Inspector Checklist for
The Surface Coating of Plastic Parts and Products
Maximum Achievable Control Technologies (MACT)

National Emission Standards for Hazardous Air Pollutants (NESHAP):
Surface Coating of Plastic Parts and Products
40 CFR Parts 63.4480 – 63.4581or Subpart PPPP
See Also General Provisions in 40 CFR Part 63

Summary: This subpart establishes national emission and operating limitations for hazardous air pollutants (HAP) emitted from the surface coating of plastic parts and products at major sources of HAP emissions. Requirements to demonstrate initial and continuous compliance with these limitations have also been established.

NOTE: This checklist has not included the emission calculations for this subpart. However, definitions, applicability of general provisions and all other tables for this subpart are included.

Checklist Sections

I. Pre Site Visit Review

1. What should I do before I visit the facility to be inspected?

❑ Review any available information on the facility. This can be found in agency files containing construction and/or operating permits, reports, enforcement actions or by contacting facility personnel.

Facility ID/Permit Number(s):	
Facility Name/Address:	
Facility Contact Name:	
Facility Number/E-mail/Fax:	
Facility Contact Address:	

❑ Review Inspection History

Inspector	Title/Agency	Phone Number	Date of Inspection

❑ Review any agency or facility specific safety procedures.

II. Applicability

2. Is facility subject to the Surface Coating of Plastic Parts and Products NESHAP? 63.4481

❑ Does the facility apply surface coating (**see coating and coating operations definitions in this checklist – Section IX – 63.4581**) to plastic parts and products? ☐ Yes ☐ No ☐NA

Note: The general use coating subcategory includes all surface coating operations that are not automotive lamp coating operations, thermoplastic olefin (TPO) coating operations, or assembled on-road vehicle coating operations.

Note: Plastic parts and products include, but are not limited to, the plastic components of the following products as well as the products themselves: Motor vehicle parts and accessories for automobiles,

trucks, recreational vehicles; sporting and recreational goods; toys; business machines; laboratory and medical equipment; household and other consumer products.

❑ Is the facility a major source, located at a major source or is part of a major source of HAP emission?
☐ Yes ☐ No ☐NA

Note: Major sources are those stationary sources (or group of stationary sources located within a contiguous area and under common control) that emit 10 TPY or more of a single air toxic or 25 TPY or more of a combination of air toxics.

❑ Does the facility own or operate a new, reconstructed or existing affected source that uses 100 gallons per year or more of coatings (non-HAP containing coatings need not be included in this determination) that contain hazardous air pollutants in the surface coating of plastic parts and products.
☐ Yes ☐ No ☐NA

3. If not a major source, what type of records does the facility have to prove its status? 63.1(b)(3) and 63.10(b)(3)

❑ Records of the total amount of materials used each month, and, if necessary, the HAP content of each material and the calculation of the total HAP consumed each month. ☐ Yes ☐ No ☐NA

❑ Records that began 12 months before the source's compliance date. ☐ Yes ☐ No ☐NA

❑ Records are kept for 5 years after they are created. ☐ Yes ☐ No ☐NA

4. Does the facility have any of the following operations that are not subject to this subpart? 63.4481

❑ Coating operations that use only coatings, thinners, additives and cleaning materials that contain no organic HAP. ☐ Yes ☐ No ☐NA

❑ Surface coating operations that occur at research or laboratory facilities. ☐ Yes ☐ No ☐NA

❑ Surface coating operations that are part of janitorial, building and facility maintenance operations.
☐ Yes ☐ No ☐NA

❑ Surface coating operations that occur at hobby shops that are operated for non-commercial purposes.
☐ Yes ☐ No ☐NA

❑ Surface coating of plastic parts and products performed on-site at installations owned or operated by the Armed Forces of the USA or the National Aeronautics and Space Administration.
☐ Yes ☐ No ☐NA

❑ Surface coating of military munitions manufactured by or for the Armed Forces of the USA.
☐ Yes ☐ No ☐ NA

❑ Surface coating where plastic is extruded onto plastic parts or products to form a coating

❑ Surface coating of magnet wire. ☐ Yes ☐ No ☐ NA

- ❑ In-mold coating operations or gel coating operations in the manufacture of reinforced plastic composite parts that meet the applicability criteria for reinforced plastics composites production (Subpart WWWW). ☐ Yes ☐ No ☐ NA

- ❑ Surface coating of plastic components of wood furniture that meet the applicability criteria for wood furniture manufacturing (Subpart JJ). ☐ Yes ☐ No ☐ NA

- ❑ Surface coating of plastic components of large appliances that meet the applicability criteria for large appliance surface coating (Subpart NNNN). ☐ Yes ☐ No ☐ NA

- ❑ Surface coating of plastic components of metal furniture that meet the applicability criteria for metal furniture surface coating (Subpart RRRR). ☐ Yes ☐ No ☐ NA

- ❑ Surface coating of plastic components of wood building products that meet the applicability criteria for wood building products surface coating (Subpart QQQQ). ☐ Yes ☐ No ☐ NA

- ❑ Surface coating of plastic components of aerospace vehicles that meet the applicability criteria for aerospace manufacturing and rework (40 CFR Part 63, Subpart GG). ☐ Yes ☐ No ☐ NA

- ❑ Surface coating of plastic parts intended for use in aerospace vehicle or component using specialty coatings as defined in Appendix A to Subpart GG. ☐ Yes ☐ No ☐ NA

- ❑ Surface coating of plastic components of ships that meet the applicability criteria for shipbuilding and ship repair (Subpart II of this part). ☐ Yes ☐ No ☐ NA

- ❑ Surface coating of plastic using a web coating process that meets the applicability criteria for paper and other web coating (Subpart JJJJ). ☐ Yes ☐ No ☐ NA

- ❑ Surface coating of fiberglass boats or parts of fiberglass boats (including, but not limited to, the use of assembly adhesives) where the facility meets the applicability criteria for boat manufacturing (Subpart VVVV of this part), except where the surface coating of the boat is a post-mold coating operation performed on personal watercraft or parts of personal watercraft. This subpart does not apply to post-mold coating operations performed on personal watercraft and parts of personal watercraft. ☐ Yes ☐ No ☐ NA

- ❑ Surface coating of plastic components of automobiles and light-duty trucks that meet the applicability criteria of the Surface coating of Automobiles and Light-Duty Trucks NESHAPS. ☐ Yes ☐ No ☐ NA

- ❑ Screen printing. ☐ Yes ☐ No ☐ NA

5. What parts of the facility is covered by this subpart? 63.4482

- ❑ Does the facility have a collection of any of the following that is used for surface coating of plastic parts and products that is new, reconstructed or existing? Check all that is applicable for the facility.

    - ☐ All coating operations as defined in this subpart (see definitions in 63.4581); ☐ Yes ☐ No ☐ NA

    - ☐ All storage containers and mixing vessels in which coatings, thinner and/or other additives and cleaning materials are stored or mixed; ☐ Yes ☐ No ☐ NA

☐ All manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials; ☐ Yes ☐ No ☐ NA

☐ All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation? ☐ Yes ☐ No ☐NA

Note: See 63.2 for the definitions of **new**, **reconstructed** or **existing** sources.

6. Did the facility meet the compliance dates for applicable sources? 63.4483

Note: The compliance date begins the initial compliance period during which the facility conducts the initial compliance demonstration for the chosen method of compliance demonstration (See 63.4540, 63.4550 and 634560).

❑ If the initial startup of the affected new or reconstructed source was before April 19, 2004, was the facility in compliance on April 19, 2004. ☐ Yes ☐ No ☐ NA

❑ If the initial startup of the affected new or reconstructed source was after April 19, 2004, was the facility compliant on the date of initial startup of the affected source? ☐ Yes ☐ No ☐ NA

❑ If the facility has an existing source, were they in compliance by the compliance date of three years after April 19, 2004? ☐ Yes ☐ No ☐ NA

❑ If the facility had an area source that increased its emissions or the potential to emit such that it came a major source of HAP emissions, did the facility meet the compliance date as follows:

☐ April 19, 2004 for any portion of the source that became a new or reconstructed affected source subject to this subpart? ☐ Yes ☐ No ☐ NA

☐ One year after the source becomes a major source or three years after April 19, 2004, whichever is later, for any portion of the source that becomes an existing affected source subject to this subpart? ☐ Yes ☐ No ☐ NA

Note: The facility must also meet the notification requirements (see 63.4510) according to the dates specified in this subpart and in the general provisions. Some notifications must be submitted before the applicable compliance dates.

III. Emissions Limitations

7. Is the facility meeting the required emissions limits applicable to them? 63.4490

New or Reconstructed Affected Source

❑ For each new general using coating, did the facility limit organic HAP emissions to no more than 0.16 kg (0.16) organic HAP emitted per kg (lb) coating solids used during each 12-mont compliance period? ☐ Yes ☐ No ☐ NA

❑ For each new automotive lamp coating affected source, did the facility limit organic HAP emissions to no more than 0.26 kg (0.26 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period? ☐ Yes ☐ No ☐ NA

❑ For each new TPO coating affected source, did the facility limit organic HAP emissions to no more than 0.22 kg (0.22 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period? ☐ Yes ☐ No ☐ NA

❑ For each new assembled on-road vehicle coating affected source, did the facility limit organic HAP emissions to no more than 1.34 kg (1.34 lb) organic HAP emitted per kg (lb) coating solids used during each 12-mont compliance period. ☐ Yes ☐ No ☐ NA

Existing Affected Source

❑ For each existing general using coating, did the facility limit organic HAP emissions to no more than 0.16 kg (0.16) organic HAP emitted per kg (lb) coating solids used during each 12-mont compliance period? ☐ Yes ☐ No ☐ NA

❑ For each existing automotive lamp coating affected source, did the facility limit organic HAP emissions to no more than 0.45 kg (0.45 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period? ☐ Yes ☐ No ☐ NA

❑ For each new TPO (Thermoplastic Olefin) coating affected source, did the facility limit organic HAP emissions to no more than 0.26 kg (0.26 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period? ☐ Yes ☐ No ☐ NA

❑ For each new assembled on-road vehicle coating affected source, did the facility limit organic HAP emissions to no more than 1.34 kg (1.34 lb) organic HAP emitted per kg (lb) coating solids used during each 12-mont compliance period. ☐ Yes ☐ No ☐ NA

Applicability Criteria for More Than One Subcategory

❑ Does the facility's surface coating operation meet the applicability criteria of more than one subcategory emissions limits for new, reconstructed or existing affected sources? ☐ Yes ☐ No ☐ NA

❑ If yes, did the facility comply separately with each subcategory emission limit? ☐ Yes ☐ No ☐ NA

❑ As an alternative, did the facility comply with one of the following options:

- ☐ Determine the predominant activity and comply with the emission limits related to the predominant activity [see 63.4490(c)(1) for determination guidance]? ☐ Yes ☐ No ☐ NA
- ☐ Or, calculate and comply with a facility-specific emission limit (per Equation 1 of this section) and include the information with submittal of Notification of Compliance Status? ☐ Yes ☐ No ☐ NA

8. What option is the facility using for meeting applicable emission limits? 63.4491

❑ Did the facility include all coatings, thinners and/or other additives and cleaning materials used in the affected source when determining their organic emission rate and whether that rate was equal to or less than the applicable emission limit (see 63.4490)? ☐ Yes ☐ No ☐ NA

❑ In order to demonstrate that, based on the materials used (coatings, thinners, additives, cleaning materials) in the coating operations, the organic HAP emission rate is less than or equal to the applicable emission limit, calculated as a rolling 12-month emission rate and determined on a monthly basis, is the facility using:

☐ The **compliant material option**? ☐ Yes ☐ No ☐ NA

Note: The requirements of 63.4540, 63.4541 and 63.4542 must be met in order to demonstrate compliance with the emissions limits when using this option.

☐ The **emission rate without add-on controls option?** ☐ Yes ☐ No ☐ NA

Note: The requirements of 63.4550, 63.4551 and 63.4552 must be met in order to demonstrate compliance with the emissions limits when using this option.

❑ In order to demonstrate that, based on the materials used (coatings, thinners, additives, cleaning materials) in the coating operations, and the emissions reductions achieved by emission capture systems and add-on controls, the organic HAP emission rate is less than or equal to the applicable emission limit, calculated as a rolling 12-month emission rate and determined on a monthly basis, is the facility using:

☐ The **emission rate with add-on controls option?** ☐ Yes ☐ No ☐ NA

Note: The requirements of 63.4560 through 63.4568 must be met in order to demonstrate compliance with the emissions limits when using this option.

❑ Does the facility have the appropriate documentation of the HAP content determination? ☐ Yes ☐ No ☐ NA

Note: The facility may use different compliance options for different coating operations or at different times on the same coating operation. The facility may use different compliance options when different coatings are applied to the same part or when the same coating is applied to different parts. However, the facility may not use different compliance options at the same time on the same coating operation. If the facility switches between compliance options for any coating operations or group of coating operations, they must document this switch and must report it in the next semiannual compliance report require in 63.4520.

9. Is the facility meeting applicable operating limits? 63.4492

Note: For any coating operations for which the facility uses the compliant material option or the emission rate without add-on controls option, there are no operating limits required to be met.

❑ Did the facility meet the operating limits in Table 1 for any controlled coating operations using the emission rate with add-on controls option (except for those which use a solvent recovery system and conduct a liquid-liquid material balance? ☐ Yes ☐ No ☐ NA

❑ Did the facility establish the operating limits during the performance test? ☐ Yes ☐ No ☐ NA

❑ Has the facility met the operating limits at all times since they were established during the performance test? ☐ Yes ☐ No ☐ NA

❑ If the facility uses an add-on control device other than those listed in Table 1 or chose to use an alternative parameter and comply with a different operating limit, did they apply to the appropriate authority for approval of this alternative monitoring? ☐ Yes ☐ No ☐ NA

10. Is the facility complying with the appropriate work practice standards? 63.4493

Note: For any coating operations for which the facility uses the compliant material option or the emission rate without add-on controls option, there are no work practice standards required to be met.

