



Louisville Metro Air Pollution Control District
850 Barret Avenue
Louisville, Kentucky 40204-1745



Permit No.: 29-10-C(R1)

Plant ID: 1216

Effective Date: [Click here to enter a date.](#)

Expiration Date: [Click here to enter a date.](#)

BAE Systems
163 Rochester Drive
Louisville, KY 40214

is authorized to construct the described process equipment by the Louisville Metro Air Pollution Control District. Authorization is based on information provided with the application submitted by the company and in accordance with applicable regulations and the conditions specified herein.

Process equipment description:

One (1) JBI front air flow spray booth model T-25-WSB-S (U16-E44) for coating miscellaneous metal parts and non-metal parts.

Applicable Regulation(s): 2.03, 2.05, 2.16, 5.01, 5.21, 7.08, 7.25, 7.59, and 40 CFR 63 Subpart M MMM

Application No.: 66942
11515

Application Received: 9/11/2014
2/04/2010

Permit Writer: Emily Tyler

Public Comment Date: 10/15/2014

Proposed Permit Date: [Click here to enter a date.](#)

Initial Issuance Public Comment Date: 6/25/2010

Initial Issuance Permit Date: 7/31/2010

{Manager}
Air Pollution Control Officer

This permit covers only the provisions of Kentucky Revised Statutes Chapter 77 Air Pollution Control, the regulations of the Louisville Metro Air Pollution Control District (District) and, where appropriate, certain federal regulations. The issuance of this permit does not exempt any owner or operator to whom it has been issued from prosecution on account of the emission or issuance of any air contaminant caused or permitted by such owner or operator in violation of any of the provisions of KRS 77 or District regulations. Any permit shall be considered invalid if timely payment of applicable fees is not made after receipt of the statement of fees (SOF). The permit contains general permit conditions and specific permit conditions. General conditions are applicable unless a more stringent requirement is specified elsewhere in the permit.

General Conditions

- G1. The owner or operator of the affected facility covered by this permit shall notify the District of any process change, equipment change, material change, or change in method or hours of operation. This requirement is applicable to those changes (except for equipment change) that may have the potential for increasing the emission of air contaminants to a level in excess of the applicable limits or standards specified in this permit or District regulations.
- G2. The owner or operator shall obtain new or revised permits from the District when: (See [District Regulation 2.16](#) for Title V sources. See [District Regulation 2.17](#) for FEDOOP sources. See [District Regulation 2.03](#) for other sources.)
- a. The company relocates to a different physical address.
 - b. The ownership of the company is changed.
 - c. The name of the company as shown on the permit is changed.
 - d. Permits are nearing expiration or have expired.
- G3. The owner or operator shall submit a timely application for changes according to G2. For minor sources only, the District does not require application for permit renewal. The District automatically commences the process of permit renewal for minor sources upon expiration. Timely renewal is not always achievable; therefore, the company is hereby authorized to continue operation in compliance with the latest District permit(s) until the District issues the renewed permit(s).
- G4. The owner or operator shall not be authorized to transfer ownership or responsibility of the permit. The District may transfer permits after appropriate notification (Form 100A) has been received and review has been made.
- G5. The owner or operator shall pay the required permit fees within 45 days after issuance of the SOF by the District, unless other arrangements have been proposed and accepted by the District.
- G6. This permit allows operation 8,760 hours per year unless specifically limited elsewhere in this permit.

- G7. The owner or operator shall submit emission inventory reports as required by [Regulation 1.06](#).
- G8. The owner or operator shall timely report abnormal conditions or operational changes, which may cause excess emissions as required by [Regulation 1.07](#).
- G9. Unless specified elsewhere in this permit, the owner or operator shall complete required monthly record keeping within 30 days following the end of each calendar month.
- G10. If a change in the Responsible Official (RO) occurs during the term of this permit, the owner or operator shall provide written notification (Form 100A) to the District within 30 calendar days of the date the RO change occurs.

Construction Permit Revisions

Revision No.	Date of Issuance	Public Notice Date	Type	Emission Unit/Page No.	Description
Initial	07/31/2010	06/25/2010	Initial	Entire Permit	Initial Permit Issuance
R1	X/X/2014	10/15/2014	Significant Revision	Entire Permit	Revision to add Regulation 7.25 to allow for plastic parts to be painted in the paint booth.

Specific Conditions

S1. Standards (Regulation 2.03, section 6.1)

a. VOC

For Regulation 7.59:

- i. The owner or operator shall not allow or cause VOC emissions, including all coatings, additives, catalysts, solvents, thinners, and cleaners from this plant, and subject to Regulation 7.59, to equal or exceed 5 tons during any 12-consecutive month period. (Regulation 7.59, section 5.2)^{1,2}

Or

- ii. The owner or operator shall not allow or cause VOC emissions from the affected facility resulting from the coating of metallic surfaces in excess of the following: (Regulation 7.59, section 2.1 and 3.1)¹
 - 1) 4.3 lb of VOC/gal of coatings, excluding water and exempt solvents, as applied for clear coatings.
 - 2) 3.5 lb of VOC/gal of coatings, excluding water and exempt solvents, as applied for air-dried coatings.
 - 3) 3.5 lb of VOC/gal of coatings, excluding water and exempt solvents, as applied for extreme performance coatings.
 - 4) 3.0 lb of VOC/gal of coatings, excluding water and exempt solvents, as applied for all other coatings.
- iii. The owner or operator shall determine compliance with Specific Condition S1.a.ii based on a calendar month averaging period. (Regulation 7.59, section 3.2)

For Regulation 7.25:

- i. The owner or operator shall not allow or cause plantwide VOC emissions, including all coatings, additives, catalysts, solvents, thinners, and cleaners from all affected facilities subject to Regulation 7.25 to equal or exceed 5 tons during any 12-consecutive month period, unless a BACT is submitted and approved by the District. (Regulation 7.25, section 2.1 and 3.1)³

¹ Metal parts are wipe-cleaned before being coated. The wipe-down cleaners used for cleaning the metal parts are subject to Regulation 7.59.

