

Section 63.3890, Equation 1

$$\text{Facility-Specific Emission Limit} = \frac{\sum_{i=1}^n (\text{Limit}_i)(\text{Solids}_i)}{\sum_{i=1}^n (\text{Solids}_i)} \quad (\text{Eq. 1})$$

Where:

Facility-specific emission limit = Facility-specific emission limit for each 12-month compliance period, kg (lb) organic HAP per kg (lb) coating solids used. Limit_i = The new source or existing source emission limit applicable to coating operation, i, included in the facility-specific emission limit, converted to kg (lb) organic HAP per kg (lb) coating solids used, if the emission limit is not already in those units. All emission limits included in the facility-specific emission limit must be in the same units. Solids_i = The liters (gal) of solids used in coating operation, i, in the 12-month compliance period that is subject to emission limit, i. You may estimate the volume of coating solids used from parameters other than coating consumption and volume solids content (e.g., design specifications for the parts or products coated and the number of items produced). The use of parameters other than coating consumption and volume solids content must be approved by the Administrator. n = The number of different coating operations included in the facility-specific emission limit.

Section 63.3961, Equation 1

$$H_C = (A_C + B_C + C_C - R_W - H_{UNC}) \left(\frac{CE}{100} \times \frac{DRE}{100} \right) \quad (\text{Eq. 1})$$

Where:

HC = Mass of organic HAP emission reduction for the controlled coating operation during the month, kg. AC = Total mass of organic HAP in the coatings used in the controlled coating operation during the month, kg, as calculated in Equation 1A of this section. BC = Total mass of organic HAP in the thinners and/or other additives used in the controlled coating operation during the month, kg, as calculated in Equation 1B of this section. CC = Total mass of organic HAP in the cleaning materials used in the controlled coating operation during the month, kg, as calculated in Equation 1C of this section. RW = Total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the compliance period, kg, determined according to §63.3951(e)(4). (You may assign a value of zero to RW if you do not wish to use this allowance.) HUNC = Total mass of organic HAP in the coatings, thinners and/or other additives, and cleaning materials used during all deviations specified in §63.3963(c) and (d) that occurred during the month in the controlled coating operation, kg, as calculated in Equation 1D of this section. CE = Capture efficiency of the emission capture system vented to the add-on control device, percent. Use the test methods and procedures specified in §§63.3964 and 63.3965 to measure and record capture efficiency. DRE =

Organic HAP destruction or removal efficiency of the add-on control device, percent. Use the test methods and procedures in §§63.3964 and 63.3966 to measure and record the organic HAP destruction or removal efficiency.

Section 63.3961, Equation 1A

$$A_C = \sum_{i=1}^m (\text{Vol}_{c,i})(D_{c,i})(W_{c,i}) \quad (\text{Eq. 1A})$$

Where:

AC = Total mass of organic HAP in the coatings used in the controlled coating operation during the month, kg. Vol_{c,i} = Total volume of coating, i, used during the month, liters. D_{c,i} = Density of coating, i, kg per liter. W_{c,i} = Mass fraction of organic HAP in coating, i, kg per kg. For reactive adhesives as defined in §63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to subpart PPPP of this part. m = Number of different coatings used.

Section 63.3961, Equation 1B

$$B_C = \sum_{j=1}^n (\text{Vol}_{t,j})(D_{t,j})(W_{t,j}) \quad (\text{Eq. 1B})$$

Where:

BC = Total mass of organic HAP in the thinners and/or other additives used in the controlled coating operation during the month, kg. Vol_{t,j} = Total volume of thinner and/or other additive, j, used during the month, liters. D_{t,j} = Density of thinner and/or other additive, j, kg per liter. W_{t,j} = Mass fraction of organic HAP in thinner and/or other additive, j, kg per kg. For reactive adhesives as defined in §63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to subpart PPPP of this part. n = Number of different thinners and/or other additives used.

