Federally Enforceable**
- b. Dioctyl phthalate shall be used only as a component in adhesives. [Air Toxics Operating Permit Approval No. 1438/03(B)(5)] **Not Federally Enforceable**
- c. Xylene shall be used only in painting and metal processing. [Air Toxics Operating Permit Approval No. 1438/03(B)(9)] **Not Federally Enforceable**
- d. Styrene shall be used only in the nail coating process. [Air Toxics Operating Permit Approval No. 1438/03(B)(11)] **Not Federally Enforceable**

## 3. Recordkeeping Requirements

- a. The permittee shall maintain the following records: [Air Toxics Operating Permit Approval No. 1438/03(C)(1)(b-e)] **Not Federally Enforceable**
  - (1) The amount of toluene-, xylene-, and styrene-containing coating material that is purchased annually,
  - (2) The amount of toluene-containing solvent that is used, on a daily basis, in the coating process,
  - (3) The amount of dioctyl phthalate-containing adhesive that is purchased annually, and
  - (4) The amount of dioctyl phthalate-containing adhesive that is used, on a daily basis, at the facility.

- b. The permittee shall estimate, on a daily basis, the amount of toluene and dioctyl phthalate that is emitted to the atmosphere. In lieu of actual daily estimates, monthly records of material used can be used to back calculate daily emissions of toluene and dioctyl phthalate. [Air Toxics Operating Permit Approval No. 1438/03(C)(2)] **Not Federally Enforceable**
- c. The permittee shall estimate, on an annual basis, the amount of toluene, dioctyl phthalate, xylene, and styrene that is emitted to the atmosphere. [Air Toxics Operating Permit Approval No. 1438/03(C)(3)] **Not Federally Enforceable**

#### **4. Reporting Requirements**

- a. The permittee shall submit the estimates of maximum daily toluene and dioctyl phthalate emissions and the annual toluene, dioctyl phthalate, xylene and styrene emissions as part of its annual air pollution inventory report. [Air Toxics Operating Permit Approval No. 1438/03(D)(1)] **Not Federally Enforceable**

## SECTION II. GENERAL CONDITIONS

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**A. Annual Emissions Fee Payment**

The permittee shall pay an annual emissions fee as established in Air Pollution Control Regulation No. 28 "Operating Permit Fees". [29.6.8(d)]

**B. Permit Renewal and Expiration**

This permit is issued for a fixed term of 5 years. 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 12 months prior to the date of permit expiration. Upon receipt of a complete and timely application for renewal, this source may continue to operate subject to final action by the Office of Air Resources on the renewal application. In such an event, the permit shield in Condition II.Y of this permit shall extend beyond the original permit term until renewal. This protection shall cease to apply if, subsequent to a completeness determination, the applicant fails to submit by the deadline specified in writing by the Office of Air Resources any additional information identified as being needed to process the application. The application for renewal shall include the current permit number, description of permit revisions and off-permit changes that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term. [29.6.8(a),29.4.2(c), 29.4.6]

**C. Transfer of Ownership or Operation**

This permit is nontransferable by the permittee. Future owners and operators must obtain a new operating permit from the Office of Air Resources. A change in ownership or operational control of this source is treated as an administrative permit amendment if no other change in this permit is necessary and provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Office of Air Resources. [29.10.1(a)(4)]

**D. Property Rights**

This permit does not convey any property rights of any sort, or any exclusive privilege. [29.6.8(c)(4)]

**E. Submissions**

1. Reports, test data, monitoring data, notifications, and requests for renewal shall be submitted to :

RIDEM - Office Air Resources  
Compliance Assurance Section  
235 Promenade St. Room 230  
Providence, RI 02908

2. Any records, compliance certifications and monitoring data required by the provisions of this permit to be submitted to USEPA shall be sent to:

USEPA Region I  
Office of Environmental Stewardship  
Director, Air Compliance Program  
Attn: Air Compliance Clerk  
One Congress St. Suite 1100 (SEA)  
Boston, MA 02114 - 2023

3. Any document submitted shall be certified as being true, accurate, and complete by a responsible official. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. [29.6.8(e)]

**F. Inspection and Entry**

1. Employees of the Office of Air Resources and its authorized representatives shall be allowed to enter this facility at all reasonable times for the purpose of:
  - a. having access to and copying at reasonable times any records that must be kept under the conditions of this permit;
  - b. inspecting at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
  - c. sampling or monitoring, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or other applicable requirements. [RIGL 23-23-5(7), 29.6.8(f)(1-4), Approval Nos. 899, 1400 - 1404(F)(4), Approval No. 1291(E)(2), Approval Nos. 1613-1641(D)(2), Approval Nos. 1925-1949(D)(3), Approval Nos. 2071-2079(D)(3), Approval Nos. 2061-2067(E)(3)]

Nothing in this condition shall limit the ability of the USEPA to inspect or enter the premises of the permittee under Section 114 or other provisions of the Clean Air Act.

**G. Compliance**

1. The permittee must comply with all conditions of this permit. Any noncompliance with a federally enforceable permit condition constitutes a violation of the Clean Air Act and is grounds for enforcement action, for permit termination, revocation and reissuance or modification, or for denial of a permit renewal application. Any noncompliance with a permit condition designated as state only enforceable constitutes a violation of state rules only and is grounds for enforcement action, for permit termination, revocation and reissuance or modification, or for denial of a permit renewal application. [29.6.8(c)(1)]
2. For each unit at the facility for which an applicable requirement becomes effective during the permit term, the permittee shall meet such requirements on a timely basis unless a more detailed schedule is expressly required by the applicable requirement. [29.6.5(a)]
3. It shall not be a defense for a 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. [29.6.8(c)(2)]

**H. Excess Emissions Due to an Emergency**

As the term is used in this condition an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of this source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes this source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error. [29.6.11(b)]

Technology-based emission limits are those established on the basis of emission reductions achievable with various control measures or process changes (e.g., a new source performance standard) rather than those established to attain a health based air quality standard.