² Plantwide equipment subject to Regulation 7.59: U1 E5, U1 E6, U1 E7, and U16 E44.

³ Plantwide equipment subject to Regulation 7.25: U1 E5, U1 E6, U1 E7, U5 E32, U10 E37, U16 E44, IA3 IE 18, IA3 IE 19, IA3 IE 20, and IA3 IE 21.

b. Opacity

The owner or operator shall not allow visible emissions to equal or exceed 20% opacity. (Regulation 7.08, section 3.1.1)

c. PM/PM₁₀

- i. The owner or operator shall not allow PM emissions to exceed 2.34 lb/hr. (Regulation 7.08, section 3.1.2)⁴
- ii. The owner or operator shall not allow plantwide PM/PM₁₀ emissions to equal or exceed 100 tons per 12 consecutive month period. (Regulation 2.05)⁵

d. HAP (40 CFR 63, Subpart M and Regulation 5.02, section 3.74)

- i. The owner or operator shall limit the organic HAP emissions to the atmosphere from the following paint booths to no more than 2.6 pound organic HAP per gallon coating solids used during each 12-month compliance period, as the following. (40 CFR 63.3890)⁶

Emi. Unit	Emi. Point	Description	Limit (lb/gal)	Citation
U1	E5	One (1) paint booth installed 1986	2.6	63.3890(b)(1)
	E6	One (1) paint booth with small oven installed 1992		
	E7	One (1) paint booth with small oven installed 1992		
U16	E44	One (1) JBI front air flow spray booth model T-25-WSB-S installed 2010		

- ii. This subpart applies to the following items that are used for surface coating of miscellaneous metal parts and products: (40 CFR 63.3882(b))
 - 1) All coating operations as defined in §63.3981;

⁴ Using the minimum spray gun transfer efficiency of 35%, the percent solids of the material (45.9%), and the efficiency of the filters (greater than 90%), the PM emission limit of the spray booth cannot be exceeded.

⁵ The PM/PM₁₀ limit of 100 tons per year, plantwide, is a PSD avoidance limit.

⁶ The surface coating facility at BAE Systems is identified as an existing source. According to 40 CFR 63.3882: An affected source is a new affected source if it commenced its construction after August 13, 2002 and the construction is a completely new miscellaneous metal parts and products surface coating facility where previously no miscellaneous metal parts and products surface coating facility had existed. An affected source is existing if it is not new or reconstructed.

- 2) All storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed;
 - 3) All manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials; and
 - 4) All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation.
- iii. *Compliance date.* The date by which you must comply with this subpart is called the compliance date. The compliance date begins the initial compliance period during which you conduct the initial compliance demonstration described in §63.3940, 63.3950, and 63.3960. (40 CFR 63.3883)
- 1) For a new or reconstructed affected source, the compliance date is the applicable date in paragraph (a)(1) or (2) of this section:
 - (a) If the initial startup of your new or reconstructed affected source is before January 2, 2004, the compliance date is January 2, 2004. (40 CFR 63.3883(a)(1))
 - (b) If the initial startup of your new or reconstructed affected source occurs after January 2, 2004, the compliance date is the date of initial startup of your affected source. (40 CFR 63.3883(a)(2))
 - 2) For an existing affected source, the compliance date is the date 3 years after January 2, 2004. (40 CFR 63.3883(b))
 - 3) For an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP emissions, the compliance date is specified in the following:
 - (a) For any portion of the source that becomes a new or reconstructed affected source subject to this subpart, the compliance date is the date of initial startup of the affected source or January 2, 2004, whichever is later. (40 CFR 63.3883(c)(1))
 - (b) For any portion of the source that becomes an existing affected source subject to this subpart, the compliance date is the date 1 year after the area source becomes a major source or 3 years after January 2, 2004, whichever is later. (40 CFR 63.3883(c)(2))
 - 4) You must meet the notification requirements in §63.3910 according to the dates specified in that section and in subpart A of this part. Some of the notifications must be submitted before the

compliance dates described in paragraphs (a) through (c) of this section.

- iv. The owner or operator must include all coatings (as defined in §63.3981), thinners and/or additives, and cleaning materials used in the affected source when determining whether the organic HAP emission rate is equal to or less than the applicable emission limit specified in §63.3890. To make this determination, you must use at least one of the following compliance options. You may apply any of the compliance options to an individual coating operation, or to multiple coating operations as a group, or to the entire affected source. You may use different compliance options for different coating operations, or at different times on the same coating operation. You may employ different compliance options when different coatings are applied to the same part, or when the same coating is applied to different parts. However, you may not use different compliance options at the same time on the same coating operation. If you switch between compliance options for any coating operation or group of coating operations, you must document this switch as required by §63.3930(c), and you must report it in the next semiannual compliance report required in §63.3920. (40 CFR 63.3891)⁷
- 1) *Compliant material option.* Demonstrate that the organic HAP content of each coating used in the coating operation(s) is less than or equal to the applicable emission limit in §63.3890, and that each thinner and/or other additive, and cleaning material used contains no organic HAP. You must meet all the requirements of §§63.3940, 63.3941, and 63.3942 to demonstrate compliance with the applicable emission limit using this option. (40 CFR 63.3891(a))
 - 2) *Emission rate without add-on controls option.* Demonstrate that, based on the coatings, thinners, and/or other additives, and cleaning material used in the coating operation(s), the organic HAP emission rate for the coating operation(s) is less than or equal to 2.60 lb organic HAP per gallon of coating solids used, calculated as a rolling 12-month emission rate and determined on a monthly basis. The owner or operator must meet all the requirements of 63.3950, 63.3951, and 63.3952 to demonstrate compliance with the emission limit using this option. (40 CFR 63.3891(b))

⁷ 40 CFR Part 63, Subpart Mmmm - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Parts and Products establishes three options to demonstrate compliance with the organic HAP emission standards in accordance with §63.3891: *Compliant Material Option*, *Emission Rate without Add-on Controls Option*, and *Emission Rate with Add-on Controls Option*. The paint booths are not equipped with any add-on controls for HAP, BAE Systems may select to demonstrate compliance with either Compliant Material Option or Emission Rate without Add-on Controls Option.