Section 63.3961, Equation 1C

$$C_C = \sum_{k=1}^p (\text{Vol}_{s,k})(D_{s,k})(W_{s,k}) \quad (\text{Eq. 1C})$$

Where:

CC = Total mass of organic HAP in the cleaning materials used in the controlled coating operation during the month, kg. Vols_k = Total volume of cleaning material, k, used during the month, liters. D_{s,k} = Density of cleaning material, k, kg per liter. W_{s,k} = Mass fraction of organic HAP in cleaning material, k, kg per kg. p = Number of different cleaning materials used.

Section 63.3961, Equation 1D

$$H_{\text{UNC}} = \sum_{h=1}^q (\text{Vol}_h)(D_h)(W_h) \quad (\text{Eq. 1D})$$

Where:

HUNC = Total mass of organic HAP in the coatings, thinners and/or other additives, and cleaning materials used during all deviations specified in §63.3963(c) and (d) that occurred during the month in the controlled coating operation, kg. Vol_h = Total volume of coating, thinner and/or other additive, or cleaning material, h, used in the controlled coating operation during deviations, liters. D_h = Density of coating, thinner and/or other additives, or cleaning material, h, kg per liter. W_h = Mass fraction of organic HAP in coating, thinner and/or other additives, or cleaning material, h, kg organic HAP per kg coating. For reactive adhesives as defined in §63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to subpart PPPP of this part. q = Number of different coatings, thinners and/or other additives, and cleaning materials used.

Section 63.3961, Equation 2

$$R_V = 100 \frac{M_{\text{VR}}}{\sum_{i=1}^m \text{Vol}_i D_i W_{\text{Vc},i} + \sum_{j=1}^n \text{Vol}_j D_j W_{\text{Vt},j} + \sum_{k=1}^p \text{Vol}_k D_k W_{\text{Vs},k}} \quad (\text{Eq. 2})$$

Where:

RV = Volatile organic matter collection and recovery efficiency of the solvent recovery system during the month, percent. MVR = Mass of volatile organic matter recovered by the solvent recovery system during the month, kg. Vol_i = Volume of coating, i, used in the coating operation controlled by the solvent recovery system during the month, liters. D_i = Density of coating, i, kg per liter. W_{Vc,i} = Mass fraction of volatile organic matter for coating, i, kg volatile organic matter per kg coating. For reactive adhesives as defined in §63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to subpart PPPP of this part. Vol_j = Volume of thinner and/or other additive, j, used in the coating operation controlled by the solvent recovery system during the month, liters. D_j = Density of thinner and/or other additive, j, kg per liter. W_{Vt,j} = Mass fraction of volatile organic matter for thinner and/or other additive, j, kg volatile organic matter per kg thinner and/or other additive. For reactive adhesives as defined in §63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to subpart PPPP of this part. Vol_k = Volume of cleaning material, k, used in the coating operation controlled by the solvent recovery system during the month, liters. D_k = Density of cleaning material, k, kg per liter. W_{Vs,k} = Mass fraction of volatile organic matter for cleaning material, k, kg volatile organic matter per kg cleaning material. m = Number of different coatings used in the coating operation controlled by the solvent recovery system during the month. n = Number of different thinners and/or other additives used in the coating operation controlled by the solvent recovery system during the

month. p = Number of different cleaning materials used in the coating operation controlled by the solvent recovery system during the month.

Section 63.3961, Equation 3

$$H_{CSR} = (A_{CSR} + B_{CSR} + C_{CSR}) \left(\frac{RV}{100} \right) \quad (\text{Eq. 3}) \quad \text{Where:}$$

HCSR = Mass of organic HAP emission reduction for the coating operation controlled by the solvent recovery system using a liquid-liquid material balance during the month, kg. ACSR = Total mass of organic HAP in the coatings used in the coating operation controlled by the solvent recovery system, kg, calculated using Equation 3A of this section. BCSR = Total mass of organic HAP in the thinners and/or other additives used in the coating operation controlled by the solvent recovery system, kg, calculated using Equation 3B of this section. CCSR = Total mass of organic HAP in the cleaning materials used in the coating operation controlled by the solvent recovery system, kg, calculated using Equation 3C of this section. RV = Volatile organic matter collection and recovery efficiency of the solvent recovery system, percent, from Equation 2 of this section.

