TABLE 5 TO SUBPART DD OF PART 63—TANK CONTROL LEVELS FOR TANKS AT NEW AFFECTED SOURCES AS REQUIRED BY 40 CFR 63.685(b)(2)

Tank design capacity (cubic meters)	Maximum HAP vapor pressure of off-site material managed in tank (kilopascals)	Tank control level
Design capacity less than 38 m^3	Maximum HAP vapor pressure less than 76.6 kPa.	Level 1.
Design capacity less than 38 m^3	Maximum HAP vapor pressure equal to or greater than 76.6 kPa.	Level 2, except that fixed roof tanks equipped with an internal floating roof and tanks equipped with an external floating roof as provided for in § 63.685(d)(1) and (2) shall not be used.
Design capacity equal to or greater than 38 m^3 and less than 151 m^3.	Maximum HAP vapor pressure less than 13.1 kPa.	Level 1.
	Maximum HAP vapor pressure equal to or greater than 13.1 kPa.	Level 2.
Design capacity equal to or greater than 151 m^3.	Maximum HAP vapor pressure less than 0.7 kPa.	Level 1.
	Maximum HAP vapor pressure equal to or greater than 0.7 kPa.	Level 2.

[80 FR 14283, Mar. 18, 2015]

Subpart EE—National Emission Standards for Magnetic Tape Manufacturing Operations

SOURCE: 59 FR 64596, Dec. 15, 1994, unless otherwise noted.

§ 63.701 Applicability.

(a) Except as specified in paragraph (b) of this section, the provisions of this subpart apply to:

(1) Each new and existing magnetic tape manufacturing operation located at a major source of hazardous air pollutant (HAP) emissions; and

(2) A magnetic tape manufacturing operation for which the owner or operator chooses to use the provisions of § 63.703(b) and (h) to obtain a Federally enforceable limit on its potential to emit HAP.

EXPLANATORY NOTE: A reason the owner or operator would make the choice described in paragraph (a)(2) of this section is if the plant site, without this limit, would be a major source. The owner or operator could use this limit, which would establish the potential to emit from magnetic tape manufacturing operations, in conjunction with the potential to emit from the other HAP emission points at the stationary source, to be an area source. Note, however, that an owner or operator is not required to use the provisions in § 63.703(b) and (h) to determine the potential to emit HAP from magnetic tape manufacturing operations.

(b) This subpart does not apply to the following:

(1) Research or laboratory facilities; and

(2) Any coating operation that produces a quantity of magnetic tape that is 1 percent or less of total production (in terms of total square footage coated) from that coating operation in any 12-month period.

(c) The affected source subject to this standard is the magnetic tape manufacturing operation, as defined in § 63.702.

(d) An owner or operator of an existing affected source subject to the provisions of this subpart shall comply according to the following schedule:

(1) Within 3 years after the effective date of the standard, if the owner or operator is required to install a new add-on air pollution control device to meet the requirements of § 63.703(c) or (g); or

(2) Within 2 years after the effective date of the standard, if a new add-on air pollution control device is not needed to comply with § 63.703(c) or (g) of these standards.

(e) The compliance date for an owner or operator of a new affected source subject to the provisions of this subpart is immediately upon startup of the affected source.

(f) The provisions of this subpart apply during periods of startup and shutdown, and whenever magnetic tape manufacturing operations are taking place.

(g) Owners or operators of affected sources subject to the provisions of this subpart shall also comply with the requirements of subpart A as identified in Table 1, according to the applicability of subpart A to such sources.

(h) In any title V permit for an affected source, all research or laboratory facilities that are exempt from the requirements of this subpart shall be clearly identified.

§ 63.702 Definitions.

(a) All terms used in this subpart that are not defined below have the meaning given to them in the Clean Air Act and in subpart A of this part.

Add-on air pollution control device means equipment installed at the end of a process vent exhaust stack or stacks that reduces the quantity of a pollutant that is emitted to the air. The device may destroy or secure the pollutant for subsequent recovery. Examples are incinerators, condensers, carbon adsorbers, and biofiltration units. Transfer equipment and ductwork are not considered in and of themselves add-on air pollution control devices.

Bag slitter means a device for enclosed transfer of particulates. A bag of raw materials is placed in a hopper, the hopper is closed, and an internal mechanism slits the bag, releasing the particulates into either a closed conveyor that feeds the mix preparation equipment or into the mix preparation equipment itself.

Base substrate means the surface, such as plastic or paper, to which a coating is applied.

Capture efficiency means the fraction of all organic vapors or other pollutants generated by a process that are directed to an add-on air pollution control device.

Capture device means a hood, enclosed room, or other means of collecting HAP vapors or other pollutants into a duct that exhausts to an add-on air pollution control device.

Carbon adsorber vessel means one vessel in a series of vessels in a carbon adsorption system that contains carbon and is used to remove gaseous pollutants from a gaseous emission source.

Car seal means a seal that is placed on a device that is used either to open a closed valve or close an opened valve so that the position of the valve cannot be changed without breaking the seal.

Closed system for flushing fixed lines means a system in which the line to be flushed is disconnected from its original position and connected to two closed containers, one that contains cleaning solvent and one that is empty. Solvent is flushed from the container with cleaning solvent, through the line, and into the empty containers.

Coater or coating applicator means the apparatus used to apply a coating to a continuous base substrate.

Coating application means the process by which the coating mix is applied to the base substrate.

Coating operation means any coater, flashoff area, and drying oven located between a base substrate unwind station and a base substrate rewind station that coats a continuous base substrate.

Control device efficiency means the ratio of the emissions collected or destroyed by an add-on air pollution control device to the total emissions that are introduced to the control device, expressed as a percentage.

Day means a 24-consecutive-hour period.

Drying oven means a chamber that uses heat to bake, cure, polymerize, or dry a surface coating; if the coating contains volatile solvents, the volatile portion is evaporated in the oven.

Enclosed transfer method means a particulate HAP transfer method that uses an enclosed system to prevent particulate HAP from entering the atmosphere as dust. Equipment used for this purpose may include vacuum injection systems or other mechanical transfer systems, bag slitters, or supersacks.

Equivalent diameter means four times the area of an opening divided by its perimeter.

Facility means all contiguous or adjoining property that is under common ownership or control in which magnetic tape manufacturing is performed. The definition includes properties that are separated only by a road or other public right-of-way.

Flashoff area means the portion of a coating operation between the coater

and the drying oven where solvent begins to evaporate from the coated base substrate.

Flushing of fixed lines means the flushing of solvent through lines that are typically fixed and are not associated with the cleaning of a tank, such as the line from the mix room to the coater.

Freeboard ratio means the vertical distance from the surface of the liquid to the top of the sink or tank (freeboard height) divided by the smaller of the length or width of the sink or tank evaporative area.

Magnetic coatings means coatings applied to base substrates to make magnetic tape. Components of magnetic coatings may include: Magnetic particles, binders, dispersants, conductive pigments, lubricants, solvents, and other additives.

Magnetic particles means particles in the coating mix that have magnetic properties. Examples of magnetic particles used in magnetic tape manufacturing are: y-oxide, doped iron oxides, chromium dioxide, barium ferrite, and metallic particles that usually consist of elemental iron, cobalt, and/or nickel.

Magnetic tape means any flexible base substrate that is covered on one or both sides with a coating containing magnetic particles and that is used for audio recording, video recording, or any type of information storage.

Magnetic tape manufacturing operation means all of the emission points within a magnetic tape manufacturing facility that are specifically associated with the manufacture of magnetic tape. These include, but are not limited to:

(1) Solvent storage tanks;

(2) Mix preparation equipment;

(3) Coating operations;

(4) Waste handling devices;

(5) Particulate transfer operations;

(6) Wash sinks for cleaning removable parts;

(7) Cleaning involving the flushing of fixed lines;

(8) Wastewater treatment systems; and

(9) Condenser vents associated with distillation and stripping columns in the solvent recovery area, but not including the vent on a condenser that is used as the add-on air pollution control device.

Mill means the pressurized equipment that uses the dispersing action of beads, combined with the high shearing forces of the centrifugal mixing action, to disperse the aggregates of magnetic particles thoroughly without reducing particle size.

Mix preparation equipment means the vessels, except for mills, used to prepare the magnetic coating.

Natural draft opening means any opening in a room, building, or total enclosure that remains open during operation of the facility and that is not connected to a duct in which a fan is installed. The rate and direction of the natural draft through such an opening is a consequence of the difference in pressures on either side of the wall containing the opening.

Nonregenerative carbon adsorber means a carbon adsorber vessel in which the spent carbon bed does not undergo carbon regeneration in the adsorption vessel.

Operating parameter value means a minimum or maximum value established for a control device or process parameter that, if achieved by itself or in combination with one or more other operating parameter values, determines that an owner or operator has complied with an applicable emission limitation or standard.

Overall HAP control efficiency means the total efficiency of the control system, determined by the product of the capture efficiency and the control device efficiency.

Particulate means any material, except uncombined water, that exists as liquid or solid particles such as dust, smoke, mist, or fumes at standard conditions (760 millimeters of mercury, 0 degrees celsius).

Particulate HAP transfer means the introduction of a particulate HAP into other dry ingredients or a liquid solution.

Removable parts cleaning means cleaning of parts that have been moved from their normal position to a wash tank or sink containing solvent for the purpose of cleaning.

Research or laboratory facility means any stationary source whose primary

purpose is to conduct research and development to develop new processes and products, where such source is operated under the close supervision of technically trained personnel and is not engaged in the manufacture of products for commercial sale in commerce, except in a de minimis manner.

Separator means a device in the wastewater treatment system in which immiscible solvent is physically separated from the water with which it is mixed.

Solvent storage tanks means the stationary tanks that are associated with magnetic tape operations and that store virgin solvent, spent solvent, cleaning solvent, solvent at any stage of the solvent recovery process, or any volatile compound. They do not serve a process function.

Solvent recovery area means the collection of devices used to remove HAP emissions from process air, to recover the HAP, and to purify the HAP. Typically, this area contains a control device such as a carbon adsorber or condenser, the wastewater treatment system, and the distillation columns.

Solvent recovery device means, for the purposes of this subpart, an add-on air pollution control device in which HAP is captured rather than destroyed. Examples include carbon adsorption systems and condensers.

Supersack means a container of particulate from the manufacturer or supplier with attached feed tubes and that is used to transfer particulate under the following conditions: the feed tubes are attached directly to the mix preparation equipment, the attachment interface is sealed, and all openings on the mix transfer equipment are closed to the atmosphere.

Temporary total enclosure means a total enclosure that is constructed for the sole purpose of measuring the fugitive emissions from an affected source. A temporary total enclosure must be constructed and ventilated (through stacks suitable for testing) so that it has minimal impact on the performance of the permanent capture system. A temporary total enclosure will be assumed to achieve total capture of fugitive emissions if it conforms to the requirements found in §63.705(c)(4)(i) and if all natural draft openings are at least four duct or hood equivalent diameters away from each exhaust duct or hood. Alternatively, the owner or operator may apply to the Administrator for approval of a temporary enclosure on a case-by-case basis.

Total enclosure means a structure that is constructed around a gaseous emission source so that all gaseous pollutants emitted from the source are collected and ducted through a control device, such that 100 percent capture efficiency is achieved. There are no fugitive emissions from a total enclosure. The only openings in a total enclosure are forced makeup air and exhaust ducts and any natural draft openings such as those that allow raw materials to enter and exit the enclosure for processing. All access doors or windows are closed during routine operation of the enclosed source. Brief, occasional openings of such doors or windows to accommodate process equipment adjustments are acceptable, but if such openings are routine or if an access door remains open during the entire operation, the access door must be considered a natural draft opening. The average inward face velocity across the natural draft openings of the enclosure must be calculated including the area of such access doors. The drying oven itself may be part of the total enclosure. A permanent enclosure that meets the requirements found in §63.705(c)(4)(i) is a total enclosure.