❑ If the facility uses the emission rate with add-on control option, have the developed and implemented a work practice plan to minimize organic HAP emissions from the storage, mixing and conveying of coatings, thinners, additives and cleaning materials used in and the waste materials generated by the controlled coating operations for which this compliance option is used? ☐ Yes ☐ No ☐ NA

❑ Does the work practice plan specify practices and procedures to ensure, at a minimum, that the following elements are implemented:

- ☐ All organic HAP-containing materials (coatings, thinners, additives, cleaning and waste materials) used are stored in closed containers; ☐ Yes ☐ No ☐ NA
- ☐ Spills of organic-HAP containing materials are minimized; ☐ Yes ☐ No ☐ NA
- ☐ Organic-HAP-containing materials are conveyed from one location to another in closed containers or pipes; ☐ Yes ☐ No ☐ NA
- ☐ Mixing vessels which contain organic-HAP-containing materials are kept closed except when adding to, removing or mixing the contents; and ☐ Yes ☐ No ☐ NA
- ☐ Emissions of organic HAP are minimized during cleaning of storage, mixing and conveying equipment. ☐ Yes ☐ No ☐ NA

❑ Or, did the facility choose to meet an alternative standard, provided permission was granted by the appropriate authority? ☐ Yes ☐ No ☐ NA

IV. General Compliance Requirements

11. Is the facility meeting general compliance requirements? 63.4500

❑ Is the facility in compliance with the following emission limitations:

- ☐ For any coating operations for which the facility used the compliant material option or the emission rate without add-on controls option, have they been incompliance with the applicable emission limit at all times (see applicable limits in 63.4490)? ☐ Yes ☐ No ☐ NA
- ☐ For any coating operations for which the facility used the emission rate with add-on controls option, has the coating operation been in compliance with applicable emission limits (see 63.4490) at all times except during periods of startup, shutdown and malfunction? ☐ Yes ☐ No ☐ NA
- ☐ For any coating operations for which the facility used the emission rate with add-on controls option, has the coating operation been in compliance with the operating limits for emission

capture systems and add-on control devices (required by 63.4492) at all times except during periods of startup, shutdown and malfunction and except for solvent recovery systems for which the facility conduct liquid-liquid material balances (according to 63.4561)?
☐ Yes ☐ No ☐ NA

☐ For any coating operations for which the facility used the emission rate with add-on controls option, has the coating operation been in compliance with applicable work practice standards (see 63.4493)? ☐ Yes ☐ No ☐ NA

☐ Has the facility always operated and maintained their affected sources, including all air pollution control and monitoring equipment they use for compliance purposes, according to the applicable general provisions (see 63.6(e)(1)(i)? ☐ Yes ☐ No ☐ NA

☐ If the facility has an affected source that uses an emission capture system and add-on control device, have the developed a written startup, shutdown and malfunction plan according to the general provisions requirements (63.6(e)(3)? ☐ Yes ☐ No ☐ NA

- Does the plan address the startup, shutdown and corrective actions in the event of a malfunction of the emission capture system or the add-on control device?
☐ Yes ☐ No ☐ NA

- Does the plan address any coating operation equipment that may cause increased emissions or that would affect capture efficiency if the process equipment malfunctions?
☐ Yes ☐ No ☐ NA

12. Does the facility know which parts of the General Provisions apply? 63.4501

❑ Has the facility reviewed Table 2 and determined the applicable general provisions (Section 63.1 – 63.15)? ☐ Yes ☐ No ☐ NA

V. Notifications, Reports and Records

13. Did the facility submit the proper notifications by the due date? 63.4510

❑ For new or reconstructed affected sources, did the facility submit the required initial notification [see 63.9(b)] no later than120 days after the initial startup or 120 days after April 19, 2004, whichever is later? ☐ Yes ☐ No ☐ NA

❑ For existing affected sources, did the facility submit the initial notification no later than 1 year after April 2004? ☐ Yes ☐ No ☐ NA

❑ If the facility is using compliance with the Surface Coating of Automobiles and Light Duty Trucks NESHAP to constitute compliance with this subpart for any or all of their plastic parts coating operations, did they include a statement to this effect in the initial notification, and other required notifications under this subpart? ☐ Yes ☐ No ☐ NA

❑ If the facility is complying with another NESHAP that constitutes the predominant activity at their facility in order to compliance with this subpart for their plastic coatings operations, did they include a statement to this effect in their initial notification, and other required notifications under this subpart?
☐ Yes ☐ No ☐ NA

- ❑ Did the facility submit the notification of compliance status report [see 63.9(h)] no later than 30 calendar days following the end of the initial compliance period that applies to each affected source?
  ☐ Yes ☐ No ☐ NA

  - ☐ Did the notification of compliance status report include all of the following information:

    - o Company name and address. ☐ Yes ☐ No ☐ NA

    - o Statement by a responsible official certifying the truth accuracy and completeness of the report contents and including the official's name, title and signature.
      ☐ Yes ☐ No ☐ NA

    - o Date of report and beginning/ending dates of the reporting period.
      ☐ Yes ☐ No ☐ NA

    - o Identification of the compliance option or options used on each coating operation during the initial compliance period. ☐ Yes ☐ No ☐ NA

    - o Statement of whether or not the affected source achieved the emission limitations for the initial compliance period. ☐ Yes ☐ No ☐ NA

    - o If a deviation occurred, a description and statement as to the cause of the deviation and all calculations used to determine the kg (lb) organic HAP emitted per kg (lb) coating solids used if facility failed to meet the applicable emissions limit.
      ☐ Yes ☐ No ☐ NA

    - o Depending upon the emission limit compliance option used, sample calculation and supporting data on how the values were determined for the mass fraction of organic HAP for one coating, one thinner, one additive and one cleaning material; the mass fraction one coating solids for one coating; the density for one coating, one thinner, on additive and one cleaning material (except if the compliant material option was used, only the example coating density is required); and the amount of waste materials and the mass of organic HAP contained in the waste materials claiming an allowance [See Equation 1 in 63.4551]. ☐ Yes ☐ No ☐ NA

    - o The calculation of kg (lb) organic HAP emitted per kg (lb) coating solids used for the compliance option(s) chosen, using the equations specified for each particular option.
      ☐ Yes ☐ No ☐ NA

    - o For each emission rate with add-on controls option, the following information [note that this requirement does not apply to solvent recovery systems used to conduct liquid-liquid material balances]:

      - ▪ A summary of data and copies of calculations supporting the determination that the emission capture system is a permanent total enclosure (PTE) or a measurement of the emission capture system efficiency.
        ☐ Yes ☐ No ☐ NA

      - ▪ A summary of the results of each add-on control device performance test.
        ☐ Yes ☐ No ☐ NA

      - ▪ A list of each emission capture system's and add-on control device's operating limits and a summary of the data used to calculate those limits.
        ☐ Yes ☐ No ☐ NA

- A statement of whether or not the facility developed and implemented the work practice plan as required. ☐ Yes ☐ No ☐ NA

o If complying with a single emission limit representing the predominant activity, the calculations and supporting information used to demonstrate that the emission limit represents the predominant activity. ☐ Yes ☐ No ☐ NA

o If complying with a facility specific-emission limit, the calculations for that limit and required supporting information. ☐ Yes ☐ No ☐ NA

14. Did the facility submit the proper reports by the due date? 63.4520

Semiannual compliance reports

❑ Did the facility submit semiannual compliance reports for each affected source?
☐ Yes ☐ No ☐ NA

❑ Were reports submitted per the following requirements [note that the semiannual compliance reporting requirements may be satisfied by reports required under other parts of the Clean Air Act (CAA)]:

☐ The first semiannual compliance report covered the first semiannual reporting period which begins the day after the end of the initial compliance period applicable to an affected source and ends on June 30 or December 31, whichever date is the first date following the end of the initial compliance period? ☐ Yes ☐ No ☐ NA

☐ Each subsequent semiannual compliance report covered the subsequent semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31? ☐ Yes ☐ No ☐ NA

☐ Each semiannual compliance report was 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?
☐ Yes ☐ No ☐ NA

☐ For each affected source that is subject to 40 CFR Part 70 or 40 CFR Part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), the facility submitted the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the date specified above? ☐ Yes ☐ No ☐ NA

❑ For each affected source on a Title V operating permit (40 CFR part 70 or 40 CFR part 71) did the facility report all deviations in the semiannual monitoring report required the Title V permit?
☐ Yes ☐ No ☐ NA

Note: If an affected source submits a semiannual compliance report required by this section along with, or as part of, the semiannual monitoring report required by the Title V operating permit and the semiannual compliance report includes all required information concerning deviations from any emission limitation in this subpart, then the submission will 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.

❑ Did the semiannual compliance report for the affected source contain the information specified:

- ☐ Company name and address? ☐ Yes ☐ No ☐ NA

- ☐ 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? ☐ Yes ☐ No ☐ NA

- ☐ 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? ☐ Yes ☐ No ☐ NA

- ☐ Identification of the compliance option or options used on each coating operation during the reporting period? ☐ Yes ☐ No ☐ NA

    - o If the facility switched between compliance options during the reporting period, did they report the beginning and ending dates for each option used? ☐ Yes ☐ No ☐ NA

- ☐ For the emission rate without add-on controls or the emission rate with add-on controls compliance option, the calculation results for each rolling 12-month organic HAP emission rate during the 6-month reporting period? ☐ Yes ☐ No ☐ NA

- ☐ For the predominant activity alternative, the annual determination of predominant activity if it was not included in the previous semi-annual compliance report? ☐ Yes ☐ No ☐ NA

- ☐ For the facility-specific emission limit alternative the calculation of the facility-specific emission limit for each 12-month compliance period during the 6-month reporting period? ☐ Yes ☐ No ☐ NA

- ❑ If there were no deviations from applicable emission limitations, did the semiannual compliance report include a statement that there were no deviations from the emission limitations during the reporting period? ☐ Yes ☐ No ☐ NA

    - ☐ For the emission rate with add-on controls option with no periods during which the continuous parameter monitoring systems (CPMS) were out-of-control, did the semiannual compliance report include a statement that there were no periods during which the CPMS were out-of-control during the reporting period? ☐ Yes ☐ No ☐ NA

- ❑ For the compliant material option where there was a deviation from the applicable organic HAP content requirements, did the semiannual compliance report must contain the following information:

    - ☐ 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? ☐ Yes ☐ No ☐ NA

    - ☐ The calculation of the organic HAP content (using Equation 1 in 63.4541) for each coating identified? ☐ Yes ☐ No ☐ NA

    - ☐ The determination of mass fraction of organic HAP for each thinner and/or other additive, and cleaning material? ☐ Yes ☐ No ☐ NA

    - ☐ A statement of the cause of each deviation? ☐ Yes ☐ No ☐ NA

- ❑ For the emission rate without add-on controls option where there was a deviation from the applicable emission limit, did the semiannual compliance report must contain the following information:

- ☐ The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit? ☐ Yes ☐ No ☐ NA

- ☐ The calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred, including the calculations for Equations 1, 1A through 1C, 2, and 3 in 63.4551; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to 63.4551(e)(4). Background information need not be submitted? ☐ Yes ☐ No ☐ NA

- ☐ A statement of the cause of each deviation? ☐ Yes ☐ No ☐ NA

❑ For the emission rate with add-on controls option where there was a deviation from an emission limitation (including any periods when emissions bypassed the add-on control device and were diverted to the atmosphere), did the semiannual compliance report contain the following information, including periods of startup, shutdown, and malfunction during which deviations occurred:

- ☐ The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit in 63.4490? ☐ Yes ☐ No ☐ NA

- ☐ The calculations used to determine the 12-month organic HAP emission rate for each compliance period in which a deviation occurred: calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month; the calculation used to determine mass of organic HAP in waste materials, if applicable; the calculation of the total mass of coating solids used each month; the calculation of the mass of organic HAP emission reduction each month by emission capture systems and add-on control devices, as applicable; the calculation of the total mass of organic HAP emissions each month; and the calculation of the 12-month organic HAP emission rate)? ☐ Yes ☐ No ☐ NA

- ☐ The date and time that each malfunction started and stopped? ☐ Yes ☐ No ☐ NA

- ☐ A brief description of the CPMS? ☐ Yes ☐ No ☐ NA

- ☐ The date of the latest CPMS certification or audit? ☐ Yes ☐ No ☐ NA

- ☐ The date and time that each CPMS was inoperative, except for zero (low-level) and high-level checks? ☐ Yes ☐ No ☐ NA

- ☐ The date, time, and duration that each CPMS was out-of-control? ☐ Yes ☐ No ☐ NA

- ☐ The date and time period of each deviation from an operating limit in Table 1 to this subpart; date and time period of any bypass of the add-on control device; and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period? ☐ Yes ☐ No ☐ NA

- ☐ A summary of the total duration of each deviation from an operating limit in Table 1 to this subpart and each bypass of the add-on control device during the semiannual reporting period, and the total duration as a percent of the total source operating time during that semiannual reporting period? ☐ Yes ☐ No ☐ NA

- ☐ A breakdown of the total duration of the deviations from the operating limits in Table 1 of this subpart and bypasses of the add-on control device during the semiannual reporting period into those that were due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes? ☐ Yes ☐ No ☐ NA

- ☐ A summary of the total duration of CPMS downtime during the semiannual reporting period and the total duration of CPMS downtime as a percent of the total source operating time during that semiannual reporting period? ☐ Yes ☐ No ☐ NA

- ☐ A description of any changes in the CPMS, coating operation, emission capture system, or add-on control device since the last semiannual reporting period? ☐ Yes ☐ No ☐ NA

- ☐ For each deviation from the work practice standards, a description of the deviation, the date and time period of the deviation, and the actions you took to correct the deviation? ☐ Yes ☐ No ☐ NA

- ☐ A statement of the cause of each deviation? ☐ Yes ☐ No ☐ NA

Performance test reports

- ❑ If the facility used the emission rate with add-on controls option, did they submit reports of performance test results for emission capture systems and add-on control devices no later than 60 days after completing the tests? ☐ Yes ☐ No ☐ NA

Startup, shutdown, malfunction reports

- ❑ If the facility used the emission rate with add-on controls option and had a startup, shutdown, or malfunction during the semiannual reporting period, did they submit the following information:

  - ☐ If actions taken were consistent with the startup, shutdown, and malfunction plan, the semiannual compliance report required which included the information specified in general provisions section 63.10(d)? ☐ Yes ☐ No ☐ NA

  - ☐ If actions taken were not consistent with the startup, shutdown, and malfunction plan, submittal of an immediate startup, shutdown, and malfunction report as follows:

    - o A description of actions taken during the event in a report delivered by facsimile, telephone, or other means to the Administrator within 2 working days after starting actions inconsistent with the plan? ☐ Yes ☐ No ☐ NA

    - o Submittal of a letter to the Administrator within 7 working days after the end of the event, unless you have made alternative arrangements with the Administrator. The letter must contain the information specified in 63.10(d)(5)(ii)? ☐ Yes ☐ No ☐ NA

15. Does the facility have the proper records? 63.4530

- ❑ A copy of each notification and report submitted and the documentation supporting each notification and report? ☐ Yes ☐ No ☐ NA

- ❑ Records of the data and calculations used to determine the predominant activity, if applicable, and including records of data and calculations for each annual predominant activity determination? ☐ Yes ☐ No ☐ NA

- ❑ Records of the data used to calculate the facility-specific emission limit for the initial compliance demonstration, if applicable, and including records of any data used in and in the calculation of the

facility-specific emission limit for each 12-month compliance period included in the semi-annual compliance reports? ☐ Yes ☐ No ☐ NA

- ❑ 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 the mass fraction of coating solids for each coating? ☐ Yes ☐ No ☐ NA

    - ☐ If tests were conducted to determine mass fraction of organic HAP, density, or mass fraction of coating solids, a copy of the complete test report? ☐ Yes ☐ No ☐ NA

    - ☐ If information provided by the manufacturer or supplier of the material that was based on testing, was used, a summary sheet of results provided by the manufacturer or supplier? ☐ Yes ☐ No ☐ NA

- ❑ For each compliance period, the following records:

    - ☐ A record of the coating operations used each compliance option and the time periods (beginning and ending dates and times) for each option used? ☐ Yes ☐ No ☐ NA

    - ☐ For the compliant material option, a record of the calculation of the organic HAP content for each coating (using Equation 1 of 63.4541)? ☐ Yes ☐ No ☐ NA

    - ☐ For the emission rate without add-on controls option, 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 63.4551) and, if applicable, the calculation used to determine mass of organic HAP in waste materials, the calculation of the total mass of coating solids used each month (using Equation 2 of 63.4551), and the calculation of each 12-month organic HAP emission rate (using Equation 3 63.4551)? ☐ Yes ☐ No ☐ NA

    - ☐ For the emission rate with add-on controls option, records of the calculations:

        - o 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 and 1A through 1C of 63.4551; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to 63.4551(e)(4); ☐ Yes ☐ No ☐ NA

        - o The calculation of the total mass of coating solids used each month using Equation 2 of 63.4551; ☐ Yes ☐ No ☐ NA

        - o The calculation of the mass of organic HAP emission reduction by emission capture systems and add-on control devices using Equations 1 and 1A through 1D of 63.4561 and Equations 2, 3, and 3A through 3C of 63.4561, as applicable; ☐ Yes ☐ No ☐ NA

        - o The calculation of each month's organic HAP emission rate using Equation 4 of 63.4561; and ☐ Yes ☐ No ☐ NA

        - o The calculation of each 12-month organic HAP emission rate using Equation 5 of 63.4561? ☐ Yes ☐ No ☐ NA