Section 63.3961, Equation 3A

$$A_{CSR} = \sum_{i=1}^m (\text{Vol}_{c,i}) (D_{c,i}) (W_{c,i}) \quad (\text{Eq. 3A})$$

Where:

ACSR = Total mass of organic HAP in the coatings used in the coating operation controlled by the solvent recovery system during the month, kg. Vol_{c,i} = Total volume of coating, i, used during the month in the coating operation controlled by the solvent recovery system, liters. D_{c,i} = Density of coating, i, kg per liter. W_{c,i} = Mass fraction of organic HAP in coating, i, kg organic HAP per kg coating. For reactive adhesives as defined in §63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to subpart PPPP of this part. m = Number of different coatings used.

Section 63.3961, Equation 3B

$$B_{CSR} = \sum_{j=1}^n (\text{Vol}_{t,j}) (D_{t,j}) (W_{t,j}) \quad (\text{Eq. 3B}) \quad \text{Where:}$$

BCSR = Total mass of organic HAP in the thinners and/or other additives used in the coating operation controlled by the solvent recovery system

during the month, kg. $Vol_{s,j}$ = Total volume of thinner and/or other additive, j, used during the month in the coating operation controlled by the solvent recovery system, liters. $Dt_{s,j}$ = Density of thinner and/or other additive, j, kg per liter. $Wt_{s,j}$ = Mass fraction of organic HAP in thinner and/or other additive, j, kg lb organic HAP per kg thinner and/or other additive. For reactive adhesives as defined in §63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to subpart PPPP of this part. n = Number of different thinners and/or other additives used.

Section 63.3961, Equation 3C

$$C_{CSR} = \sum_{k=1}^p (Vol_{s,k})(D_{s,k})(W_{s,k}) \quad (\text{Eq. 3C}) \quad \text{Where:}$$

C_{CSR} = Total mass of organic HAP in the cleaning materials used in the coating operation controlled by the solvent recovery system during the month, kg. $Vols_{s,k}$ = Total volume of cleaning material, k, used during the month in the coating operation controlled by the solvent recovery system, liters. $Ds_{s,k}$ = Density of cleaning material, k, kg per liter. $Ws_{s,k}$ = Mass fraction of organic HAP in cleaning material, k, kg organic HAP per kg cleaning material. p = Number of different cleaning materials used.

Section 63.3961, Equation 4

$$H_{HAP} = H_e - \sum_{i=1}^q (H_{c,i}) - \sum_{j=1}^r (H_{CSR,j}) \quad (\text{Eq. 4})$$

Where:

H_{HAP} = Total mass of organic HAP emissions for the month, kg. H_e = Total mass of organic HAP emissions before add-on controls from all the coatings, thinners and/or other additives, and cleaning materials used during the month, kg, determined according to paragraph (f) of this section. $H_{c,i}$ = Total mass of organic HAP emission reduction for controlled coating operation, i, not using a liquid-liquid material balance, during the month, kg, from Equation 1 of this section. $H_{CSR,j}$ = Total mass of organic HAP emission reduction for coating operation, j, controlled by a solvent recovery system using a liquid-liquid material balance, during the month, kg, from Equation 3 of this section. q = Number of controlled coating operations not controlled by a solvent recovery system using a liquid-liquid material balance. r = Number of coating operations controlled by a solvent recovery system using a liquid-liquid material balance.