- v. *Operating Limits.* For any coating operation for which you use the compliant material option or the emission rate without add-on controls option, you are not required to meet any operating limits. (40 CFR 63.3892(a))
- vi. *Work Practice Standards.* For any coating operation(s) for which you use the compliant material option or the emission rate without add-on controls, the owner or operator is not required to meet any work practice standards. (40 CFR 63.3893(a))
- vii. **General Compliance Requirements:**
 - 1) Any coating operation(s) for which you use the compliant material option or the emission rate without add-on controls, as specified in 63.3891(a) and (b), must be in compliance with the applicable emission limit in 63.3890 at all times. (40 CFR 63.3900(a)(1))
 - 2) The owner or operator must always operate and maintain the affected source, including all air pollution control and monitoring equipment you use for purposes of complying with this subpart, according to the provision in 63.6(e)(1)(i). (40 CFR 63.3900(b))
 - 3) The owner or operator shall meet the applicable General Provisions in 63.1 through 63.15, as shown in Table 2 to this subpart. (40 CFR 63.3901)

e. **TAC**

The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be *de minimis*. (Regulations 5.00 and 5.21)⁸

S2. **Monitoring and Record Keeping** (Regulation 2.03, section 6.1)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. **VOC**

For Regulation 7.59:

⁸ The potential uncontrolled TAC emissions from this unit have been determined by the District to be *de minimis* based on PTE evaluation.

- i. The owner or operator shall, monthly, calculate the plantwide monthly and 12-consecutive month VOC emissions from all equipment subject to Regulation 7.59.

Or

- ii. An owner or operator of an affected facility subject to this regulation shall maintain records that include, but not be limited to, the following: (Regulation 7.59, section 6.1)
 - 1) The regulation and section number applicable to the affected facility for which the records are being maintained,
 - 2) The application method and substrate type (metal, plastic, etc.),
 - 3) The amount and type of coatings (including catalyst and reducer for multi-component coatings) and solvent (including exempt compounds) used at each point of application during the averaging period. The District may specifically authorize the usage record to reflect a period longer than the compliance averaging period, with the usage prorated for each compliance averaging period by a method approved by the District. In this case, the usage record period shall not exceed 1 calendar month,
 - 4) The VOC content as applied in each coating and solvent,
 - 5) The date, or usage record period, for each application of coating and solvent,
 - 6) The amount of surface preparation, clean-up, wash-up of solvent (including exempt compounds) used and the VOC content of each material used during the averaging period. The District may specifically authorize the usage record to reflect a period longer than the compliance averaging period, with the usage prorated for each compliance averaging period by a method approved by the District. In this case, the usage record period shall not exceed 1 calendar month.
- iii. The VOC content shall be calculated using a percent solids basis (excluding water and exempt solvents) for coatings using EPA Method 24. (Regulation 7.59, section 6.2)
- iv. The owner or operator shall, monthly, calculate and record the average monthly VOC content for the coatings.
- v. The owner or operator shall, monthly, record the total amount used in gallons of each coating, solvent, cleaner, etc. and calculate the amount of VOC containing material used during the 12 consecutive month period.

For Regulation 7.25:

- i. The owner or operator shall, monthly, calculate the plantwide monthly and 12-consecutive month VOC emissions from all equipment subject to Regulation 7.25.
- b. **Opacity**
 - i. The owner or operator shall inspect the filters in the paint booth(s) at least monthly to ensure proper installment (i.e. proper alignment/placement, gaps, etc.) and replace as needed.
 - ii. The owner or operator shall keep a record that shows the date and the name of the person who inspected the filters and if filters were replaced.
- c. **PM/PM₁₀**
 - i. The owner or operator shall monthly calculate the PM emissions on an average hourly basis.
 - ii. The owner or operator shall monthly calculate the monthly and 12-consecutive month plantwide PM/PM₁₀ emissions.
- d. **HAP (40 CFR 63, Subpart M and Regulation 5.02, section 3.74)**
 - i. Compliance requirements for *compliant material option*:
 - 1) You must complete the initial compliance demonstration for the initial compliance period according to the requirements in §63.3941. The initial compliance period begins on the applicable compliance date specified in §63.3883 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through that month plus the next 12 months. The initial compliance demonstration includes the calculations according to §63.3941 and supporting documentation showing that during the initial compliance period, you used no coating with an organic HAP content that exceeded the applicable emission limit in §63.3890, and that you used no thinners and/or other additives, or cleaning materials that contained organic HAP as determined according to §63.3941(a). (40 CFR 63.3940)⁹
 - 2) You may use the compliant material option for any individual coating operation, for any group of coating operations in the affected source, or for all the coating operations in the affected

⁹ BAE Systems submitted an initial notification and notification of compliance status on June 10, 2010.