Utilize means the use of HAP that is delivered to mix preparation equipment for the purpose of formulating coatings, the use of any other HAP (e.g., dilution solvent) that is added at any point in the manufacturing process, and the use of any HAP for cleaning activities. Alternatively, annual HAP utilization can be determined as net usage; that is, the HAP inventory at the beginning of a 12-month period, plus the amount of HAP purchased during the 12-month period, minus the amount of HAP in inventory at the end of a 12-month period.

Vacuum injection system means a system in which a vacuum draws particulate from a storage container into a closed system that transfers particulates into the mix preparation equipment.

Volatile organic compound (VOC) means any organic compound that participates in atmospheric photochemical reactions or that is measured by EPA Test Methods 18, 24, or 25A in appendix A of part 60 or an alternative test method as defined in § 63.2.

Volatile organic hazardous air pollutant (VOHAP) concentration means the concentration of an individually-speciated organic HAP in a wastewater discharge that is measured by Method 305 of appendix A to 40 CFR part 63.

Waste handling means processing or treatment of waste (liquid or solid) that is generated as a by-product of either the magnetic tape production process or cleaning operations.

Waste handling device means equipment that is used to separate solvent from solid waste (e.g., filter dryers) or liquid waste (e.g., pot stills and thin film evaporators). The solvents are recovered by heating, condensing, and collection.

Wastewater discharge means the water phase that is discharged from the separator in a wastewater treatment system.

Wastewater treatment system means the assortment of devices in which the solvent/water mixture, generated when the carbon bed in the carbon adsorber is desorbed by steam, is treated to remove residual organics in the water.

(b) The nomenclature used in this subpart is defined when presented or has the meaning given below:

(1) A_k = the area of each natural draft opening (k) in a total enclosure, in square meters.

(2) C_{aj} = the concentration of HAP or VOC in each gas stream (j) exiting the emission control device, in parts per million by volume.

(3) C_{bi} = the concentration of HAP or VOC in each gas stream (i) entering the emission control device, in parts per million by volume.

(4) C_{di} = the concentration of HAP or VOC in each gas stream (i) entering the emission control device from the affected source, in parts per million by volume.

(5) C_{fk} = the concentration of HAP or VOC in each uncontrolled gas stream (k) emitted directly to the atmosphere from the affected source, in parts per million by volume.

(6) C_{gv} = the concentration of HAP or VOC in each uncontrolled gas stream entering each individual carbon adsorber vessel (v), in parts per million by volume. For the purposes of calculating the efficiency of the individual carbon adsorber vessel, C_{gv} may be measured in the carbon adsorption system's common inlet duct prior to the branching of individual inlet ducts to the individual carbon adsorber vessels.

(7) C_{hv} = the concentration of HAP or VOC in the gas stream exiting each individual carbon adsorber vessel (v), in parts per million by volume.

(8) E = the control device efficiency achieved for the duration of the emission test (expressed as a fraction).

(9) F = the HAP or VOC emission capture efficiency of the HAP or VOC capture system achieved for the duration of the emission test (expressed as a fraction).

(10) FV = the average inward face velocity across all natural draft openings in a total enclosure, in meters per hour.

(11) G = the calculated mass of HAP per volume of coating solids (in kilograms per liter) contained in a batch of coating.

(12) H_v = the individual carbon adsorber vessel (v) efficiency achieved for the duration of the emission test (expressed as a fraction).

(13) H_{sys} = the efficiency of the carbon adsorption system calculated when each carbon adsorber vessel has an individual exhaust stack (expressed as a fraction).

(14) L_{si} = the volume fraction of solids in each batch of coating (i) applied as determined from the formulation records at the affected source.

(15) M_{ci} = the total mass in kilograms of each batch of coating (i) applied, or of each coating applied at an affected coating operation during a 7-day period, as appropriate, as determined from records at the affected source. This quantity shall be determined at a time and location in the process after all ingredients (including any dilution solvent) have been added to the coating, or if ingredients are added after the mass of the coating has been determined, appropriate adjustments shall be made to account for them.

(16) M_r = the total mass in kilograms of HAP or VOC recovered for a 7-day period.

(17) Q_{aj} = the volumetric flow rate of each gas stream (j) exiting the emission control device in either dry standard cubic meters per hour when EPA Method 18 in appendix A of part 60 is used to measure HAP or VOC concentration or in standard cubic meters per hour (wet basis) when EPA Method 25A is used to measure HAP or VOC concentration.

(18) Q_{bi} = the volumetric flow rate of each gas stream (i) entering the emission control device, in dry standard cubic meters per hour when EPA Method 18 is used to measure HAP or VOC concentration or in standard cubic meters per hour (wet basis) when EPA Method 25A is used to measure HAP or VOC concentration.

(19) Q_{di} = the volumetric flow rate of each gas stream (i) entering the emission control device from the affected source in either dry standard cubic meters per hour when EPA Method 18 is used to measure HAP or VOC concentration or in standard cubic meters per hour (wet basis) when EPA Method 25A is used to measure HAP or VOC concentration.

(20) Q_{fk} = the volumetric flow rate of each uncontrolled gas stream (k) emitted directly to the atmosphere from the affected source in either dry standard cubic meters per hour when EPA Method 18 is used to measure HAP or VOC concentration or in standard cubic meters per hour (wet basis) when EPA Method 25A is used to measure HAP or VOC concentration.

(21) Q_{gv} = the volumetric flow rate of each gas stream entering each individual carbon adsorber vessel (v) in either dry standard cubic meters per hour when EPA Method 18 is used to measure HAP or VOC concentration or in standard cubic meters per hour (wet basis) when EPA Method 25A is used to measure HAP or VOC concentration. For purposes of calculating the efficiency of the individual carbon adsorber vessel, the value of Q_{gv} can be assumed to equal the value of Q_{hv} measured for that carbon adsorber vessel.

(22) Q_{hv} = the volumetric flow rate of each gas stream exiting each individual carbon adsorber vessel (v) in either dry standard cubic meters per hour when EPA Method 18 is used to measure HAP or VOC concentration or in standard cubic meters per hour (wet basis) when EPA Method 25A is used to measure HAP or VOC concentration.

(23) Q_{in} i = the volumetric flow rate of each gas stream (i) entering the total enclosure through a forced makeup air duct in standard cubic meters per hour (wet basis).

(24) Q_{out} j = the volumetric flow rate of each gas stream (j) exiting the total enclosure through an exhaust duct or hood in standard cubic meters per hour (wet basis).

(25) R = the overall HAP or VOC emission reduction achieved for the duration of the emission test (expressed as a percentage).

(26) RS_i = the total mass in kilograms of HAP or VOC retained in the coated substrate after oven drying for a given magnetic tape product.

(27) V_{ci} = the total volume in liters of each batch of coating (i) applied as determined from records at the affected source.

(28) W_{oi} = the weight fraction of HAP or VOC in each batch of coating (i) applied, or of each coating applied at an affected coating operation during a 7-day period, as appropriate, as determined by EPA Method 24 or formulation data. This value shall be determined at a time and location in the process after all ingredients (including any dilution solvent) have been added to the coating, or if ingredients are added after the weight fraction of HAP or VOC in the coating has been determined, appropriate adjustments shall be made to account for them.

§ 63.703 Standards.

(a) Each owner or operator of any affected source that is subject to the requirements of this subpart shall comply with the requirements of this subpart on and after the compliance dates specified in § 63.701.

(b)(1) The owner or operator subject to § 63.701(a)(2) shall determine limits on the amount of HAP utilized (see definition) in the magnetic tape manufacturing operation as the values for the potential to emit HAP from the magnetic tape manufacturing operation.

(2) The limits on the amount of HAP utilized in the magnetic tape manufacturing operations shall be determined in the following manner.

(i) The potential to emit each HAP from each emission point at the stationary source, other than those from magnetic tape manufacturing operations, shall be calculated and converted to the units of Mg/yr (or tons/yr).

(ii) The limits on the HAP utilized in the magnetic tape manufacturing operation shall be determined as the values that, when summed with the values in paragraph (b)(2)(i) of this section, are less than 9.1 Mg/yr (10 tons/yr) for each individual HAP and 22.7 Mg/yr (25 tons/yr) for the combination of HAP.

(3) The limits on the HAP utilized determined in paragraph (b)(2) of this section shall be in terms of Mg/yr (or tons/yr), calculated monthly on a rolling 12-month average. The owner or operator shall not exceed these limits.

(4) An owner or operator subject to paragraph (b) of this section shall meet the requirements in paragraph (h) of this section.

(5) A magnetic tape manufacturing operation that is subject to paragraph (b) of this section and is located at an area source is not subject to paragraphs (c) through (g) of this section.

(c) Except as provided by § 63.703(b), each owner or operator of an affected source subject to this subpart shall limit gaseous HAP emitted from each solvent storage tank, piece of mix preparation equipment, coating operation, waste handling device, and condenser vent in solvent recovery as specified in paragraphs (c)(1) through (c)(5) of this section:

(1) Except as otherwise allowed in paragraphs (c)(2), (3), (4), and (5) of this section, each owner or operator shall limit gaseous HAP emitted from each solvent storage tank, piece of mix preparation equipment, coating operation, waste handling device, and condenser vent in solvent recovery by an overall HAP control efficiency of at least 95 percent.

(2) An owner or operator that uses an incinerator to control emission points listed in paragraph (c)(1) of this section may choose to meet the overall HAP control efficiency requirement of paragraph (c)(1) of this section, or may operate the incinerator such that an outlet HAP concentration of no greater than 20 parts per million by volume (ppmv) by compound on a dry basis is achieved, as long as the efficiency of the capture system is 100 percent.

(3) An owner or operator may choose to meet the requirements of paragraph (c)(1) or (2) of this section by venting the room, building, or enclosure in which the HAP emission point is located to an add-on air pollution control device, as long as the required overall HAP control efficiency of this method is sufficient to meet the requirements of paragraph (c)(1) or (2) of this section.

(4) In lieu of controlling HAP emissions from each solvent storage tank and piece of mix preparation equipment to the level required by paragraph (c)(1) of this section, an owner or operator of an affected source may elect to comply with one of the options set forth in paragraph (c)(4)(i), (ii) or (iii) of this section.

(i) Control HAP emissions from all coating operations by an overall HAP control efficiency of at least 97 percent in lieu of either:

(A) Controlling up to 10 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(B) Controlling 1 piece of mix preparation equipment that does not exceed 1,200 gallons in capacity and up to 8 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(C) Controlling up to 2 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 6 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(D) Controlling up to 3 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 4 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(E) Controlling up to 4 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 2 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(F) Controlling up to 5 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity.

(ii) Control HAP emissions from all coating operations by an overall HAP control efficiency of at least 98 percent in lieu of either:

(A) Controlling up to 15 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(B) Controlling 1 piece of mix preparation equipment that does not exceed 1,200 gallons in capacity and up to 13 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(C) Controlling up to 2 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 11 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(D) Controlling up to 3 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 9 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(E) Controlling up to 4 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 7 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(F) Controlling up to 5 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 5 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(G) Controlling up to 6 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 3 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(H) Controlling up to 7 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 1 HAP solvent storage tank that does not exceed 20,000 gallons in capacity.

(iii) Control HAP emissions from all coating operations by an overall HAP control efficiency of at least 99 percent in lieu of either:

(A) Controlling up to 20 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(B) Controlling 1 piece of mix preparation equipment that does not exceed 1,200 gallons in capacity and up to 18 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(C) Controlling up to 2 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 16 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(D) Controlling up to 3 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 14 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(E) Controlling up to 4 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 12 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(F) Controlling up to 5 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 10 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(G) Controlling up to 6 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 8 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(H) Controlling up to 7 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 6 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(I) Controlling up to 8 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 4 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(J) Controlling up to 9 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 2 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(K) Controlling up to 10 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity.

(iv) Owners or operators choosing to meet the requirements of paragraphs

(c)(4)(i), (ii), or (iii) of this section are also subject to the reporting requirement of § 63.707(k).