The permittee may seek to establish that noncompliance with a technology-based emission limitation under this permit was due to an emergency. To do so, the permittee shall demonstrate the affirmative defense of emergency through properly signed, contemporaneous operating logs, or other relevant evidence that: [29.6.11(a) & 29.6.11(c)]

1. an emergency occurred and that the permittee can identify the cause(s) of the emergency; [29.6.11(c)(1)]
2. the permitted facility was at the time being properly operated; [29.6.11(c)(2)]

3. during the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards, or other requirements in this permit; and [29.6.11(c)(3)]
4. the permittee submitted notice of the emergency to the Office of Air Resources within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This notice fulfills the requirements of Condition II.AA.3 of this permit. [29.6.11(c)(4)]

The permittee shall have the burden of proof in seeking to establish the occurrence of an emergency. [29.6.11(d)]

**I. Duty to Provide Information**

The permittee shall furnish to the Office of Air Resources, within a reasonable time, any pertinent information that the Office of Air Resources may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Office of Air Resources copies of records that the permittee is required to keep by this permit, or for information claimed to be confidential, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality. [29.6.8(c)(5)]

**J. Duty to Supplement**

The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the Office of Air Resources. The permittee shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete renewal application was submitted but prior to release of a draft permit. [29.5.4]

**K. Reopening for Cause**

The Office of Air Resources will reopen and revise this permit as necessary to remedy deficiencies in the following circumstances:

1. Additional requirements under the Clean Air Act become applicable to a major source 3 or more years prior to the expiration date of this permit. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the expiration date of this permit, unless this permit or any of its terms and conditions has been extended. [29.6.13(a)]

2. The Office of Air Resources or the Administrator determines that this permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit. [29.6.13(c)]
3. The Office of Air Resources or the Administrator determines that the permit must be revised or revoked to assure compliance with the applicable requirements. [29.6.13(d)]

Reopenings shall not be initiated before a notice of intent to reopen is provided to the permittee by the Office of Air Resources at least 30 days in advance of the date that this permit is to be reopened, except that the Office of Air Resources may provide a shorter time period (but not less than 5 days) in the case of an emergency. [29.9.5(b)]

Proceedings to reopen and issue 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 shall be made as expeditiously as practicable. [29.9.5(a)]

All permit conditions remain in effect until such time as the Office of Air Resources takes final action. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [§70.6(a)(6)(iii)]

**L. Severability Clause**

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby. [29.6.8(b)]

**M. Off-Permit Changes**

1. The permittee is allowed to make certain changes that are not addressed or prohibited by this permit without a permit revision, provided that the following conditions are met: [29.11.2(a)]
  - a. Each such change shall not violate any term or condition of this permit. [29.11.2(b)]
  - b. Each change shall comply with all applicable requirements. [29.11.2(b)]
  - c. Changes under this provision may not include changes or activities subject to any requirement under Title IV or modifications under any provision of Title I of the Clean Air Act. [29.11.2(a)]

- d. Before the permit change is made, the permittee must provide contemporaneous written notice to the Office of Air Resources and the USEPA Region I, except for changes that qualify as insignificant activities in Appendix A of APC Regulation No. 29. This notice shall describe each change, including the date, and change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change. [29.11.2(c)]
  - e. The permit shield does not apply to changes made under this provision. [29.11.2(d)]
  - f. The permittee shall keep a record describing changes made at the stationary source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes, including any other data necessary to show compliance with applicable ambient air quality standards. The record shall reside at the permittee's facility. [29.11.2(e)]
2. Changes made pursuant to this provision shall not be exempt from the requirement to obtain a minor source permit pursuant to the requirements of Air Pollution Control Regulation No. 9, if applicable. [29.11.2(a)]
  3. Changes made pursuant to this provision shall be incorporated into this permit at the time of renewal. [29.11.2(f)]

**N. Section 502(b)(10) Changes**

1. The permittee is allowed to make changes within this permitted facility that contravene the specific terms of this permit without applying for a permit revision, provided the changes do not exceed the emissions allowable under this permit, whether expressed therein as a rate of emissions or in terms of total emissions and are not Title I modifications. This class of changes does not include:
  - a. changes that would violate applicable requirements; or
  - b. changes to federally-enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements. [29.11.1(a), 29.1.36]
2. The permittee shall provide written notice to the Office of Air Resources and the USEPA Region I of any change made under this provision. The notice must be received by the Office of Air Resources no later than fourteen (14) days in advance of the proposed changes. The notice shall include information describing the nature of the change, the effect of the change on the emission of any air contaminant, the scheduled completion date of the planned change and identify any permit terms or

conditions that are no longer applicable as a result of the change. The permittee shall attach each notice to its copy of this permit. [29.11.1(a)(1), 29.11.1(a)(2)]

3. The permittee shall be allowed to make such change proposed in its notice the day following the last day of the advance notice described in paragraph 2 if the Office of Air Resources has not responded nor objected to the proposed change on or before that day. [29.11.1(b)]
4. Any permit shield provided in this permit does not apply to changes made under this provision. If subsequent changes cause the permittee's operations and emissions to revert to those anticipated in this permit, the permittee resumes compliance with the terms and conditions of the permit, and has provided the Office of Air Resources and the USEPA with a minimum of fourteen (14) days advance notice of such changes in accordance with the provisions of paragraph 2, the permit shield shall be reinstated in accordance with terms and conditions stated in this permit. [29.11.1(c)]
5. Changes made pursuant to this provision shall be incorporated into the operating permit at the time of renewal. [29.11.1(d)]

**O. Emissions Trading**

No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit. [29.6.6(a)]

**P. Emission of Air Contaminants Detrimental to Person or Property**

The permittee shall not emit any air contaminant which either alone or in connection with other emissions, by reason of their concentration or duration, may be injurious to human, plant or animal life, or cause damage to property or which unreasonably interferes with the enjoyment of life or property. [7.2]

**Q. Odors**

1. The permittee shall not emit or cause to be emitted into the atmosphere any air contaminant or combination of air contaminants which creates an objectionable odor beyond the property line of this facility. [17.2]
2. A staff member of the Office of Air Resources shall determine by personal observation if an odor is objectionable, taking into account its nature, concentration, location, duration and source. [17.3]

**R. Visible Emissions**

1. Except as may be specified in other provisions of this permit, the permittee shall not

emit into the atmosphere, from any emission unit, any air contaminant, for a period or periods aggregating more than three minutes in any one hour, which is greater than or equal to 20 percent opacity. [1.2] Where the presence of uncombined water is the only reason for failure to meet this requirement, such failure shall not be a violation of this permit. [1.4]