source. You must use either the emission rate without add-on controls option or the emission rate with add-on controls option for any coating operation in the affected source for which you do not use this option. To demonstrate initial compliance using the compliant material option, the coating operation or group of coating operations must use no coating with an organic HAP content that exceeds the applicable emission limits in §63.3890 and must use no thinner and/or other additive, or cleaning material that contains organic HAP as determined according to this section. Any coating operation for which you use the compliant material option is not required to meet the operating limits or work practice standards required in §§63.3892 and 63.3893, respectively. You must conduct a separate initial compliance demonstration for each general use, high performance, magnet wire, rubber-to-metal, and extreme performance fluoropolymer coating operation unless you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.3890(c). If you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.3890(c), you must demonstrate that all coating operations included in the predominant activity determination or calculation of the facility-specific emission limit comply with that limit. You must meet all the requirements of this section. Use the procedures in this section on each coating, thinner and/or other additive, and cleaning material in the condition it is in when it is received from its manufacturer or supplier and prior to any alteration. You do not need to redetermine the organic HAP content of coatings, thinners and/or other additives, and cleaning materials that are reclaimed on-site (or reclaimed off-site if you have documentation showing that you received back the exact same materials that were sent off-site) and reused in the coating operation for which you use the compliant material option, provided these materials in their condition as received were demonstrated to comply with the compliant material option. (40 CFR 63.3941)

- 3) *Determine the mass fraction of organic HAP for each material used.* You must determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during the compliance period by using one of the following: (40 CFR 63.3941(a))
 - (a) *(Method 311 appendix A to 40 CFR part 63).* You may use Method 311 for determining the mass fraction of organic HAP. Use the procedures specified in paragraphs (a)(1)(i) and (ii) of this section 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, you may 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 to subpart PPPP of this part, rather than Method 24. You may use the volatile fraction that is emitted, as measured by the alternative method in appendix A to subpart PPPP of this part, as a substitute for the mass fraction of organic HAP. (40 CFR 63.3941(a)(2))
- (c) *Alternative method*. You may use an alternative test method for determining the mass fraction of organic HAP once the Administrator has approved it. You must 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*. You may rely on information other than that generated by the test methods specified in paragraphs (a)(1) through (3) of this section, 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 paragraphs (a)(1) through (3) of this section, then the test method results will take precedence unless, after consultation, you demonstrate to the satisfaction of the enforcement agency 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, you may use the default values for the mass fraction of organic HAP in these solvent blends listed in Table 3 or 4 to this subpart. If you use the tables, you must use the values in Table 3 for all solvent blends that match Table 3 entries according to the instructions for Table 3, and you may use Table 4 only if the solvent blends in the materials you use do not match any of the solvent blends in Table 3 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 Table 3 or 4 to this subpart, the Method 311 results will take precedence unless, after consultation, you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct. (40 CFR 63.3941(a)(5))
- 4) *Determine the volume fraction of coating solids for each coating.* You must 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 (b)(1) through (4) of this section. If test results obtained according to paragraph (b)(1) of this section do not agree with the information obtained under paragraph (b)(3) or (4) of this section, the test results will take precedence unless, after consultation, you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct. (40 CFR 63.3941(b))

- (a) *ASTM Method D2697-86 (Reapproved 1998) or ASTM Method D6093-97 (Reapproved 2003).* You 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.* You may use an alternative test method for determining the solids content of each coating once the Administrator has approved it. You must follow the procedure in §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.* You 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.* You may determine the volume fraction of coating solids using Equation 1 of this section: (40 CFR 63.3941(b)(4))

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

Where:

- V_s = Volume fraction of coating solids, liters (gal) coating solids per liter (gal) coating.
- $m_{volatiles}$ = 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_{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 enforcement agency that the formulation data are correct.

- 5) *Determine the density of each coating.* Determine the density of each coating used during the compliance period 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 specific gravity data for pure chemicals. If there is disagreement between ASTM Method D1475-98 test results and the supplier's or manufacturer's information, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct. (40 CFR 63.3941(c))
- 6) *Determine the organic HAP content of each coating.* Calculate the organic HAP content, kg (lb) of organic HAP emitted per liter (gal) coating solids used, of each coating used during the compliance period using Equation 2 of this section: (40 CFR 63.3941(d))

$$H_c = \frac{(D_c)(W_c)}{V_s} \quad \text{(Equation 2)}$$

Where:

- H_c = Organic HAP content of the coating, kg organic HAP emitted per liter (gal) coating solids used.
- D_c = Density of coating, kg coating per liter (gal) coating, determined according to paragraph (c) of this section.
- W_c = Mass fraction of organic HAP in the coating, kg organic HAP per kg coating, determined according to paragraph (a) of this section.
- V_s = Volume fraction of coating solids, liter (gal) coating solids per liter (gal) coating, determined according to paragraph (b) of this section

- 7) *Compliance demonstration.* The calculated organic HAP content for each coating used during the initial compliance period must be less than or equal to the applicable emission limit in §63.3890; and each thinner and/or other additive, and cleaning material used

during the initial compliance period must contain no organic HAP, determined according to paragraph (a) of this section. You must keep all records required by §§63.3930 and 63.3931. As part of the notification of compliance status required in §63.3910, you must identify the coating operation(s) for which you used the compliant material option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because you used no coatings for which the organic HAP content exceeded the applicable emission limit in §63.3890, and you used no thinners and/or other additives, or cleaning materials that contained organic HAP, determined according to the procedures in paragraph (a) of this section. (40 CFR 63.3941(e))

