the temperature value, whichever is larger.

(4) Shield the temperature sensor system from electromagnetic interference and chemical contaminants.

(5) If a chart recorder is used, it must have a sensitivity in the minor division of at least 20 degrees Fahrenheit.

(6) Perform an electronic calibration at least semiannually according to the procedures in the manufacturer's owners manual. Following the electronic calibration, you must conduct a temperature sensor validation check in which a second or redundant temperature sensor placed near the process temperature sensor must yield a reading within 16.7 degrees centigrade of the process temperature sensor's reading.

(7) Conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor.

(8) At least monthly, inspect all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion.

(c) For each integrating regeneration stream flow monitoring device associated with a carbon adsorber, you must meet the requirements in paragraphs (a) and (c)(1) and (2) of this section.

(1) Use a device that has an accuracy of ±10 percent or better.

(2) Use a device that is capable of recording the total regeneration stream mass or volumetric flow for each regeneration cycle.

(d) For any other control device, or for other capture systems, ensure that the CPMS is operated according to a monitoring plan submitted to the Administrator with the compliance status report required by §63.9(h). The monitoring plan must meet the requirements in paragraphs (a) and (d)(1) through (3) of this section. Conduct monitoring in accordance with the plan submitted to the Administrator unless comments received from the Administrator require an alternate monitoring scheme.

(1) Identify the operating parameter to be monitored to ensure that the control or capture efficiency measured during the initial compliance test is maintained.

(2) Discuss why this parameter is appropriate for demonstrating ongoing compliance.

(3) Identify the specific monitoring procedures.

(e) For each pressure differential monitoring device, you must meet the requirements in paragraphs (a) and (e)(1) and (2) of this section.

(1) Conduct a quarterly EPA Method 2 procedure (found in 40 CFR part 60, appendix A) on the applicable NDOs and use the results to calibrate the pressure monitor if the difference in results are greater than 10 percent.

(2) Inspect the NDO monthly to ensure that their size has not changed, that there are no new NDO, and that no HAP sources have been moved closer to the NDO than when the last performance test was conducted.

§ 63.5996 How do I demonstrate initial compliance with the emission limits for tire production affected sources?

(a) You must demonstrate initial compliance with each emission limit that applies to you according to Table 6 to this subpart.

(b) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6009(e).

Testing and Initial Compliance Requirements for Tire Cord Production Affected Sources

§ 63.5997 How do I conduct tests and procedures for tire cord production affected sources?

(a) *Methods to determine the mass percent of each HAP in coatings.* (1) To determine the HAP content in the coating used at your tire cord production affected source, use EPA Method 311 of appendix A of this part, an approved alternative method, or any other reasonable means for determining the HAP content of your coatings. Other reasonable means include, but are not limited to: an MSDS, provided it contains appropriate information; a CPDS; or a manufacturer's HAP data sheet. You are not required to test the materials that you use, but the Administrator may require a test using EPA Method 311 (or an approved alternative method)

to confirm the reported HAP content. If the results of an analysis by EPA Method 311 are different from the HAP content determined by another means, the EPA Method 311 results will govern compliance determinations.

(2) Unless you demonstrate otherwise, the HAP content analysis must be based on coatings prior to any crosslinking reactions, *i.e.,* curing. However, you may account for differences in HAP emissions resulting from chemical reactions based on the conversion rates of the individual coating formulations, chemistry demonstrations, or other demonstrations that are verifiable to the approving agency. Use the revised value in your compliance demonstration in the relevant equations in paragraph (b) of this section.

(b) *Methods to determine compliance with the emission limits in Table 2 to this subpart, option 1.* Use the equations in this paragraph (b) to demonstrate initial and continuous compliance with the emission limits for tire cord production sources using the compliance alternatives described in §63.5987(a) and (b).

(1) *Determine mass percent of HAP.* Determine the mass percent of all HAP in each coating according to the procedures in paragraph (a) of this section.

(2) *Compliance without use of an add-on control device.* If you do not use an add-on control device to meet the emission limits, use Equation 1 of this section to calculate the monthly HAP emission rate in grams of HAP emitted per megagram of fabric processed at the tire cord production source to show that the monthly average HAP emissions do not exceed the emission limits in Table 2 to this subpart, option 1. Equation 1 follows:

$$E_{month} = \frac{\sum_{i=1}^{n} (HAP_i)(TCOAT_i)}{TFAB} \quad \text{(Eq. 1)}$$

Where:

E_{month}=mass of all HAP emitted per total mass of fabric processed in the month, grams per megagram.

HAP_i=mass percent, expressed as a decimal, of all HAP in the coating i, prior to curing and including any application station dilution, determined in accordance with paragraph (a) of this section.

$TCOAT_i$=total mass of coating i made and used for application to fabric at the facility in the month, grams.

n=number of coatings used in the month.

TFAB=total mass of fabric processed in the month, megagrams.