(5) In lieu of controlling HAP emissions from a coating operation to the level required by paragraph (c)(1) of this section, owners or operators may use magnetic coatings that contain no greater than 0.18 kilograms of HAP per liter of coating solids for that coating operation. For the requirements of this paragraph, §§ 63.6(e)(3), 63.6(f) (1) and (2), 63.8(b) (2) and (3), 63.8(c), 63.8(d), 63.8(e), 63.8(g), 63.9 (e) and (g), 63.10(c), 63.10(d) (2), (3), and (5), 63.10(e) (1) and (2), and 63.11 of subpart A do not apply.

(d) *Particulate transfer operations.* Except as stipulated by § 63.703(b), each owner or operator of an affected source subject to this subpart shall:

(1) Use an enclosed transfer method to perform particulate HAP transfer; or

(2) Direct emissions from particulate HAP transfer through a hood or enclosure to a baghouse or fabric filter that exhibits no visible emissions while controlling HAP emissions from particulate HAP transfer.

(e) *Wash sinks for cleaning removable parts.* (1) Except as stipulated by § 63.703(b), each owner or operator of an affected source subject to this subpart shall limit gaseous HAP emissions from each wash sink containing HAP:

(i) So that the overall HAP control efficiency is no less than 88 percent; or

(ii) By maintaining a minimum freeboard ratio of 75 percent in the wash sink at all times when the sink contains HAP.

(2) Owners or operators may meet the requirements of paragraph (e)(1)(i) of this section by venting the room, building, or enclosure in which the sink is located, as long as the overall HAP control efficiency of this method is demonstrated to be at least 88 percent using the test methods in § 63.705(e).

(3) Wash sinks subject to the control provisions of subpart T of this part are not subject to paragraph (e)(1) or (e)(2) of this section.

(f) *Equipment for flushing fixed lines.* (1) Except as stipulated by § 63.703(b), each owner or operator of an affected source subject to this subpart shall limit gaseous HAP emissions from each affected set of equipment for flushing fixed lines:

(i) So that the overall HAP control efficiency is at least 95 percent; or

(ii) By using a closed system for flushing fixed lines.

(2) Owners or operators may meet the requirements of paragraph (f)(1)(i) of this section by venting the room, building, or enclosure in which the fixed lines are located, as long as the overall HAP control efficiency of this method is demonstrated to be at least 95 percent using the test methods in § 63.705(f).

(g) *Wastewater treatment systems.* (1) Except as stipulated by § 63.703(b), each owner or operator of an affected source subject to this subpart shall:

(i) Treat the wastewater discharge to remove each HAP from magnetic tape manufacturing operations that is present in the wastewater discharge by at least the fraction removed (F_R) specified in Table 9 of 40 CFR part 63, subpart G; or

(ii) Treat (other than by dilution) the HAP from magnetic tape manufacturing operations that are present in the wastewater discharge such that the exit concentration is less than 50 ppmw of total VOHAP.

(2) The treatment method used to meet the requirements of paragraph (g)(1) of this section shall not transfer emissions from the water to the atmosphere in an uncontrolled manner.

(h)(1) Magnetic tape manufacturing operations that are subject to § 63.703(b) and are not at major sources are not subject to §§ 63.6(e), 63.6(f), 63.6(g), 63.6(i)(4), 63.7, 63.8, 63.9 (c) through (h), 63.10(b)(2), 63.10(c), 63.10(d) (2) through (5), 63.10(e), and 63.11 of subpart A.

(2) Magnetic tape manufacturing operations subject to § 63.703(b) shall fulfill the recordkeeping requirements of § 63.706(e) and the reporting requirements of § 63.707 (b), (c), and (j).

(3) An owner or operator of a magnetic tape manufacturing operation subject to § 63.703(b) who chooses to no longer be subject to § 63.703(b) shall notify the Administrator or delegated State of such change. If by no longer being subject to § 63.703(b), the source

at which the magnetic tape manufacturing operation is located would become a major source, the owner or operator shall meet the following requirements, starting from the date of such notification:

(i) Comply with paragraphs (c) through (g) of this section, and other provisions of this subpart within the timeframe specified in § 63.6(c)(5); and

(ii) Comply with the HAP utilization limits in § 63.703(b) until the requirements of paragraph (h)(3)(i) of this section are met.

(i) For any solvent storage tank, piece of mix preparation equipment, waste handling device, condenser vent in solvent recovery, wash sink for cleaning removable parts, and set of equipment for flushing of fixed lines, the owner or operator may, instead of meeting the requirements of paragraphs (c)(1), (e)(1)(i), or (f)(1)(i) of this section, vent the gaseous HAP emissions to an add-on air pollution control device other than an incinerator that, in conjunction with capture equipment or ductwork, is designed to achieve an overall HAP control efficiency of at least 95 percent for the emissions from the coating operation, and achieve an alternate outlet concentration limit when coating operations are not occurring, as determined in § 63.704(b)(11)(ii).

(j) The requirements of this subpart do not preclude the use of pressure relief valves and vacuum relief valves for safety purposes.

[59 FR 64596, Dec. 15, 1994, as amended at 64 FR 17464, Apr. 9, 1999]

§ 63.704 Compliance and monitoring requirements.

(a) For owners or operators of an affected source that are using add-on air pollution control equipment or a steam stripper to comply with § 63.703, paragraph (b) of this section identifies the operating parameter to be monitored to demonstrate continuous compliance. For all owners or operators subject to § 63.703, except § 63.703(b) and (h), regardless of the type of control technique used, paragraph (c) of this section identifies the procedures that must be followed to demonstrate continuous compliance with § 63.703.

(b) *Establishing a limit under § 63.703(i) and operating parameter values.* The owner or operator of an affected source subject to § 63.703 except § 63.703(b) and (h), shall establish the operating parameter value to be monitored for compliance as required by paragraph (c) of this section, in accordance with paragraphs (b)(1) through (b)(11) of this section. An owner or operator subject to § 63.703(i) shall establish a limit as required in paragraph (b)(11)(ii) of this section.

(1) Except as allowed by paragraphs (b)(2), (3), (4), (5), or (9) of this section, for each add-on air pollution control device used to control solvent HAP emissions, the owner or operator shall fulfill the requirements of paragraph (b)(1)(i) or (ii) of this section.

(i) The owner or operator shall establish as a site-specific operating parameter the outlet total HAP or VOC concentration that demonstrates compliance with § 63.703(c)(1), (c)(2), (c)(4), (e)(1)(i), (f)(1)(i), or (i) as appropriate; or

(ii) The owner or operator shall establish as the site-specific operating parameter the control device efficiency that demonstrates compliance with § 63.703(c)(1), (c)(4), (e)(1)(i), and (f)(1)(i).

(iii) When a nonregenerative carbon adsorber is used to comply with § 63.703(c)(1), the site-specific operating parameter value may be established as part of the design evaluation used to demonstrate initial compliance (§ 63.705(c)(6)). Otherwise, the site-specific operating parameter value shall be established during the initial performance test conducted according to the procedures of § 63.705(c)(1), (2), (3), or (4).

(2) For each condenser used as the add-on air pollution control device to comply with § 63.703(c), (e)(1)(i), (f)(1)(i) or (i), in lieu of meeting the requirements of § 63.704(b)(1), during the initial performance test conducted according to the procedures of § 63.705(c)(1), (2), or (4), the owner or operator may establish as a site-specific operating parameter the maximum temperature of the condenser vapor exhaust stream and shall set the operating parameter value that demonstrates compliance with § 63.703(c), (e)(1)(i), (f)(1)(i) or (i) as appropriate;

(3) For each thermal incinerator, in lieu of meeting the requirements of

§ 63.704(b)(1), during the initial performance test conducted according to the procedures of § 63.705(c)(1), (2), or (4), the owner or operator may establish as a site-specific operating parameter the minimum combustion temperature and set the operating parameter value that demonstrates compliance with § 63.703(c), (e)(1)(i), or (f)(1)(i), as appropriate.

(4) For each catalytic incinerator, in lieu of meeting the requirements of § 63.704(b)(1), during the initial performance test conducted according to the procedures of § 63.705(c)(1), (2), or (4), the owner or operator may establish as site-specific operating parameters the minimum gas temperature upstream of the catalyst bed and the minimum gas temperature difference across the catalyst bed, and set the operating parameter values that demonstrate compliance with § 63.703(c), (e)(1)(i), or (f)(1)(i), as appropriate.

(5) For each nonregenerative carbon adsorber, in lieu of meeting the requirements of § 63.704(b)(1), the owner or operator may establish as the site-specific operating parameter the carbon replacement time interval, as determined by the maximum design flow rate and organic concentration in the gas stream vented to the carbon adsorption system. The carbon replacement time interval shall be established either as part of the design evaluation to demonstrate initial compliance (§ 63.705(c)(6)), or during the initial performance test conducted according to the procedures of § 63.705(c)(1), (2), (3), or (4).

(6) Each owner or operator venting solvent HAP emissions from a source through a room, enclosure, or hood, to a control device to comply with § 63.703(c), (e)(1)(i), (f)(1)(i), or (i) shall:

(i) Submit to the Administrator with the compliance status report required by § 63.9(h) of the General Provisions a plan that:

(A) Identifies the operating parameter to be monitored to ensure that the capture efficiency measured during the initial compliance test is maintained;

(B) Discusses why this parameter is appropriate for demonstrating ongoing compliance; and

(C) Identifies the specific monitoring procedures;

(ii) Set the operating parameter value, or range of values, that demonstrate compliance with § 63.703(c), (e)(1)(i), (f)(1)(i), or (i), as appropriate; and

(iii) Conduct monitoring in accordance with the plan submitted to the Administrator unless comments received from the Administrator require an alternate monitoring scheme.

(7) For each baghouse or fabric filter used to control particulate HAP emissions in accordance with § 63.703(d)(2), the owner or operator shall establish as the site-specific operating parameter the minimum ventilation air flow rate through the inlet duct to the baghouse or fabric filter that ensures that particulate HAP are being captured and delivered to the control device. The minimum ventilation air flow rate is to be supported by the engineering calculations that are considered part of the initial performance test, as required by § 63.705(g)(2).

(8) Owners or operators subject to § 63.704(b)(1), (2), (3), (4), (5), (6), or (7) shall calculate the site-specific operating parameter value, or range of values, as the arithmetic average of the maximum and/or minimum operating parameter values, as appropriate, that demonstrate compliance with § 63.703(c), (d), (e), (f) or (i) during the multiple test runs required by § 63.705(b)(2) and (b)(1), or during the multiple runs of other tests conducted as allowed by paragraph § 63.704(b)(11).

(9) For each solvent recovery device used to comply with § 63.703(c), in lieu of meeting the requirements of paragraph (b)(1) of this section, the results of the material balance calculation conducted in accordance with § 63.705(c)(1) may serve as the site-specific operating parameter that demonstrates compliance with § 63.703(c).

(10) Owners or operators complying with the provisions of § 63.703(g) shall establish the site-specific operating parameter according to paragraph (b)(10)(i) or (ii) of this section.

(i) Owners or operators using a steam stripper shall establish the steam-to-feed ratio as the site-specific operating parameter, except as allowed in paragraph (b)(10)(ii) of this section, according to the following criteria:

(A) The minimum operating parameter value shall correspond to at least the fraction removed specified in § 63.703(g)(1)(i) and be submitted to the permitting authority for approval with the design specifications required by § 63.705(h)(1); or

(B) The minimum operating parameter value shall be that value that corresponds to a total VOHAP outlet concentration in the wastewater of less than 50 ppmw as determined through tests conducted in accordance with § 63.705(b)(9) and (h)(2); or

(C) The minimum operating parameter value shall be the value that corresponds to at least the fraction removed specified in § 63.705(g)(1)(i), as demonstrated through tests conducted in accordance with § 63.705(b)(9) and (h)(3).