- 8) The owner or operator shall meet the following requirements to demonstrate *continuous compliance* with emission limitation:
 - (a) For each compliance period to demonstrate continuous compliance, you must use no coating for which the organic HAP content (determined using Equation 2 of §63.3941) exceeds the applicable emission limit in §63.3890, and use no thinner and/or other additive, or cleaning material that contains organic HAP, determined according to §63.3941(a). A compliance period consists of 12 months. Each month, after the end of the initial compliance period described in §63.3940, is the end of a compliance period consisting of that month and the preceding 11 months. If you are complying with a facility-specific emission limit under §63.3890(c), you must also perform the calculation using Equation 1 in §63.3890(c)(2) on a monthly basis using the data from the previous 12 months of operation.
 - (b) If you choose to comply with the emission limitations by using the compliant material option, the use of any coating, thinner and/or other additive, or cleaning material that does not meet the criteria specified in paragraph (a) of this section is a deviation from the emission limitations that must be reported as specified in §§63.3910(c)(6) and 63.3920(a)(5).
 - (c) As part of each semiannual compliance report required by §63.3920, you must identify the coating operation(s) for which you used the compliant material option. If there were no deviations from the applicable emission limit in §63.3890, submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because you used no coatings

for which the organic HAP content exceeded the applicable emission limit in §63.3890, and you used no thinner and/or other additive, or cleaning material that contained organic HAP, determined according to §63.3941(a).

- (d) You must maintain records as specified in §63.3930 and §63.3931. (40 CFR 63.3942(d))
- ii. Compliance requirements for *emission rate without add-on controls option*.

- 1) The owner or operator must complete the initial compliance demonstration for the initial compliance period according to requirements of §63.3951. The initial compliance period begins on the applicable compliance date specified in §63.3883 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through the end of the month plus the next 12 months. You must determine the mass of organic HAP emissions and volume of coating solids used each month and then calculate an organic HAP emission rate at the end of the initial compliance period. The initial compliance demonstration includes the calculations according to §63.3951 and supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the applicable emission limit in §63.3890 . (40 CFR 63.3950)
- 2) You may use the emission rate without add-on controls option for any individual coating operation, for any group of coating operation in the affected source, or for all the coating operations in the affected source. You must use either the compliant material option or the emission rate with add-on controls option for any coating operation in the affected source for which you do not use this option. To demonstrate initial compliance using the emission rate without add-in controls option, the coating operation or group of coating operation must meet the applicable emission limit in §63.3890, but is not required to meet the operating limits or work practice standards in §63.3892 and §63.3893, respectively. You must conduct a separate initial compliance demonstration for each general use, magnet wire, rubber-to-metal, and extreme performance fluoropolymer coating operation unless you are demonstrating compliance with a predominant activity or facility-specific emission limit at provided in §63.3890(c). If you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.3890(c), you must demonstrate that all coating operations included in the predominant

activity determination or calculation of the facility-specific emission limit comply with that limit. You must meet all the requirements of §63.3951. When calculating the organic HAP emission rate according to §63.3951, do not include any coatings, thinners and/or other additives, or cleaning materials used on coating operation for which you use the compliant material option or the emission rate with add-on controls option. You do not need to re-determine the mass of organic HAP in coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site (or reclaimed off-site if you have documentation showing that you received back the exact same materials that were sent off-site) and reused in the coating operation for which you use the emission rate without add-on controls option. If you use coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site, the amount of each used in a month may be reduced by the amount of each that is reclaimed. That is, the amount used may be calculated as the amount consumed to account for materials that are reclaimed. (40 CFR 63.3951)

- 3) *Determine the mass fraction of organic HAP for each material.* The owner or operator shall determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each month according to the requirements in §63.3941(a). (40 CFR 63.3951(a))
- 4) *Determine the volume fraction of coating solids.* The owner or operator shall determine the volume fraction of coating solids (liter (gal) of coating per solids liter (gal) of coating) for each coating used during each month according to the requirements in §63.3941(b). (40 CFR 63.3951(b))
- 5) *Determine the density of each material.* The owner or operator 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 the 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 enforcement agency 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 section §63.3951 (See Specific Condition S2.d.ii.6)). (40 CFR 63.3951(c))

- 6) *Determine the volume of each material used.* The owner or operator shall determine the volume (liters) of each coating, thinner and/or other additives, 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 section §63.951 (See Specific Condition S2.d.ii.6)). (40 CFR 63, section 63.3951(d))
- 7) *Calculate the mass of organic HAP emission.* The mass of organic HAP emission is the combined mass of organic HAP contained in all coating, thinners and/or other additives, and cleaning materials used during each month minus the organic HAP in certain waste materials. The owner or operator shall calculate the mass of organic HAP emissions using Equation 1 of §63.3951 as follows: (40 CFR 63, section 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.
- B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg, as calculated in Equation 1B.
- C = Total mass of organic HAP in the cleaning materials used during the month, kg, as calculated in Equation 1C.
- 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 paragraph (e)(4) of §63.3951. (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 coating used during the month using Equation 1A of §63.3951 as follows: (40 CFR 63.3951(e)(1))

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

(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 to Subpart PPPP of Part 63.
- 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 §63.3951 as follows: (40 CFR 63.3951(e)(2))

$$B = \sum_{j=1}^m (Vol_{t,j})(D_{t,j})(W_{t,j})$$

(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 to Subpart PPPP of Part 63.