2. Tests for determining compliance with the opacity limitations specified in this permit shall be performed per 40 CFR 60, Appendix A, Method 9. Additionally, all observers must qualify as per 40 CFR 60, Appendix A, Method 9. [1.3.1, 1.3.2]

**S. Open Fires**

It shall be unlawful for the permittee to burn any material in an open fire, except as provided in APC Regulation No. 4, Section 4.3. [4.2]

**T. Construction Permits**

It shall be unlawful for the permittee to construct, install, modify or cause the construction, installation or modification of any stationary source subject to the provisions of APC Regulation No. 9 without obtaining either a minor source permit or a major source permit from the Director. [9.2.1]

**U. Sulfur in Fuel**

1. Except as may be specified in other provisions of this permit, unless the Director declares in writing after a hearing that a shortage of low sulfur fuel exists, the permittee shall not use or store fuel oil with a sulfur content greater than 1.0% by weight, except for use with marine vessels or motor vehicles. [8.2, 8.3.6]
2. Compliance with the sulfur in fuel limitations contained in this section shall be determined by the procedures listed below or by another method deemed equivalent by the Director and USEPA: [29.6.3(a), Approval No. 1291(C)(1)]
  - a. For each shipment of fuel oil, the permittee shall obtain a certification from the fuel supplier which contains: [Approval No. 1291(C)(2)]
    - (1) For distillate fuel oil: [Approval No. 1291(C)(2)(a)]
      - (a) the name of the supplier [Approval No. 1291(C)(2)(a)(i)]
      - (b) a statement that the oil complies with the specification for fuel oil number 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396-78 "Standard Specification for Fuel Oils." [Approval No. 1291(C)(2)(a)(ii), 27.6.4(a-b)]

- (2) For residual fuel oil: [Approval No. 1291(C)(2)(b)]
  - (a) The name of the supplier, [Approval No. 1291(C)(2)(b)(i)]
  - (b) The nitrogen and sulfur content of the oil and the ASTM method used to determine the nitrogen and sulfur content of the oil, [Approval No. 1291(C)(2)(b)(iii-iv)]
  - (c) The location of the oil when the sample was drawn for analysis to determine the nitrogen and sulfur content of the oil, specifically including whether the oil was sampled as delivered to the permittee or whether the sample was drawn from oil in storage at the oil suppliers/refiners facility or another location. [Approval No. 1291(C)(2)(b)(ii), 27.6.5(a-d)]
  
- (3) For diesel fuel oil:
  - (a) the name of the supplier,
  - (b) a statement that the oil complies with the specification for diesel fuel oil grade 1-D or 2-D, as defined by the American Society for Testing and Materials in ASTM D975-03 “Standard Specification for Fuel Oils.” [29.6.3]
  
- b. As an alternative to fuel oil certification, the permittee may elect to sample the fuel oil prior to combustion. Sampling and analysis shall be conducted after each new shipment of fuel oil is received. Samples shall be collected from the fuel tank immediately after the fuel tank is filled and before any fuel oil is combusted. [27.6.6, 8.4.1(b) Approval No. 1291(C)(3), 27.6.6]
  
- c. All fuel oil must be sampled and analyzed according to ASTM methods which have the prior approval of or are required by the Office of Air Resources. [27.6.6, 8.4.1(b)]
  
- d. Copies of the fuel oil analysis sheets shall be maintained at the facility and be made accessible for review by the Office of Air Resources or designated personnel of the Office of Air Resources and the USEPA. These records shall include a certified statement, signed by a responsible official, that the records represent all of the fuel combusted during each quarter. [27.6.7, 29.6.4(a)(1)]
  
- e. The Director may require, under his supervision, the collection of fossil fuel samples for the purpose of determining compliance with the sulfur limitations in this permit. Sampling and analysis of fossil fuels under

Condition II.U.2 of this permit shall not limit the collection of samples under this condition. [8.4.3]

**V. Air Pollution Episodes**

Conditions justifying the proclamation of an air pollution alert, air pollution warning or air pollution emergency shall be deemed to exist whenever the Director determines that the accumulation of air pollutants in any place is attaining or has attained levels which could, if such levels are sustained or exceeded, lead to a substantial threat to the health of persons. If the governor declares an air pollution alert, air pollution warning or air pollution emergency, the permittee shall comply with the applicable requirements contained in APC Regulation No. 10. [10.1]

**W. Fugitive Dust**

The permittee shall not cause or permit any materials, including but not limited to sand, gravel, soil, aggregate and any other organic or inorganic solid matter capable of releasing dust, to be handled, transported, mined, quarried, stored or otherwise utilized in any way so as to cause airborne particulate matter to travel beyond the property line of the facility without taking adequate precautions to prevent particulate matter from becoming airborne. Such precaution shall be in accordance with good industrial practice as determined by the Director and/or shall be other reasonable fugitive dust prevention measures as determined by the Director. [5.3]

**X. Compliance Certifications**

1. The permittee shall submit a certification of compliance with permit terms and conditions annually. [29.6.5(c)(1)]
2. The certification shall describe the following:
  - a. the permit term or condition that is the basis of the certification; [29.6.5(c)(3)a]
  - b. the current compliance status; [29.6.5(c)(3)b]
  - c. whether compliance was continuous or intermittent; and [29.6.5(c)(3)c]
  - d. the methods used for determining compliance, currently and over the reporting period. [29.6.5(c)(3)d]
3. All compliance certifications shall be submitted to the Office of Air Resources and to the USEPA Region I. They shall be submitted within 60 days following the end of the reporting period which is the calendar year unless otherwise specified. [29.6.5(c)(4)]

4. All compliance certifications shall be certified as being true, accurate, and complete by a responsible corporate official. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. [29.6.8(e)]