(ii) Owners or operators complying with § 63.703(g) through the use of a steam stripper or any other control technique may establish as a site-specific operating parameter the outlet total VOHAP concentration according to the following criteria:

(A) The minimum operating parameter value shall correspond to at least the fraction removed specified in § 63.703(g)(1)(i) and be submitted to the permitting authority for approval with the design specifications required by § 63.705(h)(1); or

(B) The minimum operating parameter value shall be a total VOHAP outlet concentration in the wastewater of less than 50 ppmw, as required by § 63.703(g)(1)(ii), and as determined through tests conducted in accordance with § 63.705 (b)(9) and (h)(2); or

(C) The minimum operating parameter value shall be the value that corresponds to at least the fraction removed specified in § 63.705(g)(1)(i), as demonstrated through tests conducted in accordance with § 63.705 (b)(9) and (h)(3).

(11) *Compliance provisions for nonrepresentative operating conditions.* (i) The owner or operator of an affected source may conduct multiple performance tests to establish the operating parameter value, or range of values, that demonstrates compliance with the standards in § 63.703 during various operating conditions.

(ii) To establish an alternate outlet concentration limit as provided in § 63.703(i), the owner or operator, when the coating operation is not occurring, shall conduct a performance test using the methods in § 63.705 for determining initial compliance with § 63.703 (c)(1), (e)(1)(i) or (f)(1)(i), or shall collect data from continuous emission monitors used to determine continuous compliance as specified in § 63.704 (b) and (c). During the period in which this limit is being established, the control device shall be operated in accordance with good air pollution control practices and in the same manner as it was operated to achieve the emission limitation for coating operations. Owners or operators choosing to establish such an alternative shall also comply with paragraphs (b)(11)(ii) (A) and (B) of this section.

(A) The owner or operator shall submit the alternate outlet HAP concentration limit within 180 days after the compliance demonstration required by § 63.7 of subpart A, to the Administrator, as required by § 63.707(k)(1).

(B) The Administrator will approve or disapprove the limit proposed in accordance with paragraph (b)(11)(ii)(A) of this section within 60 days of receipt of the report required by § 63.707(k)(1), and any other supplemental information requested by the Administrator to support the alternate limit.

(c) *Continuous compliance monitoring.* Following the date on which the initial compliance demonstration is completed, continuous compliance with the standards shall be demonstrated as outlined in paragraphs (c), (d), (e), or (f) of this section.

(1)(i) Each owner or operator of an affected source subject to § 63.703 (c)(1), (c)(2), (c)(3), (c)(4), (e)(1)(i), (f)(1)(i), or (i) of this subpart shall monitor the applicable parameters specified in paragraphs (c)(3), (4), (5), (6), (7), or (9) of this section depending on the type of control technique used, and shall monitor the parameters specified in paragraph (c)(10) of this section.

(ii) Each owner or operator of an affected source subject to § 63.703(c)(5) of this subpart shall demonstrate continuous compliance as required by paragraph (c)(8) of this section.

(iii) Each owner or operator of an affected source subject to § 63.703(d)(2) of this subpart shall demonstrate continuous compliance as required by paragraph (e) of this section.

(iv) Each owner or operator of an affected source subject to § 63.703(g) of this subpart shall demonstrate continuous compliance as required by paragraph (d) of this section.

(2) Compliance monitoring shall be subject to the following provisions.

(i) Except as allowed by paragraph (c)(3)(i)(C) of this section, all continuous emission monitors shall comply with performance specification (PS) 8 or 9 in 40 CFR part 60, appendix B, as appropriate depending on whether volatile organic compound (VOC) or HAP concentration is being measured. The requirements in appendix F of 40 CFR part 60 shall also be followed. In conducting the quarterly audits required by appendix F, owners or operators must challenge the monitors with compounds representative of the gaseous emission stream being controlled.

(ii) All temperature monitoring equipment shall be installed, calibrated, maintained, and operated according to the manufacturer's specifications. The thermocouple calibration shall be verified or replaced every 3 months. The replacement shall be done either if the owner or operator chooses not to calibrate the thermocouple, or if the thermocouple cannot be properly calibrated.

(iii) If the effluent from multiple emission points are combined prior to being channeled to a common control device, the owner or operator is required only to monitor the common control device, not each emission point.

(3) Owners or operators complying with § 63.703(c), (e)(1)(i), (f)(1)(i), or (i) through the use of a control device and establishing a site-specific operating parameter in accordance with § 63.704(b)(1) shall fulfill the requirements of paragraphs (c)(3)(i) of this section and paragraph (c)(3)(ii), (iii), (iv), or (v) of this section, as appropriate.

(i) The owner or operator shall install, calibrate, operate, and maintain a continuous emission monitor.

(A) The continuous emission monitor shall be used to measure continuously the total HAP or VOC concentration at both the inlet and the outlet whenever HAP from magnetic tape manufacturing operations are vented to the control device, if continuous compliance is demonstrated through a percent efficiency calculation (§ 63.704(b)(1)(ii)); or

(B) The continuous emission monitor shall be used to measure continuously the total outlet HAP or VOC concentration whenever HAP from magnetic tape manufacturing operations are vented to the control device, if the provisions of § 63.704(b)(1)(i) are being used to determine continuous compliance.

(C) For owners or operators using a nonregenerative carbon adsorber, in lieu of using continuous emission monitors as specified in paragraph (c)(3)(i)(A) or (B) of this section, the owner or operator may use a portable monitoring device to monitor total HAP or VOC concentration at the inlet and outlet, or outlet of the carbon adsorber, as appropriate.

(*1*) The monitoring device shall be calibrated, operated, and maintained in accordance with the manufacturer's specifications.

(*2*) The monitoring device shall meet the requirements of part 60, appendix A, method 21, sections 2, 3, 4.1, 4.2, and 4.4. For the purposes of paragraph (c)(3)(i)(C) of this section, the words ''leak definition'' in method 21 shall be the outlet concentration determined in accordance with § 63.704(b)(1). The calibration gas shall either be representative of the compounds to be measured or shall be methane, and shall be at a concentration associated with 125 percent of the expected organic compound concentration level for the carbon adsorber outlet vent.

(*3*) The probe inlet of the monitoring device shall be placed at approximately the center of the carbon adsorber outlet vent. The probe shall be held there for at least 5 minutes during which flow into the carbon adsorber is expected to occur. The maximum reading during that period shall be used as the measurement.

(ii) If complying with § 63.703 (c)(1), (c)(3), (c)(4), (e)(1)(i), (f)(1)(i), or (i)

through the use of a carbon adsorption system with a common exhaust stack for all of the carbon vessels, the owner or operator shall not operate the control device at an average control efficiency less than that required by § 63.703 (c)(1), (c)(3), (c)(4), (e)(1)(i), or (f)(1)(i) or at an average outlet concentration exceeding the site-specific operating parameter value or that required by § 63.703(i), for three consecutive adsorption cycles. Operation in this manner shall constitute a violation of § 63.703 (c)(1), (c)(3), (c)(4), (e)(1)(i), (f)(1)(i), or (i).

(iii) If complying with § 63.703 (c)(1), (c)(3), (c)(4), (e)(1)(i), (f)(1)(i), or (i) through the use of a carbon adsorption system with individual exhaust stacks for each of the multiple carbon adsorber vessels, the owner or operator shall not operate any carbon adsorber vessel at an average control efficiency less than that required by § 63.703 (c)(1), (c)(3), (c)(4), (e)(1)(i), or (f)(1)(i), or at an average outlet concentration exceeding the site-specific operating parameter value or that required by § 63.703(i), as calculated daily using a 3-day rolling average. Operation in this manner shall constitute a violation of § 63.703 (c)(1), (c)(3), (c)(4), (e)(1)(i), (f)(1)(i), or (i).

(iv) If complying with § 63.703 (c)(1), (c)(2), (c)(3), (c)(4), (e)(1)(i), (f)(1)(i), or (i) through the use of any control device other than a carbon adsorber, the owner or operator shall not operate the control device at an average control efficiency less than that required by § 63.703 (c)(1), (c)(3), (c)(4), (e)(1)(i), or (f)(1)(i), or at an average outlet concentration exceeding the site-specific operating parameter value or that required by § 63.703(c)(2) or (i), as calculated for any 3-hour period. Operation in this manner shall constitute a violation of § 63.703 (c)(1), (c)(2), (c)(3), (c)(4), (e)(1)(i), (f)(1)(i), or (i).

(v) If complying with § 63.703(c)(1) through the use of a nonregenerative carbon adsorber, in lieu of the requirements of paragraphs (c)(3) (ii) or (iii) of this section, the owner or operator may:

(A) monitor the VOC or HAP concentration of the adsorber exhaust daily or at intervals no greater than 20 percent of the design carbon replacement interval, whichever is greater; operation of the control device at a HAP or VOC concentration greater than that determined in accordance with § 63.704(b)(1)(iii) shall constitute a violation of § 63.703 (c)(1), (e)(1)(i), or (f)(1)(i); or

(B) replace the carbon in the carbon adsorber system with fresh carbon at a regular predetermined time interval as determined in accordance with § 63.704(b)(5); failure to replace the carbon at this predetermined time interval shall constitute a violation of § 63.703 (c)(1), (e)(1)(i), or (f)(1)(i).

(4) Owners or operators complying with § 63.703 (c)(1), (c)(3), (c)(4), (e)(1)(i), (f)(1)(i), or (i) through the use of a condenser as the add-on air pollution control device, and demonstrating compliance in accordance with § 63.704(b)(2), shall install, calibrate, operate, and maintain a thermocouple to measure continuously the temperature of the condenser vapor exhaust stream whenever HAP from magnetic tape manufacturing operations are vented to the control device. Operation of the control device at an average vapor exhaust temperature greater than the site-specific operating parameter value or values established in accordance with § 63.704(b)(2) for any 3-hour period shall constitute a violation of § 63.703 (c)(1), (c)(3), (c)(4), (e)(1)(i), (f)(1)(i) or (i).

(5) Owners or operators complying with § 63.703 (c)(1), (c)(2), (c)(3), (c)(4), (e)(1)(i), or (f)(1)(i) through the use of a thermal incinerator and demonstrating compliance in accordance with § 63.704(b)(3) shall install, calibrate, operate, and maintain a thermocouple to measure continuously the combustion temperature whenever HAP from magnetic tape manufacturing operations are vented to the control device. Operation of the control device at an average combustion temperature less than the operating parameter value or values established in accordance with § 63.704(b)(3) for any 3-hour period shall constitute a violation of § 63.703 (c)(1), (c)(2), (c)(3), (c)(4), (e)(1)(i), or (f)(1)(i).

(6) Owners or operators complying with § 63.703 (c)(1), (c)(2), (c)(3), (c)(4), (e)(1)(i), or (f)(1)(i) through the use of a catalytic incinerator and demonstrating compliance in accordance

with §63.704(b)(4) shall install, calibrate, operate, and maintain a thermocouple to measure continuously the gas temperature both upstream and downstream of the catalyst bed whenever HAP from magnetic tape manufacturing operations are vented to the control device. Operation of the control device at an average upstream gas temperature, or at an average gas temperature difference across the catalyst bed, less than the operating parameter values established in accordance with §63.704(b)(4) for any 3-hour period shall constitute a violation of §63.703 (c)(1), (c)(2), (c)(3), (c)(4), (e)(1)(i), or (f)(1)(i).

(7) Owners or operators complying with §63.703 (c)(1), (c)(2), (c)(3), (c)(4), (e)(1)(i), (f)(1)(i), or (i) by capturing emissions through a room, enclosure, or hood shall install, calibrate, operate, and maintain the instrumentation necessary to measure continuously the site-specific operating parameter established in accordance with §63.704(b)(6) whenever HAP from magnetic tape manufacturing operations are vented through the capture device. Operation of the capture device at an average value greater than or less than (as appropriate) the operating parameter value established in accordance with §63.704(b)(6) for any 3-hour period shall constitute a violation of §63.703 (c)(1), (c)(2), (c)(3), (c)(4), (e)(1)(i), (f)(1)(i), or (i).