- ❑ A record of the name and mass of each coating, thinner and/or other additive, and cleaning material used during each compliance period [If using the compliant material option for all coatings at the source,

the facility may maintain purchase records for each material used rather than a record of the mass used]? ☐ Yes ☐ No ☐ NA

- ❑ 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? ☐ Yes ☐ No ☐ NA

- ❑ A record of the mass fraction of coating solids for each coating used during each compliance period? ☐ Yes ☐ No ☐ NA

- ❑ If an allowance in Equation 1 of 63.4551 was used for organic HAP contained in waste materials sent to or designated for shipment to a treatment, storage, and disposal facility (TSDF), the following information:

    - ☐ The name and address of each TSDF where waste materials were sent for which use in an allowance in Equation 1, a statement of which subparts under 40 CFR parts 262, 264, 265, and 266 apply to the facility; and the date of each shipment? ☐ Yes ☐ No ☐ NA

    - ☐ 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? ☐ Yes ☐ No ☐ NA

    - ☐ The methodology used 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 (including 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)? ☐ Yes ☐ No ☐ NA

- ❑ Records of the date, time, and duration of each deviation? ☐ Yes ☐ No ☐ NA

- ❑ If the emission rate with add-on controls option was used, the following records:

    - ☐ For each deviation, a record of whether the deviation occurred during a period of startup, shutdown, or malfunction? ☐ Yes ☐ No ☐ NA

    - ☐ Records related to startup, shutdown, and malfunction? ☐ Yes ☐ No ☐ NA

    - ☐ Records required to show continuous compliance with each applicable operating limit specified in Table 1? ☐ Yes ☐ No ☐ NA

    - ☐ For each capture system that is a PTE, the data and documentation used to support a determination that the capture system meets the criteria in Method 204 of Appendix M to 40 CFR Part 51 for a PTE and has a capture efficiency of 100 percent, as specified in 63.4565(a)? ☐ Yes ☐ No ☐ NA

    - ☐ For each capture system that is not a PTE, the data and documentation used to determine capture efficiency according to the requirements. ☐ Yes ☐ No ☐ NA

        - o Records of the mass of total volatile hydrocarbon (TVH) as measured by Method 204A or 204F of Appendix M to 40 CFR part 51 for each material used in the coating operation, and the total TVH for all materials used during each capture efficiency test run, including a copy of the test report? ☐ Yes ☐ No ☐ NA

        - o Records of the mass of TVH emissions not captured by the capture system that exited the temporary total enclosure or building enclosure during each capture efficiency test

run, as measured by Method 204D or 204E of Appendix M to 40 CFR Part 51, including a copy of the test report? ☐ Yes ☐ No ☐ NA

- o Records documenting that the enclosure used for the capture efficiency test met the criteria in Method 204 of Appendix M to 40 CFR Part 51 for either a temporary total enclosure or a building enclosure? ☐ Yes ☐ No ☐ NA

- o Records of the mass of TVH emissions captured by the emission capture system as measured by Method 204B or 204C of Appendix M to 40 CFR Part 51 at the inlet to the add-on control device, including a copy of the test report? ☐ Yes ☐ No ☐ NA

- o Records of the mass of TVH emissions not captured by the capture system that exited the temporary total enclosure or building enclosure during each capture efficiency test run as measured by Method 204D or 204E of Appendix M to 40 CFR Part 51, including a copy of the test report? ☐ Yes ☐ No ☐ NA

- o Records documenting that the enclosure used for the capture efficiency test met the criteria in Method 204 of Appendix M to 40 CFR Part 51 for either a temporary total enclosure or a building enclosure? ☐ Yes ☐ No ☐ NA

- o Records needed to document a capture efficiency determination using an alternative method or protocol, if applicable? ☐ Yes ☐ No ☐ NA

☐ The records for each add-on control device organic HAP destruction or removal efficiency determination, including:

- o Records of each add-on control device performance test conducted? ☐ Yes ☐ No ☐ NA

- o Records of the coating operation conditions during the add-on control device performance test showing that the performance test was conducted under representative operating conditions? ☐ Yes ☐ No ☐ NA

☐ Records of the data and calculations used to establish the emission capture and add-on control device operating limits and to document compliance with the operating limits as specified in Table 1? ☐ Yes ☐ No ☐ NA

☐ A record of the work practice plan and documentation that the plan is being implementing on a continuous basis? ☐ Yes ☐ No ☐ NA

16. Are the facility records in the proper form and kept for the appropriate time? 63.4531

❑ Does the facility maintain all applicable records in such a manner that they can be readily accessed and are suitable for inspection? ☐ Yes ☐ No ☐ NA

❑ Did the facility keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record? ☐ Yes ☐ No ☐ NA

❑ Did the facility keep the required records on-site for at least 2 years following the date of each occurrence, measurement, maintenance, corrective action, report or record? **Note:** Records may be kept off-site for the remaining 3 years? ☐ Yes ☐ No ☐ NA

❑ Did the facility keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record? [Note: Records may be kept offsite for the remaining 3 years. Records may be kept in hard copy or computer readable form including, but not limited to, paper, microfilm, computer floppy disk, magnetic tape, or microfiche.]
☐ Yes ☐ No ☐ NA

VI. Compliance Requirements for the Compliant Material Option

17. Did the facility conduct the initial compliance demonstration by the appropriate date? 63.4540

❑ Did the facility complete the initial compliance demonstration for the initial compliance period applicable to their affected source in a timely fashion? **Note:** the initial compliance period begins on the applicable compliance date 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 the month, then the initial compliance period extends through that month plus the next twelve months. ☐ Yes ☐ No ☐ NA

❑ Did the initial compliance demonstration include required calculations (see 63.4541) and supporting documentation showing that during the applicable compliance period that they used no coating with an organic HAP content that exceeded the applicable established emission limit and that they used no thinners, additives or cleaning materials that contained organic HAP? ☐ Yes ☐ No ☐ NA

18. How did the facility conduct the initial emission limits compliance demonstration? 63.4541

❑ Did the facility demonstrate compliance by determining the organic HAP content for each coating used during compliance period to show that each had an organic HAP content less than or equal to the applicable emission limit (see 63.4490) and that they used not thinners, additives or cleaning materials that contained organic HAP? ☐ Yes ☐ No ☐ NA

- ☐ Did the facility conduct a separate initial compliance demonstration for each general use coating, TPO coating, automotive lamp coating and assembled on-road vehicle coating affected source, unless they were demonstrating compliance with a predominant activity of facility-specific emission limit? ☐ Yes ☐ No ☐ NA

- ☐ If the facility demonstrated compliance with a predominant activity or facility-specific emission limit, did they show that all coating operations included in the predominant activity determination or calculation of the facility-specific emission limit comply with that limit? ☐ Yes ☐ No ☐ NA

- ☐ As required for initial compliance demonstration:

  - o Did the facility determine the mass fraction of organic HAP for each material used (coatings, thinners, other additives and cleaning materials) by using an appropriate method (Method 311, Method 24, an approved Alternative Method or using information from the supplier or manufacturer of the material)? ☐ Yes ☐ No ☐ NA

    - ▪ If solvent blends that had no available test data or manufacturer's data were used, did the facility use the default values in Table 3 or Table 4 as appropriate? ☐ Yes ☐ No ☐ NA

  - o Did the facility determine the mass fraction of coating solids for each coating used during the compliance period by a test (Method 24 or an alternative approved method),

by information provided by the supplier or manufacturer of the material or by calculations (Equation 1 of this section 63.4541)? ☐ Yes ☐ No ☐ NA

☐ Did the facility conduct the demonstration for each material used in the condition it was in when received from its manufacturer or supplier prior to any alteration? ☐ Yes ☐ No ☐ NA

☐ Did the facility keep all records required for the initial compliance demonstration? ☐ Yes ☐ No ☐ NA

☐ As part of the notification of compliance status (see 63.4510), did the facility identify the coating operations for which they used the compliant material option and submit a statement they the applicable coating operations were in compliance with the emission limitations during the initial compliance period because they used not coating for which the organic HAP content exceeded the applicable emission limit and that they did not use any thinners, other additives and cleaning materials that contained organic HAP, as determined by appropriate compliance demonstration method? ☐ Yes ☐ No ☐ NA

19. How did the facility demonstrate continuous compliance with emission limitations? 63.4542

❑ To demonstrate continuous compliance for each compliance period, did the facility use no coating for which the organic HAP content exceeded the applicable emission limit, and use no thinner and/or other additive, or cleaning material that contained organic HAP? [Note that a compliance period consists of 12 months. Each month, after the end of the initial compliance period is the end of a compliance period consisting of that month and the preceding 11 months.] ☐ Yes ☐ No ☐ NA

☐ If complying with a facility-specific emission limit, did the facility also perform the necessary calculations for compliance demonstration on a monthly basis using the data from the previous 12 months of operation? ☐ Yes ☐ No ☐ NA

❑ If the facility chose to comply with the emission limitations by using the compliant material option and used a coating, thinner and/or other additive, or cleaning material that did not meet criteria, did they report this as a deviation from the emission limitations? ☐ Yes ☐ No ☐ NA

❑ As part of each semiannual compliance report, did the facility identify the coating operation(s) for which they used the compliant material option? ☐ Yes ☐ No ☐ NA

❑ If there were no deviations from the applicable emission limit, did they submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because they used no coatings for which the organic HAP content exceeded the applicable emission limit, and you used no thinner and/or other additive, or cleaning material that contained organic HAP? ☐ Yes ☐ No ☐ NA

❑ Does the facility maintain the necessary records for continuous compliance demonstration (see 63.4530 and 63.4531)? ☐ Yes ☐ No ☐ NA

VII. Compliance Requirements for the Emission Rate without Add-On Controls Option

20. Did the facility conduct the initial compliance demonstration by the appropriate date? 63.4550

- ❑ Did the facility complete the initial compliance demonstration for the compliance period that began on the applicable compliance date (as explained in 63.4483) and ended on the last day of the 12th month following the compliance date? [Note: 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 that month plus the next 12 months.] ☐ Yes ☐ No ☐ NA

- ❑ Did the facility determine the mass of organic HAP emissions and mass of coating solids used each month and then calculate an organic HAP emission rate at the end of the initial compliance period? ☐ Yes ☐ No ☐ NA

- ❑ Did the initial compliance demonstration include the calculations 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? ☐ Yes ☐ No ☐ NA

21. Did the facility demonstrate initial compliance with the emission limitations using an appropriate method? 63.4551

- ❑ Did the facility determine the mass fraction of organic HAP for each material (coating, thinner, additive and cleaning material) used during each month using an appropriate method (Method 311, Method 24, an approved Alternative Method or using information from the supplier or manufacturer of the material)? ☐ Yes ☐ No ☐ NA

- ❑ Did the facility determine the mass fraction of coating solids for each coating used during each month by a test (Method 24 or an alternative approved method), by information provided by the supplier or manufacturer of the material or by calculations (Equation 1 of section 63.4541)? ☐ Yes ☐ No ☐ NA

- ❑ Did the facility determine the density of each material (liquid coating, thinner, additive, cleaning material) used during each month from test results using ASTM MethodD1475-98, “Standard Test Method for Density of Liquid Coatings, Inks and Related Products, information from the supplier or manufacturer of the material, or by reference sources providing density or specific gravity data for pure materials? ☐ Yes ☐ No ☐ NA

- ❑ Did the facility determine the volume of each material (coating, thinner, additive cleaning material) used during each month by measurement or usage records? ☐ Yes ☐ No ☐ NA

- ❑ Did the facility calculate the mass of organic HAP emissions for each material, the kg organic HAP in coatings using during the month, the kg of organic HAP in thinners and/or other additives and the kg organic HAP in the cleaning materials used during the month by using Equations 1, 1A, 1B and 1C, respectively, of this section 63.4551? ☐ Yes ☐ No ☐ NA

- ❑ Did the facility calculate the total mass coating solids used (i.e., the combined mass of coating solids for all the coating used during the each month, using Equation 2 of this section 63.4551? ☐ Yes ☐ No ☐ NA

- ❑ Did the facility calculate the organic HAP emission rate for the compliance period using Equation 3 of this section 63.4551 and demonstrate that the calculated total organic HAP emission rate for the initial compliance period was less than or equal t the applicable emission limits? ☐ Yes ☐ No ☐ NA

22. Is the facility demonstrating continuous compliance with the emission limitations? 63.4552

❑ To demonstrate continuous compliance, did the facility show that the organic HAP emission rate for each compliance period is less than or equal to the applicable emission limit [Note that a compliance period consists of 12 months. Each month after the end of the initial compliance period is the end of a compliance period consisting of that month and the preceding 11 months]? ☐ Yes ☐ No ☐ NA

- ☐ Did the facility perform the applicable calculations [see 63.4551(a)-(g)] on a monthly basis using data from the previous 12 months of operation? ☐ Yes ☐ No ☐ NA
- ☐ If the facility is complying with a facility-specific emission limit did they also perform the calculation using Equation 1 in 63.4490(c)(2) on a monthly basis using the data from the previous 12 months of operation? ☐ Yes ☐ No ☐ NA

❑ If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit in 63.4490, did the facility report this deviation from the emission limitation for that compliance period as required? ☐ Yes ☐ No ☐ NA

❑ As part of each semiannual compliance report, did the facility identify the coating operation(s) for which they used the emission rate without add-on controls option? ☐ Yes ☐ No ☐ NA

- ☐ If there were no deviations from the emission limitations, did the facility submit a statement that their coating operation was 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? ☐ Yes ☐ No ☐ NA

❑ Did the facility maintain the proper records (see 63.4530 and 63.4531)? ☐ Yes ☐ No ☐ NA

VIII. Compliance Requirements for the Emission Rate with Add-On Controls Option

23. Did the facility conduct performance tests and other initial compliance demonstrations by the applicable dates? 63.4560

New and reconstructed affected sources

❑ For a new or reconstructed affected source, did the facility meet the following requirements:

- ☐ All emission capture systems, add-on control devices, and CPMS were installed and operating no later than the applicable compliance date? ☐ Yes ☐ No ☐ NA
- ☐ Except for solvent recovery systems for which liquid-liquid material balances were conducted, a performance test was conducted for each capture system and add-on control device? ☐ Yes ☐ No ☐ NA
  - o The required operating limits were established no later than 180 days after the applicable compliance date? ☐ Yes ☐ No ☐ NA
  - o For a solvent recovery system for which liquid-liquid material balances were conducted, the first material balance was initiated no later than the applicable compliance date? ☐ Yes ☐ No ☐ NA

- ☐ A work practice plan was developed and implemented no later than the specified compliance date? ☐ Yes ☐ No ☐ NA

- ☐ The initial compliance demonstration for the initial compliance period was completed? [Note that the initial compliance period begins on the applicable compliance date 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 that month plus the next 12 months.] ☐ Yes ☐ No ☐ NA

- ☐ The mass of organic HAP emissions and mass of coatings solids used each month was determined and then an organic HAP emission rate at the end of the initial compliance period was calculated? ☐ Yes ☐ No ☐ NA

- ☐ The initial compliance demonstration includes:

    - o The results of emission capture system and add-on control device performance tests conducted; results of liquid-liquid material balances conducted; ☐ Yes ☐ No ☐ NA

    - o Calculations 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; ☐ Yes ☐ No ☐ NA

    - o The operating limits established during the performance tests and the results of the continuous parameter monitoring; ☐ Yes ☐ No ☐ NA

    - o And documentation of whether the facility developed and implemented the work practice plan? ☐ Yes ☐ No ☐ NA

    Note: The facility does not need to comply with the operating limits for the emission capture system and add-on control device until after they have completed the required performance tests. Instead, they must maintain a log detailing the operation and maintenance of the emission capture system, add-on control device, and continuous parameter monitors during the period between the compliance date and the performance test. The facility must begin complying with the operating limits for their affected source on the date they complete the performance tests These requirements do not apply to solvent recovery systems for which the facility conducts liquid-liquid material balances.