**Y. Permit Shield**

1. Compliance with the terms and conditions of this permit shall be deemed compliance with all requirements applicable to the source in the following Approval Nos. 795, 1128, 899, 1400 – 1404, 1291, 1613-1641, 1925-1949, 2061-2067, 2071 – 2079, Air Toxics Operating Permit Approval No. 1438/03, 40 CFR 63 Subpart A, 40 CFR 63 Subpart T, 40 CFR Subpart MMMM and RI APC Regulations Nos. 1, 4, 5, 6, 7, 8, 9, 10, 13, 14, 16, 17, 19, 22, 27, 28, 29 and 36. [29.6.12(a)(1)]
2. The Office of Air Resources has determined that units B001 – B003, G001, G002, P008 – P070, P071 – P077, T001, T004, T005 and D001 are not subject to 3, 11, 12, 15, 20, 21, 23, 24, 25, 26, 30, 31, 32, 33, 35, 39, 41 and 43. [29.6.12(a)(2)]
3. Nothing in this permit shall alter or affect the following:
  - a. the provisions of Section 303 of the Clean Air Act, including the authority of the USEPA under that Section. [29.6.12(c)(1)]
  - b. the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [29.6.12(c)(2)]
  - c. the applicable requirements of the acid rain program consistent with Section 408 of the Clean Air Act. [29.6.12(c)(3)]
  - d. the ability of the USEPA to obtain information under Section 114 of the Act. [29.6.12(c)(4)]
4. If it is determined that this operating permit was issued based on inaccurate or incomplete information provided by the permittee, this permit shield shall be void as to the portions of this permit which are affected, directly or indirectly, by the inaccurate or incomplete information. [29.6.12(d)]

**Z. Recordkeeping**

1. The permittee shall, at the request of the Director, maintain records of and provide data on operational processes, fuel usage, raw materials, stack dimensions, exhaust gas flow rates and temperatures, emissions of air contaminants, steam or hot water generator capacities, types of equipment producing air contaminants and air pollution control systems or other data that may be necessary to determine if the facility is in compliance with air pollution control regulations. [14.2.1]

2. All records and supporting information required by this permit shall be maintained at the permittee's 2 Briggs Drive facility for a period of at least 5 years from the date of sample monitoring, measurement, report or application, and shall be made available to representatives of the Office of Air Resources and the USEPA upon request. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [14.2.1, 29.6.4(a)(2), Approval Nos. 899, 1400 - 1404(E)(11), Approval No. 1291(D)(6), Approval Nos. 1613-1641(C)(9), 63.10(b)(1), Approval Nos. 1925-1949(C)(11), 40 CFR 63.3931(a-c), Approval Nos. 2071-2079(C)(11), Approval Nos. 2061 – 2067(D)(13)]
3. The permittee shall keep records of required monitoring information that include the following:
  - a. The date, place and time of sampling or measurements; [29.6.4(a)(1)]
  - b. The date(s) analyses were performed; [29.6.4(a)(1)]
  - c. The company or entity that performed the analyses; [29.6.4(a)(1)]
  - d. The analytical techniques or methods used; [29.6.4(a)(1)]
  - e. The results of such analyses; and [29.6.4(a)(1)]
  - f. The operating conditions as existing at the time of sampling or measurement. [29.6.4(a)(1)]

**AA. Reporting**

1. The information recorded by the permittee pursuant to Condition II.Z.1 of this Section shall be summarized and reported at least annually to the Director. It shall be submitted by April 15<sup>th</sup> unless otherwise specified. [14.2.2] Information submitted pursuant to this condition will be correlated with applicable emission limitations and other applicable emissions information and will be available for public inspection. [14.2.3]
2. The permittee shall submit reports of any required monitoring for each semi annual period ending 30 June and 31 December of every calendar year. These reports shall be due to the Office of Air Resources no later than forty-five (45) days after the end of the reporting period. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with condition II.X.4. [29.6.4(b)(1)]
3. Deviations from permit conditions, including those attributable to upset conditions as defined in this permit, shall be reported, in writing, within five (5) business days of the deviation, to the Office of Air Resources. A copy of any such report shall be sent

to the USEPA Region I. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken. Each report must be certified by a responsible official consistent with Condition II.X.4. of this permit. [29.6.4(b)(2), Approval Nos. 1925-1949(C)(9), Approval Nos. 2071-2079(C)(9), Approval Nos. 2061 – 2067(D)(12)]

4. The Office of Air Resources shall be notified in writing of any planned physical change or operational change to the emissions units and control devices identified in this permit. Such notification shall include information describing the nature of the change, information describing the effect of the change on the emissions of air contaminants and the scheduled completion date of the planned change. Any change which may result in an increased emission rate of any air contaminant shall be subject to approval of the Office. [Approval No. 1128, Approval Nos. 899, 1400 - 1404(E)(10), Approval No. 1291(D)(2), Approval Nos. 1613-1641(C)(8), Air Toxics Operating Permit Approval No. 1438/03(D)(2), Approval Nos. 1925-1949(C)(10), Approval Nos. 2071-2079(C)(10), Approval Nos. 2061 – 2067(D)(11)]

**BB. Credible Evidence**

For the purpose of submitting compliance certifications or establishing whether or not the permittee has violated or is in violation of any provision of this permit, the methods used in this permit shall be used, as applicable. However, 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 applicable requirements if the appropriate performance or compliance test procedures or methods had been performed. [40 CFR 51.212(c), 51.12(c), 52.33(a)]

**CC. Emission Statements**

1. The permittee shall submit annually an emission statement which includes information for both VOC and NO<sub>x</sub> if facility wide actual emissions are 25 tons per year of either pollutant. Emission statements shall be submitted to the Office of Air Resources on April 15<sup>th</sup> of each year unless otherwise specified. The permittee may apply to the Office of Air Resources to be allowed to discontinue submitting annual emission statements if actual emissions at the facility decrease to below 10 tons per year as a result of a permanent process change. [14.3.1] The permittee shall submit an emission statement in a format approved by the Office of Air Resources. The emission statement shall contain the following information: [14.3.2]
  - a. A certification that the information contained in the emission statement is accurate and complete to the best knowledge of the certifying individual.
  - b. The full name, title, signature, date of signature, and telephone number of the certifying individual.