Section 63.3961, Equation 5

$$H_{\text{annual}} = \frac{\sum_{y=1}^n H_{\text{HAP},y}}{\sum_{y=1}^n V_{\text{st},y}} \quad (\text{Eq. 5})$$

Where e:

H_{annual} = Organic HAP emission rate for the compliance period, kg organic HAP emitted per liter coating solids used. H_{HAP,y} = Organic HAP emissions for month, y, kg, determined according to Equation 4 of this section. V_{st,y} = Total volume of coating solids used during month, y, liters, from Equation 2 of §63.3951. y = Identifier for months. n = Number of full or partial months in the compliance period (for the initial compliance period, n equals 12 if the compliance date falls on the first day of a month; otherwise n equals 13; for all following compliance periods, n equals 12).

Section 63.3965, Equation 1

$$TVH_{\text{used}} = \sum_{i=1}^n (TVH_i)(Vol_i)(D_i) \quad (\text{Eq. 1})$$

Where here:

TVH_{used} = Mass of liquid TVH in materials used in the coating operation during the capture efficiency test run, kg. TVH_i = Mass fraction of TVH in coating, thinner and/or other additive, or cleaning material, i, that is used in the coating operation during the capture efficiency test run, kg TVH per kg material. Vol_i = Total volume of coating, thinner and/or other additive, or cleaning material, i, used in the coating operation during the capture efficiency test run, liters. D_i = Density of coating, thinner and/or other additive, or cleaning material, i, kg material per liter material. n = Number of different coatings, thinners and/or other additives, and cleaning materials used in the coating operation during the capture efficiency test run.

Section 63.3965, Equation 2

$$CE = \frac{(TVH_{\text{used}} - TVH_{\text{uncaptured}})}{TVH_{\text{used}}} \times 100 \quad (\text{Eq. 2}) \quad \text{Where:}$$

CE = Capture efficiency of the emission capture system vented to the add-on control device, percent. TVH_{used} = Total mass of TVH liquid input used in the coating operation during the capture efficiency test run, kg. TVH_{uncaptured} = Total mass of TVH that is not captured by the emission capture system and that exits from the temporary total enclosure or building enclosure during the capture efficiency test run, kg.

Section 63.3965, Equation 3

$$CE = \frac{TVH_{\text{captured}}}{(TVH_{\text{captured}} + TVH_{\text{uncaptured}})} \times 100 \quad (\text{Eq. 3}) \quad \text{Where:}$$

CE = Capture efficiency of the emission capture system vented to the add-on control device, percent. TVH_{captured} = Total mass of TVH captured by the emission capture system as measured at the inlet to the add-on control device during the emission capture efficiency test run, kg. TVH_{uncaptured} = Total mass of TVH that is not captured by the emission capture system and that exits from the temporary total enclosure or building enclosure during the capture efficiency test run, kg.

Section 63.3966, Equation 1

Where:

$M_f = Q_{sd} C_c (12) (0.0416) (10^{-6})$ (Eq. 1) M_f = Total gaseous organic emissions mass flow rate, kg per hour (h). C_c = Concentration of organic compounds as carbon in the vent gas, as determined by Method 25 or Method 25A, parts per million by volume (ppmv), dry basis. Q_{sd} = Volumetric flow rate of gases entering or exiting the add-on control device, as determined by Method 2, 2A, 2C, 2D, 2F, or 2G, dry standard cubic meters/hour (dscm/h). 0.0416 = Conversion factor for molar volume, kg-moles per cubic meter (mol/m³) (@ 293 Kelvin (K) and 760 millimeters of mercury (mmHg)).

Section 63.3966, Equation 2

$$DRE = \frac{M_{fi} - M_{fo}}{M_{fi}} \times 100 \quad (\text{Eq. 2}) \quad \text{here:}$$

DRE = Organic emissions destruction or removal efficiency of the add-on control device, percent. M_{fi} = Total gaseous organic emissions mass flow rate at the inlet(s) to the add-on control device, using Equation 1 of this section, kg/h. M_{fo} = Total gaseous organic emissions

mass flow rate at the outlet(s) of the add-on control device, using Equation 1 of this section, kg/h.