Existing affected sources

- ❑ For an existing affected source, did the facility meet the following requirements:

    - ☐ All emission capture systems, add-on control devices, and CPMS were installed and operating no later than the applicable compliance date? ☐ Yes ☐ No ☐ NA

    - ☐ Except for solvent recovery systems for which they conduct liquid-liquid material balances, conduct a performance test for each capture system and add-on control device and establish operating limits no later than the compliance date? ☐ Yes ☐ No ☐ NA

        - o For a solvent recovery system for which they conduct liquid-liquid material balances according, initiate the first material balance no later than the compliance date? ☐ Yes ☐ No ☐ NA

    - ☐ Developed and implementing the work practice plan required no later than the compliance date specified? ☐ Yes ☐ No ☐ NA

☐ Complete the initial compliance demonstration for the initial compliance period? [Note that the initial compliance period begins on the applicable compliance date 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 that month plus the next 12 months.] ☐ Yes ☐ No ☐ NA

- o Determine the mass of organic HAP emissions and mass of coatings solids used each month and then calculate an organic HAP emission rate at the end of the initial compliance period? ☐ Yes ☐ No ☐ NA

❑ Did the facility receive approval to use the results of a previously conducted performance test conducted on that capture system or control device? ☐ Yes ☐ No ☐ NA

☐ If yes, did such previous tests must meet the following conditions:

- o The previous tests were conducted using the specified methods and conditions? ☐ Yes ☐ No ☐ NA
- o Either no process or equipment changes were made since the previous test was performed, or the facility is able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes? ☐ Yes ☐ No ☐ NA
- o Either the required operating parameters were established in the previous test or sufficient data were collected in the previous test to establish the required operating parameters? ☐ Yes ☐ No ☐ NA

24. How did the facility demonstrate initial compliance? 63.4561

❑ Did the facility use the emission rate with add-on controls option for any coating operation, for any group of coating operations in the affected source, or for all of the coating operations in the affected source? ☐ Yes ☐ No ☐ NA

☐ Were both controlled and uncontrolled coating operations included? ☐ Yes ☐ No ☐ NA

Note: A facility must use either the compliant material option or the emission rate without add-on controls option for any coating operation in the affected source for which they do not use the emission rate with add-on controls option.

❑ Did the facility conduct a separate initial compliance demonstration for each general use, TPO, automotive lamp, and assembled on-road vehicle coating operation, unless compliance was demonstrated with a predominant activity or facility-specific emission limit? ☐ Yes ☐ No ☐ NA

❑ If compliance was demonstrated with a predominant activity or facility-specific emission limit, did the facility demonstrate that all coating operations included in the predominant activity determination or calculation of the facility-specific emission limit comply with that limit? ☐ Yes ☐ No ☐ NA

Compliance with operating limits

❑ Except for solvent recovery systems for which liquid-liquid material balances were conducted, the facility established and demonstrated continuous compliance during the initial compliance period with the operating limits using the proper procedures? ☐ Yes ☐ No ☐ NA

Compliance with work practice requirements

- ❑ The facility developed, implemented, and documented their implementation of a work practice plan during the initial compliance period? ☐ Yes ☐ No ☐ NA

Compliance with emission limits

- ❑ The facility followed the specified procedures to demonstrate compliance with the applicable emission limit for each affected source in each subcategory? ☐ Yes ☐ No ☐ NA

Determining the mass fraction of organic HAP, density, volume used, and mass fraction of coating solids

- ❑ The facility followed specified procedures to determine the mass fraction of organic HAP, density, and volume of each coating, thinner and/or other additive, and cleaning material used during each month; and the mass fraction of coating solids for each coating used during each month? ☐ Yes ☐ No ☐ NA

Calculating the total mass of organic HAP emissions before add-on controls

- ❑ The facility used Equation 1 (see 63.4551) to calculate the total mass of organic HAP emissions before add-on controls from all coatings, thinners and/or other additives, and cleaning materials used during each month in the coating operation or group of coating operations for which they used the emission rate with add-on controls option? ☐ Yes ☐ No ☐ NA
  - ☐ The facility calculated the mass of organic HAP in the coatings used in the controlled coating operation using Equation 1A? ☐ Yes ☐ No ☐ NA
  - ☐ The facility calculated the mass of organic HAP in the thinners and/or other additives used in the controlled coating operation using Equation 1B? ☐ Yes ☐ No ☐ NA
  - ☐ The facility calculated the mass organic HAP in the cleaning materials used in the controlled coating operation during the month using Equation 1C? ☐ Yes ☐ No ☐ NA
  - ☐ The facility calculated the mass of organic HAP in the coatings, thinners and/or other additives, and cleaning materials used in the controlled coating operation during the deviations using Equation 1D? ☐ Yes ☐ No ☐ NA

Calculating the organic HAP emission reduction for each controlled coating operation

Note: The emission reduction determination quantifies the total organic HAP emissions that pass through the emission capture system and are destroyed or removed by the add-on control device.

- ❑ The facility determined the mass of organic HAP emissions reduced for each controlled coating operation during each month? ☐ Yes ☐ No ☐ NA
- ❑ The facility used the specified procedures to calculate the mass of organic HAP emission reduction for each controlled coating operation using an emission capture system and add-on control device other than a solvent recovery system for which they conducted liquid-liquid material balances? ☐ Yes ☐ No ☐ NA

- ❑ For each controlled coating operation using a solvent recovery system for which the facility conducted a liquid-liquid material balance, the facility used the specified procedures to calculate the organic HAP emission reduction? ☐ Yes ☐ No ☐ NA

Calculating the organic HAP emission reduction for each controlled coating operation not using liquid-liquid material balance

- ❑ The facility used Equation 1 of this section to calculate the organic HAP emission reduction for each controlled coating operation using an emission capture system and add-on control device other than a solvent recovery system for which they conducted liquid-liquid material balances? ☐ Yes ☐ No ☐ NA

Calculating the organic HAP emission reduction for each controlled coating operation using liquid-liquid material balances

- ❑ For each controlled coating operation using a solvent recovery system for which the facility conducted liquid-liquid material balances, they calculated the organic HAP emission reduction by applying the volatile organic matter collection and recovery efficiency to the mass of organic HAP contained in the coatings, thinners and/or other additives, and cleaning materials that are used in the coating operation controlled by the solvent recovery system during each month? ☐ Yes ☐ No ☐ NA

- ❑ The facility performed a liquid-liquid material balance for each month and calculated the mass of organic HAP emission reduction by the solvent recovery system as specified below:

  - ☐ For each solvent recovery system, they installed, calibrated, maintained, and operated, according to the manufacturer's specifications, a device that indicates the cumulative amount of volatile organic matter recovered by the solvent recovery system each month? ☐ Yes ☐ No ☐ NA

    - o The device was be initially certified by the manufacturer to be accurate to within ±2.0 percent of the mass of volatile organic matter recovered? ☐ Yes ☐ No ☐ NA

  - ☐ For each solvent recovery system, the facility determined the mass of volatile organic matter recovered for the month, based on measurement with the device? ☐ Yes ☐ No ☐ NA

  - ☐ The facility determined the mass fraction of volatile organic matter for each coating, thinner and/or other additive, and cleaning material used in the coating operation controlled by the solvent recovery system during the month, kg volatile organic matter per kg coating? ☐ Yes ☐ No ☐ NA

    Note: The facility can determine the volatile organic matter mass fraction using Method 24 of 40 CFR part 60, appendix A, or an EPA approved alternative method, or information provided by the manufacturer or supplier of the coating. In the event of any inconsistency between information provided by the manufacturer or supplier and the results of Method 24 of 40 CFR part 60, appendix A, or an approved alternative method, the test method results will take precedence unless, after consultation the facility demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

  - ☐ The facility determined the density of each coating, thinner and/or other additive, and cleaning material used in the coating operation controlled by the solvent recovery system during the month, kg per liter? ☐ Yes ☐ No ☐ NA

- ☐ The facility measured the volume (liters) of each coating, thinner and/or other additive, and cleaning material used in the coating operation controlled by the solvent recovery system during the month? ☐ Yes ☐ No ☐ NA

- ☐ Each month, the facility calculated the solvent recovery system's volatile organic matter collection and recovery efficiency, using Equation 2 of this section? ☐ Yes ☐ No ☐ NA

- ☐ The facility calculated the mass of organic HAP emission reduction for the coating operation controlled by the solvent recovery system during the month, using Equation 3 of this section and accordingly:

    - o Calculated the mass of organic HAP in the coatings used in the coating operation controlled by the solvent recovery system using Equation 3A of this section? ☐ Yes ☐ No ☐ NA

    - o Calculated the mass of organic HAP in the thinners and/or other additives used in the coating operation controlled by the solvent recovery system using Equation 3B of this section? ☐ Yes ☐ No ☐ NA

    - o Calculated the mass of organic HAP in the cleaning materials used in the coating operation controlled by the solvent recovery system during the month using Equation 3C of this section? ☐ Yes ☐ No ☐ NA

Calculate the total mass of coating solids used

- ❑ The facility determined the total mass of coating solids used, which is the combined mass of coating solids for all the coatings used during each month in the coating operation or group of coating operations for which they used the emission rate with add-on controls option, using Equation 2 of section 63.4551? ☐ Yes ☐ No ☐ NA

Calculate the mass of organic HAP emissions for each month

- ❑ The facility determined the mass of organic HAP emissions during each month, using Equation 4 of this section? ☐ Yes ☐ No ☐ NA

Calculate the organic HAP emission rate for the compliance period

- ❑ The facility determined the organic HAP emission rate for the compliance period of organic HAP emitted per coating solids used, using Equation 5 of this section? ☐ Yes ☐ No ☐ NA

Compliance demonstration

- ❑ In order to demonstrate compliance, the facility has shown that the organic HAP emission rate for the initial compliance period, calculated using Equation 5 of this section, is less than or equal to the applicable emission limit for each subcategory or the predominant activity or facility-specific emission limit allowed? ☐ Yes ☐ No ☐ NA

- ❑ The facility has kept all required records [see 63.4530 and 63.4531]? ☐ Yes ☐ No ☐ NA

- ❑ As part of the notification of compliance status [see 63.4510], the facility has identified the coating operation(s) for which they used the emission rate with add-on controls option and submitted a

statement that the coating operations 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, and that they achieved the required operating limits [see 63.4492] and the work practice standards [see 63.4493]? ☐ Yes ☐ No ☐ NA

25. How did the facility demonstrate continuous compliance with the emission limitations? 63.4563

❑ In order to demonstrate continuous compliance with applicable emission limits, the facility showed that the organic HAP emission rate for each compliance period was equal to or less than the applicable emission limit? [Note that a compliance period consists of 12 months. Each month after the end of the initial compliance period is the end of a compliance period consisting of that month and the preceding 11 months.] ☐ Yes ☐ No ☐ NA

- ☐ Did the facility performed the necessary (see 63.4561) on a monthly basis using data from the previous 12 months of operation? ☐ Yes ☐ No ☐ NA

- ☐ If the facility is complying with a facility-specific emission limit, have they also performed the calculation [Equation 1 in 63.4490(c)(2)] on a monthly basis using the data from the previous 12 months of operation? ☐ Yes ☐ No ☐ NA

❑ If the facility had a deviation [the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit] from the emission limitation for that compliance period, did they report it as required? ☐ Yes ☐ No ☐ NA

❑ Did the facility demonstrate continuous compliance with each operating limit that applies, as specified in Table 1 to this subpart, when there coating line was in operation? ☐ Yes ☐ No ☐ NA

- ☐ If an operating parameter was out of the allowed range specified in Table 1, was this deviation from the operating limit reported as required [see 63.4510(c)(6)and 63.4520(a)(7)]? ☐ Yes ☐ No ☐ NA

- ☐ If an operating parameter deviated from the operating limit specified in Table 1, did the facility assume that the emission capture system and add-on control device were achieving zero efficiency during the time period of the deviation, unless they had other data indicating the actual efficiency of the emission capture system and add-on control device and the use of these data is approved by the Administrator? ☐ Yes ☐ No ☐ NA

❑ Did the facility meet the requirements for bypass lines for controlled coating operations for which they do not conduct liquid-liquid material balances? ☐ Yes ☐ No ☐ NA

Note: If any bypass line is opened and emissions are diverted to the atmosphere when the coating operation is running, this is a deviation that must be reported as such. For the purposes of completing the compliance calculations [see 63.4561(h)], the facility must treat the materials used during a deviation on a controlled coating operation as if they were used on an uncontrolled coating operation for the time period of the deviation as indicated.

❑ Did the facility demonstrate continuous compliance with the work practice standards (see 63.4493)? ☐ Yes ☐ No ☐ NA

❑ If the facility did not develop a work practice plan, or did not implement the plan, or did not keep the required records, did they treat this as a deviation from the work practice standards and report it as required? ☐ Yes ☐ No ☐ NA

- ❑ As part of each semiannual compliance report, did the facility identify the coating operation(s) for which they used the emission rate with add-on controls option? ☐ Yes ☐ No ☐ NA

    - ☐ If there were no deviations from the emission limitations, did they submit a statement that they 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, and that they achieved the required operating limits and the work practice standards required during each compliance period? ☐ Yes ☐ No ☐ NA

- ❑ Did the facility maintain the required records (see 63.4530 and 63.4531)? ☐ Yes ☐ No ☐ NA

26. Has the facility met general requirements for performance tests? 63.4564

Note: A facility must conduct each performance test required by 63.4560 according to the requirements in 63.7(e)(1) and under specified conditions unless they obtain a waiver of the performance test according to the provisions in 63.7(h).

Representative coating operation operating conditions

- ❑ Did the facility conduct the required performance test under representative operating conditions for the coating operation? {Note that operations during periods of startup, shutdown, or malfunction and during periods of non-operation do not constitute representative conditions.] ☐ Yes ☐ No ☐ NA

- ❑ Did the facility record the process information necessary to document operating conditions during the test and explain why the conditions represent normal operation? ☐ Yes ☐ No ☐ NA

Representative emission capture system and add-on control device operating conditions

- ❑ Did the facility conduct the required performance test when the emission capture system and add-on control device were operating at a representative flow rate, and the add-on control device was operating at a representative inlet concentration? ☐ Yes ☐ No ☐ NA

- ❑ Did the facility record information that is necessary to document emission capture system and add-on control device operating conditions during the test and explain why the conditions represent normal operation? ☐ Yes ☐ No ☐ NA

- ❑ Did the facility conduct each performance test of an emission capture system according to the specified requirements (see 63.4565)? ☐ Yes ☐ No ☐ NA

- ❑ Did the facility conduct each performance test of an add-on control device according to specified requirements (see 63.4566)? ☐ Yes ☐ No ☐ NA

27. How did the facility determine the emission capture system efficiency? 63.4565

Note: Facilities must use the procedures and test methods in this section to determine capture efficiency as part of the required performance test.

Assuming 100 percent capture efficiency

- ❑ If the facility made the assumption that their capture system efficiency is 100 percent, were both of the following conditions met:

- ☐ The capture system met the criteria in Method 204 of appendix M to 40 CFR part 51 for a PTE and directs all the exhaust gases from the enclosure to an add-on control device? ☐ Yes ☐ No ☐ NA

- ☐ All coatings, thinners and/or other additives, and cleaning materials used in the coating operation are applied within the capture system; coating solvent flash-off, curing, and drying occurs within the capture system; and the removal or evaporation of cleaning materials from the surfaces they are applied to occurs within the capture system? [Note as an example that this criterion is not met if parts enter the open shop environment when being moved between a spray booth and a curing oven.] ☐ Yes ☐ No ☐ NA

Measuring capture efficiency

❑ If the capture system did not meet both of the criteria above, then did the facility use one of the three accepted protocols to measure capture efficiency? ☐ Yes ☐ No ☐ NA

Note: The capture efficiency measurements use TVH capture efficiency as a surrogate for organic HAP capture efficiency. For two of the three protocols described in this section, the capture efficiency measurement must consist of three test runs. Each test run must be at least 3 hours duration or the length of a production run, whichever is longer, up to 8 hours. For the purposes of this test, a production run means the time required for a single part to go from the beginning to the end of the production, which includes surface preparation activities and drying and curing time.

