

§ 63.4581

40 CFR Ch. I (7-1-07 Edition)

(2) Approval of major alternatives to test methods under § 63.7(e)(2)(ii) and (f) and as defined in § 63.90.

(3) Approval of major alternatives to monitoring under § 63.8(f) and as defined in § 63.90.

(4) Approval of major alternatives to recordkeeping and reporting under § 63.10(f) and as defined in § 63.90.

**§ 63.4581 What definitions apply to this subpart?**

Terms used in this subpart are defined in the CAA, in 40 CFR 63.2, and in this section as follows:

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

*Add-on control* means 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* means any 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* means 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* means any 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* means 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* means the portion (expressed as a percentage) of the pollutants from an emission source that is delivered to an add-on control device.

*Capture system* means 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* means 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. Thus, it includes any cleaning material used on substrates or equipment or both.

*Coating* means a material applied to a substrate for decorative, protective, or functional purposes. Such materials include, 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* means 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* means the nonvolatile portion of the coating that makes up the dry film.

*Continuous parameter monitoring system (CPMS)* means 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* means 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* means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) 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;

(2) 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

(3) Fails to meet any emission limit, or operating limit, or work practice standard in this subpart during start-up, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

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

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

*Exempt compound* means 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* means 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* means any coating operation that is not an automotive lamp, TPO, or assembled on-road vehicle coating operation.

*Hobby shop* means 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* means 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. Manufacturer's formulation data may include, but are not limited to, information on density, organic HAP content, volatile organic matter content, and coating solids content.

*Mass fraction of coating solids* means the ratio of the mass of solids (also

known as the mass of nonvolatiles) to the mass of a coating in which it is contained; kg of coating solids per kg of coating.

*Mass fraction of organic HAP* means 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* means a calendar month or a pre-specified period of 28 days to 35 days to allow for flexibility in record-keeping when data are based on a business accounting period.

*Non-HAP coating* means, 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* means 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)* means 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* means 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* means 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* means 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* means 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* means 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* means responsible official as defined in 40 CFR 70.2.

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

*Surface preparation* means 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* means 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)* means 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).

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**Pt. 63, Subpt. PPPP, Table 1**

*Thermoplastic olefin (TPO) coating* means 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* means an organic solvent that is added to a coating after the coating is received from the supplier.

*Total volatile hydrocarbon (TVH)* means 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* means 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)* means any compound defined as VOC in 40 CFR 51.100(s).

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

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

If you are required to comply with operating limits by §63.4491(c), you must comply with the applicable operating limits in the following table:

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 §63.4567(a).	i. Collecting the combustion temperature data 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 §63.4567(b); 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 §63.4567(b)(2); or  c. Develop and implement an inspection and maintenance plan according to §63.4567(b)(4).	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.  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.  i. Maintaining an 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 §63.4567(b)(4), 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 §63.4567(c); and	i. Measuring the total regeneration desorbing gas (e.g., steam or nitrogen) 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.

For the following device . . .	You must meet the following operating limit . . .	And you must demonstrate continuous compliance with the operating limit by . . .
4. Condenser .....	<p>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).</p> <p>a. The average condenser outlet (product side) gas temperature in any 3-hour period must not exceed the temperature limit established according to § 63.4567(d).</p>	<p>i. Measuring the temperature of the carbon bed after completing each regeneration and any cooling cycle according to § 63.4568(d); and</p> <p>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.</p>
5. Concentrators, including zeolite wheels and rotary carbon adsorbers.	<p>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</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 § 63.4567(e).</p>	<p>i. Collecting the condenser outlet (product side) gas temperature according to § 63.4568(e);</p> <p>ii. Reducing the data to 3-hour block averages; and</p> <p>iii. Maintaining the 3-hour average gas temperature at the outlet at or below the temperature limit.</p>
6. Emission capture system that is a PTE according to § 63.4565(a).	<p>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</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 § 63.4567(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 minute; or</p> <p>c. The pressure drop across the enclosure must be at least 0.007 inch H<sub>2</sub>O, as established in Method 204 of appendix M to 40 CFR part 51.</p>	<p>i. Collecting the temperature data according to § 63.4568(f);</p> <p>ii. Reducing the data to 3-hour block averages; and</p> <p>iii. Maintaining the 3-hour average temperature at or above the temperature limit.</p> <p>i. Collecting the pressure drop data according to § 63.4568(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 § 63.4568(g)(1) or the pressure drop across the enclosure according to § 63.4568(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>
7. Emission capture system that is not a PTE according to § 63.4565(a).	<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 § 63.4567(f).</p>	<p>i. Collecting the gas volumetric flow rate or duct static pressure for each capture device according to § 63.4568(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 limit.</p>