(3) *Compliance with use of an add-on control device.* If you use a control device to meet the emission limits, use Equation 2 of this section to calculate the monthly HAP emission rate in grams of HAP emitted per megagram of fabric processed to show that the monthly average HAP emissions do not exceed the HAP emission limit in Table 2 of this subpart, option 1. Equation 2 follows:

$$E_{month} = \frac{\sum_{i=1}^{n} (HAP_i)(TCOAT_i) + \sum_{j=1}^{m} (HAP_j)(TCOAT_j)\left(1 - \frac{EFF}{100}\right) + \sum_{k=1}^{p} (HAP_k)(TCOAT_k)}{TFAB} \quad \text{(Eq. 2)}$$

Where:

E_{month}=mass of all HAP emitted per total mass of fabric processed in the month, grams per megagram.

HAP_i=mass percent, expressed as a decimal, of all HAP in coating i, prior to curing and including any application stations dilution, determined in accordance with paragraph (a) of this section, for coatings used in the month in processes that are not routed to a control device.

$TCOAT_i$=total mass of coating i made and used for application to fabric at the facility in the month in processes that are not routed to a control device, grams.

n=number of coatings used in the month in processes that are not routed to a control device.

HAP_j=mass percent, expressed as a decimal, of all HAP in coating j, prior to curing and including any application station dilution, determined in accordance with paragraph (a) of this section, for coatings used in the month in processes that are routed to a control device during operating days, which are defined as days when the control system is operating within the operating

range established during the performance test and when monitoring data are collected.

$TCOAT_j$=total mass of coating j made and used for application to fabric at the facility in the month in processes that are routed to a control device during all operating days, grams.

EFF=efficiency of the control system determined during the performance test (capture system efficiency multiplied by the control device efficiency), percent.

m=number of coatings used in the month that are routed to a control device during all operating days.

HAP_k=mass percent, expressed as a decimal, of all HAP in coating k, prior to curing and including any application station dilution, for coatings used in the month in processes that are routed to a control device during non-control operating days, which are defined as days when either the control system is not operating within the operating range established during the performance test or when monitoring data are not collected.

$TCOAT_k$=total mass of coating k made and used for application to fabric at the facility in the month in processes that are routed to a control device during all non-control operating days, grams.

p=number of coatings used in the month that are routed to a control device during all non-control operating days.

TFAB=total mass of fabric processed in the month, megagrams.

(4) Each monthly calculation is a compliance demonstration for the purpose of this subpart.

(c) *Methods to determine compliance with the emission limits in Table 2 of this subpart, option 2.* Use the equations in this paragraph (c) to demonstrate initial and continuous compliance with the emission limits for tire cord production sources using the compliance alternatives described in §63.5987(a) and (b).

(1) Determine the mass percent of each HAP in each coating according to the procedures in paragraph (a) of this section.

(2) Use Equation 3 of this section to calculate the monthly average HAP emission rate when complying by using coatings without using an add-on control device to show that the monthly average HAP emissions do not exceed the emission limits in Table 2 to this subpart, option 2. Equation 3 follows:

$$E_{month} = \frac{\left(\sum_{i=1}^{n}(HAP_i)(TCOAT_i)\right)(10^6)}{\sum_{i=1}^{n} TCOAT_i} \qquad \text{(Eq. 3)}$$

Where:

E_{month}=mass of the specific HAP emitted per total mass of coatings from all coatings made and used in tire cord fabric production per month, grams per megagram.

HAP_i=mass percent, expressed as a decimal, of the specific HAP in the coating i, prior to curing and including any application station dilution, determined in accordance with paragraph (a) of this section.

$TCOAT_i$=total mass of coating i made and used for application to fabric at the facility in the month, grams.

n=number of coatings used in the month.

(3) Use Equation 4 of this section to calculate the monthly average HAP emission rate when complying by using an add-on control device to show that the monthly average HAP emissions do not exceed the emission limits in Table 2 to this subpart, option 2. Equation 4 follows:

$$E_{month} = \frac{\left\{\sum_{i=1}^{n}(HAP_i)(TCOAT_i) + \sum_{j=1}^{m}(HAP_j)(TCOAT_j)\left(1 - \frac{EFF}{100}\right) + \sum_{k=1}^{p}(HAP_k)(TMASS_k)\right\}(10^6)}{\sum_{i=1}^{n}TCOAT_i + \sum_{j=1}^{m}TCOAT_j + \sum_{k=1}^{p}TCOAT_k} \quad \text{(Eq. 4)}$$

Where:

E_{month}=mass of the specific HAP emitted per total mass of coatings from all coatings made and used in tire cord fabric production per month, grams per megagram.

HAP_i=mass percent, expressed as a decimal, of the specific HAP in coating i, prior to curing and including any application station dilution, determined in accordance with paragraph (a) of this section, for coatings used in the month in processes that are not routed to a control device.

$TCOAT_i$=total mass of coating i made and used for application to fabric at the facility in the month in processes that are not routed to a control device, grams.

n=number of coatings used in the month in processes that are not routed to a control device.