Liquid-to-uncaptured-gas protocol using a temporary total enclosure or building enclosure

Note: The liquid-to-uncaptured-gas protocol compares the mass of liquid TVH in materials used in the coating operation to the mass of TVH emissions not captured by the emission capture system. Facilities must use a temporary total enclosure or a building enclosure and the following procedures to measure emission capture system efficiency using the liquid-to-uncaptured-gas protocol.

❑ Did the facility either use a building enclosure **or** construct an enclosure around the coating operation where coatings, thinners and/or other additives and cleaning materials are applied, and all areas where emissions from these applied coatings and materials subsequently occur, such as flash-off, curing, and drying areas? ☐ Yes ☐ No ☐ NA

- ☐ Were areas of the coating operation where capture devices collect emissions for routing to an add-on control device, such as the entrance and exit areas of an oven or spray booth, also inside the enclosure? ☐ Yes ☐ No ☐ NA

- ☐ Does the enclosure must meet the applicable definition of a temporary total enclosure or building enclosure in Method 204 of appendix M to 40 CFR Part 51? ☐ Yes ☐ No ☐ NA

❑ Did the facility use Method 204A or 204F of Appendix M to 40 CFR Part 51 to determine the mass fraction of TVH liquid input from each coating, thinner and/or other additive, and cleaning material used in the coating operation during each capture efficiency test run? [Note: To make the determination, substitute TVH for each occurrence of the term volatile organic compounds (VOC) in the methods.] ☐ Yes ☐ No ☐ NA

❑ Did the facility use Equation 1 of this section to calculate the total mass of TVH liquid input from all the coatings, thinners and/or other additives, and cleaning materials used in the coating operation during each capture efficiency test run? ☐ Yes ☐ No ☐ NA

- ❑ Did the facility use Method 204D or 204E of Appendix M to 40 CFR Part 51 to measure the total mass, kg, of TVH emissions that are not captured by the emission capture system?

    - ☐ Were the emissions measured as they exit the temporary total enclosure or building enclosure during each capture efficiency test run? [Note: To make the measurement, substitute TVH for each occurrence of the term VOC in the methods. ☐ Yes ☐ No ☐ NA

- ❑ Did the facility use Method 204D of appendix M to 40 CFR part 51 if the enclosure is a temporary total enclosure? ☐ Yes ☐ No ☐ NA

- ❑ Did the facility use Method 204E of appendix M to 40 CFR 51 if the enclosure is a building enclosure?

    - ☐ During the capture efficiency measurement, were all organic compound emitting operations inside the building enclosure, other than the coating operation for which capture efficiency is being determined, shut down, but all fans and blowers operating normally? ☐ Yes ☐ No ☐ NA

- ❑ For each capture efficiency test run, did the facility determine the percent capture efficiency of the emission capture system using Equation 2 of this section? ☐ Yes ☐ No ☐ NA

- ❑ Did the facility determine the capture efficiency of the emission capture system as the average of the capture efficiencies measured in the three test runs? ☐ Yes ☐ No ☐ NA

Gas-to-gas protocol using a temporary total enclosure or a building enclosure

Note: The gas-to-gas protocol compares the mass of TVH emissions captured by the emission capture system to the mass of TVH emissions not captured. The facility must use a temporary total enclosure or a building enclosure and the following procedures to measure emission capture system efficiency using the gas-to-gas protocol.

- ❑ Did the facility either use a building enclosure or construct an enclosure around the coating operation where coatings, thinners and/or other additives, and cleaning materials are applied, and all areas where emissions from these applied coatings and materials subsequently occur, such as flash-off, curing, and drying areas? [Note that the areas of the coating operation where capture devices collect emissions generated by the coating operation for routing to an add-on control device, such as the entrance and exit areas of an oven or a spray booth, must also be inside the enclosure. ☐ Yes ☐ No ☐ NA

    - ☐ Does the enclosure must meet the applicable definition of a temporary total enclosure or building enclosure in Method 204 of appendix M to 40 CFR part 51? ☐ Yes ☐ No ☐ NA

- ❑ Did the facility use Method 204B or 204C of appendix M to 40 CFR part 51 to measure the total mass of TVH emissions captured by the emission capture system during each capture efficiency test run as measured at the inlet to the add-on control device? ☐ Yes ☐ No ☐ NA

    - ☐ Were the sampling points for the Method 204B or 204C measurement upstream from the add-on control device and did the points represent the total emissions routed from the capture system and entering the add-on control device? ☐ Yes ☐ No ☐ NA

    - ☐ If multiple emission streams from the capture system enter the add-on control device without a single common duct, were the emissions entering the add-on control device simultaneously measured in each duct and the total emissions entering the add-on control device determined? ☐ Yes ☐ No ☐ NA

- ❑ Did the facility use Method 204D or 204E of appendix M to 40 CFR part 51 to measure the total mass of TVH emissions that are not captured by the emission capture system? [Note that these emissions are measured as they exit the temporary total enclosure or building enclosure during each capture efficiency test run.] ☐ Yes ☐ No ☐ NA

    - ☐ Did the facility use Method 204D of appendix M to 40 CFR part 51 if the enclosure was a temporary total enclosure? ☐ Yes ☐ No ☐ NA

    - ☐ Did the facility use Method 204E of appendix M to 40 CFR part 51 if the enclosure was a building enclosure? ☐ Yes ☐ No ☐ NA

        - o During the capture efficiency measurement, were all organic compound emitting operations inside the building enclosure, other than the coating operation for which capture efficiency is being determined, shut down, but all fans and blowers operating normally? ☐ Yes ☐ No ☐ NA

- ❑ For each capture efficiency test run, did the facility determine the percent capture efficiency of the emission capture system using Equation 3 of this section? ☐ Yes ☐ No ☐ NA

- ❑ Did the facility determine the capture efficiency of the emission capture system as the average of the capture efficiencies measured in the three test runs? ☐ Yes ☐ No ☐ NA

Alternative capture efficiency protocol

- ❑ As an alternative to the procedures specified in this section and subject to the approval of the Administrator, did the facility choose to determine capture efficiency using any other capture efficiency protocol and test methods that satisfy the criteria of either the DQO or LCL approach as described in appendix A to subpart KK of this part? ☐ Yes ☐ No ☐ NA

28. How did the facility determine the add-on control device emission destruction or removal efficiency? 63.4566

Note: A facility with an affected source must use the procedures and test methods described in this section to determine the add-on control device emission destruction or removal efficiency as part of the required performance test. Three test runs must be conducted [see 63.7(e)(3)] and each test run must last at least 1 hour.

- ❑ For all types of add-on control devices, did the facility use the test methods specified below:

    - ☐ Method 1 or 1A of appendix A to 40 CFR Part 60, as appropriate, to select sampling sites and velocity traverse points? ☐ Yes ☐ No ☐ NA

    - ☐ Method 2, 2A, 2C, 2D, 2F, or 2G of Appendix A to 40 CFR Part 60, as appropriate, to measure gas volumetric flow rate? ☐ Yes ☐ No ☐ NA

    - ☐ Method 3, 3A, or 3B of appendix A to 40 CFR Part 60, as appropriate, for gas analysis to determine dry molecular weight? ☐ Yes ☐ No ☐ NA

    - ☐ Method 4 of appendix A to 40 CFR part 60 to determine stack gas moisture? ☐ Yes ☐ No ☐ NA

- ☐ Methods for determining gas volumetric flow rate, dry molecular weight, and stack gas moisture must be performed, as applicable, during each test run? ☐ Yes ☐ No ☐ NA

❑ Did the facility measure total gaseous organic mass emissions as carbon at the inlet and outlet of the add-on control device simultaneously, using either Method 25 or 25A of appendix A to 40 CFR part 60 as follows:

- ☐ Method 25, if the add-on control device was an oxidizer and the facility expected the total gaseous organic concentration as carbon to be more than 50 parts per million (ppm) at the control device outlet? ☐ Yes ☐ No ☐ NA

- ☐ Method 25A, if the add-on control device was an oxidizer and the facility expected the total gaseous organic concentration as carbon to be 50 ppm or less at the control device outlet? ☐ Yes ☐ No ☐ NA

- ☐ Method 25A, if the add-on control device was not an oxidizer? ☐ Yes ☐ No ☐ NA

❑ If two or more add-on control devices were used for the same emission stream, did the facility measure emissions at the outlet to the atmosphere of each device. ☐ Yes ☐ No ☐ NA

❑ For each test run, did the facility determine the total gaseous organic emissions mass flow rates for the inlet and the outlet of the add-on control device, using Equation 1 of this section? ☐ Yes ☐ No ☐ NA

- ☐ If there were more than one inlet or outlet to the add-on control device, did the facility calculate the total gaseous organic mass flow rate using Equation 1 of this section for each inlet and each outlet and then total all of the inlet emissions and total all of the outlet emissions? ☐ Yes ☐ No ☐ NA

❑ For each test run, did the facility determine the add-on control device organic emissions destruction or removal efficiency, using Equation 2 of this section? ☐ Yes ☐ No ☐ NA

❑ Did the facility determine the emission destruction or removal efficiency of the add-on control device as the average of the efficiencies determined in the three test runs and calculated in Equation 2 of this section? ☐ Yes ☐ No ☐ NA

29. How did the facility establish the emission capture system and add-on control device operation limits during the performance test? 63.4567

❑ Unless they had approval for alternative monitoring and operating limits, did the facility establish the required operating limits during the performance test? ☐ Yes ☐ No ☐ NA

❑ If the add-on control device was a thermal oxidizer, were the operating limits established accordingly:

❑ During the performance test, did the facility monitor and record the combustion temperature at least once every 15 minutes during each of the three test runs? ☐ Yes ☐ No ☐ NA

- ☐ Did the facility monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurred? ☐ Yes ☐ No ☐ NA

❑ Did the facility use the data collected during the performance test to calculate and record the average combustion temperature maintained during the performance test? [Note that this average combustion temperature is the minimum operating limit for the facility's thermal oxidizer.]
☐ Yes ☐ No ☐ NA

Catalytic oxidizers

❑ If the facility's add-on control device was a catalytic oxidizer, did they establish the operating limits according to the following:

☐ During the performance test, did they monitor and record the temperature just before the catalyst bed and the temperature difference across the catalyst bed at least once every 15 minutes during each of the three test runs? ☐ Yes ☐ No ☐ NA

☐ Did they use the data collected during the performance test to calculate and record the average temperature just before the catalyst bed and the average temperature difference across the catalyst bed maintained during the performance test? ☐ Yes ☐ No ☐ NA

☐ Did the facility monitor the temperature at the inlet to the catalyst bed and implement a site-specific inspection and maintenance plan for their catalytic oxidizer?
☐ Yes ☐ No ☐ NA

☐ Did the facility develop and implement an inspection and maintenance plan for their catalytic oxidizer(s) for which they elect to monitor? ☐ Yes ☐ No ☐ NA

☐ Did the plan, at a minimum, address the following elements:

- Annual sampling and analysis of the catalyst activity (i.e., conversion efficiency) following the manufacturer's or catalyst supplier's recommended procedures? [Note that if problems are found during the catalyst activity test, the facility must replace the catalyst bed or take other corrective action consistent with the manufacturer's recommendations.] ☐ Yes ☐ No ☐ NA

- Monthly external inspection of the catalytic oxidizer system, including the burner assembly and fuel supply lines for problems? [Note that the facility should adjust the equipment as necessary to assure proper air-to-fuel mixtures.]
☐ Yes ☐ No ☐ NA

- Annual internal inspection of the catalyst bed to check for channeling, abrasion, and settling?

  - If problems were found during the annual internal inspection of the catalyst, did the facility replace the catalyst bed or take other corrective action consistent with the manufacturer's recommendations? ☐ Yes ☐ No ☐ NA

  - If a catalyst bed was replaced with one not of like or better kind and quality as the old catalyst, did the facility conduct a new performance test to determine destruction efficiency? [Note that if a catalyst bed is replaced and the replacement catalyst is of like or better kind and quality as the old catalyst, then a new performance test to determine destruction efficiency is not required and the facility may continue to use the previously established operating limits for that catalytic oxidizer.] ☐ Yes ☐ No ☐ NA

- ❑ If the facility's add-on control device is a regenerative carbon adsorber, did they establish the operating limits according to the following:

    - ☐ The facility monitored and recorded the total regeneration desorbing gas (e.g., steam or nitrogen) mass flow for each regeneration cycle, and the carbon bed temperature after each carbon bed regeneration and cooling cycle for the regeneration cycle either immediately preceding or immediately following the performance test? ☐ Yes ☐ No ☐ NA

    - ☐ The operating limits for their regenerative carbon adsorber were the minimum total desorbing gas mass flow recorded during the regeneration cycle and the maximum carbon bed temperature recorded after the cooling cycle? ☐ Yes ☐ No ☐ NA

Condensers

- ❑ If the facility's add-on control device is a condenser, did they establish the operating limits according to the following:

    - ☐ During the performance test, did the facility monitor and record the condenser outlet (product side) gas temperature at least once every 15 minutes during each of the three test runs? ☐ Yes ☐ No ☐ NA

    - ☐ Did the facility use the data collected during the performance test to calculate and record the average condenser outlet (product side) gas temperature maintained during the performance test? ☐ Yes ☐ No ☐ NA

Concentrators

- ❑ If the facility's add-on control device includes a concentrator, did they establish operating limits for the concentrator according to the following:

    - ☐ During the performance test, did the facility monitor and record the desorption concentrate stream gas temperature at least once every 15 minutes during each of the three runs of the performance test? ☐ Yes ☐ No ☐ NA

    - ☐ Did the facility use the data collected during the performance test to calculate and record the average temperature? ☐ Yes ☐ No ☐ NA

    - ☐ During the performance test, did the facility monitor and record the pressure drop of the dilute stream across the concentrator at least once every 15 minutes during each of the three runs of the performance test? ☐ Yes ☐ No ☐ NA

    - ☐ Did the facility use the data collected during the performance test to calculate and record the average pressure drop? ☐ Yes ☐ No ☐ NA

Emission capture systems

- ❑ For each capture device that is not part of a PTE that meets the specified criteria, did the facility establish an operating limit for either the gas volumetric flow rate or duct static pressure, as specified below: [Note that the operating limit for a PTE is specified in Table 1 to this subpart.]

☐ During the capture efficiency determination, did the facility monitor and record either the gas volumetric flow rate or the duct static pressure for each separate capture device in their emission capture system at least once every 15 minutes during each of the three test runs at a point in the duct between the capture device and the add-on control device inlet?
☐ Yes ☐ No ☐ NA

☐ Did the facility calculate and record the average gas volumetric flow rate or duct static pressure for the three test runs for each capture device? [Note that this average gas volumetric flow rate or duct static pressure is the minimum operating limit for that specific capture device.]
☐ Yes ☐ No ☐ NA

30. Did the facility comply with requirements for continuous parameter monitoring system installation, operation and maintenance? 63.4568

General

❑ Did the facility install, operate, and maintain each CPMS according to the following:

☐ The CPMS completed a minimum of one cycle of operation for each successive 15-minute period? [Note that the facility should have a minimum of four equally spaced successive cycles of CPMS operation in 1 hour.] ☐ Yes ☐ No ☐ NA

☐ The facility determined the average of all recorded readings for each successive 3-hour period of the emission capture system and add-on control device operation?
☐ Yes ☐ No ☐ NA

☐ The facility recorded the results of each inspection, calibration, and validation check of the CPMS? ☐ Yes ☐ No ☐ NA

☐ The facility maintained the CPMS at all times and have available necessary parts for routine repairs of the monitoring equipment? ☐ Yes ☐ No ☐ NA

☐ The facility operated the CPMS and collected emission capture system and add-on control device parameter data at all times that a controlled coating operation was operating, except during monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, if applicable, calibration checks and required zero and span adjustments)?
☐ Yes ☐ No ☐ NA

☐ The facility did not use emission capture system or add-on control device parameter data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities when calculating data averages? [Note that the facility must use all the data collected during all other periods in calculating the data averages for determining compliance with the emission capture system and add-on control device operating limits.] ☐ Yes ☐ No ☐ NA

Note: A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the CPMS to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations is a deviation from the monitoring requirements.