TABLE 2 TO SUBPART PPPP OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART PPPP OF PART 63

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

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Pt. 63, Subpt. PPPP, Table 2

Citation	Subject	Applicable to subpart PPPP	Explanation
§ 63.1(a)(1)–(14) .....	General Applicability .....	Yes.	Applicability to subpart PPPP is also specified in § 63.4481.
§ 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 PPPP.
§ 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 § 63.4581.
§ 63.1(e) .....	Applicability of Permit Program Before Relevant Standard is Set.	Yes.	
§ 63.2 .....	Definitions .....	Yes .....	
§ 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/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 63.4483 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 .....	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) .....	Startup, Shutdown, and Malfunction Plan.	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 PPPP 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 §§ 63.4564, 63.4565, and 63.4566.
§ 63.6(j) .....	Presidential Compliance Exemption ....	Yes.	
§ 63.7(a)(1) .....	Performance Test Requirements—Applicability.	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)(2) .....	Performance Test Requirements—Dates.	Yes .....	
§ 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 standards.
§ 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 Alternative Test Method.	Yes .....	Applies to all test methods except those of 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.

Citation	Subject	Applicable to subpart PPPP	Explanation
§ 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 standards. Additional requirements for monitoring are specified in § 63.4568.
§ 63.8(a)(4) .....	Additional Monitoring Requirements .....	No .....	Subpart PPPP does not have monitoring requirements for flares.
§ 63.8(b) .....	Conduct of Monitoring .....	Yes.	
§ 63.8(c)(1)–(3) .....	Continuous Monitoring Systems (CMS) Operation and Maintenance.	Yes .....	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standard. Additional requirements for CMS operations and maintenance are specified in § 63.4568.
§ 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) .....	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) .....	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 using these to comply with the standards.
§ 63.9(f) .....	Notification of Visible Emissions/Opacity Test.	No .....	Subpart PPPP does not have opacity or visible emission standards.
§ 63.9(g)(1)–(3) .....	Additional Notifications When 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 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 §§ 63.4530 and 63.4531.
§ 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 standards.
§ 63.10(b)(2) (vi)–(xi) .....	.....	Yes.	
§ 63.10(b)(2) (xii) ....	Records .....	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) .....	Recordkeeping Requirements for Applicability Determinations.	Yes.	

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Pt. 63, Subpt. PPPP, Table 3

Citation	Subject	Applicable to subpart PPPP	Explanation
§ 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 Opacity or Visible Emissions Observations.	No .....	Subpart PPPP 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 standards.
§ 63.10(e)(1)–(2) .....	Additional CMS Reports .....	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) .....	Recordkeeping/Reporting Waiver .....	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 .....	Yes.	
§ 63.14 .....	Incorporation by Reference .....	Yes.	
§ 63.15 .....	Availability of Information/Confidentiality.	Yes.	

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

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

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. Lignoines (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 PPPP OF PART 63—DEFAULT ORGANIC HAP MASS FRACTION FOR PETROLEUM SOLVENT GROUPS <sup>A</sup>

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

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

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

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

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

#### APPENDIX A TO SUBPART PPPP OF PART 63—DETERMINATION OF WEIGHT VOLATILE MATTER CONTENT AND WEIGHT SOLIDS CONTENT OF REACTIVE ADHESIVES

##### 1.0 APPLICABILITY AND PRINCIPLE

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

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

this undesirable deterioration of the adhesive performance.