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 §63.3951 as follows: (40 CFR 63.3951(e)(3))

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

(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

- 8) *Calculate the total volume of coating solids used.* The owner or operator 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 §63.3951 as follows: (40 CFR 63, section 63.3951(f))

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

(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

- 9) *Calculate the total volume of coating solids used.* The owner or operator shall 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 §63.3951 as follows. (40 CFR 63, section 63.3951(g))

$$H_{yr} = \frac{\sum_{y=1}^n H_e}{\sum_{y=1}^n V_{st}}$$

(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.
- V_{st} = Total volume of coating solids used during month, y, liters, as calculated by Equation 2.
- 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)

- 10) *Compliance demonstration.* The organic HAP emission rate for the initial compliance period calculated using Equation 3 of section §63.3951 must be less than or equal to the applicable emission limit for each subcategory in §63.3890 or the predominant activity or facility-specific emission limit allowed in §63.3890(c). You must keep all records as required by §63.3930 and §63.3931. As part of the notification of compliance status required by §63.3910, you must identify the coating operation(s) for which you used the emission rate without add-on controls option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because the organic HAP emission rate was less than or equal to the applicable emission limit in §63.3890, determined according to the procedures in this section. (40 CFR 63, section 63.3951(h))
- 11) The owner or operator shall meet the following requirements to demonstrate *continuous compliance* with emission limitation:
- (a) To demonstrate continuous compliance, the organic HAP emission rate for each compliance period, determined according to §63.3951(a) through (g), must be less than or equal to the applicable emission limit in §63.3890. A compliance period consists of 12 months. Each month after the end of the initial compliance period described in §63.3950 is the end of a compliance period consisting of

that month and the preceding 11 months. You must perform the calculation in 63.3951(a) through (g) on a monthly basis using data from the previous 12 months of operation. (40 CFR 63.3952(a))

- (b) If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit in §63.3890, this is a deviation from the emission limitation for that compliance period and must be reported as specified in §63.3910(c)(6) and §63.3920(a)(6). (40 CFR 63.3952(b))
- (c) As part of each semiannual compliance report required by §63.3920, you 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, you must 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 in §63.3890, determined according to §63.3951(a) through (g). (40 CFR 63.3952(c))
- (d) You must maintain records as specified in §63.3930 and §63.3931. (40 CFR 63.3952(d))

iii. The owner or operator shall maintain the following records:

- 1) The owner or operator must collect and keep records of the data and information specified in section §63.3930. Failure to collect and keep these records is a deviation from the applicable standard. (40 CFR 63.3930)
- 2) A copy of each notification and report that you submitted to comply with Subpart M MMM and the documentation supporting each notification and report. (40 CFR 63.3930(a))
- 3) A current copy of information provided by the 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 materials, and the volume fraction of coating solids for each coating. If you conducted testing to determine mass fraction of organic HAP, density, or volume fraction of coating solids, you must keep a copy of the complete test report. If you use information provided to you by the manufacturer or supplier of the

materials that was based on testing, you must keep the summary sheet of results provided to you by the manufacturer or supplier. You are not required to obtain the test report or other supporting documentation from the manufacturer or supplier. (40 CFR 63.3930(b))

- 4) For each compliance period, the records specified in paragraphs §63.3930 (c)(1), (c)(2) and (c)(3) as follows: (40 CFR 63.3930(c))
 - (a) A record of the coating operations on which you used each compliance option and the time periods (beginning and ending dates and times) for each option you used. (40 CFR 63.3930(c)(1))
 - (b) For the compliant material option, a record of the calculation of the organic HAP content for each coating, using Equation 2 of §63.3941. (40 CFR 63.3930(c)(2))
 - (c) For the emission rate without add-on controls option, a record of the calculation of the total mass of organic HAP emission for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1, 1A through 1C, and 2 of §63.3951; and, if applicable, the calculation used to determine mass of organic HAP in waste material according to §63.3951(e)(4); the calculation of the total volume of coating solids used each month using Equation 2 of §63.3951; and the calculation of each 12-month organic HAP emission rate using Equation 3 of §63.3951. (40 CFR 63.3930(c)(3))
- 5) 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))
- 6) 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))
- 7) A record of the volume fraction of coating solids for each coating used during each compliance period. (40 CFR 63.3930(f))
- 8) If you use either the emission rate without add-on controls or the emission rate with add-on controls compliance option, the density for each coating, thinner and/or other additive, and cleaning material used during each compliance period. (40 CFR 63.3930(g))

- 9) If you use and allowance in Equation 1 of §63.3951 for organic HAP contained in waste materials sent to or designated for shipment to a treatment, storage, and disposal facility (TSDF) according to §63.3951(e)(4), you must keep records of the information specified in paragraphs (h)(1) through (3) of §63.3930 as follows: (40 CFR 63.3930(h))
 - (a) The name and address of each TSDF to which you sent waste materials for which you use an allowance in Equation 1 of §63.3951; 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 you used the allowance for these materials in Equation 1 of §63.3951. (40 CFR 63.3930(h)(2))
 - (c) The methodology used in accordance with §63.3951(e)(4) 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))
- 10) The owner or operator shall keep records of the date, time, and duration of each deviation. (40 CFR 63.3930(j))
- iv. The owner or operator shall keep records in the form and time period as the following:
 - 1) The owner or operator must keep records in a form suitable and readily available for expeditious review, according to §63.10(b)(1). Where appropriate, the records may be maintained as electronic spreadsheets or as a database. (40 CFR 63.3931(a))
 - 2) As specified in 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. (40 CFR 63.3931(b))
 - 3) The owner or operator must keep each record on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to

§63.10(b)(1). You may keep the records off-site for the remaining 3 years. (40 CFR 63.3931(c))

- v. The owner or operator shall maintain a copy of the Material Safety Data Sheet (MSDS) for each HAP-containing material used as this plant. (Regulation 2.16, section 4.1.9)

e. **TAC**

- i. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS, analysis of emissions, and/or modeling results.
- ii. The owner or operator shall re-evaluate the environmental acceptability and document the environmentally acceptable emissions of a new TAC is introduced or the content of a TAC in a raw material increases above *de minimis* at the time of the change.