Capture system bypass line

- ❑ Did the facility meet the following requirements for each emission capture system that contains bypass lines that could divert emissions away from the add-on control device to the atmosphere:

  - ☐ The facility monitored or secured the valve or closure mechanism controlling the bypass line in a non-diverting position in such a way that the valve or closure mechanism could not be opened without creating a record that the valve was opened? ☐ Yes ☐ No ☐ NA

  - ☐ The method used to monitor or secure the valve or closure mechanism met one of the requirements:

    - o A ***Flow control position indicator*** was installed, calibrated, maintained, and operated according to the manufacturer's specifications, takes a reading at least once every 15 minutes and provides a record indicating whether the emissions are directed to the add-on control device or diverted from the add-on control device? ☐ Yes ☐ No ☐ NA

      - The time of occurrence and flow control position is recorded, as well as every time the flow direction is changed? ☐ Yes ☐ No ☐ NA

      - The flow control position indicator was installed at the entrance to any bypass line that could divert the emissions away from the add-on control device to the atmosphere? ☐ Yes ☐ No ☐ NA

    - o ***Car-seal or lock-and-key valve closures*** are used to secure any bypass line valve in the closed position?

      - The facility visually inspects the seal or closure mechanism at least once every month to ensure that the valve is maintained in the closed position, and the emissions are not diverted away from the add-on control device to the atmosphere? ☐ Yes ☐ No ☐ NA

    - o ***Valve closure monitoring*** is used to ensure that any bypass line valve is in the closed (non-diverting) position?

      - Monitoring of valve position occurs at least once every 15 minutes? ☐ Yes ☐ No ☐ NA

      - The facility inspects the monitoring system at least once every month to verify that the monitor will indicate valve position? ☐ Yes ☐ No ☐ NA

    - o An ***Automatic shutdown system*** is used whereby the coating operation is stopped when flow is diverted by the bypass line away from the add-on control device to the atmosphere when the coating operation is running? ☐ Yes ☐ No ☐ NA

      - The facility inspects the automatic shutdown system at least once every month to verify that it will detect diversions of flow and shut down the coating operation? ☐ Yes ☐ No ☐ NA

    - o A ***Flow direction indicator*** was installed, calibrated, maintained, and operated according to the manufacturer's specifications? ☐ Yes ☐ No ☐ NA

      - The indicator takes a reading at least once every 15 minutes and provides a record indicating whether the emissions are directed to the add-on control device or diverted from the add-on control device? ☐ Yes ☐ No ☐ NA

- Each time the flow direction changes, the next reading of the time of occurrence and flow direction is recorded? ☐ Yes ☐ No ☐ NA

- A flow direction indicator was installed in each bypass line or air makeup supply line that could divert the emissions away from the add-on control device to the atmosphere? ☐ Yes ☐ No ☐ NA

☐ If any bypass line is opened, the facility has included a description of why the bypass line was opened and the length of time it remained open in the semiannual compliance reports (see 63.4520)? ☐ Yes ☐ No ☐ NA

Thermal oxidizers and catalytic oxidizer

❑ If the facility is using a thermal oxidizer or catalytic oxidizer as an add-on control device (including those used with concentrators or with carbon adsorbers to treat desorbed concentrate streams), did they comply with the following requirements:

☐ For a thermal oxidizer, the facility installed a gas temperature monitor in the firebox of the thermal oxidizer or in the duct immediately downstream of the firebox before any substantial heat exchange occurred? ☐ Yes ☐ No ☐ NA

☐ For a catalytic oxidizer, the facility installed gas temperature monitors upstream and/or downstream of the catalyst bed [see 63.3967(b)]? ☐ Yes ☐ No ☐ NA

☐ For all thermal oxidizers and catalytic oxidizers, the facility has met the requirements for each gas temperature monitoring device:

o Located the temperature sensor in a position that provides a representative temperature? ☐ Yes ☐ No ☐ NA

o Used a temperature sensor with a measurement sensitivity of 5 degrees Fahrenheit or 1.0 percent of the temperature value, whichever is larger? ☐ Yes ☐ No ☐ NA

o Before using the sensor for the first time or when relocating or replacing the sensor, the facility performed a validation check by comparing the sensor output to a calibrated temperature measurement device or by comparing the sensor output to a simulated temperature? ☐ Yes ☐ No ☐ NA

o The facility conducted an accuracy audit every quarter and after every deviation? ☐ Yes ☐ No ☐ NA

o The facility conducted a visual inspection of each sensor every quarter if redundant temperature sensors were not used? ☐ Yes ☐ No ☐ NA

Regenerative carbon adsorbers

❑ If the facility is using a regenerative carbon adsorber as an add-on control device, did they monitor the total regeneration desorbing gas (e.g., steam or nitrogen) mass flow for each regeneration cycle, the carbon bed temperature after each regeneration and cooling cycle? ☐ Yes ☐ No ☐ NA

❑ Did the facility also comply with the following:

- ☐ Insured that the regeneration desorbing gas mass flow monitor that is an integrating device having a measurement sensitivity of plus or minus 10 percent capable of recording the total regeneration desorbing gas mass flow for each regeneration cycle? ☐ Yes ☐ No ☐ NA

- ☐ Insured that the carbon bed temperature monitor is capable of recording the temperature within 15 minutes of completing any carbon bed cooling cycle? ☐ Yes ☐ No ☐ NA

- ☐ For all regenerative carbon adsorbers, met the following requirements for each temperature monitoring device:

    - o Located the temperature sensor in a position that provides a representative temperature? ☐ Yes ☐ No ☐ NA

    - o Used a temperature sensor with a measurement sensitivity of 5 degrees Fahrenheit or 1.0 percent of the temperature value, whichever is larger? ☐ Yes ☐ No ☐ NA

    - o Before using the sensor for the first time or when relocating or replacing the sensor, the facility performed a validation check by comparing the sensor output to a calibrated temperature measurement device or by comparing the sensor output to a simulated temperature? ☐ Yes ☐ No ☐ NA

    - o The facility conducted an accuracy audit every quarter and after every deviation? ☐ Yes ☐ No ☐ NA

    - o The facility conducted a visual inspection of each sensor every quarter if redundant temperature sensors are not used? ☐ Yes ☐ No ☐ NA

Condensers

- ❑ If the facility is using a condenser, did they monitor the condenser outlet (product side) gas temperature and comply the following:

    - ☐ The temperature monitor provides a gas temperature record at least once every 15 minutes. ☐ Yes ☐ No ☐ NA

    - ☐ For all condensers, meet the following requirements for each temperature monitoring device:

        - o Located the temperature sensor in a position that provides a representative temperature? ☐ Yes ☐ No ☐ NA

        - o Used a temperature sensor with a measurement sensitivity of 5 degrees Fahrenheit or 1.0 percent of the temperature value, whichever is larger? ☐ Yes ☐ No ☐ NA

        - o Before using the sensor for the first time or when relocating or replacing the sensor, the facility performed a validation check by comparing the sensor output to a calibrated temperature measurement device or by comparing the sensor output to a simulated temperature? ☐ Yes ☐ No ☐ NA

        - o The facility conducted an accuracy audit every quarter and after every deviation? ☐ Yes ☐ No ☐ NA

        - o The facility conducted a visual inspection of each sensor every quarter if redundant temperature sensors were not used? ☐ Yes ☐ No ☐ NA

Concentrators

- ❑ If the facility is using a concentrator, such as a zeolite wheel or rotary carbon bed concentrator, did they comply with the following requirements:

    - ☐ Installed a temperature monitor in the desorption gas stream that is maintained and operated properly? ☐ Yes ☐ No ☐ NA

    - ☐ Installed a device to monitor pressure drop across the zeolite wheel or rotary carbon bed. The pressure monitoring device is maintained and operated properly and has met all specified requirements? ☐ Yes ☐ No ☐ NA

Emission capture systems

- ❑ Does the facility's emission capture system monitoring system comply with the following requirements:

    - ☐ Each flow measurement device used meets the following:

        - o The flow sensor is located in a position that provides a representative flow measurement in the duct from each capture device in the emission capture system to the add-on control device? ☐ Yes ☐ No ☐ NA

        - o The flow sensor used has an accuracy of at least 10 percent of the flow? ☐ Yes ☐ No ☐ NA

        - o An initial sensor calibration was performed in accordance with the manufacturer's requirements? ☐ Yes ☐ No ☐ NA

        - o A validation check was performed before initial use or upon relocation or replacement of a sensor? [Note that validation checks include comparison of sensor values with electronic signal simulations or via relative accuracy testing.] ☐ Yes ☐ No ☐ NA

        - o An accuracy audit was conducted every quarter and after every deviation? [Note that accuracy audit methods include comparisons of sensor values with electronic signal simulations or via relative accuracy testing.] ☐ Yes ☐ No ☐ NA

        - o Leak checks are performed monthly? ☐ Yes ☐ No ☐ NA

        - o Visual inspections of the sensor system are performed quarterly if there is no redundant sensor? ☐ Yes ☐ No ☐ NA

    - ☐ For each pressure drop measurement the facility complies with the following:

        - o Located the pressure sensor(s) in or as close to a position that provides a representative measurement of the pressure drop across each opening the facility is monitoring. ☐ Yes ☐ No ☐ NA

        - o Used a pressure sensor with an accuracy of at least 0.5 inches of water column or 5 percent of the measured value, whichever is larger? ☐ Yes ☐ No ☐ NA

- Performed an initial calibration of the sensor according to the manufacturer's requirements? ☐ Yes ☐ No ☐ NA

- Conducted a validation check before initial operation or upon relocation or replacement of a sensor? ☐ Yes ☐ No ☐ NA

- Conducted an accuracy audits every quarter and after every deviation? ☐ Yes ☐ No ☐ NA

- Performed monthly leak checks on pressure connections? [Note that a pressure of at least 1.0 inches of water column to the connection must yield a stable sensor result for at least 15 seconds.] ☐ Yes ☐ No ☐ NA

- Performed a visual inspection of the sensor at least monthly if there is no redundant sensor? ☐ Yes ☐ No ☐ NA

IX. Definitions

The following definitions are for terms used in this Subpart PPPP [63.4581] and are also defined in the Clean Air Act (CAA) in 40 CFR 63.2 and in the general provisions of this part.

Additive – a material that is added to a coating after purchase from a supplier (e.g., catalysts, activators, accelerators).

Add-on control – an air pollution control device, such as a thermal oxidizer or carbon adsorber, that reduces pollution in an air stream by destruction or removal before discharge to the atmosphere.

Adhesive, adhesive coating – a chemical substance that is applied for the purpose of bonding two surfaces together. Products used on humans and animals, adhesive tape, contact paper, or any other product with an adhesive incorporated onto or in an inert substrate shall not be considered adhesives under this subpart.

Assembled on-road vehicle coating – any coating operation in which coating is applied to the surface of some component or surface of a fully assembled motor vehicle or trailer intended for on-road use including, but not limited to, components or surfaces on automobiles and light-duty trucks that have been repaired after a collision or otherwise repainted, fleet delivery trucks, and motor homes and other recreational vehicles (including camping trailers and fifth wheels). Assembled on-road vehicle coating includes the concurrent coating of parts of the assembled on-road vehicle that are painted off-vehicle to protect systems, equipment, or to allow full coverage. Assembled on-road vehicle coating does not include surface coating operations that meet the applicability criteria of the Automobiles and Light- Duty Trucks NESHAP. Assembled on road vehicle coating also does not include the use of adhesives, sealants, and caulks used in assembling on-road vehicles.

Automotive lamp coating – a coating operation in which coating is applied to the surface of some component of the body of an exterior automotive lamp, including the application of reflective argent coatings and clear topcoats. Exterior automotive lamps include head lamps, tail lamps, turn signals, brake lights, and side marker lights. Automotive lamp coating does not include any coating operation performed on an assembled on-road vehicle.

Capture device – a hood, enclosure, room, floor sweep, or other means of containing or collecting emissions and directing those emissions into an add-on air pollution control device.

Capture efficiency or capture system efficiency – the portion (expressed as a percentage) of the pollutants from an emission source that is delivered to an add-on control device.

Capture system – one or more capture devices intended to collect emissions generated by a coating operation in the use of coatings or cleaning materials, both at the point of application and at subsequent points where emissions from the coatings and cleaning materials occur, such as flashoff, drying, or curing. As used in this subpart, multiple capture devices that collect emissions generated by a coating operation are considered a single capture system.

Cleaning material – a solvent used to remove contaminants and other materials, such as dirt, grease, oil, and dried or wet coating (*e.g.*, depainting), from a substrate before or after coating application or from equipment associated with a coating operation, such as spray booths, spray guns, racks, tanks, and hangers. Includes any cleaning material used on substrates or equipment or both.

Coating – a material applied to a substrate for decorative, protective, or functional purposes. Includes, but are not limited to, paints, sealants, liquid plastic coatings, caulks, inks, adhesives, and maskants. Decorative, protective, or functional materials that consist only of protective oils for metal, acids, bases, or any combination of these substances, or paper film or plastic film which may be pre-coated with an adhesive

by the film manufacturer, are not considered coatings for the purposes of this subpart. A liquid plastic coating means a coating made from fine particle-size polyvinyl chloride (PVC) in solution (also referred to as a plastisol).

Coating operation – equipment used to apply cleaning materials to a substrate to prepare it for coating application (surface preparation) or to remove dried coating; to apply coating to a substrate (coating application) and to dry or cure the coating after application; or to clean coating operation equipment (equipment cleaning). A single coating operation may include any combination of these types of equipment, but always includes at least the point at which a given quantity of coating or cleaning material is applied to a given part and all subsequent points in the affected source where organic HAP are emitted from the specific quantity of coating or cleaning material on the specific part. There may be multiple coating operations in an affected source. Coating application with handheld, non-refillable aerosol containers, touch-up markers, or marking pens is not a coating operation for the purposes of this subpart.

Coatings solids – the nonvolatile portion of the coating that makes up the dry film.

Continuous parameter monitoring system (CPMS) – the total equipment that may be required to meet the data acquisition and availability requirements of this subpart, used to sample, condition (if applicable), analyze, and provide a record of coating operation, or capture system, or add-on control device parameters.

Controlled coating operation – a coating operation from which some or all of the organic HAP emissions are routed through an emission capture system and add-on control device.

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

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

Emission limitation – the aggregate of all requirements associated with a compliance option including emission limit, operating limit, work practice standard, etc.

Enclosure – a structure that surrounds a source of emissions and captures and directs the emissions to an add-on control device.

Exempt compound – a specific compound that is not considered a VOC due to negligible photochemical reactivity. The exempt compounds are listed in 40 CFR 51.100(s).

Facility maintenance – the routine repair or renovation (including the surface coating) of the tools, equipment, machinery, and structures that comprise the infrastructure of the affected facility and that are necessary for the facility to function in its intended capacity.

General use coating – any coating operation that is not an automotive lamp, TPO, or assembled on-road vehicle coating operation.

Hobby shop – any surface coating operation, located at an affected source, that is used exclusively for personal, noncommercial purposes by the affected source's employees or assigned personnel.