(8) The owner or operator of an affected source complying with §63.703(c)(5) shall demonstrate continuous compliance by using a coating that has a HAP content of no greater than 0.18 kilograms of HAP per liter of coating solids, as measured in accordance with §63.705(c)(5), and by maintaining and reporting the records required by §§63.706(f) and 63.707(e) and (i)(2).

(9) For owners or operators complying with §63.703 (c)(1), (c)(3), or (c)(4) through the use of a solvent recovery device and demonstrating initial compliance in accordance with the provisions of §63.705(c)(1), continuous compliance shall be demonstrated using procedures in §63.705(c)(1) and through the recordkeeping and reporting requirements of §§63.706(d), 63.707(d), and 63.707(i)(5). The provisions of §63.8(b) (2) and (3), (c), (d), (e), (f), and (g) (1), and (2) of subpart A do not apply.

(10) The owner or operator of an affected emission point using a vent system that contains bypass lines (not including equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves needed for safety purposes) that could potentially divert a vent stream away from the control device used to comply with §63.703 (c)(1), (c)(2), (c)(3), (c)(4), (e)(1)(i), (f)(1)(i), or (i) shall:

(i) Install, calibrate, maintain, and operate a flow indicator that provides a record of vent stream flow at least once every 15 minutes; records shall be generated as specified in §63.706(c)(1); and the flow indicator shall be installed at the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere; or

(ii) Secure any bypass line valve in the closed position with a car-seal or a lock-and-key type configuration; a visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and the vent stream is not diverted through the bypass line; or

(iii) Ensure that any bypass line valve is in the closed position through continuous monitoring of valve position; the monitoring system shall be inspected at least once every month to ensure that it is functioning properly; or

(iv) Use an automatic shutdown system in which any HAP-emitting operations are ceased when flow from these operations is diverted away from the control device to any bypass line; the automatic system shall be inspected at least once every month to ensure that it is functioning properly.

(d) Owners or operators complying with §63.703(g) shall demonstrate continuous compliance in accordance with paragraph (d)(1) or (d)(2) of this section.

(1) An owner or operator that established the steam-to-feed ratio as the site-specific operating parameter in accordance with §63.704(b)(10)(i) shall continuously measure the steam-to-feed ratio whenever HAP-containing

wastewater from magnetic tape manufacturing operations is being fed to the steam stripper. Operation of the steam stripper at a steam-to-feed ratio less than the operating parameter value or values established in accordance with §63.704(b)(10)(i) for any 3-hour period shall constitute a violation of §63.703(g).

(2) An owner or operator that established the total outlet VOHAP concentration of the wastewater discharge as the site-specific operating parameter in accordance with §63.704(b)(10)(ii) shall measure the total VOHAP concentration of the wastewater discharge once per month. Operation of the control device at an outlet VOHAP concentration greater than the operating parameter value or values established in accordance with §63.704(b)(10)(ii) for any month shall constitute a violation of §63.703(g).

(e) Owners or operators complying with §63.703(d)(2) of this subpart through the use of a baghouse or fabric filter shall perform visible emission testing each day that particulate HAP transfer occurs, using the procedures in §63.705(b)(10). Owners or operators shall also install, calibrate, and operate the instrumentation necessary to continuously monitor the ventilation air flow rate in the inlet duct to the baghouse or fabric filter whenever particulate HAP transfer occurs. The occurrence of visible emissions shall constitute a violation of §63.703(d)(2), and the operation of the baghouse or fabric filter at a flow rate less than the value or values established in accordance with §63.704(b)(7) for any 3-hour period shall constitute a violation of §63.703(d)(2).

(f) An owner or operator who uses an air pollution control device not listed in §63.704 to comply with §63.703(c), (e)(1)(i), (f)(1)(i), or (i), or a device other than a steam stripper to comply with §63.703(g) shall submit to the Administrator a description of the device, test data verifying the performance of the device, and appropriate site-specific operating parameters that will be monitored to demonstrate continuous compliance with the standard. The monitoring plan submitted by an owner or operator in accordance with this paragraph is subject to approval by the Administrator.

§63.705 Performance test methods and procedures to determine initial compliance.

(a) Except as specified in §63.705(a) (1) through (3), to determine initial compliance with the emission limits under §63.703 (c), (d)(2), (e)(1), (f)(1), and (g), the owner or operator shall conduct an initial performance demonstration as required under §63.7 using the procedures and test methods listed in §63.7 and §63.705. If multiple emission points are vented to one common control device to meet the requirements of §63.703 (c), (d)(2), (e)(1), and (f)(1), only one performance test is required to demonstrate initial compliance for that group of emission points. This section also contains initial compliance demonstration procedures (other than testing) for owners or operators subject to §63.703 (c), (d)(1), (e)(1)(ii), (f)(1)(ii), and (g).

(1) A control device (not enclosure) used to comply with §63.703 (c), (e), or (f) does not need to be tested if each of the following criteria are met:

(i) It is used to control gaseous HAP emissions from an existing affected source;

(ii) It is operating prior to March 11, 1994;

(iii) It is equipped with continuous emission monitors for determining inlet and outlet total HAP or VOC concentration, such that a percent efficiency can be calculated; and

(iv) The continuous emission monitors are used to demonstrate continuous compliance in accordance with §63.704(c)(3)(i).

(2) The owner or operator is not required to conduct an initial performance test if the requirements of §63.7(e)(2)(iv) or §63.7(h) are met.

(3) An owner or operator is not required to conduct an initial performance test for a capture device when:

(i) The room, enclosure, or vent was previously tested to demonstrate compliance with subpart SSS of part 60; and

(ii) Sufficient data were gathered during the test to establish operating parameter values in accordance with §63.704(b)(6) (i), (ii), and (iii).

(b) When an initial compliance demonstration is required by this subpart, the procedures in paragraphs (b)(1)

through (b)(10) of this section shall be used in determining initial compliance with the provisions of this subpart.

(1) EPA Method 24 of appendix A of part 60 is used to determine the VOC content in coatings. If it is demonstrated to the satisfaction of the Administrator that plant coating formulation data are equivalent to EPA Method 24 results, formulation data may be used. In the event of any inconsistency between an EPA Method 24 test and an affected source's formulation data, the EPA Method 24 test will govern. For EPA Method 24, the coating sample must be a 1-liter sample taken into a 1-liter container at a location and time such that the sample will be representative of the coating applied to the base substrate (i.e., the sample shall include any dilution solvent or other VOC added during the manufacturing process). The container must be tightly sealed immediately after the sample is taken. Any solvent or other VOC added after the sample is taken must be measured and accounted for in the calculations that use EPA Method 24 results.

(2) Formulation data is used to determine the HAP content of coatings.

(3) Either EPA Method 18 or EPA Method 25A of appendix A of part 60, as appropriate to the conditions at the site, shall be used to determine HAP or VOC concentration of air exhaust streams as required by §63.705(c). The owner or operator shall submit notice of the intended test method to the Administrator for approval along with the notification of the performance test required under §63.7(b). Method selection shall be based on consideration of the diversity of organic species present and their total concentration and on consideration of the potential presence of interfering gases. Except as indicated in paragraphs (b)(3) (i) and (ii) of this section, the test shall consist of three separate runs, each lasting a minimum of 30 minutes.

(i) When either EPA Method 18 or EPA Method 25A is to be used in the determination of the efficiency of a fixed-bed carbon adsorption system with a common exhaust stack for all the individual carbon adsorber vessels pursuant to §63.705(c) (2) or (4), the test shall consist of three separate runs, each coinciding with one or more complete sequences through the adsorption cycles of all of the individual carbon adsorber vessels.

(ii) When either EPA Method 18 or EPA Method 25A is to be used in the determination of the efficiency of a fixed-bed carbon adsorption system with individual exhaust stacks for each carbon adsorber vessel pursuant to §63.705(c) (3) or (4), each carbon adsorber vessel shall be tested individually. The test for each carbon adsorber vessel shall consist of three separate runs. Each run shall coincide with one or more complete adsorption cycles.

(4) EPA Method 1 or 1A of appendix A of part 60 is used for sample and velocity traverses.

(5) EPA Method 2, 2A, 2C, or 2D of appendix A of part 60 is used for velocity and volumetric flow rates.

(6) EPA Method 3 of appendix A of part 60 is used for gas analysis.

(7) EPA Method 4 of appendix A of part 60 is used for stack gas moisture.

(8) EPA Methods 2, 2A, 2C, 2D, 3, and 4 shall be performed, as applicable, at least twice during each test period.

(9) Wastewater analysis shall be conducted in accordance with paragraph (b)(9)(i) or (b)(9)(ii) of this section.

(i) Use Method 305 of 40 CFR part 63, appendix A and the equations in paragraphs (b)(9)(i) (A) and (B) of this section to determine the total VOHAP concentration of a wastewater stream.

(A) The following equation shall be used to calculate the VOHAP concentration of an individually speciated HAP.

$$C_i = \left(C_C * \frac{MW}{24.055} * \frac{P_i}{760} * \frac{293}{T_i} * t * L * 10^3 \right) / M_s$$

where:

C_i = VOHAP concentration of the individually-speciated organic HAP in the wastewater, parts per million by weight.

C_c = Concentration of the organic HAP (i) in the gas stream, as measured by Method 305 of appendix A of this part, parts per million by volume on a dry basis.

M_s = Mass of sample, from Method 305 of appendix A of this part, milligrams.

MW = Molecular weight of the organic HAP (i), grams per gram-mole.

24.055 = Ideal gas molar volume at 293° Kelvin and 760 millimeters of mercury, liters per gram-mole.

P_i = Barometric pressure at the time of sample analysis, millimeters mercury absolute.

760 = Reference or standard pressure, millimeters mercury absolute.

293 = Reference or standard temperature, °Kelvin.

T_i = Sample gas temperature at the time of sample analysis, °Kelvin.

t = Actual purge time, from Method 305 of appendix A of this part, minutes.

L = Actual purge rate, from Method 305 of appendix A of this part, liters per minute.

10^3 = Conversion factor, milligrams per gram.

(B) Total VOHAP concentration (stream) can be determined by summing the VOHAP concentrations of all individually speciated organic HAP in the wastewater.

$$C_{stream} = \sum_{i=1}^{n} C_i$$

where:

C_{stream} = Total VOHAP concentration of wastewater stream.

n=Number of individual organic HAP (i) in the wastewater stream.

C_i = VOHAP concentration of individual organic HAP (i) calculated according to the procedures in paragraph (b)(9)(i)(A) of this section.

(ii) Use a test method or results from a test method that measures organic HAP concentrations in the wastewater, and that has been validated according to section 5.1 or 5.3 of Method 301 of appendix A of this part. The specific requirement of Method 305 of appendix A of this part to collect the sample into polyethylene glycol would not be applicable.

(A) If measuring the total VOHAP concentration of the exit stream in accordance with §§ 63.703(g)(1)(ii) and 63.705(h)(2), the concentrations of the individual organic HAP measured in the water shall be corrected to their concentrations had they been measured by Method 305 of appendix A of this part. This is done by multiplying each concentration by the compound-specific fraction measured factor (F_M) listed in table 34 of 40 CFR part 63, subpart G.

(B) If measuring the total HAP concentration of an inlet and outlet wastewater stream to demonstrate compliance with § 63.703(g)(1)(i) and following the procedures of § 63.705(h)(3), the concentrations of the individual organic HAP measured in the water do not need to be corrected.

(10) EPA Method 22 of appendix A of part 60 is used to determine visible emissions. Visible emissions testing shall be conducted for a minimum of 6 minutes during a time when particulate HAP transfer, as defined in this subpart, is occurring.

(c) *Initial compliance demonstrations.* Except as stipulated in § 63.705(a), each owner or operator subject to the requirements of § 63.703(c) must demonstrate initial compliance with the requirements of this subpart by following the procedures of paragraphs (c)(1), (2), (3), (4), (5), or (6) and paragraph (d) of this section, as applicable. Each owner or operator subject to § 63.703(d), (e), (f), and (g) must demonstrate initial compliance with the requirements of this subpart by following the procedures of paragraphs (e), (f), (g), and (h) of this section, as appropriate.