TABLE 1 TO SUBPART MMMM OF PART 63.—OPERATING LIMITS IF USING THE EMISSION RATE WITH ADD-ON CONTROLS OPTION

For the following device . . .	You must meet the following operating limit . . .	And you 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 §63.3967(a).	i. Collecting the combustion temperature data according to §63.3968(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 §63.3967(b) (for magnet wire coating machines, temperature can be monitored before or after the catalyst bed); and either b. Ensure that the average temperature difference across the catalyst bed in any 3-hour period does not fall below the temperature difference limit established according to §63.3967(b) (2); or c. Develop and implement an inspection and maintenance plan according to §63.3967(b)(4) or for magnet wire coating machines according to section 3.0 of appendix A to this subpart.	i. Collecting the temperature data according to §63.3968(c); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average temperature before (or for magnet wire coating machines after) the catalyst bed at or above the temperature limit. i. Collecting the temperature data according to §63.3968(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. i. Maintaining and up-to-date inspection and maintenance plan, records of annual catalyst activity checks, records of monthly inspections of the oxidizer system, and records of the annual internal inspections of the catalyst bed. If a problem is discovered during a monthly or annual inspection required by §63.3967(b)(4) or for magnet wire coating machines by section 3.0 of appendix A to this subpart, you must take corrective action as soon as practicable consistent with the manufacturer's recommendations.
3. Regenerative carbon adsorber.	a. The total regeneration desorbing gas (e.g., steam or nitrogen) mass flow for each carbon bed regeneration cycle must not fall below the total regeneration desorbing gas mass flow limit established according to §63.3967(c); and 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 §63.3967(c).	i. Measuring the total regeneration desorbing gas (e.g., steam or nitrogen) mass flow for each regeneration cycle according to §63.3968(d); and ii. Maintaining the total regeneration desorbing gas mass flow at or above the mass flow limit. i. Measuring the temperature of the carbon bed after completing each regeneration and any cooling cycle according to §63.3968(d); and ii. 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.
4. Condenser	a. The average condenser outlet (product side) gas temperature in any 3-hour period must not exceed the temperature limit established according to §63.3967(d).	i. Collecting the condenser outlet (product side) gas temperature according to §63.3968(e); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour 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 §63.3967(e); and	i. Collecting the temperature data according to §63.3968(f); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average temperature at or above the temperature limit.

TABLE 1 TO SUBPART MMMM OF PART 63.—OPERATING LIMITS IF USING THE EMISSION RATE WITH ADD-ON CONTROLS OPTION—Continued

For the following device . . .	You must meet the following operating limit . . .	And you must demonstrate continuous compliance with the operating limit by . . .
<p>6. Emission capture system that is a PTE according to §63.3965(a).</p> <p>7. Emission capture system that is not a PTE according to §63.3965(a).</p>	<p>b. The average pressure drop of the dilute stream across the concentrator in any 3-hour period must not fall below the limit established according to §63.3967(e).</p> <p>a. The direction of the air flow at all times must be into the enclosure; and either</p> <p>b. The average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minutes; or</p> <p>c. The pressure drop across the enclosure must be at least 0.007 inch H₂O, as established in Method 204 of appendix M to 40 CFR part 51.</p> <p>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-hour period must not fall below the average volumetric flow rate or duct static pressure limit established for that capture device according to §63.3967(f).</p>	<p>i. Collecting the pressure drop data according to 63.3968(f);</p> <p>ii. Reducing the pressure drop data to 3-hour block averages; and</p> <p>iii. Maintaining the 3-hour average pressure drop at or above the pressure drop limit.</p> <p>i. Collecting the direction of air flow, and either the facial velocity of air through all natural draft openings according to §63.3968(b)(1) or the pressure drop across the enclosure according to §63.3968(g)(2); and</p> <p>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.</p> <p>i. See items 6.a.i and 6.a.ii.</p> <p>i. See items 6.a.i and 6.a.ii.</p> <p>i. Collecting the gas volumetric flow rate or duct static pressure for each capture device according to §63.3968(g);</p> <p>ii. Reducing the data to 3-hour block averages; and</p> <p>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 limited.</p>