Manufacturer's formulation data – data on a material (such as a coating) that are supplied by the material manufacturer based on knowledge of the ingredients used to manufacture that material, rather than based on testing of the material with the test methods specified in 63.4541.
Mass fraction of coating solids – the ratio of the mass of solids (also known as the mass of non-volatiles) to the mass of a coating in which it is contained; kg of coating solids per kg of coating.

Mass fraction of organic HAP – the ratio of the mass of organic HAP to the mass of a material in which it is contained, expressed as kg of organic HAP per kg of material.

Month – a calendar month or a pre-specified period of 28 days to 35 days to allow for flexibility in recordkeeping when data are based on a business accounting period.

Non-HAP coating – for the purposes of this subpart, a coating that contains no more than 0.1 percent by mass of any individual organic HAP that is an OSHA-defined carcinogen as specified in 29 CFR 1910.1200(d)(4) and no more than 1.0 percent by mass for any other individual HAP.

Organic HAP content – the mass of organic HAP emitted per mass of coating solids used for a coating calculated using Equation 1 of § 63.4541. The organic HAP content is determined for the coating in the condition it is in when received from its manufacturer or supplier and does not account for any alteration after receipt. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, organic HAP content is the mass of organic HAP that is emitted, rather than the organic HAP content of the coating as it is received.

Permanent total enclosure (PTE) – a permanently installed enclosure that meets the criteria of Method 204 of appendix M, 40 CFR part 51, for a PTE and that directs all the exhaust gases from the enclosure to an add-on control device.

Personal watercraft – a vessel (boat) which uses an inboard motor powering a water jet pump as its primary source of motive power and which is designed to be operated by a person or persons sitting, standing, or kneeling on the vessel, rather than in the conventional manner of sitting or standing inside the vessel.

Plastic part and product – any piece or combination of pieces of which at least one has been formed from one or more resins. Such pieces may be solid, porous, flexible or rigid.

Protective oil – an organic material that is applied to metal for the purpose of providing lubrication or protection from corrosion without forming a solid film. This definition of protective oil includes, but is not limited to, lubricating oils, evaporative oils (including those that evaporate completely), and extrusion oils.

Reactive adhesive – adhesive systems composed, in part, of volatile monomers that react during the adhesive curing reaction, and, as a result, do not evolve from the film during use. These volatile components instead become integral parts of the adhesive through chemical reaction. At least 70 percent of the liquid components of the system, excluding water, react during the process.

Research or laboratory facility – a facility whose primary purpose is for research and development of new processes and products, that is conducted under the close supervision of technically trained personnel, and is not engaged in the manufacture of final or intermediate products for commercial purposes, except in a de minimis manner.

Responsible official – a responsible official as defined in 40 CFR 70.2.

Startup, initial – the first time equipment is brought online in a facility.

Surface preparation – use of a cleaning material on a portion of or all of a substrate. This includes use of a cleaning material to remove dried coating, which is sometimes called depainting.

Temporary total enclosure – an enclosure constructed for the purpose of measuring the capture efficiency of pollutants emitted from a given source as defined in Method 204 of appendix M, 40 CFR Part 51.

Thermoplastic olefin (TPO) – polyolefins (blends of polypropylene, polyethylene and its copolymers). This also includes blends of TPO with polypropylene and polypropylene alloys including, but not limited to, thermoplastic elastomer (TPE), TPE polyurethane (TPU), TPE polyester (TPEE), TPE polyamide (TPAE), and thermoplastic elastomer polyvinyl chloride (TPVC).

Thermoplastic olefin (TPO) coating – any coating operation in which the coatings are components of a system of coatings applied to a TPO substrate, including adhesion promoters, primers, color coatings, clear coatings and topcoats. Thermoplastic olefin coating does not include the coating of TPO substrates on assembled on-road vehicles.

Thinner – an organic solvent that is added to a coating after the coating is received from the supplier.

Total volatile hydrocarbon (TVH) – the total amount of nonaqueous volatile organic matter determined according to Methods 204 and 204A through 204F of appendix M to 40 CFR part 51 and substituting the term TVH each place in the methods where the term VOC is used. The TVH includes both VOC and non-VOC.

Uncontrolled coating operation – a coating operation from which none of the organic HAP emissions are routed through an emission capture system and add-on control device.

Volatile organic compound (VOC) – any compound defined as VOC in 40 CFR 51.100(s).

Wastewater – water that is generated in a coating operation and is collected, stored, or treated prior to being discarded or discharged.

X. Surface Coating of Plastic Parts Compliance Timeline (69 FR 20968)

A. Existing Sources

Note: This timeline does not take into account special situation such as compliance extensions.

Event	Timeline
Effective Date	**April 19, 2004**
Submit Initial Notification	No later than **April 19, 2005** [63.4510(b)]
Compliance Date	**April 19, 2007** [63.4493(b)] **Area Source that becomes a major source:** **April 19, 2007** or one year after the area source becomes an existing major source, whichever is later. [63.4483(c)(2)]
Conduct Initial Compliance Demonstrations	The initial compliance demonstration must be completed for the initial compliance period, which begins on April 30, 2007, and ends on April 30, 2008 [63.4540, 63.4550, 63.4560(b)(3)].
Submit Notification of Intent to Conduct a Performance Test **Note**: Applies to add-on controls option only.	No later than **February 18 2007** [63.7(b) and63.9(e)]
Conduct Performance Test **Note:** Performance tests must be performed for each capture system and add-on control device, except for solvent recovery systems. For solvent recovery systems, the first material balance must be initiated.	No later than **April 19, 2007** [63.4560(b)(1)]
Develop and Implement Work Practice Plan **Note:** Work practice plans must be developed for compliance with the add-on controls option only.	No later than **April 19, 2007** [63.4560(b)(2)]
Results of Initial Performance Tests	No later than **June 18, 2007** [63.4520(b)]
Notification of Compliance Status	No later than **May 30, 2008** [63.4510(c)]
Semiannual Compliance Reports	**July 31, 2008** and every **January 31** and **July 31 thereafter** [63.4520(a)(1)]

B. All New or Reconstructed Source

Note: New affected source: an affected source that the construction or reconstruction of which commenced after December 4, 2002 [63.4482(c)].

Event	Timeline
Effective Date	**April 19, 2004** [69 FR 20968]
Submit Initial Notification	**August 17, 2004** or within 120 days from start-up, whichever is later [63.4510(b)]
Compliance Date	**Upon startup or April 19, 2004,** whichever is later [63.4483(a)] **Area Source that becomes a major source: April 19, 2004** or upon becomes a new major source, whichever is later. [63.4483(c)(1)]
Conduct Initial Compliance Demonstrations	The initial compliance demonstration must be completed for the initial compliance period, which begins on the **day after the compliance date** and **ends on the last day of the 12th full month after the compliance date** [63.4540, 63.4550 or 63.4560(a)(3)]
Submit Notification of Intent to Conduct a Performance Test **Note**: Applies to add-on controls option only.	By August 17, 2004 or within 60 days before the performance test is scheduled to begin, whichever is later [63.7(b) and 63.9(e)]
Conduct Performance Test **Note:** Performance tests must be performed for each capture system and add-on control device, except for solvent recovery systems. For solvent recovery systems, the first material balance must be initiated.	**October 16, 2004** or no later than 180 days after the compliance date, whichever is later [63.4560(a)(1)]
Develop and Implement Work Practice Plan **Note:** Work practice plans must be developed for compliance with the add-on controls option only.	**April 19, 2004**, or initial startup, whichever is later [63.4560(a)(2)]
Results of Initial Performance Tests	**December 15, 2004** or within 60 days after completing the performance test, whichever is later [63.4520(b)]
Notification of Compliance Status	**May 30, 2005** or no later than 30 days following the end of the initial compliance period, whichever is later [63.4510(c)] **Note:** The initial compliance period begins on the day after the compliance date and ends on the last day of the 12th full month after the compliance date [63.4540, 63.4560(a)(3) and (b)(3)].
Semiannual Compliance Reports	Every **January 31** and **July 31**, after the end of the initial compliance period. **Note**: The initial semiannual report must cover the period beginning on the day after the end of the initial compliance period and ends on June 30 or December 31, whichever date is the first date following the end of the initial compliance period. **[63.4520(a)(1)**

XI. Tables 1 – 4 for Subpart PPPP of Part 63

Table 1 to Subpart PPPP of Part 63 – Operating Limits if Using the Emission Rate with Add-on Controls Option. If the source is required to comply with operating limits by 63.4491(c), then the applicable operating limits in the following table must be complied with:

For the following device	The facility must meet the following operating limit…	And must demonstrate continuous compliance with the operating limit by…
1. Thermal Oxidizer	a. The average combustion temperature in any 3-hour period must not fall below the combustion temperature limit established according to 63.4567(a).	i. Collecting the combustion temperature according to 63.4568(c); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average combustion temperature at or above the temperature limit.
2. Catalytic Oxidizer	a. The average temperature measured just before the catalyst bed in any 3-hour period must not fall below the limit established according to 63.457(b): and either	i. Collecting the temperature data according to 63.4568(c); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average temperature before the catalyst bed at or above the temperature limit.
	b. Ensure that the average temperature across the catalyst bed in any 3-hr period does not fall below the temperature difference limit established according to 63.4567(b)(2); or	i. Collecting the temperature data according to 63.4568(c); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average temperature difference at or above the temperature difference limit.
	c. Develop and implement an inspection and maintenance plan according to 63.4567.	i. Maintaining an up-to-date inspection and maintenance plan, records of annual catalyst activity checks, records of monthly inspections of the annual internal inspections of the catalyst bed. If a problem is discovered during a monthly or annual inspection required by 63.4567(b)(4), then corrective action must be taken as soon as practicable consistent with the manufacturer's recommendations.
3. Regenerative Carbon Adsorber	a. The total regeneration desorbing gas mass flow for each carbon bed regeneration cycle must not fall below the total regeneration desorbing gas mass flow limit established according to 63.4567(c); and	i. Measuring the total regeneration desorbing gas mass flow for each regeneration cycle according to 63.4568(d); and ii. Maintaining the total regeneration desorbing gas mass flow at or above the mass flow limit.
	b. The temperature of the carbon bed, after completing each regeneration and any cooling cycle, must not exceed the carbon bed temperature limit established according to 63.4567(c)	i. Measuring the temperature of the carbon bed after completing each regeneration and any cooling cycle according to 63.4568(d); ii. and Operating the carbon beds such that each carbon bed is not returned to service until completing each regeneration and any cooling cycle until the recorded temperature of the carbon bed is at or below the temperature limit.

For the following device	The facility must meet the following operating limit…	And must demonstrate continuous compliance with the operating limit by…
4. Condenser	a. The average condenser outlet (product side) gas temperature in any 3-hr period must not exceed the temperature limit established according to 63.4567(d).	i. Collecting the condenser outlet gas temperature according to 63.4568(e); ii. Reducing the data to 3-hr block averages; and iii. Maintaining the 3-hr average gas temperature at the outlet at or below the temperature limit.
5. Concentrators, including zeolite wheels and rotary carbon adsorbers	a. The average gas temperature of the desorption concentrate stream in any 3-hour period must not fall below the limit established according to 63.4567(e); and	i. Collecting the temperature data according to 63.4568(f); ii. Reducing the data to 3-hr block averages; and iii. Maintaining the 3-hr average temperature at or above the temperature limit.
	b. The average pressure drop of the dilute stream across the dilute stream across the concentrator in any 3-hr period must not fall below the limit established according to 63.4567(e)	i. Collecting the pressure drop data according to 63.4568(f); ii. Reducing the pressure drop data to 3-hr block averages; and iii. Maintaining the 3-hr average pressure drop at or above the pressure drop limit.
6. Emission capture system that is a PTE according to 63.4565(a)	a. The direction of the air flow at all times must be into the enclosure; and either	i. Collecting the direction of air flow, and either the facial velocity of air through all natural draft openings according to 63.4568(g)(2); and ii. Maintaining the facial velocity of air flow through all natural draft openings or the pressure drop at or above the facial velocity limit or pressure drop limit, and maintaining the direction of air flow into the enclosure at all times
	b. The average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minute; or	i. See items 6.a.i and 6.a.ii above
	c. The pressure drop across the enclosure must be at least 0.007 inch water, as established in Method 204 of Appendix M to 40 CFR Part 51	i. See items 6.a.i and 6.a.ii above
7. Emission capture system that is not a PTE according to 4565(a)	a. The average gas volumetric flow rate or duct static pressure in each duct between a capture device and add-on control device inlet in any 3-hr period must not fall below the average volumetric flow rate or duct static pressure limit established for that capture device according to 63.4567(f).	i. Collecting the gas volumetric flow rate or duct static pressure for each capture device according to 63.4568(g); ii. Reducing the data to 3-hr block averages; and iii. Maintaining the 3-hour average gas volumetric flow rate or duct static pressure for each capture device at or above the gas volumetric flow rate or duct static pressure limit.

Table 2 to Subpart PPPP of Part 63 – Applicability of General Provisions (Subpart A)

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

Citation	Subject	Applicable to Subpart PPPP?	Explanation
63.1(a) (1) – (14)	General applicability	Yes	
63.1 (b) (1) – (3)	Initial applicability determination	Yes	Applicability to Subpart PPPP is also specified in 63.4481.
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 PPPP.
63.1 (c) (4) – (5)	Extensions and Notifications	Yes	
63.1 (e)	Applicability of permit program before a relevant standard is set	Yes	
63.2	Definitions	Yes	Additional items defined in 63.4581.
63.3 (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 or reconstruction	Yes	
63.5 (e)	Approval of construction or reconstruction	Yes	
63.5 (f)	Approval of construction or 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 63.4483 specifies the compliance dates.
63.6 (c) (1) – (5)	Compliance dates for existing sources	Yes	Section 63.4483 specifies the compliance dates.
63.6 (e) (1) – (2)	Operation and maintenance requirements	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 periods of 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 Alternative standard	Yes	
63.6 (h)	Compliance with Opacity and visible emission standards	No	Subpart PPPP des not establish opacity standards and does not require continuous opacity monitoring systems (COMS).
63.6 (i) (1) – (16)	Compliance extensions	Yes	
63.6 (j)	Presidential compliance exemption	Yes	
63.7 (a) (1)	Applicability of performance test requirements	Yes	Applies to all affected sources. Additional requirements for performance testing are specified in 63.4564, 63.4565 and 63.4566.
63.7 (a) (2)	Performance test dates	Yes	Applies only to performance tests for capture system and control device efficiency at sources using these to comply with the standards. Section 63.4560 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 standards.

Citation	Subject	Applicable to Subpart PPPP?	Explanation
63.7 (f)	Performance Tests 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 standards
63.8 (a) (1) – (3)	Applicability of monitoring requirements	Yes	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standards. Additional requirements for monitoring are specified in §63.4568.
63.8 (a) (4)	Additional Monitoring Requirements	No	
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 63.4568.
63.8 (c) (4)	CMS	No	Section 63.4568 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)	Continuous Opacity Monitoring System (COMS)	No	Subpart PPPP does not have opacity or visible emission standards.
63.8 (c) (6)	CMS Requirements	No	Section 63.4568 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	Section 63.4520 requires reporting of CMS out-of-control periods.
63.8 (d) –(e)	CMS quality control program and CMS Performance Evaluation	No	Subpart PPPP 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 PPPP does not require the use of continuous emissions monitoring systems.
63.8 (g) (1) – (5)	Data reduction	No	Sections 63.4567 and 63.4568 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 suing these to comply with the standards.
63.9 (f)	Notification of opacity and visible emissions Tests	No	Subpart PPPP does not have opacity or visible emission standards.
63.9 (g) (1) – (3)	Additional notification requirements for sources using CMS	No	Subpart PPPP does not require the use of continuous emissions monitoring systems.
63.9 (h)	Notification of compliance status	Yes	Section 63.4510 specifies the dates for submitting the notification of compliance status.
63.9 (i)	Adjustment of submittal deadlines	Yes	
63.9 (j)	Change in information provided	Yes	
63.10 (a)	Record keeping and reporting – Applicability and General Information	Yes	
63.10 (b) (1)	General Recordkeeping Requirements	Yes	Additional requirements are specified in 63.4530 and 63.4531.