- c. Facility identification information, including the full name, physical location, mailing address, latitude, longitude, and four digit SIC code(s).
- d. Process data pertaining to each process emitting VOC and/or NO<sub>x</sub>, including:
  - (1) Annual and typical ozone season daily fuel use,
  - (2) Annual and typical ozone season daily process rate(s), and
  - (3) Process throughput while air pollution control equipment was not in operation.
- e. Operating data pertaining to each process emitting VOC and/or NO<sub>x</sub> during the reporting year, including:
  - (1) Percentage annual throughput,
  - (2) Average hours of operation per day during the reporting year and on a typical ozone season day,
  - (3) Average number of days of operation per week during the reporting year and during a typical ozone season week, and
  - (4) Weeks of operation during the reporting year and during the peak ozone season.
- f. Control equipment information, including:
  - (1) Specific primary and secondary control equipment for each process emitting VOC and/or NO<sub>x</sub>,
  - (2) Current overall control efficiency for each piece of control equipment (indicated by percent capture and percent destruction or removal), and
  - (3) Control equipment downtime during the reporting year and during the peak ozone season.
- g. Emissions information, including:
  - (1) Actual annual and typical ozone season daily emissions of VOC and NO<sub>x</sub> for each process. Emissions should be reported in tons per year and in pounds per day.
  - (2) A description of the emission calculation method and, if applicable, emission factor(s) used, and
  - (3) The calendar year for which emissions are reported.
- h. Any additional information required by the Director to document the facility's emission statements.

**DD. Miscellaneous Conditions**

1. This permit may be modified, revoked, reopened, reissued or terminated for cause. The filing of a request, by the permittee, for a permit modification, revocation and reissuance or termination or of a notification of planned changes or anticipated noncompliance does not release the permittee from the conditions of this permit. [29.6.8(c)(3)]
2. Any application for a permit revision need only submit information related to the proposed change. [29.4.3(c)]
3. Terms not otherwise defined in this permit shall have the meaning given to such terms in 40 CFR 63.2, the Clean Air Act as amended in 1990 or the referenced regulation as applicable.
4. Where more than one condition in this permit applies to an emission unit and/or the entire facility, the most stringent condition shall apply.

### SECTION III. SPECIAL CONDITIONS

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#### A. Ozone-depleting Substances

This section contains air pollution control requirements that are applicable to this facility, and the United States Environmental Protection Agency enforces these requirements.

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
  - a. All containers containing a class I or class II substance that is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to 40 CFR 82.106.
  - b. The placement of the required warning statement must comply with the requirements of 40 CFR 82.108.
  - c. The form of the label bearing the required warning statement must comply with the requirements of 40 CFR 82.110.
  - d. No person may modify, remove or interfere with the required warning statement except as described in 40 CFR 82.112.
2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVAC) in Subpart B:
  - a. Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices of 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 of 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.
  - d. Persons disposing of small appliances, MVACs and MVAC-like appliances (as defined in 40 CFR 82.152) must comply with recordkeeping requirements of 40 CFR 82.166.

- e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair equipment requirements of 40 CFR 82.156.
  - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
3. If the permittee manufactures, transforms, imports or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, "Production and Consumption Controls".
  4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, "Servicing of Motor Vehicle Air Conditioners".

The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo or system used on passenger buses using HCFC-22 refrigerant.
  5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, "Significant New Alternatives Policy Program".

## **B. Prevention of Accidental Releases**

This section contains air pollution control requirements that are applicable to this facility, and the United States Environmental Protection Agency enforces these requirements.

Your facility is subject to the requirements of the General Duty Clause, under 112(r)(1) of the CAA Amendments of 1990. This clause specifies that owners or operators of stationary sources producing, processing, handling or storing a chemical in any quantity listed in 40 CFR Part 68 or any other extremely hazardous substance have a general duty to identify hazards associated with these substances and to design, operate and maintain a safe facility, in order to prevent releases and to minimize the consequences of accidental releases which may occur.

## Appendix A

### Determination of Weight Volatile Matter Content and Weight Solids Content of Reactive Adhesives

#### 1.0 Applicability and Principle

1.1 *Applicability*: This method applies to the determination of weight volatile matter content and weight solids content for most one-part or multiple-part reactive adhesives. Reactive adhesives are composed, in large part, of monomers that react during the adhesive curing reaction, and, as a result, do not volatilize. The monomers become integral parts of the cured adhesive through chemical reaction. At least 70 weight percent of the system, excluding water and non-volatile solids such as fillers, react during the process. This method is not appropriate for cyanoacrylates. For cyanoacrylates, South Coast Air Quality Management District Test Method 316B should be used. This method is not appropriate for one-part moisture cure urethane adhesives or for silicone adhesives. For one-part moisture cure urethane adhesives and for silicone adhesives, USEPA Method 24 should be used.

1.2 *Principle*: One-part and multiple-part reactive adhesives undergo a reactive conversion from liquid to solid during the application and assembly process. Reactive adhesives are applied to a single surface, but then are usually quickly covered with another mating surface to achieve a bonded assembly. The monomers employed in such systems typically react and are converted to non-volatile solids. If left uncovered, as in a Method 24 (ASTM D2369) test, the reaction is inhibited by the presence of oxygen and volatile loss of the reactive components competes more heavily with the cure reaction. If this were to happen under normal use conditions, the adhesives would not provide adequate performance. This method minimizes this undesirable deterioration of the adhesive performance.

#### 2.0 Materials and Apparatus

2.1 Aluminum foil, aluminum sheet, non-leaching plastic film or non-leaching plastic sheet, approximately 3 inches by 3 inches. Precondition the foil, film, or sheet for 30 minutes in an oven at  $110 \pm 5$  degrees Celsius and store in a desiccator prior to use. Use tongs or rubber gloves or both to handle the foil, film, or sheet.

2.2 Flat, rigid support panels slightly larger than the foil, film, or sheet. Polypropylene with a minimum thickness of  $1/8$  inch is recommended for the support panels. Precondition the support panels for 30 minutes in an oven at  $110 \pm 5$  degrees Celsius and store in a desiccator prior to use. Use tongs or rubber gloves or both to handle the support panels.

2.3 Aluminum spacers,  $1/8$  inch thick. Precondition the spacers for 30 minutes in an oven at  $110 \pm 5$  degrees Celsius and store in a desiccator prior to use. Use tongs or rubber gloves or both to handle the spacers.

2.4 Forced draft oven, type IIA or IIB as specified in ASTM E145–94 (Reapproved 2001), “Standard Specification for Gravity-Convection and Forced-Ventilation Ovens” (incorporated by reference, see §63.14).