TABLE 2 TO SUBPART MMMM OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART MMMM OF PART 63

Citation	Subject	Applicable to subpart MMMM	Explanation
§ 63.1(a)(1)–(14)	General Applicability	Yes	Applicability to subpart MMMM is also specified in § 63.3881.
§ 63.1(b)(1)–(3)	Initial Applicability Determination	Yes	
§ 63.1(c)(1)	Applicability After Standard Established	Yes	Area sources are not subject to subpart MMMM.
§ 63.1(c)(2)–(3)	Applicability of Permit Program for Area Sources.	No	
§ 63.1(c)(4)–(5)	Extensions and Notifications	Yes	Additional definitions are specified in § 63.3981.
§ 63.1(e)	Applicability of Permit Program Before Relevant Standard is Set.	Yes	
§ 63.2	Definitions	Yes	
§ 63.1(a)–(c)	Units and Abbreviations	Yes	
§ 63.4(a)(1)–(5)	Prohibited Activities	Yes	
§ 63.4(b)–(c)	Circumvention/Severability	Yes	
§ 63.5(a)	Construction/Reconstruction	Yes	
§ 63.5(b)(1)–(6)	Requirements for Existing Newly Constructed, and Reconstructed Sources.	Yes	
§ 63.5(d)	Application for Approval of Construction/Reconstruction.	Yes	
§ 63.5(e)	Approval of Construction/Reconstruction	Yes	
§ 63.5(f)	Approval of Construction/Reconstruction Based on Prior State Review.	Yes	
§ 63.6(a)	Compliance With Standards and Maintenance Requirements—Applicability.	Yes	
§ 63.6(b)(1)–(7)	Compliance Dates for New and Reconstructed Sources.	Yes	Section 63.3883 specifies the compliance dates.
§ 63.6(c)(1)–(5)	Compliance Dates for Existing Sources	Yes	Section 63.3883 specifies the compliance dates.

TABLE 2 TO SUBPART MMMM OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART MMMM OF PART 63—Continued

Citation	Subject	Applicable to subpart MMMM	Explanation
§ 63.6(e)(1)–(2)	Operation and Maintenance 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(e)(3)		Yes	
§ 63.6(f)(1)	Compliance Except During Startup, Shutdown, and Malfunction.	Yes	Applies only to sources using an add-on control device to comply with the standard.
§ 63.6(f)(2)–(3)	Methods for Determining Compliance.	Yes.	Subpart MMMM does not establish opacity standards and does not require continuous opacity monitoring systems (COMS).
§ 63.6(g)(1)–(3)	Use of an Alternative Standard	Yes.	
§ 63.6(h)	Compliance With Opacity/Visible Emission Standards.	No	
§ 63.6(i)(1)–(16)	Extension of Compliance	Yes.	Applies to all affected sources. Additional requirements for performance testing are specified in §§ 63.3964, 63.3965, and 63.3966.
§ 63.6(j)	Presidential Compliance Exemption	Yes.	
§ 63.7(a)(1)	Performance Test Requirements—Applicability.	Yes	
§ 63.7(a)(2)	Performance Test Requirements—Dates.	Yes	Applies only to performance tests for capture system and control device efficiency at sources using these to comply with the standard. Section 63.3960 specifies the schedule for performance test requirements that are earlier than those specified in § 63.7(a)(2).
§ 63.7(a)(3)	Performance Tests Required By the Administrator.	Yes.	Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standard.
§ 63.7(b)–(e)	Performance Test Requirements—Notification, Quality Assurance, Facilities Necessary for Safe Testing, Conditions During Test.	Yes	
§ 63.7(f)	Performance Test Requirements—Use of Alternative Test Method.	Yes	
§ 63.7(g)–(h)	Performance Test Requirements—Data Analysis, Recordkeeping, Reporting, Waiver of Test.	Yes	Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standard.
§ 63.8(a)(1)–(3)	Monitoring Requirements—Applicability	Yes	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standard. Additional requirements for monitoring are specified in § 63.3968.
§ 63.8(a)(4)	Additional Monitoring Requirements	No	Subpart MMMM does not have monitoring requirements for flares.
§ 63.8(b)	Conduct of Monitoring	Yes.	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standard. Additional requirements for CMS operations and maintenance are specified in § 63.3968.
§ 63.8(c)(1)–(3)	Continuous Monitoring Systems (CMS) Operation and Maintenance.	Yes	
§ 63.8(c)(4)	CMS	No	§ 63.3968 specifies the requirements for the operation of CMS for capture systems and add-on control devices at sources using these to comply.
§ 63.8(c)(5)	COMS	No	Subpart MMMM does not have opacity or visible emission standards.
§ 63.8(c)(6)	CMS Requirements	No	Section 63.3968 specifies the requirements for monitoring systems for capture systems and add-on control devices at sources using these to comply.
§ 63.8(c)(7)	CMS Out-of-Control Periods	Yes.	