S3. **Reporting** (Regulation 2.03, section 6.1)

The owner or operator shall submit semi-annual compliance reports that include the information in this section. All reports shall include the company name, plant ID number, and the beginning and ending date of the reporting period. The compliance reports shall clearly identify any deviation from a permit requirement. The compliance reports shall be postmarked within 60 days following the end of each reporting period. All compliance reports shall include the following certification statement per Regulation 2.16, section 3.5.11

- “Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate, and complete.”
- Signature and title of the responsible official of the company.

The compliance reports are due on or before the following dates of each calendar year:

<u>Reporting Period</u>	<u>Report Due Date</u>
January 1 st through June 30 th	August 29 th
July 1 st through December 31 st	March 1 st

a. **VOC**

For Regulation 7.59:

- i. The monthly and 12-consecutive month VOC emissions from all equipment subject to Regulation 7.59.

Or

- ii. The owner or operator shall include, at a minimum, the following information in the semi-annual compliance reports for Regulation 7.59:
 - 1) Emission unit ID number and emission point or stack ID number;
 - 2) The beginning and ending date of the reporting period;
 - 3) Identification of each exceedance of the coating VOC content limit and the quantity of excess emissions; and
 - 4) Description of any corrective action taken.
 - 5) A negative declaration if no excess emissions occurred.

For Regulation 7.25:

- i. The monthly and 12-consecutive month VOC emissions from all equipment subject to Regulation 7.25;
- ii. Identification of all periods of exceedances of the VOC limit including the quantity of excess emissions;
- iii. Reason for excess emissions; and
- iv. Description of corrective action taken to prevent future exceedances.
- v. A negative declaration if no excess emissions occurred.

b. Opacity

- i. Any deviation from the requirement to perform the required monthly visual inspections of the paint booth PM filter system; and
- ii. Any deviation from the requirement to record the results of each paint booth PM filter system inspection.

c. PM/PM₁₀

- i. The owner or operator shall identify all periods of exceeding PM emission standards during a reporting period. The report shall include the following:
 - 1) Emission point ID number;
 - 2) The date and duration (including the start and stop time) during which a deviation occurred;
 - 3) The quantity of excess emissions;
 - 4) Summary information on the cause or reason for excess emissions;
 - 5) Corrective action taken to minimize the extent and duration of each excess emission event; and
 - 6) Measures implemented to prevent reoccurrence of the situation that resulted in excess PM emissions.
 - 7) If no deviations occur during a semi-annual reporting period, the report shall contain a negative declaration.
- ii. The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports for PM/PM₁₀:

- 1) The reporting period;
- 2) The monthly and 12-consecutive month PM/PM₁₀ emissions, plantwide, for each month in the reporting period;
- 3) Identification of all periods of exceedances of the plantwide PM/PM₁₀ emission limit including the quantity of excess emissions;
- 4) Reason for excess emissions whether process upset, control device malfunction, other known causes, or unknown causes; and
- 5) Description of any corrective action taken.
- 6) A negative declaration if there were no excess emissions.

d. **HAP (40 CFR 63, Subpart M and Regulation 5.02, section 3.74)**

i. Notifications:

- 1) *General.* You must submit the notifications in §§63.7(b) and (c), 63.8(f)(4), and 63.9(b) through (e) and (h) that apply to you by the dates specified in those sections, except as provided in paragraphs (b) and (c) of this section. (40 CFR 63.3910(a))
- 2) *Initial Notification.* You must submit the initial notification required by §63.9(b) for a new or reconstructed affected source no later than 120 days after initial startup or 120 days after January 2, 2004, whichever is later. (40 CFR 63.3910(b))
- 3) *Notification of compliance status.* You must submit the notification of compliance status required by §63.9(h) no later than 30 calendar days following the end of the initial compliance period described in §63.3940, 63.3950, or 63.3960 that applies to your affected source. The notification of compliance status must contain the information in §63.9(h) and the following:
 - (a) Company name and address.
 - (b) 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.
 - (c) Date of the report and beginning and ending dates of the reporting period. The reporting period is the initial compliance period described in §§63.3940, 63.3950, or 63.3960 that applies to your affected source.
 - (d) Identification of the compliance option or options specified in §63.3891 that you used on each coating operation in the affected source during the initial compliance period.

- (e) Statement of whether or not the affected source achieved the emission limitations for the initial compliance period.
- (f) If you had a deviation, include the information in paragraphs (c)(6)(i) and (ii) of this section.
 - (i) A description and statement of the cause of the deviation.
 - (ii) If you failed to meet the applicable emission limit in §63.3890, include all the calculations you used to determine the kg (lb) of organic HAP emitted per liter (gal) coating solids used. You do not need to submit information provided by the materials' suppliers or manufacturers, or test reports.
- (g) For each of the data items listed in paragraphs (c)(7)(i) through (iv) of this section that is required by the compliance option(s) you used to demonstrate compliance with the emission limit, include an example of how you determined the value, including calculations and supporting data. Supporting data may include a copy of the information provided by the supplier or manufacturer of the example coating or material, or a summary of the results of testing conducted according to §63.3941(a), (b), or (c). You do not need to submit copies of any test reports.
 - (i) Mass fraction of organic HAP for one coating, for one thinner and/or other additive, and for one cleaning material.
 - (ii) Volume fraction of coating solids for one coating.
 - (iii) Density for one coating, one thinner and/or other additive, and one cleaning material, except that if you use the compliant material option, only the example coating density is required.
 - (iv) The amount of waste materials and the mass of organic HAP contained in the waste materials for which you are claiming an allowance in Equation 1 of §63.3951.
- (h) The calculation of kg (lb) of organic HAP emitted per liter (gal) coating solids used for the compliance option(s) you used, as specified in paragraphs (c)(8)(i) through (iii) of this section.
 - (i) For the compliant material option, provide an example calculation of the organic HAP content for one coating, using Equation 2 of §63.3941.