(1) To demonstrate initial and continuous compliance with § 63.703(c)(1), (c)(3), or (c)(4) when emissions from only the affected coating operations are controlled by a dedicated solvent recovery device, each owner or operator of the affected coating operation may perform a liquid-liquid HAP or VOC material balance over rolling 7-day periods in lieu of demonstrating compliance through the methods in paragraphs (c)(2), (c)(3), or (c)(4) of this section. Results of the material balances calculation performed to demonstrate initial compliance shall be submitted to the Administrator with the notification of compliance status required by § 63.9(h) and § 63.707(d). When demonstrating compliance by

this procedure, § 63.7(e)(3) of subpart A does not apply. The amount of liquid HAP or VOC applied and recovered shall be determined as discussed in paragraph (c)(1)(iii) of this section. The overall HAP or VOC emission reduction (R) is calculated using equation 1:

$$R = \frac{M_r}{\sum_{i=1}^{n}\left[W_{oi}M_{ci} - RS_i\right]} \times 100 \qquad \text{(Eq. 1)}$$

(i) The value of RS_i is zero unless the owner or operator submits the following information to the Administrator for approval of a measured RS_i value that is greater than zero:

(A) Measurement techniques; and

(B) Documentation that the measured value of RS_i exceeds zero.

(ii) The measurement techniques of paragraph (c)(1)(i)(A) of this section shall be submitted to the Administrator for approval with the notification of performance test required under § 63.7(b).

(iii) Each owner or operator demonstrating compliance by the test method described in paragraph (c)(1) of this section shall:

(A) Measure the amount of coating applied at the coater;

(B) Determine the VOC or HAP content of all coating applied using the test method specified in § 63.705(b) (1) or (2);

(C) Install, calibrate, maintain, and operate, according to the manufacturer's specifications, a device that indicates the amount of HAP or VOC recovered by the solvent recovery device over rolling 7-day periods; the device shall be certified by the manufacturer to be accurate to within ±2.0 percent, and this certification shall be kept on record;

(D) Measure the amount of HAP or VOC recovered; and

(E) Calculate the overall HAP or VOC emission reduction (R) for rolling 7-day periods using Equation 1.

(iv) Compliance is demonstrated if the value of R is equal to or greater than the overall HAP control efficiency required by § 63.703 (c)(1), (c)(3), or (c)(4).

(2) To demonstrate initial compliance with § 63.703 (c)(1), (c)(2), (c)(3), or (c)(4) when affected HAP emission points are controlled by an emission control device other than a fixed-bed carbon adsorption system with individual exhaust stacks for each carbon adsorber vessel, each owner or operator of an affected source shall perform a gaseous emission test using the following procedures.

(i) Construct the overall HAP emission reduction system so that all volumetric flow rates and total HAP or VOC emissions can be accurately determined by the applicable test methods and procedures specified in § 63.705(b) (3) through (8).

(ii) Determine capture efficiency from the HAP emission points by capturing, venting, and measuring all HAP emissions from the HAP emission points. During a performance test, the owner or operator of affected HAP emission points located in an area with other gaseous emission sources not affected by this subpart shall isolate the affected HAP emission points from all other gaseous emission points by one of the following methods:

(A) Build a temporary total enclosure (see § 63.702) around the affected HAP emission point(s); or

(B) Shut down all gaseous emission points not affected by this subpart and continue to exhaust fugitive emissions from the affected HAP emission points through any building ventilation system and other room exhausts such as drying ovens.

All ventilation air must be vented through stacks suitable for testing.

(iii) Operate the emission control device with all affected HAP emission points connected and operating.

(iv) Determine the efficiency (E) of the control device using equation 2:

$$E = \frac{\sum_{i=1}^{n} Q_{bi}C_{bi} - \sum_{j=1}^{p} Q_{aj}C_{aj}}{\sum_{i=1}^{n} Q_{bi}C_{bi}} \qquad \text{(Eq. 2)}$$

(v) Determine the efficiency (F) of the capture system using equation 3:

$$F = \frac{\sum_{i=1}^{n} Q_{di} C_{di}}{\sum_{i=1}^{n} Q_{di} C_{di} + \sum_{k=1}^{p} Q_{fk} C_{fk}} \quad \text{(Eq. 3)}$$

(vi) For each HAP emission point subject to §63.703, compliance is demonstrated if either of the following conditions are met:

(A) The product of (E)×(F) is equal to or greater than the overall HAP control efficiency required by §63.703(c)(1), (c)(3), or (c)(4); or

(B) When the owner or operator is subject to §63.703(c)(2), the value of F is equal to 1 and the value of C_{aj} at the outlet of the incinerator is demonstrated to be no greater than 20 ppmv by compound, on a dry basis.

(3) To demonstrate compliance with §63.703(c)(1), (c)(3), or (c)(4) when affected HAP emission points are controlled by a fixed-bed carbon adsorption system with individual exhaust stacks for each carbon adsorber vessel, each owner or operator of an affected source shall perform a gaseous emission test using the following procedures:

(i) Construct the overall HAP emission reduction system so that each volumetric flow rate and the total HAP emissions can be accurately determined by the applicable test methods and procedures specified in §63.705(b)(3) through (8);

(ii) Assure that all HAP emissions from the affected HAP emission point(s) are segregated from gaseous emission points not affected by this subpart and that the emissions can be captured for measurement, as described in §63.705(c)(2)(ii) (A) and (B);

(iii) Operate the emission control device with all affected HAP emission points connected and operating;

(iv) Determine the efficiency (H_v) of each individual carbon adsorber vessel (v) using equation 4:

$$H_v = \frac{Q_{gv} C_{gv} - Q_{hv} C_{hv}}{Q_{gv} C_{gv}} \quad \text{(Eq. 4)}$$

(v) Determine the efficiency of the carbon adsorption system (H_{sys}) by computing the average efficiency of the individual carbon adsorber vessels as weighted by the volumetric flow rate (Q_{hv}) of each individual carbon adsorber vessel (v) using equation 5:

$$H_{sys} = \frac{\sum_{v=1}^{q} H_v Q_{hv}}{\sum_{v=1}^{q} Q_{hv}} \quad \text{(Eq. 5)}$$

(vi) Determine the efficiency (F) of the capture system using equation (3).

(vii) For each HAP emission point subject to §63.703(c), compliance is demonstrated if the product of (H_{sys})×(F) is equal to or greater than the overall HAP control efficiency required by §63.703(c)(1), (c)(3), or (c)(4).

(4) An alternative method of demonstrating compliance with §63.703(c)(1) through (c)(4) is the installation of a total enclosure around the affected HAP emission point(s) and the ventilation of all HAP emissions from the total enclosure to a control device with the efficiency or outlet concentration specified in paragraph (c)(4)(iii) of this section. If this method is selected, the compliance test methods described in paragraphs (c)(1), (c)(2), and (c)(3) of this section are not required. Instead, each owner or operator of an affected source shall:

(i) Demonstrate that a total enclosure is installed. An enclosure that meets the requirements in paragraphs (c)(4)(i) (A) through (D) of this section shall be considered a total enclosure. The owner or operator of an enclosure that does not meet these requirements may apply to the Administrator for approval of the enclosure as a total enclosure on a case-by-case basis. The enclosure shall be considered a total enclosure if it is demonstrated to the satisfaction of the Administrator that all HAP emissions from the affected HAP emission point(s) are contained and vented to the control device. The requirements for automatic approval are as follows:

(A) Total area of all natural draft openings shall not exceed 5 percent of the total surface area of the total enclosure's walls, floor, and ceiling;

(B) All sources of emissions within the enclosure shall be a minimum of

four equivalent diameters away from each natural draft opening;

(C) Average inward face velocity (FV) across all natural draft openings shall be a minimum of 3,600 meters per hour as determined by the following procedures:

(*1*) All forced makeup air ducts and all exhaust ducts are constructed so that the volumetric flow rate in each can be accurately determined by the test methods and procedures specified in § 63.705(b) (4) and (5); volumetric flow rates shall be calculated without the adjustment normally made for moisture content; and

(*2*) Determine FV by equation 6:

$$FV = \frac{\sum_{j=1}^{n} Q_{out\ j} - \sum_{i=1}^{p} Q_{in\ i}}{\sum_{k=1}^{q} A_k} \qquad \text{(Eq. 6)}$$

(D) The air passing through all natural draft openings shall flow into the enclosure continuously. If FV is less than or equal to 9,000 meters per hour, the continuous inward flow of air shall be verified by continuous observation using smoke tubes, streamers, tracer gases, or other means approved by the Administrator over the period that the volumetric flow rate tests required to determine FV are carried out. If FV is greater than 9,000 meters per hour, the direction of airflow through the natural draft openings shall be presumed to be inward at all times without verification.

(ii) Determine the control device efficiency using equation (2) or equations (4) and (5), as applicable, and the test methods and procedures specified in § 63.705(b) (3) through (8).

(iii) Be in compliance if either of the following criteria are met:

(A) The installation of a total enclosure is demonstrated and the value of E determined from equation (2) (or the value of H_{sys} determined from equations (4) and (5), as applicable) is equal to or greater than the overall HAP control efficiency required by § 63.703 (c)(1), (c)(3), or (c)(4); or

(B) When the owner or operator is subject to § 63.703(c)(2), the installation of a total enclosure is demonstrated and the value of C_{aj} at the outlet of the incinerator is demonstrated to be no greater than 20 ppmv by compound, on a dry basis.

(5) To demonstrate initial and continuous compliance with § 63.703(c)(5), each owner or operator of an affected source shall determine the mass of HAP contained in the coating per volume of coating solids applied for each batch of coating applied, according to the procedures of paragraphs (c)(5) (i) through (iii) of this section. If a batch of coating is identical to a previous batch of coating applied, the original calculations can be used to demonstrate the compliance of subsequent identical batches. The calculation of the HAP content of the coating used to demonstrate initial compliance with § 63.703(c)(5) shall be submitted to the Administrator with the notification of compliance status required by § 63.9(h) and § 63.707(e). When demonstrating compliance by this procedure, § 63.7(e)(3) of subpart A does not apply.

(i) Determine the weight fraction of HAP in each coating applied using formulation data as specified in § 63.705(b)(2);

(ii) Determine the volume of coating solids in each coating applied from the facility records; and

(iii) Compute the mass of HAP per volume of coating solids by equation 7:

$$G = \frac{W_{oi} M_{ci}}{L_{si} V_{ci}} \qquad \text{(Eq. 7)}$$

(iv) The owner or operator of an affected source is in compliance with § 63.703(c)(5) if the value of G is less than or equal to 0.18 kilogram of HAP per liter of coating solids applied.

(6) When nonregenerative carbon adsorbers are used to comply with § 63.703(c)(1), the owner or operator may conduct a design evaluation to demonstrate initial compliance in lieu of following the compliance test procedures of paragraph (c) (1), (2), (3), or (4) of this section. The design evaluation shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature, and shall establish the design exhaust vent stream organic compound concentration level, capacity of the carbon bed, type and working capacity of activated carbon used for the carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and the emission point operating schedule.

(d)(1) To demonstrate initial compliance with § 63.703(c) when hard piping or ductwork is used to direct HAP emissions from a HAP source to the control device, each owner or operator shall demonstrate upon inspection that the criteria of paragraph (d)(1)(i) and paragraph (d)(1) (ii) or (iii) are met.

(i) The equipment must be vented to a control device.

(ii) The control device efficiency (E or H_{sys}, as applicable) determined using equation (2) or equations (4) and (5), respectively, and the test methods and procedures specified in § 63.705(b) (3) through (8), must be equal to or greater than the overall HAP control efficiency required by § 63.703 (c)(1), (c)(3), or (c)(4), or the outlet concentration must be no greater than 20 ppmv by compound, on a dry basis, as required by § 63.703(c)(2).