Citation	Subject	Applicable to Subpart PPPP?	Explanation
63.10 (b) (2) (i) – (v)	Records related to startup, shutdown and malfunction	Yes	Requirements for startup, shutdown and malfunction records only apply to add-on control devices used to comply with the standards.
63.10 (b) (2) (vi) – (xi)		Yes	
63.10 (b) (2) (xii)	Record s	Yes	
63.10 (b) (2) (xiii)		No	Subpart PPPP does not require the use of continuous emissions monitoring systems
63.10 (b) (2) (xiv)		Yes	
63.10 (b) (3)	Records 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 63.4520(a)(7)
63.10 (c) (9) – (15)		Yes	
63.10 (d) (1)	General reporting requirements	Yes	Additional requirements are specified in 63.4520.
63.10 (d) (2)	Report of performance test results	Yes	Additional requirements are specified in 63.4520 (b).
63.10 (d) (3)	Reporting results of opacity or visible emission observations	No	Subpart PPPP does not require opacity or visible emissions observations.
63.10 (d) (4)	Progress reports as part of extension of compliance	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 standards.
63.10 (e) (1) – (2)	Additional reporting requirements for CMS	No	Subpart PPPP does not require the use of continuous emissions monitoring systems.
63.10 (e) (3)	Excess Emissions/CMS Performance Reports	No	Section 63.4520(b) specifies the contents of periodic compliance reports.
63.10 (e) (4)	COMS Data Reports	No	Subpart PPPP does not specify requirements for opacity or COMS
63.10 (f)	Waiver for recordkeeping/reporting	Yes	
63.11	Control device requirements/Flares	No	Subpart PPPP does not specify use of flares for compliance.
63.12	State authority and delegations	Yes	
63.13	Addresses of State air pollution control agencies and EPA Regional Offices	Yes	
63.14	Incorporation by reference	Yes	
63.15	Availability of information and confidentiality	Yes	

TABLE 3 TO SUBPART PPPP OF PART 63 — Default Organic HAP Mass Fraction for Solvents and Solvent Blends

The facility may use the mass fraction values in the following table for solvent blends for which they 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 Table 4 to this subpart if neither the name nor CAS number matches.

Solvent/Solvent Blend	CAS Number	Average Organic HAP mass Fraction	Typical Organic HAP Percent by Mass
1. Toluene	108-88-3	1.0	Toluene
2. Xylenes(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		0.21	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	64742-89-6	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
19. Super High-flash Naphtha	64742-95-6	0.05	Xylenes
20. Varsol® 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

TABLE 4 TO SUBPART PPPP OF PART 63 — Default Organic HAP Mass Fraction for Petroleum Solvent Groups.

The facility may use the mass fraction values in the following table for solvent blends for which they do not have the test data or manufacturer's formulation data. NOTE: Use this table only if the solvent blend does not match any solvent blends in Table 3 to this subpart by either solvent blend name or CAS number and only if it is know whether the blend is aliphatic or aromatic.

Solvent Type	Average Organic HAP Mass Fraction	Typical Organic HAP (Percent by Mass)
Aliphatic **Note:** 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	0.03	1% Xylene, 1% Toluene and 1% Ethylbenzene
Aromatic **Note:** Medium-flash Naphtha, High-flash Naphtha, Aromatic Naphtha, Light Aromatic Naphtha, Light Aromatic Hydrocarbons, Aromatic Hydrocarbons, Light Aromatic Solvent	0.064	4% Xylene, 1% Toluene and 1% Ethylbenzene

XII. Startup, Shutdown and Malfunction (SSM) Plan Checklist

The following is a Summary of Requirements for MACT Standard's Startup, Shutdown, and Malfunction Plans. This document was originally prepared in September 2003 by EC/R Incorporated for the U.S. Environmental Protection Agency and is only a tool for assessing a facility's plan.

It should be noted that on April 20, 2006, EPA issued a final amendment to the general provisions of the national emissions standards for hazardous air pollutants (NESHAP) and other specific national emissions standards affecting the SSM plan requirements. An SSM plan is still required, as applicable, however, a source in now allowed to deviate from its SSM plan in order to have more flexibility to address emissions during such SSM periods. However, sources must still operate to minimize emissions during periods of startup, shutdown and malfunction. Refer to http://www.epa.gov/ttn/oarpg/t3/fact_sheets/genprov_fs.html for additional details.

1. What is meant by Startup, Shutdown and Malfunction?

- ***Startup*** is defined as "setting in operation of an affected source or portion of an affected source for any purpose" (40 CFR 63.2). Startup is what you do when you start your process equipment.

- ***Shutdown*** is defined as "the cessation of operation of an affected source or portion of an affected source for any purpose" (40 CFR 63.2). Shutdown is what you do when you turn your process equipment off.

- ***Malfunction*** is defined as "any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions" (40 CFR 63.2). A malfunction is what happens when your equipment stops working properly because of unforeseeable equipment or other process-related failure. It does not include what happens to your equipment if you fail to maintain the equipment properly or are careless during operation so that the equipment breaks down or stops working properly.

2. What requires a facility to prepare a SSM Plan?

The Federal air pollution control requirements published by the EPA require owners and operators of MACT sources to write and put into use a Startup, Shutdown, and Malfunction Plan (SSM Plan). See Section 63.6(e)(3)(i) of the EPA "General Provisions" for these requirements.

3. What is the purpose of a SSM Plan?

The purpose of the SSM Plan is to make sure that:

- A facility runs (and keep in good running order) their MACT sources so that the facility's air emissions are minimized during all startups, shutdowns, and malfunctions (SSM) to the greatest extent which is consistent with safety and good air pollution control practices [63.6(e)(3)(i)(A)];

- A facility is ready to correct (for example, repair) malfunctions as soon as practical after they happen so as to minimize any emissions that might occur as a result of the malfunction [63.6(e)(3)(i)(B)]; and

- A facility's reporting duty is simplified when a SSM happens since the procedures followed during the startup or shutdown or to correct a malfunction are already described in a SSM Plan [63.6(e)(3)(i)(C)].

1. When must an SSM Plan be developed?

An SSM Plan must be developed by the compliance date of a facility's NESHAP [63(e)(3)(i)] or as otherwise specified for its MACT source.

2. What information should an SSM Plan contain?

An SSM Plan should describe how a facility is going to startup and shutdown the MACT source. The SSM Plan should also describe how the facility will handle malfunctions of its processes to minimize emissions, as well as malfunctions of the devices that control and monitor the emissions from regulated air pollution sources including continuous emissions monitoring systems (CEMS) [63.6(e)(3)].

A facility's SSM Plan should describe the information listed below [63.6(e)(3)]:

- How the facility plans to operate, or in other words, how the facility will run the MACT process equipment during startups and shutdowns to minimize emissions;
- How the facility plans to operate the MACT source during malfunctions to minimize emissions; and
- How the facility plan's to correct/repair malfunctioning equipment as soon as practical after malfunctions occur.

It may also be helpful to address in the SSM Plan the information that will be recorded during each SSM [63.6(e)(3) and 63.10(b)]. See Item 9 of this document for the list of information that needs to be recorded. The records may take the form of a "checklist" or any other type of recordkeeping that keeps track of the same information [63.6(e)(3)(iii) and 63.10(b)(2)(v)].

A facility may use a standard operating procedures (SOP) manual, an Occupational Safety and Health Administration (OSHA) plan, or other plan to satisfy the requirements for writing a SSM Plan as long as the other plan meets all the requirements of a SSM Plan, as described here [63.6(e)(3)(vi)]. Some MACT sources reference portions of their SOP manual in their SSM Plan.

3. When is a facility required to use a SSM Plan?

A facility must use the SSM Plan during all SSM occurrences of their MACT sources, and run and keep in good running order the MACT source using the procedures described in the SSM Plan [63.6(e)(3)(ii)]. If it is impracticable in a given situation to follow the procedures in the SSM plan, newly promulgated amendments to the general provisions allows the flexibility to deviate from the SSM plan. See http://www.epa.gov/ttn/oarpg/t3/fact_sheets/genprov_fs.html for additional details.

4. Who sees the SSM Plan and how long should it be kept?

- A facility's SSM Plan is a public document and may be requested by the public. You must submit your plan to your permitting authority when asked to do so in response to a request from the public. It may also need to be submitted as required by the NESHAP for your source.

- Under a facility's permit required by Title V (part 70 and 71) of the 1990 Clean Air Act

Amendments facilities are required to have an SSM plan. The Title V permit also requires facilities to follow the procedures in their SSM Plan during all times of startups, shutdowns, and malfunctions as they operate the equipment at their facility. Revisions made to an SSM Plan are not considered Title V permit revisions. Also, none of the procedures in the SSM Plan fall within the "permit shield" provision in Section 504(f) of the Clean Air Act [63.6(e)(3)(ix)].

- Facilities should keep a copy of their SSM Plan in a safe place with other important records so that it can be read or copied by EPA or any other regulatory agency for as long as they continue to operate their MACT processes and for five (5) years after they stop operating the process [63.6(e)(3)(v)].

- If an SSM Plan is ever revised, facilities should also keep the previous versions for five (5) years afterwards so that it can be available to EPA or any other regulatory agency and the public [63.6(e)(3)(v)].

8. When must a facility modify the SSM Plan?

A facility must modify their current SSM Plan in the following situations:

- To reflect changes to MACT operations or SSM procedures since the SSM Plan was last prepared [63.6(e)(viii)]; and
- If the current SSM Plan:
    - Does not include instructions for a SSM that has occurred [63.6(e)(3)(vii)(A)];
    - Does not include instructions for what will be done during a SSM -- i.e., safe procedures and good air pollution control practices that minimize emissions to the greatest extent [63.6(e)(3)(vii)(B)];
    - Does not include enough instructions for correcting/repairing the malfunctioning process, air pollution control, or monitoring equipment as quickly as practical [63.6(e)(3)(vii)(C)]; or
    - Includes instructions for anything that is not a SS&M, as defined above [63.6(e)(3)(vii)(D)];

Note: If the current SSM Plan leaves out or does not include enough instructions to correctly handle any incident that occurs that can be called a malfunction, the facility must revise its SSM Plan within 45 days after the incident. The facility must add to the revised SSM Plan information on what will be done in case this type of incident happens again [63.6(e)(3)(viii)]. Depending on what the SSM Plan revisions are, the permitting authority and/or EPA may ask to see a copy of the revised SSM Plan. If the facility revises its SSM Plan, it must report that the SSM Plan has been revised in the next semiannual SSM Report for its NESHAP (or Title V) compliance certification. These reports are typically due within 60 days following the end of each 6-month period [63.6(e)(viii) and 63.10(d)(5)(i); 70.5(c)(9)], although the permitting authority can approve less frequent reporting in some cases. If the revisions to the SSM Plan include changes to the scope of activities considered to be SSM events or otherwise changes how any emission limit, work practice requirement, or other requirement in your NESHAP will apply to the facility, the revised SSM Plan is not effective until the permitting authority receives written notice from the facility describing these SSM Plan revisions [63.6(e)(3)(viii)]. Until then, continue following the existing approved SSM Plan.

9. Does a facility have to keep any SSM records?

A facility is required to keep the following records (including all reports and notifications) for five years [63.6(e)(3) and 63.10(b)(2)]:

- When and how long each malfunction of MACT operations, or air pollution control and monitoring equipment happened;
- What was done to correct/repair the malfunctioning equipment;

- Whether the facility followed their current SSM Plan;
- What was done, if at all, that was different from what is in the current SSM Plan; and
- Any other information required by the facility's NESHAP, such as the cause of the malfunctions.

10. Does a facility have to submit SSM Reports?

If you revise your SSM Plan to reflect changes to your MACT source operation or procedures, you must report that you have revised your SSM Plan in your next semiannual SSM Report for your NESHAP (or Title V compliance certification) which is typically due within 60 days following the end of each 6-month period [63.6(e)(viii) and 63.10(d)(5)(i); 70.5(c)(9)].

If a SSM occurs and you correctly followed the procedures in your SSM Plan, you must submit the following in a letter in your next semiannual SSM Report, due within 60 days following the end of each 6-month period [63.6(e)(iii) and 63.10(d)(5)(i))]:

- Facility contact name and title;
- Certifying signature of the owner/operator or other responsible official;
- Statement that current SSM Plan was followed or deviation occurred; and
- How many SSM happened, how long the SSM were, and a brief description of each SSM. (Note: This information may take the form of a checklist)

If what you did during a SSM was not as written in your SSM Plan and/or the type of SSM was not covered by your current SSM Plan and your source exceeds any of the applicable emission limitations in the relevant standard, you must report exactly what your actions were and/or the type of SSM that occurred by telephone or facsimile (FAX) transmission within two (2) working days afterwards. Also, you must send a letter within seven (7) working days after the end of the SSM. The letter should include the following information [63.6(e)(3)(iv) and 63.10(d)(5)(ii)]:

- Facility contact name and title;
- Certifying signature of the owner/operator or other responsible official;
- How the recent SSM happened;
- What was done during the SSM;
- The reason(s) that current SSM Plan was not followed; and
- Whether any emissions and/or parameters that were monitored were higher or different than their allowable values during the SSM.

If, as above, what was done during a SSM was not as written in the current SSM Plan and/or the type of event was not covered by the current SSM Plan, the facility must also revise the SSM Plan within 45 days after the SSM so as to describe what will be done in case a similar SSM happens again.

A facility may also have reports to make that are required by the State Implementation Plan (SIP). Check with local permitting authority to find out about these additional requirements.

11. Startup, Shutdown and Malfunction (SSM) Plan Checklist:

a. Has the facility described what will be done to operate, in other words, how the facility run all **process equipment** at the MACT sources during **startups and shutdowns** to minimize emissions?

b. Has the facility included how they will record what will be done during a **startup or shutdown** if this information is not already included in the plan?

c. Has the facility included what they will do to find and record the circumstances of malfunctions of the **process, air pollution control, and air pollution monitoring** equipment?

d. Has the facility included what they will do to correct (for example, repair) the malfunctioning **process, air pollution control, and air pollution monitoring** equipment as soon as practical after the malfunctions happens to minimize emissions, and how they will record these corrections?

e. Has the facility included how they will obtain any other information required by the applicable NESHAP, such as the cause of the malfunction?

Note: This is the least amount of information that a facility should have in their SSM Plan. The facility can include more information so that employees can operate the facility as best as possible during any startup, shutdown, or malfunction. They may also include any or all of the following as additional requirements: (1) the SSM Plan should be kept in a place where everyone who operates any equipment can find it quickly; (2) a manager should sign off any SSM Plan revisions and be notified of each SSM; or (3) all employees must be trained in the SSM procedures.

12. Sample SSM Recordkeeping Checklist:

a. At what piece of equipment or where in the process did the startup, shutdown, or malfunction occur?

b. What was the date and time of the startup and how long did it last?

c. What was the date and time of the shutdown and how long did it last?

d. What was the date and time of the malfunction and how long did it last?

e. What did you do to correct the malfunctioning equipment?

f. Is what was done during the startup, shutdown, or malfunction exactly as described in the SSM Plan?

g. If the facility did anything that was not in the current SSM Plan, what was the result?

h. Did the facility include all other information required by the applicable NESHAP, such as the cause of the malfunctions?

Note: This is the least amount of information that a facility should write down during any startup, shutdown, and malfunctions. The facility can include more information so that they can describe as best as possible what happened during any startup, shutdown, or malfunction.