HAP_j=mass percent, expressed as a decimal, of the specific HAP in coating j, prior to curing and including any application station dilution, determined in accordance with paragraph (a) of this section, for coatings used in the month in processes that are routed to a control device during operating days, which are defined as days when the control system is operating within the operating range established during the performance test and when monitoring data are collected.

$TCOAT_j$=total mass of coating i made and used for application to fabric at the facility in the month in processes that are routed to a control device during all operating days, grams.

EFF=efficiency of the control system determined during the performance test (capture system efficiency multiplied by the control device efficiency), percent.

m=number of coatings used in the month that are routed to a control device during all operating days.

HAP_k=mass percent, expressed as a decimal, of the specific HAP in coating k, prior to curing and including any application station dilution, for coatings used in the month in processes that are routed to a control device during non-control operating days, which are defined as days when either the control system is not operating within the operating range established during the performance test or when monitoring data are not collected.

$TCOAT_k$=total mass of coating i made and used for application to fabric at the facility in the month in processes that are routed to a control device during all non-control operating days, grams.

p = number of coatings used in the month that are routed to a control device during all non-control operating days.

(4) Each monthly calculation is a compliance demonstration for the purpose of this subpart.

(d) *Specific compliance demonstration requirements for tire cord production affected sources.* (1) Conduct any required compliance demonstrations according to the requirements in § 63.5993.

(2) Conduct the compliance demonstration using coatings with average mass percent HAP content that are representative of the coatings typically used at your tire cord production affected source.

(3) Establish an operating range that corresponds to the control efficiency as described in Table 5 to this subpart.

(e) *How to take credit for HAP emissions reductions from add-on control devices.* If you want to take credit in Equations 2 and 4 of this section for HAP emissions reduced using a control system, you must meet the requirements in paragraphs (e)(1) and (2) of this section.

(1) Monitor the established operating parameters as appropriate.

(i) If you use a thermal oxidizer, continuously monitor the firebox secondary chamber temperature.

(ii) If you use a carbon adsorber, monitor the total regeneration stream mass or volumetric flow for each regeneration cycle and the carbon bed temperature after each regeneration and within 15 minutes of completing any cooling cycle.

(iii) If you use a control device other than a thermal oxidizer or a regenerative carbon adsorber, install and operate a continuous parameter monitoring system according to your site-specific performance test plan submitted according to § 63.7(c)(2)(i).

(iv) If you use a permanent total enclosure, monitor the face velocity

across the NDO in the enclosure. Also, if you use an enclosure, monitor to ensure that the sizes of the NDO have not changed, that there are no new NDO, and that a HAP emission source has not been moved closer to an NDO since the last performance test was conducted.

(v) If you use other capture systems, monitor the parameters identified in your monitoring plan.

(2) Maintain the operating parameter within the operating range established during the compliance demonstration.

(f) *How to take credit for HAP emissions reductions when streams are combined.* When performing material balances to demonstrate compliance, if the storage of materials, exhaust, or the wastewater from more than one affected source are combined at the point where control systems are applied, any credit for emissions reductions needs to be prorated among the affected sources based on the ratio of their contribution to the uncontrolled emissions.

§ 63.5998 What are my monitoring installation, operation, and maintenance requirements?

For each operating parameter that you are required by § 63.5997(e)(1) to monitor, you must install, operate, and maintain a continuous parameter monitoring system according to the provisions in § 63.5995(a) through (e).

§ 63.5999 How do I demonstrate initial compliance with the emission limits for tire cord production affected sources?

(a) You must demonstrate initial compliance with each emission limit that applies to you according to Table 7 to this subpart.

(b) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.6009(e).

TESTING AND INITIAL COMPLIANCE REQUIREMENTS FOR PUNCTURE SEALANT APPLICATION AFFECTED SOURCES

§ 63.6000 How do I conduct tests and procedures for puncture sealant application affected sources?

(a) *Methods to determine compliance with the puncture sealant application emission limitations in Table 3 to this subpart.* Use the methods and equations in paragraph (b) of this section to demonstrate initial and continuous compliance with the overall control efficiency compliance alternatives described in § 63.5989(a) and (b). Use the methods and equations in paragraphs (c) through (g) of this section to demonstrate initial and continuous compliance with the HAP constituent compliance alternative described in § 63.5989(c) and (d).

(b) *Methods to determine compliance with the emission limits in Table 3 to this subpart, option 1.* Follow the test procedures described in § 63.5993 to determine the overall control efficiency of your system.

(1) You must also meet the requirements in paragraphs (b)(1)(i) and (ii) of this section.

(i) Conduct the performance test using a puncture sealant with an average mass percent HAP content that is representative of the puncture sealants typically used at your puncture sealant application affected source.

(ii) Establish all applicable operating limit ranges that correspond to the control system efficiency as described in Table 5 to this subpart.

(2) Use Equation 1 of this section to calculate the overall efficiency of the control system. If you have a permanent total enclosure that satisfies EPA Method 204 (found in 40 CFR part 51, appendix M) criteria, assume 100 percent capture efficiency for variable F. Equation 1 follows:

$$R = \frac{(F)(E)}{100} \qquad \text{(Eq. 1)}$$