(iii) When a nonregenerative carbon adsorber is used, the ductwork from the affected emission point(s) must be vented to the control device and the carbon adsorber must be demonstrated, through the procedures of § 63.705(c) (1), (2), (3), (4), or (6) to meet the requirements of § 63.703(c)(1).

(2) To demonstrate initial compliance with provisions for mix preparation equipment, owners or operators shall, in addition to paragraph (d)(1) of this section, ensure that covers are closed at all times except when adding ingredients, withdrawing samples, transferring the contents, or making visual inspection when such activities cannot be carried out with the cover in place. Such activities shall be carried out through ports of the minimum practical size.

(e) To demonstrate initial compliance with § 63.703(e), the owner or operator of a wash sink subject to the provisions of this standard shall:

(1) If complying with § 63.703(e)(1)(ii), maintain at least the required minimum freeboard ratio at all times; or

(2) If complying with § 63.703(e)(1)(i), the owner or operator of an existing wash sink that vents emissions from the wash sink to a control device prior to March 11, 1994 must demonstrate that the control device is at least 95-percent efficient in accordance with § 63.705(c) (2), (3), (4), or (6); or

(3) If complying with § 63.703(e)(1)(i), each owner or operator that vents emissions from the wash sink, through a capture device, and to a control device starting on or after March 11, 1994, must demonstrate that the overall HAP control efficiency is at least 88 percent using the test methods and procedures in § 63.705(c) (2), (3), (4), or (6).

(f) To demonstrate initial compliance with § 63.703(f), the owner or operator shall:

(1) If complying with § 63.703(f)(1)(ii), install and use a closed system for flushing fixed lines; or

(2) If complying with § 63.703(f)(1)(i), each owner or operator that vents emissions from the flushing operation, through a capture device, and to a control device must demonstrate that the overall HAP control efficiency is at least 95 percent using the test methods

and procedures in §63.705(c) (2), (3), (4), or (6).

(g) To demonstrate initial compliance with §63.703(d), the owner or operator shall:

(1) If complying with §63.703(d)(1), install an enclosed transfer device for conveying particulate HAP, and use this device, following manufacturer's specifications or other written procedures developed for the device; or

(2) If complying with §63.703(d)(2):

(i) Test the baghouse or fabric filter to demonstrate that there are no visible emissions using the test method in §63.705(b)(10); and

(ii) provide engineering calculations in accordance with §63.707(h) of this subpart with the performance test results required by §63.7(g)(1) and §63.9(h) of subpart A, to demonstrate that the ventilation rate from the particulate transfer activity to the control device is sufficient for capturing the particulate HAP.

(h) To demonstrate initial compliance with §63.703(g), the owner or operator of an affected source shall follow the compliance procedures of either paragraph (h)(1), paragraph (h)(2), or paragraph (h)(3) of this section.

(1) The owner or operator shall submit to the permitting authority with the notification of compliance status required by §63.9(h) and §63.707(f) the design specifications demonstrating that the control technique meets the required efficiency for each HAP compound. For steam strippers, these specifications shall include at a minimum: feed rate, steam rate, number of theoretical trays, number of actual trays, feed composition, bottoms composition, overheads composition, and inlet feed temperature.

(2) The owner or operator shall demonstrate the compliance of a treatment process with the parts per million by weight (ppmw) wastewater stream concentration limits specified in §63.703(g)(1)(ii) by measuring the concentration of total VOHAP at the outlet of the treatment process using the method specified in §63.705(b)(9) (i) or (ii). A minimum of three representative samples of the wastewater stream exiting the treatment process, which are representative of normal flow and concentration conditions, shall be collected and analyzed. Wastewater samples shall be collected using the sampling procedures specified in Method 25D of appendix A of part 60. Where feasible, samples shall be taken from an enclosed pipe prior to the wastewater being exposed to the atmosphere. When sampling from an enclosed pipe is not feasible, a minimum of three representative samples shall be collected in a manner that minimizes exposure of the sample to the atmosphere and loss of organic HAP prior to analysis.

(3) The owner or operator shall demonstrate the compliance of a treatment process with the HAP fraction removed requirement specified in §63.703(g)(1)(i) by measuring the concentration of each HAP at the inlet and outlet of the treatment process using the method specified in §63.705(b)(9) (i) or (ii) and the procedures of paragraphs (h)(3) (i) through (iii) of this section.

(i) The same test method shall be used to analyze the wastewater samples from both the inlet and outlet of the treatment process.

(ii) The HAP mass flow rate of each individually speciated HAP compound entering the treatment process (E_b) and exiting the treatment process (E_a) shall be determined by computing the product of the flow rate of the wastewater stream entering or exiting the treatment process, and the HAP concentration of each individual HAP compound of the entering or exiting wastewater streams, respectively.

(A) The flow rate of the entering and exiting wastewater streams shall be determined using inlet and outlet flow meters, respectively.

(B) The average HAP concentration of each individual HAP of the entering and exiting wastewater streams shall be determined according to the procedures specified in either paragraph (b)(9)(i)(A) or (b)(9)(ii)(B) of this section. If measuring the VOHAP concentration of an individual HAP in accordance with §63.705(b)(9)(i)(A), the concentrations of the individual organic VOHAP measured in the water shall be corrected to a HAP concentration by dividing each VOHAP concentration by the compound-specific fraction measured factor (F_M) listed in table 34 of 40 CFR part 63, subpart G.

(C) Three grab samples of the entering wastewater stream shall be taken at equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of a minimum of three runs.

(D) Three grab samples of the exiting wastewater stream shall be taken at equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of a minimum of three runs conducted over the same 3-hour period at which the total HAP mass flow rate entering the treatment process is determined.

(E) The HAP mass flow rates of each individual HAP compound entering and exiting the treatment process are calculated as follows:

$$E_b = \frac{K}{n \times 10^6}\left(\sum_{p=1}^{n} V_{bp} C_{bp}\right)$$

$$E_a = \frac{K}{n \times 10^6}\left(\sum_{p=1}^{n} V_{ap} C_{ap}\right)$$

where:

E_b = HAP mass flow rate of an individually speciated HAP compound entering the treatment process, kilograms per hour.

E_a = HAP mass flow rate of an individually speciated HAP compound exiting the treatment process, kilograms per hour.

K = Density of the wastewater stream, kilograms per cubic meter.

V_{bp} = Average volumetric flow rate of wastewater entering the treatment process during each run p, cubic meters per hour.

V_{ap} = Average volumetric flow rate of wastewater exiting the treatment process during each run p, cubic meters per hour.

C_{bp} = Average HAP concentration of an individually speciated HAP in the wastewater stream entering the treatment process during each run p, parts per million by weight.

C_{ap} = Average HAP concentration of an individually speciated HAP in the wastewater stream exiting the treatment process during each run p, parts per million by weight.

n = Number of runs.

(iii) The fraction removed across the treatment process for each individually speciated HAP compound shall be calculated as follows:

$$F_R = \frac{E_b - E_a}{E_b}$$

where:

F_R = Fraction removed for an individually speciated HAP compound of the treatment process.

E_b = HAP mass flow rate of an individually speciated HAP compound entering the treatment process, kilogram per hour.

E_a = HAP mass flow rate of an individually speciated HAP compound exiting the treatment process, kilograms per hour.

(i) Startups and shutdowns are normal operation for this source category. Emissions from these activities are to be included when determining if the standards specified in § 63.703 are being attained.

(j) An owner or operator who uses compliance techniques other than those specified in this subpart shall submit a description of those compliance procedures, subject to the Administrator's approval, in accordance with § 63.7(f) of subpart A.

§ 63.706 Recordkeeping requirements.

(a) Except as stipulated in § 63.703 (b), (c)(5), and (h), the owner or operator of a magnetic tape manufacturing operation subject to this subpart shall fulfill all applicable recordkeeping requirements in § 63.10 of subpart A, as outlined in Table 1.

(b) The owner or operator of an affected source subject to this subpart that is also subject to the requirements of § 63.703(e)(1)(ii) (a minimum freeboard ratio of 75 percent), shall record whether or not the minimum freeboard ratio has been achieved every time that HAP solvent is added to the wash sink. A measurement of the actual ratio is not necessary for each record as long as the owner or operator has a reliable method for making the required determination. For example, the record may be made by comparing the HAP solvent level to a permanent mark on the sink that corresponds to a 75 percent freeboard ratio. A HAP solvent level in the sink higher than the mark would indicate the minimum ratio has not been achieved.

(c) The owner or operator of an affected source subject to this subpart that is subject to the requirements of § 63.704(c)(10) shall:

(1) If complying with § 63.704(c)(10)(i), maintain hourly records of whether the flow indicator was operating and whether flow was detected at any time during the hour, as well as records of the times and durations of all periods when the vent stream is diverted from the control device or the monitor is not operating;

(2) If complying with § 63.704(c)(10)(ii), (iii), or (iv), maintain a record of monthly inspections, and the records of the times and durations of all periods when:

(i) Flow was diverted through any bypass line such that the seal mechanism was broken;

(ii) The key for a lock-and-key type lock had been checked out;

(iii) The valve position on any bypass line changed to the open position; or

(iv) The diversion of flow through any bypass line caused a shutdown of HAP-emitting operations.

(d) The owner or operator of an affected source that is complying with § 63.703(c) by performing a material balance in accordance with § 63.705(c)(1) shall:

(1) Maintain a record of each 7-day rolling average calculation; and

(2) Maintain a record of the certification of the accuracy of the device that measures the amount of HAP or VOC recovered.

(e) The owner or operator of a magnetic tape manufacturing operation subject to the provisions of § 63.703 (b) and (h) shall maintain records of the calculations used to determine the limits on the amount of HAP utilized as specified in § 63.703(b)(2), and of the HAP utilized in each month and the sum over each 12-month period.

(f) The owner or operator of an affected source subject to the provisions of § 63.703(c)(5) shall keep records of the HAP content of each batch of coating applied as calculated according to § 63.705(c)(5), and records of the formulation data that support the calculations. When a batch of coating applied is identical to a previous batch applied, only one set of records is required to be kept.

(g) The owner or operator of an affected source that is complying with § 63.703(c)(1) through the use of a nonregenerative carbon adsorber and demonstrating initial compliance in accordance with § 63.705(c)(6) shall maintain records to support the outlet VOC or HAP concentration value or the carbon replacement time established as the site-specific operating parameter to demonstrate compliance.

(h) In accordance with § 63.10(b)(1) of subpart A, the owner or operator of an affected source subject to the provisions of this subpart shall retain all records required by this subpart and subpart A for at least 5 years following their collection.

§ 63.707 Reporting requirements.

(a) Except as stipulated in § 63.703(b), (c)(5), and (h), the owner or operator of a magnetic tape manufacturing operation subject to this subpart shall fulfill all applicable reporting requirements in § 63.7 through § 63.10, as outlined in Table 1 to this subpart. These reports shall be submitted to the Administrator or delegated State.

(b) The owner or operator of an existing magnetic tape manufacturing operation subject to § 63.703(b) and (h) shall include the values of the limits on the amount of HAP utilized as determined in § 63.703(b)(2), along with supporting calculations, in the initial notification report required by § 63.9(b).

(c) The owner or operator of a new magnetic tape manufacturing operation subject to § 63.703(h) shall include the values of the limits on the amount of HAP utilized as determined in § 63.703(b)(2), along with supporting calculations, and the amount of HAP expected to be utilized during the first consecutive 12-month period of operation in the initial notification report required by § 63.9(b).

(d) The owner or operator subject to § 63.703(c) and following the compliance provisions of § 63.705(c)(1) (material balance calculation) shall include with the notification of compliance status required by § 63.9(h) the results of the initial material balance calculation.

(e) The owner or operator subject to § 63.703(c)(5) and following the compliance provisions of § 63.705(c)(5) (low-HAP coating) shall include with the

notification of compliance status required by § 63.9(h) the results of the initial low-HAP coating demonstration.