2.5 Electronic balance capable of weighing to  $\pm 0.0001$  grams (0.1 mg).

2.6 Flat bottom weight (approximately 3 lbs) or clamps.

### *Material and Apparatus Notes*

1—The foil, film, or sheet should be thick or rigid enough so that it can be easily handled in the test procedure.

### 3.0 Procedure

3.1 Two procedures are provided. In Procedure A the initial specimen weight is determined by weighing the foil, film, or sheet before and after the specimen is dispensed onto the foil, film, or sheet. In Procedure B the initial specimen weight is determined by weighing the adhesive cartridge (kit) before and after the specimen is dispensed.

3.2 At least four test specimens should be run for each test material. Run the test at room temperature, 74 degrees Fahrenheit (23 degrees Celsius).

#### *Procedure A*

1. Zero electronic balance.
2. Place 2 pieces of aluminum foil (or aluminum sheet, plastic film, or plastic sheet) on scale.
3. Record weight of aluminum foils. (A).
4. Tare balance.
5. Remove top piece of aluminum foil.
6. Dispense a 10 to 15 gram specimen of premixed adhesive onto bottom piece of aluminum foil. Place second piece of aluminum foil on top of the adhesive specimen to make a sandwich.
7. Record weight of sandwich (specimen and aluminum foils). (B).
8. Remove sandwich from scale, place sandwich between two support panels with aluminum spacers at the edges of the support panels to make a supported sandwich. The spacers provide a standard gap. Take care to mate the edges.
9. Place the supported sandwich on a flat surface.

10. Place the weight on top of the supported sandwich to spread the adhesive specimen to a uniform thickness within the sandwich. Check that no adhesive squeezes out from between the pieces of aluminum foil or through tears in the aluminum foil.

11. Allow to cure 24 hours.

12. Remove the sandwich from between the support panels. Record the weight of the sandwich. This is referred to as the 24 hr weight. (C).

13. Bake sandwich at 110 degrees Celsius for 1 hour.

14. Remove sandwich from the oven, place immediately in a desiccator, and cool to room temperature. Record post bake sandwich weight. (D).

#### *Procedure B*

1. Zero electronic balance.

2. Place two pieces of aluminum foil (or aluminum sheet, plastic film, or plastic sheet) on scale.

3. Record weight of aluminum foils. (A).

4. Tare balance.

5. Place one support panel on flat surface. Place first piece of aluminum foil on top of this support panel.

6. Record the weight of a pre-mixed sample of adhesive in its container. If dispensing the adhesive from a cartridge (kit), record the weight of the cartridge (kit) plus any dispensing tips. (F).

7. Dispense a 10 to 15 gram specimen of mixed adhesive onto the first piece of aluminum foil. Place second piece of aluminum foil on top of the adhesive specimen to make a sandwich.

8. Record weight of the adhesive container. If dispensing the adhesive from a cartridge (kit), record the weight of the cartridge (kit) plus any dispensing tips. (G).

9. Place the aluminum spacers at the edges of the bottom support panel polypropylene sheet. The spacers provide a standard gap.

10. Place the second support panel on top of the assembly to make a supported sandwich. Take care to mate the edges.

11. Place the supported sandwich on a flat surface.

12. Place the weight on top of the supported sandwich to spread the adhesive specimen to a uniform thickness within the sandwich. Check that no adhesive squeezes out from between the pieces of aluminum foil or through tears in the aluminum foil.
13. Allow to cure 24 hours.
14. Remove the sandwich from between the support panels. Record the weight of the sandwich. This is referred to as the 24 hr weight. (C).
15. Bake sandwich at 110 degrees Celsius for 1 hour.
16. Remove sandwich from the oven, place immediately in a desiccator, and cool to room temperature.
17. Record post-bake sandwich weight. (D).

#### *Procedural Notes*

1—The support panels may be omitted if the aluminum foil (or aluminum sheet, plastic film, or plastic sheet) will not tear and the adhesive specimen will spread to a uniform thickness within the sandwich when the flat weight is placed directly on top of the sandwich.

2—Clamps may be used instead of a flat bottom weight to spread the adhesive specimen to a uniform thickness within the sandwich.

3—When dispensing from a static mixer, purging is necessary to ensure uniform, homogeneous specimens. The weighing in Procedure B, Step 6 must be performed after any purging.

4—Follow the adhesive manufacturer's directions for mixing and for dispensing from a cartridge (kit).

#### 4.0 Calculations

4.1 The total weight loss from curing and baking of each specimen is used to determine the weight percent volatile matter content of that specimen

#### *Procedure A*

Weight of original specimen (S) = (B)–(A)

Weight of post-bake specimen (P) = (D)–(A)

Total Weight Loss (L) = (S)–(P)

*Procedure B*

Weight of original specimen (S) = (F)–(G)

Weight of post-bake specimen (P) = (D)–(A)

Total Weight Loss (L) = (S)–(P)

*Procedure A and Procedure B*

Weight Percent Volatile Matter Content

$(V) = [(Total\ weight\ loss)/(Initial\ specimen\ weight)] \times 100 = [(L)/(S)] \times 100$

4.2 The weight volatile matter content of a material is the average of the weight volatile matter content of each specimen of that material. For example, if four specimens of a material were tested, then the weight percent volatile matter content for that material is:

$V = [V1 + V2 + V3 + V4]/4$

Where:

$V_i$  = the weight percent volatile matter content of specimen  $i$  of the material.

4.3 The weight percent solids content of the material is calculated from the weight percent volatile content of the material.

Weight Percent Solids Content (N) = 100–(V)

*Calculation Notes*

1—The weight loss during curing and the weight loss during baking may be calculated separately. These values may be useful for identifying sources of variation in the results obtained for different specimens of the same material.

2—For both Procedure A and Procedure B, the weight loss during curing is (S)–[(C)–(A)] and the weight loss during baking is (C)–(D).