##### 2.0 MATERIALS AND APPARATUS

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

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

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

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

2.5 Electronic balance capable of weighing to ±0.0001 grams (0.1 mg).

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

##### *Material and Apparatus Notes*

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

## 3.0 PROCEDURE

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

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

*Procedure A*

1. Zero electronic balance.
2. Place 2 pieces of aluminum foil (or aluminum sheet, plastic film, or plastic sheet) on scale.
3. Record weight of aluminum foils. (A).
4. Tare balance.
5. Remove top piece of aluminum foil.
6. Dispense a 10 to 15 gram specimen of premixed adhesive onto bottom piece of aluminum foil. Place second piece of aluminum foil on top of the adhesive specimen to make a sandwich.
7. Record weight of sandwich (specimen and aluminum foils). (B).
8. Remove sandwich from scale, place sandwich between two support panels with aluminum spacers at the edges of the support panels to make a supported sandwich. The spacers provide a standard gap. Take care to mate the edges.
9. Place the supported sandwich on a flat surface.
10. Place the weight on top of the supported sandwich to spread the adhesive specimen to a uniform thickness within the sandwich. Check that no adhesive squeezes out from between the pieces of aluminum foil or through tears in the aluminum foil.
11. Allow to cure 24 hours.
12. Remove the sandwich from between the support panels. Record the weight of the sandwich. This is referred to as the 24 hr weight. (C).
13. Bake sandwich at 110 degrees Celsius for 1 hour.
14. Remove sandwich from the oven, place immediately in a desiccator, and cool to room temperature. Record post bake sandwich weight. (D).

*Procedure B*

1. Zero electronic balance.
2. Place two pieces of aluminum foil (or aluminum sheet, plastic film, or plastic sheet) on scale.
3. Record weight of aluminum foils. (A).
4. Tare balance.
5. Place one support panel on flat surface. Place first piece of aluminum foil on top of this support panel.

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

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

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

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

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

11. Place the supported sandwich on a flat surface.

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

13. Allow to cure 24 hours.

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

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

16. Remove sandwich from the oven, place immediately in a desiccator, and cool to room temperature.

17. Record post-bake sandwich weight. (D).

*Procedural Notes*

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

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

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

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

## 4.0 CALCULATIONS

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

*Procedure A*

Weight of original specimen (S) = (B) – (A)  
 Weight of post-bake specimen (P) = (D) – (A)  
 Total Weight Loss (L) = (S) – (P)

*Procedure B*

Weight of original specimen (S) = (F) – (G)  
 Weight of post-bake specimen (P) = (D) – (A)  
 Total Weight Loss (L) = (S) – (P)

*Procedure A and Procedure B*

Weight Percent Volatile Matter Content

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

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

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

Where:

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

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

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

*Calculation Notes*

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

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

**Subpart QQQQ—National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products**

SOURCE: 68 FR 31760, May 28, 2003, unless otherwise noted.

WHAT THIS SUBPART COVERS

**§ 63.4680 What is the purpose of this subpart?**

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for wood building products surface coating sources. This subpart also establishes requirements to demonstrate initial and continuous

compliance with the emission limitations.

**§ 63.4681 Am I subject to this subpart?**

(a) Except as provided in paragraphs (c) and (d) of this section, the source category to which this subpart applies is surface coating of wood building products, which means the application of coatings using, for example, roll coaters or curtain coaters in the finishing or laminating of any wood building product that contains more than 50 percent by weight wood or wood fiber excluding the weight of any glass components, and is used in the construction, either interior or exterior, of a residential, commercial, or institutional building. The wood building products source category includes the subcategories listed in paragraphs (a)(1) through (5) of this section.

(1) *Doors, windows, and miscellaneous.* The doors, windows, and miscellaneous subcategory includes doors, windows, finished doorskins, and door and window components such as millwork, moulding, or trim, and other miscellaneous wood building products including, but not limited to, all moulding and trim, shingles, and shutters.

(2) *Flooring.* The flooring subcategory includes solid wood flooring, engineered wood flooring, and wood laminate flooring.

(3) *Interior wall paneling and tileboard.* The interior wall paneling and tileboard subcategory includes interior wall paneling products. Tileboard is a premium interior wall paneling product.

(4) *Other interior panels.* The other interior panel subcategory includes panels that are sold for uses other than interior wall paneling, such as coated particleboard, hardboard, and perforated panels.

(5) *Exterior siding and primed doorskins.* The exterior siding and primed doorskins subcategory includes lap or panel siding, trimboard, and primed doorskins. Doorskins that are coated with more than primer are included in the doors, windows, and miscellaneous subcategory.

(b) You are subject to this subpart if you own or operate a new, reconstructed, or existing affected source, as defined in § 63.4682, that uses 4,170 liters