TABLE 2 TO SUBPART M MMM OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART M MMM OF PART 63—Continued

Citation	Subject	Applicable to subpart M MMM	Explanation
§ 63.8(c)(8)	CMS Out-of-Control Periods and Reporting.	No	§ 63.3920 requires reporting of CMS out-of-control periods.
§ 63.8(d)–(e)	Quality Control Program and CMS Performance Evaluation.	No	Subpart M MMM does not require the use of continuous emissions monitoring systems.
§ 63.8(f)(1)–(5)	Use of an Alternative Monitoring Method.	Yes.	
§ 63.8(f)(6)	Alternative to Relative Accuracy Test	No	Subpart M MMM does not require the use of continuous emissions monitoring systems.
§ 63.8(g)(1)–(5)	Data Reduction	No	Sections 63.3967 and 63.3968 specify monitoring data reduction.
§ 63.9(a)–(d)	Notification Requirements	Yes.	
§ 63.9(e)	Notification of Performance Test	Yes	Applies only to capture system and add-on control device performance tests at sources using these to comply with the standard.
§ 63.9(f)	Notification of Visible Emissions/Opacity Test.	No	Subpart M MMM does not have opacity or visible emissions standards.
§ 63.9(g)(1)–(3)	Additional Notifications When Using CMS.	No	Subpart M MMM does not require the use of continuous emissions monitoring systems.
§ 63.9(h)	Notification of Compliance Status	Yes	Section 63.3910 specifies the dates for submitting the notification of compliance status.
§ 63.9(i)	Adjustment of Submittal Deadlines	Yes.	
§ 63.9(j)	Change in Previous Information	Yes.	
§ 63.10(a)	Recordkeeping/Reporting—Applicability and General Information.	Yes.	
§ 63.10(b)(1)	General Recordkeeping Requirements	Yes	Additional requirements are specified in §§ 63.3930 and 63.3931.
§ 63.10(b)(2) (i)–(v)	Recordkeeping Relevant to Startup, Shutdown, and Malfunction Periods and CMS.	Yes	Requirements for startup, shutdown, and malfunction records only apply to add-on control devices used to comply with the standard.
§ 63.10(b)(2) (vi)–(xi)		Yes.	
§ 63.10(b)(2) (xii)	Records	Yes.	
§ 63.10(b)(2) (xiii)		No	Subpart M MMM does not require the use of continuous emissions monitoring systems.
§ 63.10(b)(2) (xiv)		Yes.	
§ 63.10(b)(3)	Recordkeeping Requirements for Applicability Determinations.	Yes.	
§ 63.10(c) (1)–(6)	Additional Recordkeeping Requirements for Sources with CMS.	Yes.	
§ 63.10(c) (7)–(8)		No	The same records are required in § 63.3920(a)(7).
§ 63.10(c) (9)–(15)		Yes.	
§ 63.10(d)(1)	General Reporting Requirements	Yes	Additional requirements are specified in § 63.3920.
§ 63.10(d)(2)	Report of Performance Test Results	Yes	Additional requirements are specified in § 63.3920(b).
§ 63.10(d)(3)	Reporting Opacity or Visible Emissions Observations.	No	Subpart M MMM does not require opacity or visible emissions observations.
§ 63.10(d)(4)	Progress Reports for Sources With Compliance Extensions.	Yes.	
§ 63.10(d)(5)	Startup, Shutdown, and Malfunction Reports.	Yes	Applies only to add-on control devices at sources using these to comply with the standard.
§ 63.10(e) (1)–(2)	Additional CMS Reports	No	Subpart M MMM does not require the use of continuous emissions monitoring systems.
§ 63.10(e) (3)	Excess Emissions/CMS Performance Reports.	No	Section 63.3920 (b) specifies the contents of periodic compliance reports.
§ 63.10(e) (4)	COMS Data Reports	No	Subpart M MMM does not specify requirements for opacity or COMS.
§ 63.10(f)	Recordkeeping/Reporting Waiver	Yes.	
§ 63.11	Control Device Requirements/Flares	No	Subpart M MMM does not specify use of flares for compliance.
§ 63.12	State Authority and Delegations	Yes.	