[40 CFR 63, Subpart PPPP, Appendix A Approval Nos. 2071-2079 Appendix A]

**Appendix B**

The permittee must comply with the applicable General Provisions requirements according to the following table:

<b>Citation</b>	<b>Subject</b>	<b>Applicable to subpart MMMM</b>	<b>Explanation</b>
§63.1(a)(1)–(14)	General Applicability	Yes	
§63.1(b)(1)–(3)	Initial Applicability Determination	Yes	Applicability to subpart MMMM is also specified in §63.3881.
§63.1(c)(1)	Applicability After Standard Established	Yes	
§63.1(c)(2)–(3)	Applicability of Permit Program for Area Sources	No	Area sources are not subject to subpart MMMM.
§63.1(c)(4)–(5)	Extensions and Notifications	Yes	
§63.1(e)	Applicability of Permit Program Before Relevant Standard is Set	Yes	
§63.2	Definitions	Yes	Additional definitions are specified in §63.3981.
§63.1(a)–(c)	Units and Abbreviations	Yes	
§63.4(a)(1)–(5)	Prohibited Activities	Yes	
§63.4(b)–(c)	Circumvention/Severability	Yes	
§63.5(a)	Construction/Reconstruction	Yes	
§63.5(b)(1)–(6)	Requirements for Existing Newly Constructed, and Reconstructed Sources	Yes	
§63.5(d)	Application for Approval of Construction/Reconstruction	Yes	
§63.5(e)	Approval of Construction/Reconstruction	Yes	
§63.5(f)	Approval of Construction/Reconstruction Based on Prior State Review	Yes	
§63.6(a)	Compliance With Standards and Maintenance Requirements—Applicability	Yes	

§63.6(b)(1)–(7)	Compliance Dates for New and Reconstructed Sources	Yes	Section 63.3883 specifies the compliance dates.
§63.6(c)(1)–(5)	Compliance Dates for Existing Sources	Yes	Section 63.3883 specifies the compliance dates.
§63.6(e)(1)–(2)	Operation and Maintenance	Yes	
§63.6(e)(3)	Startup, Shutdown, and Malfunction Plan	Yes	Only sources using an add-on control device to comply with the standard must complete startup, shutdown, and malfunction plans.
§63.6(f)(1)	Compliance Except During Startup, Shutdown, and Malfunction	Yes	Applies only to sources using an add-on control device to comply with the standard.
§63.6(f)(2)–(3)	Methods for Determining Compliance.	Yes	
§63.6(g)(1)–(3)	Use of an Alternative Standard	Yes	
§63.6(h)	Compliance With Opacity/Visible Emission Standards	No	Subpart MMMM does not establish opacity standards and does not require continuous opacity monitoring systems (COMS).
§63.6(i)(1)–(16)	Extension of Compliance	Yes	
§63.6(j)	Presidential Compliance Exemption	Yes	
§63.7(a)(1)	Performance Test Requirements—Applicability	Yes	Applies to all affected sources. Additional requirements for performance testing are specified in §§63.3964, 63.3965, and 63.3966.
§63.7(a)(2)	Performance Test Requirements—Dates	Yes	Applies only to performance tests for capture system and control device efficiency at sources using these to comply with the standard. Section 63.3960 specifies the schedule for performance test requirements that are earlier than those specified in §63.7(a)(2).

§63.7(a)(3)	Performance Tests Required By the Administrator	Yes	
§63.7(b)–(e)	Performance Test Requirements—Notification, Quality Assurance, Facilities Necessary for Safe Testing, Conditions During Test	Yes	Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standard.
§63.7(f)	Performance Test Requirements—Use of Alternative Test Method	Yes	Applies to all test methods except those used to determine capture system efficiency.
§63.7(g)–(h)	Performance Test Requirements—Data Analysis, Recordkeeping, Reporting, Waiver of Test	Yes	Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standard.
§63.8(a)(1)–(3)	Monitoring Requirements—Applicability	Yes	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standard. Additional requirements for monitoring are specified in §63.3968.
§63.8(a)(4)	Additional Monitoring Requirements	No	Subpart MMMM does not have monitoring requirements for flares.
§63.8(b)	Conduct of Monitoring	Yes	
§63.8(c)(1)–(3)	Continuous Monitoring Systems (CMS) Operation and Maintenance	Yes	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standard. Additional requirements for CMS operations and maintenance are specified in §63.3968.
§63.8(c)(4)	CMS	No	§63.3968 specifies the requirements for the operation of CMS for capture systems and add-on control devices at sources using these to comply.
§63.8(c)(5)	COMS	No	Subpart MMMM does not have opacity or visible emission standards.

§63.8(c)(6)	CMS Requirements	No	Section 63.3968 specifies the requirements for monitoring systems for capture systems and add-on control devices at sources using these to comply.
§63.8(c)(7)	CMS Out-of-Control Periods	Yes	
§63.8(c)(8)	CMS Out-of-Control Periods and Reporting	No	§63.3920 requires reporting of CMS out-of-control periods.
§63.8(d)–(e)	Quality Control Program and CMS Performance Evaluation	No	Subpart M MMM does not require the use of continuous emissions monitoring systems.
§63.8(f)(1)–(5)	Use of an Alternative Monitoring Method	Yes	
§63.8(f)(6)	Alternative to Relative Accuracy Test	No	Subpart M MMM does not require the use of continuous emissions monitoring systems.
§63.8(g)(1)–(5)	Data Reduction	No	Sections 63.3967 and 63.3968 specify monitoring data reduction.
§63.9(a)–(d)	Notification Requirements	Yes	
§63.9(e)	Notification of Performance Test	Yes	Applies only to capture system and add-on control device performance tests at sources using these to comply with the standard.
§63.9(f)	Notification of Visible Emissions/Opacity Test	No	Subpart M MMM does not have opacity or visible emissions standards.
§63.9(g)(1)–(3)	Additional Notifications When Using CMS	No	Subpart M MMM does not require the use of continuous emissions monitoring systems.
§63.9(h)	Notification of Compliance Status	Yes	Section 63.3910 specifies the dates for submitting the notification of compliance status.
§63.9(i)	Adjustment of Submittal Deadlines	Yes	
§63.9(j)	Change in Previous Information	Yes	
§63.10(a)	Recordkeeping/Reporting—Applicability and General Information	Yes	
§63.10(b)(1)	General Recordkeeping	Yes	Additional requirements are