- (ii) For the emission rate without add-on controls option, provide the calculation of the total mass of organic HAP emissions for each month; the calculation of the total volume of coating solids used each month; and the calculation of the 12-month organic HAP emission rate using Equations 1 and 1A through 1C, 2, and 3, respectively, of §63.3951.
 - ii. *Semiannual compliance reports.* You must submit semiannual compliance reports for each affected source according to the requirements of paragraphs (a)(1) through (7) of this section.
 - 1) *Dates.* Unless the Administrator has approved or agreed to a different schedule for submission of reports under §63.10(a), you must prepare and submit each semiannual compliance report according to the dates specified in paragraphs (a)(1)(i) through (iv) of this section. Note that the information reported for each of the months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.¹⁰
 - (a) The first semiannual compliance report must cover the first semiannual reporting period which begins the day after the end of the initial compliance period described in §63.3940, §63.3950, or §63.3960 that applies to your affected source and ends on June 30 or December 31, whichever date is the first date following the end of the initial compliance period.
 - (b) Each subsequent semiannual compliance report must cover the subsequent semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.
 - (c) Each semiannual compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.
 - 2) *Inclusion with Title V report.* Each affected source that has obtained a Title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in 40 CFR Part 63, Subpart M MMM in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR

¹⁰ In accordance with 40 CFR Part 63, Subpart M MMM, section 63.3920(a)(1) and 63.3920(a)(1)(iv), BAE Systems may submit their Subpart M MMM semiannual compliance reports on the same schedule as the Title V operating permit reporting requirements.

71.6(a)(3)(iii)(A). If an affected source submits a semiannual compliance report pursuant to §63.3920 along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the semiannual compliance report includes all required information concerning deviations from any emission limitation in Subpart Mmmm, its submission will be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a semiannual compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permitting authority. (40 CFR 63.3920(a)(2))

- 3) *General Requirements.* The semiannual compliance report must contain the information specified in paragraphs (a)(3)(i) through (vii) of §63.3920, and the information specified in paragraphs (a)(4) through (7) and (c)(1) of section §63.3920 that is applicable to your affected source as follows: (40 CFR 63.3920(a)(3))
- (a) Company name and address. (40 CFR 63.3920(a)(3)(i))
 - (b) 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))
 - (c) 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))
 - (d) Identification of the compliance option or options specified in §63.3891 that you used on each coating operation during the reporting period. If you switched 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))
 - (e) If you used the emission rate without add-on controls or the emission rate with add-on controls compliance option (§63.3891(b) or (c)), the calculations result for each rolling 12-month organic HAP emission rate during the 6-month reporting period. (40 CFR 63.3920(a)(3)(v))

- 4) *No deviations.* If there were no deviations from the emission limitations in §63.3890, §63.3892, and §63.3893 that apply to you, 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))
- 5) *Deviations: Compliant material option.* If you used the compliant material option and there was a deviation from the applicable organic HAP content requirements in §63.3890, the semiannual compliance report must contain the following information: (40 CFR 63.3920(a)(5))
 - (a) Identification of each coating used that deviated from the applicable emission limit, and each thinner and/or other additive, and cleaning material used that contained organic HAP, and the dates and time periods each was used. (40 CFR 63.3920(a)(5)(i))
 - (b) The calculation of the organic HAP content (using Equation 2 of §63.3941) for each coating identified in paragraph (a)(5)(i) of this section. You do not need to submit background data supporting this calculation (e.g., information provided by coating suppliers or manufacturers, or test reports). (40 CFR 63.3920(a)(5)(ii))
 - (c) The determination of mass fraction of organic HAP for each thinner and/or other additive, and cleaning material identified in paragraph (a)(5)(i) of this section. You do not need to submit background data supporting this calculation (e.g., information provided by material suppliers or manufacturers, or test reports). (40 CFR 63.3920(a)(5)(iii))
 - (d) A statement of the cause of each deviation. (40 CFR 63.3920(a)(5)(iv))
- 6) *Deviations: Emission rate without add-on controls option.* If you used the emission rate without add-on controls option and there was a deviation from the applicable emission limit in §63.3890, the semiannual compliance report must contain the information in paragraphs (a)(6)(i) through (iii) of section 63.3920 as follows: (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 in §63.3890. (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. You must submit the calculations for Equations 1, 1A through 1C, 2, and 3 of §63.3951; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to §63.3951(e)(4). You do not need to submit background data supporting these calculations (e.g., information provided by materials suppliers or manufacturers, or test reports). (40 CFR 63.3920(a)(6)(ii))
- (c) A statement of the cause of each deviation. (40 CFR 63.3920(a)(6)(iii))

e. TAC

- i. The owner or operator shall report any conditions that were inconsistent with those conditions analyzed in the most recent Environmental Acceptability Demonstration or a negative declaration stating that operations were within the conditions analyzed. This includes, but is not limited to, control device upset conditions.
- ii. For any conditions outside the analysis, the owner or operator shall re-analyze to determine whether these conditions comply with the STAR program. Changes to the air dispersion modeling program or meteorological data used in the most recent Environmental Acceptability Demonstration do not trigger the requirement to re-analyze. (Regulation 5.21 sections 4.22 – 4.24)
- iii. The owner or operator shall submit the re-evaluated EA demonstration to the District within 6 months after a change of a raw material as described in S2.f.ii.

Comments

- 1. The construction permit fee of \$2,542.40 is based on the Schedule of Fees table in Regulation 2.08, section 12. The following table is a breakdown of the applicable fees:

Fee Type	Amount
Permit Actions: Significant Revision	\$2,542.40