TABLE 2 TO SUBPART MMMM OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART MMMM OF PART 63—Continued

Citation	Subject	Applicable to subpart MMMM	Explanation
63.13	Addresses	Yes.	
63.14	Incorporation by Reference	Yes.	
63.15	Availability of Information/Confidentiality	Yes.	

TABLE 3 TO SUBPART MMMM OF PART 63.—DEFAULT ORGANIC HAP MASS FRACTION FOR SOLVENTS AND SOLVENT BLENDS

Solvent/solvent blend	CAS. No.	Average organic HAP mass fraction	Typical organic HAP, percent by mass
1. Toluene	108-88-3	1.0	Toluene.
2. Xylene(s)	1330-20-7	1.0	Xylenes, ethylbenzene.
3. Hexane	110-54-3	0.5	n-hexane.
4. n-Hexane	110-54-3	1.0	n-hexane.
5. Ethylbenzene	100-41-4	1.0	Ethylbenzene.
6. Aliphatic 140		0	None.
7. Aromatic 100		0.02	1% xylene, 1% cumene.
8. Aromatic 150		0.09	Naphthalene.
9. Aromatic naphtha	64742-95-6	0.02	1% xylene, 1% cumene.
10. Aromatic solvent	64742-94-5	0.1	Naphthalene.
11. Exempt mineral spirits	8032-32-4	0	None.
12. Ligroines (VM & P)	8032-32-4	0	None.
13. Lactol spirits	64742-89-6	0.15	Toluene.
14. Low aromatic white spirit	64742-82-1	0	None.
15. Mineral spirits	64742-88-7	0.01	Xylenes.
16. Hydrotreated naphtha	64742-48-9	0	None.
17. Hydrotreated light distillate	64742-47-8	0.001	Toluene.
18. Stoddard solvent	8052-41-3	0.01	Xylenes.
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 MMMM OF PART 63.—DEFAULT ORGANIC HAP MASS FRACTION FOR PETROLEUM SOLVENT GROUPS^a

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

^a Use this table only if the solvent blend does not match any of the solvent blends in Table 3 to this subpart by either solvent blend name or CAS number and you only know whether the blend is aliphatic or aromatic.

^b 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.

^c Medium-flash Naphtha, High-flash Naphtha, Aromatic Naphtha, Light Aromatic Naphtha, Light Aromatic Hydrocarbons, Aromatic Hydrocarbons, Light Aromatic Solvent.