	Requirements		specified in §§63.3930 and 63.3931.
§63.10(b)(2)(i)–(v)	Recordkeeping Relevant to Startup, Shutdown, and Malfunction Periods and CMS	Yes	Requirements for startup, shutdown, and malfunction records only apply to add-on control devices used to comply with the standard.
§63.10(b)(2)(vi)–(xi)		Yes	
§63.10(b)(2)(xii)	Records	Yes	
§63.10(b)(2)(xiii)		No	Subpart M MMM does not require the use of continuous emissions monitoring systems.
§63.10(b)(2)(xiv)		Yes	
§63.10(b)(3)	Recordkeeping Requirements for Applicability Determinations	Yes	
§63.10(c)(1)–(6)	Additional Recordkeeping Requirements for Sources with CMS	Yes	
§63.10(c)(7)–(8)		No	The same records are required in §63.3920(a)(7).
§63.10(c)(9)–(15)		Yes	
§63.10(d)(1)	General Reporting Requirements	Yes	Additional requirements are specified in §63.3920.
§63.10(d)(2)	Report of Performance Test Results	Yes	Additional requirements are specified in §63.3920(b).
§63.10(d)(3)	Reporting Opacity or Visible Emissions Observations	No	Subpart M MMM does not require opacity or visible emissions observations.
§63.10(d)(4)	Progress Reports for Sources With Compliance Extensions	Yes	
§63.10(d)(5)	Startup, Shutdown, and Malfunction Reports	Yes	Applies only to add-on control devices at sources using these to comply with the standard.
§63.10(e)(1)–(2)	Additional CMS Reports	No	Subpart M MMM does not require the use of continuous emissions monitoring systems.
§63.10(e)(3)	Excess Emissions/CMS	No	Section 63.3920 (b) specifies the

	Performance Reports		contents of periodic compliance reports.
§63.10(e) (4)	COMS Data Reports	No	Subpart M MMMM does not specify requirements for opacity or COMS.
§63.10(f)	Recordkeeping/Reporting Waiver	Yes	
§63.11	Control Device Requirements/Flares	No	Subpart M MMMM does not specify use of flares for compliance.
§63.12	State Authority and Delegations	Yes	
§63.13	Addresses	Yes	
§63.14	Incorporation by Reference	Yes	
§63.15	Availability of Information/Confidentiality	Yes	

[40 CFR 63, Subpart M MMMM, Table 2]

**Appendix C**

**Default Organic HAP Mass Fraction for Solvents and Solvent Blends**

The permittee may use the mass fraction values in the following table for solvent blends for which you do not have test data or manufacturer's formulation data and which match either the solvent blend name or the chemical abstract series (CAS) number. If a solvent blend matches both the name and CAS number for an entry, that entry's organic HAP mass fraction must be used for that solvent blend. Otherwise, use the organic HAP mass fraction for the entry matching either the solvent blend name or CAS number, or use the organic HAP mass fraction from Appendix D of this permit if neither the name nor CAS number match.

<b>Solvent/solvent blend</b>	<b>CAS. No.</b>	<b>Average organic HAP mass fraction</b>	<b>Typical organic HAP, percent by mass</b>
1. Toluene	108-88-3	1.0	Toluene.
2. Xylene(s)	1330-20-7	1.0	Xylenes, ethylbenzene.
3. Hexane	110-54-3	0.5	n-hexane.
4. n-Hexane	110-54-3	1.0	n-hexane.
5. Ethylbenzene	100-41-4	1.0	Ethylbenzene.
6. Aliphatic 140		0	None.
7. Aromatic 100		0.02	1% xylene, 1% cumene.
8. Aromatic 150		0.09	Naphthalene.
9. Aromatic naphtha	64742-95-6	0.02	1% xylene, 1% cumene.
10. Aromatic solvent	64742-94-5	0.1	Naphthalene.
11. Exempt mineral spirits	8032-32-4	0	None.
12. Ligroines (VM & P)	8032-32-4	0	None.
13. Lactol spirits	64742-89-6	0.15	Toluene.
14. Low aromatic white spirit	64742-82-1	0	None.
15. Mineral spirits	64742-88-7	0.01	Xylenes.
16. Hydrotreated naphtha	64742-48-9	0	None.
17. Hydrotreated light distillate	64742-47-8	0.001	Toluene.
18. Stoddard solvent	8052-41-3	0.01	Xylenes.

<b>Solvent/solvent blend</b>	<b>CAS. No.</b>	<b>Average organic HAP mass fraction</b>	<b>Typical organic HAP, percent by mass</b>
19. Super high-flash naphtha	64742-95-6	0.05	Xylenes.
20. Varsol <sup>®</sup> solvent	8052-49-3	0.01	0.5% xylenes, 0.5% ethylbenzene.
21. VM & P naphtha	64742-89-8	0.06	3% toluene, 3% xylene.
22. Petroleum distillate mixture	68477-31-6	0.08	4% naphthalene, 4% biphenyl.

[40 CFR 63, Subpart M, Table 3, Approval Nos. 2071-2079 Appendix B]

**Appendix D**

Default Organic HAP Mass Fraction for Petroleum Solvent Groups<sup>a</sup>

You may use the mass fraction values in the following table for solvent blends for which you do not have test data or manufacturer's formulation data.

<b>Solvent type</b>	<b>Average organic HAP mass fraction</b>	<b>Typical organic HAP, percent by mass</b>
Aliphatic <sup>b</sup>	0.03	1% Xylene, 1% Toluene, and 1% Ethylbenzene.
Aromatic <sup>c</sup>	0.06	4% Xylene, 1% Toluene, and 1% Ethylbenzene.

<sup>a</sup>Use this table only if the solvent blend does not match any of the solvent blends in Appendix C of this permit by either solvent blend name or CAS number and you only know whether the blend is aliphatic or aromatic.

<sup>b</sup>Mineral Spirits 135, Mineral Spirits 150 EC, Naphtha, Mixed Hydrocarbon, Aliphatic Hydrocarbon, Aliphatic Naphtha, Naphthol Spirits, Petroleum Spirits, Petroleum Oil, Petroleum Naphtha, Solvent Naphtha, Solvent Blend.

<sup>c</sup>Medium-flash Naphtha, High-flash Naphtha, Aromatic Naphtha, Light Aromatic Naphtha, Light Aromatic Hydrocarbons, Aromatic Hydrocarbons, Light Aromatic Solvent.

[40 CFR 63, Subpart Mmmm, Table 4, Approval Nos. 2071-2079 Appendix C]