(f) The owner or operator subject to the provisions of § 63.703(g) and demonstrating compliance in accordance with § 63.705(h)(1) shall submit to the permitting authority with the notification of compliance status required by § 63.9(h) the design specifications demonstrating that the control technique meets the required efficiency. For steam strippers, these specifications shall include at a minimum: feed rate, steam rate, number of theoretical trays, number of actual trays, feed composition, bottoms composition, overheads composition, and inlet feed temperature.

(g) The owner or operator of an affected source that is complying with § 63.703(c)(1) through the use of a nonregenerative carbon adsorber and demonstrating initial compliance in accordance with § 63.705(c)(6) shall submit to the permitting authority with the notification of compliance status required by § 63.9(h) the design evaluation.

(h) The owner or operator of an affected source that is complying with § 63.703(d) through the use of a baghouse or fabric filter and demonstrating initial compliance in accordance with § 63.705(g)(2) shall submit to the permitting authority with the notification of compliance status required by § 63.9(h) the engineering calculations that support the minimum ventilation rate needed to capture HAP particulates for delivery to the control device.

(i) Excess emissions and continuous monitoring system performance report and summary reports shall be submitted as required by § 63.10(e).

(1) The owner or operator of an affected source subject to § 63.704 shall include deviations of monitored values from the operating parameter values required by § 63.704(c) in the reports. In the case of exceedances, the report must also contain a description and timing of the steps taken to address the cause of the exceedance.

(2) The owner or operator of an affected source subject to § 63.703(c)(5) shall report the HAP content of each batch of coating applied as the monitored operating parameter value in the reports.

(3) The owner or operator of an affected source subject to § 63.703(e)(1)(ii) and maintaining a minimum freeboard ratio of 75 percent shall report violations of the standard (freeboard ratio is less than 75 percent) in the reports.

(4) The owner or operator of an affected source subject to § 63.704(c)(10) of this subpart shall include records of any time period and duration of time that flow was diverted from the control device, as well as the results of monthly inspections required by § 63.704(c)(10)(ii), (iii), and (iv) in the reports.

(5) The owner or operator of an affected source complying with § 63.703(c) by performing a material balance calculation in accordance with § 63.705(c)(1) shall report any exceedances of the standard, as demonstrated through the calculation, in the reports.

(j) The owner or operator of a magnetic tape manufacturing operation subject to the provisions of § 63.703(h) shall report the amount of HAP utilized in each 12-month period in an annual report to the Administrator according to the following schedule:

(1) For existing sources, the first report shall cover the 12-month period prior to the source's compliance date and shall be submitted to the Administrator no later than 30 days after the compliance date; and

(2) For new sources, the first report shall include the quantity of HAP that is expected to be utilized during the first 12 months of operation and shall be submitted to the Administrator no later than 30 days after the compliance date;

(3) Annual reports shall be submitted to the Administrator no later than 30 days after the last 12-month period included in the report; and

(4) A report shall also be submitted no later than 30 days after monthly records required to be maintained by § 63.706(e) indicate that any limit on the amount of HAP utilized has been exceeded. The report shall indicate the amount by which the limit has been exceeded.

(k) The owner or operator establishing an alternate HAP outlet concentration limit in accordance with §§ 63.703(i) and 63.704(b)(11)(ii) shall:

(1) To support the proposed limit, submit the following within 180 days following completion of the performance test required by § 63.7:

(i) The performance test or CEM data collected to establish the limit;

(ii) Records of when coating operations were down;

(iii) The rationale for the alternate proposed limit; and

(iv) A statement signed by a responsible official of the company that the control device was operated in accordance with good air pollution control practices and in the same manner it was operated to achieve compliance with the emission limitation for coating operations; and

(2) In the excess emissions and continuous monitoring system performance report and summary report required by § 63.10(e)(3), include parameter or CEM data to demonstrate compliance or noncompliance with the alternate outlet HAP concentration established in accordance with §§ 63.703(i) and 63.704(b)(11)(ii) once the limit is approved.

§ 63.708 Implementation and enforcement.

(a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or Tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or Tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to a State, local, or Tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or Tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of U.S. EPA and cannot be transferred to the State, local, or Tribal agency.

(c) The authorities that cannot be delegated to State, local, or Tribal agencies are as specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to the requirements in §§ 63.701 and 63.703.

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

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

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

[68 FR 37352, June 23, 2003]

TABLE 1 TO SUBPART EE OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART EE

Reference	Applies to subpart EE	Comment
63.1(a)(1)	Yes	Additional terms defined in § 63.702(a); when overlap between subparts A and EE occurs, subpart EE takes precedence.
63.1(a)(2)–(14)	Yes.	
63.1(b)(1)–(3)	Yes.	
63.1(c)(1)	Yes	Subpart EE specifies the applicability of each paragraph in subpart A to sources subject to subpart EE.
63.1(c)(2)	No	The applicability of §§ 63.701(a)(2) and 63.703 (b) and (h) to a source does not in and of itself make a source subject to part 70.
63.1(c)(4)–(5)	Yes.	
63.1(e)	Yes.	
63.2	Yes	Additional terms defined in § 63.702(a); when overlap between subparts A and EE occurs, subpart EE takes precedence.
63.3	Yes	Units specific to subpart EE are defined in subpart EE.
63.4(a)(1)–(3)	Yes.	
63.4(a)(5)	Yes.	
63.4(b)	Yes.	
63.4(c)	Yes.	

Reference	Applies to subpart EE	Comment
63.5(a)	Yes.	
63.5(b)(1)	Yes.	
63.5(b)(3)–(6)	Yes.	
63.5(d)	Yes.	
63.5(e)	Yes.	
63.5(f)	Yes.	
63.6(a)	Yes.	
63.6(b)(1)–(5)	Yes.	
63.6(b)(7)	Yes.	
63.6(c)(1)–(2)	Yes.	
63.6(c)(5)	Yes.	
63.6(e)(1)–(2)	Yes.	
63.6(e)(3)	Yes	Owners or operators of affected sources subject to subpart EE do not need to address startups and shutdowns because the emission limitations apply during these times.
63.6(f)(1)	No	§ 63.701(f) of subpart EE specifies when the standards apply.
63.6(f)(2)(i)–(ii)	Yes.	
63.6(f)(2)(iii)	Yes	§ 63.705(a)(3) of subpart EE includes additional circumstances under which previous capture device demonstrations are acceptable to show compliance.
63.6(f)(2)(iv)–(v)	Yes.	
63.6(f)(3)	Yes.	
63.6(g)	Yes.	
63.6(h)(1)	No	§ 63.701(f) of subpart EE specifies when the standards apply.
63.6(h)(2)(i)	Yes.	
63.6(h)(2)(iii)	Yes.	
63.6(h)(4)	Yes	This requirement applies only for the visible emission test required under § 63.705(g)(2).
63.6(h)(5)(i)–(iii)	Yes.	
63.6(h)(5)(v)	No.	
63.6(h)(6)	Yes.	
63.6(h)(7)	No.	
63.6(h)(8)	Yes.	
63.6(h)(9)	No.	
63.6(i)(1)–(14)	Yes	§ 63.703(c)(4) of subpart EE shall not be considered emissions averaging for the purposes of § 63.6(i)(4)(i)(B).
63.6(i)(16)	Yes.	
63.6(j)	Yes.	
63.7(a)(1)	Yes.	
63.7(a)(2)(i)–(vi)	Yes.	
63.7(a)(2)(ix)	Yes.	
63.7(a)(3)	Yes.	
63.7(b)	Yes.	
63.7(c)	Yes.	
63.7(d)	Yes.	
63.7(e)	Yes	§ 63.7(e) establishes the minimum performance test requirements. This section does not preclude owners or operators from conducting multiple test runs under alternate operating conditions to establish an appropriate range of compliance operating parameter values in accordance with § 63.704(b)(11)(i) of subpart EE. Also as required in § 63.701(f) of subpart EE, the emissions standards apply during startup and shutdown.
63.7(f)	Yes.	
63.7(g)(1)	Yes.	
63.7(g)(3)	Yes.	
63.7(h)	Yes.	
63.8(a)(1)–(2)	Yes.	
63.8(a)(4)	Yes.	
63.8(b)(1)	Yes.	
63.8(b)(2)	No	§ 63.704 of subpart EE specifies monitoring locations; when multiple emission points are tied to one central control device, the monitors are located at the central control device.
63.8(b)(3)	Yes.	
63.8(c)(1)–(3)	Yes.	
63.8(c)(4)	Yes	Provisions related to COMS, however, do not apply.
63.8(c)(5)	No.	
63.8(c)(6)–(8)	Yes.	
63.8(d)	Yes.	
63.8(e)	Yes.	
63.8(f)(1)–(6)	Yes.	
63.8(g)(1)–(5)	Yes.	
63.9(a)	Yes.	
63.9(b)	Yes.	
63.9(c)	Yes.	
63.9(d)	Yes.	
63.9(e)	Yes.	
63.9(f)	Yes.	

Reference	Applies to subpart EE	Comment
63.9(g)(1)	Yes.	
63.9(g)(2)	No.	
63.9(g)(3)	Yes.	
63.9(h)(1)–(3)	Yes.	
63.9(h)(5)–(6)	Yes.	
63.9(i)	Yes.	
63.9(j)	Yes.	
63.10(a)	Yes.	
63.10(b)(1)	Yes.	
63.10(b)(2)	Yes	Except information on startup and shutdown periods is not necessary because the standards apply during these time periods.
63.10(b)(3)	Yes.	
63.10(c)(1)	Yes.	
63.10(c)(5)–(8)	Yes	Except information on startup and shutdown periods is not necessary because the standards apply during these times.
63.10(c)(10)–(15)	Yes	Except information on startup and shutdown periods is not necessary because the standards apply during these times.
63.10(d)(1)–(2)	Yes.	
63.10(d)(3)	Yes	This requirement applies only for the visible emissions test required under § 63.705(g)(2). The results of visible emissions tests under § 63.704(e) shall be reported as required in § 63.10(e)(3).
63.10(d)(4)	Yes.	
63.10(d)(5)	Yes	Except information on startup and shutdown periods is not necessary because the standards apply during these times.
63.(10)(e)(1)	Yes.	
63.10(e)(2)(i)	Yes.	
63.10(e)(2)(ii)	No.	
63.10(e)(3)(i)–(v)	Yes.	
63.10(e)(3)(vi)–(viii)	Yes	Except emissions/CMS performance during startup and shutdown do not need to be specified because the standards apply during startup and shutdown.
63.10(e)(4)	No.	
63.10(f)	Yes.	
63.11–63.15	Yes.	

Subpart FF [Reserved]

Subpart GG—National Emission Standards for Aerospace Manufacturing and Rework Facilities

SOURCE: 60 FR 45956, Sept. 1, 1996, unless otherwise noted.

§ 63.741 Applicability and designation of affected sources.

(a) This subpart applies to facilities that are engaged, either in part or in whole, in the manufacture or rework of commercial, civil, or military aerospace vehicles or components and that are major sources as defined in § 63.2.

(b) The owner or operator of an affected source shall comply with the requirements of this subpart and of subpart A of this part, except as specified in § 63.743(a) and Table 1 of this subpart.

(c) *Affected sources.* The affected sources to which the provisions of this subpart apply are specified in paragraphs (c)(1) through (7) of this section. The activities subject to this subpart are limited to the manufacture or rework of aerospace vehicles or components as defined in this subpart. Where a dispute arises relating to the applicability of this subpart to a specific activity, the owner or operator shall demonstrate whether or not the activity is regulated under this subpart.

(1) Each cleaning operation as follows:

(i) All hand-wipe cleaning operations constitute an affected source.

(ii) Each spray gun cleaning operation constitutes an affected source.

(iii) All flush cleaning operations constitute an affected source.

(2) For organic HAP or VOC emissions, each primer application operation, which is the total of all primer applications at the facility.

(3) For organic HAP or VOC emissions, each topcoat application operation, which is the total of all topcoat applications at the facility.

(4) For organic HAP or VOC emissions, each depainting operation, which