

TABLE 1 TO SUBPART S—GENERAL PROVISIONS APPLICABILITY TO SUBPART S<sup>a</sup>—Continued

Reference	Applies to Subpart S	Comment
63.10(d)(1) .....	Yes.	Pertains to continuous opacity monitors that are not part of this standard.
63.10(d)(2) .....	Yes.	
63.10(d)(3) .....	No .....	
63.10(d)(4) .....	Yes.	
63.10(d)(5) .....	Yes.	
63.10(e)(1) .....	Yes.	Pertains to continuous opacity monitors that are not part of this standard.
63.10(e)(2)(i) .....	Yes.	
63.10(e)(2)(ii) .....	No .....	
63.10(e)(3) .....	Yes.	Pertains to continuous opacity monitors that are not part of this standard.
63.10(e)(4) .....	No .....	
63.10(f) .....	Yes.	
63.11–63.15 .....	Yes.	

<sup>a</sup> Wherever subpart A specifies "postmark" dates, submittals may be sent by methods other than the U.S. Mail (e.g., by fax or courier). Submittals shall be sent by the specified dates, but a postmark is not required.

[63 FR 18617, Apr. 15, 1998, as amended at 64 FR 17564, Apr. 12, 1999]

**Subpart T—National Emission Standards for Halogenated Solvent Cleaning**

SOURCE: 59 FR 61805, Dec. 2, 1994, unless otherwise noted.

**§ 63.460 Applicability and designation of source.**

(a) The provisions of this subpart apply to each individual batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machine that uses any solvent containing methylene chloride (CAS No. 75-09-2), perchloroethylene (CAS No. 127-18-4), trichloroethylene (CAS No. 79-01-6), 1,1,1-trichloroethane (CAS No. 71-55-6), carbon tetrachloride (CAS No. 56-23-5) or chloroform (CAS No. 67-66-3), or any combination of these halogenated HAP solvents, in a total concentration greater than 5 percent by weight, as a cleaning and/or drying agent. The concentration of these solvents may be determined using EPA test method 18, material safety data sheets, or engineering calculations. Wipe cleaning activities, such as using a rag containing halogenated solvent or a spray cleaner containing halogenated solvent are not covered under the provisions of this subpart.

(b) Except as noted in appendix C (General Provisions Applicability to Subpart T) of this subpart, the provisions of subpart A of this part (General Provisions) apply to owners or operators of any solvent cleaning machine

meeting the applicability criteria of paragraph (a) of this section.

(c) Except as provided in paragraph (g) of this section, each solvent cleaning machine subject to this subpart that commences construction or reconstruction after November 29, 1993 shall achieve compliance with the provisions of this subpart immediately upon start-up or by December 2, 1994, whichever is later.

(d) Except as provided in paragraph (g) of this section, each solvent cleaning machine subject to this subpart that commenced construction or reconstruction on or before November 29, 1993 shall achieve compliance with the provisions of this subpart no later than December 2, 1997.

(e) In delegating implementation and enforcement authority to a State under section 112(d) of the Act, the authority contained in paragraph (f) of this section shall be retained by the Administrator and not transferred to a State.

(f) The authority conferred in § 63.463(d)(9) and § 63.469 will not be delegated to any State.

(g) Each continuous web cleaning machine subject to this subpart shall achieve compliance with the provisions of this subpart no later than December 2, 1999.

[59 FR 61805, Dec. 2, 1994; 59 FR 67750, Dec. 30, 1994, as amended at 60 FR 29485, June 5, 1995; 63 FR 68400, Dec. 11, 1998]

**§ 63.461 Definitions.**

Unless defined below, all terms used in this subpart are used as defined in

the 1990 Clean Air Act, or in subpart A of 40 CFR part 63:

*Administrator* means the Administrator of the United States Environmental Protection Agency or his or her authorized representative (e.g., State that has been delegated the authority to implement the provisions of this part.)

*Air blanket* means the layer of air inside the solvent cleaning machine freeboard located above the solvent/air interface. The centerline of the air blanket is equidistant between the sides of the machine.

*Air knife system* means a device that directs forced air at high pressure, high volume, or a combination of high pressure and high volume, through a small opening directly at the surface of a continuous web part. The purpose of this system is to remove the solvent film from the surfaces of the continuous web part.

*Automated parts handling system* means a mechanical device that carries all parts and parts baskets at a controlled speed from the initial loading of soiled or wet parts through the removal of the cleaned or dried parts. Automated parts handling systems include, but are not limited to, hoists and conveyors.

*Batch cleaning machine* means a solvent cleaning machine in which individual parts or a set of parts move through the entire cleaning cycle before new parts are introduced into the solvent cleaning machine. An open-top vapor cleaning machine is a type of batch cleaning machine. A solvent cleaning machine, such as a ferris wheel or a cross-rod degreaser, that clean multiple batch loads simultaneously and are manually loaded are batch cleaning machines.

*Carbon adsorber* means a bed of activated carbon into which an air-solvent gas-vapor stream is routed and which adsorbs the solvent on the carbon.

*Clean liquid solvent* means fresh unused solvent, recycled solvent, or used solvent that has been cleaned of soils (e.g., skimmed of oils or sludge and strained of metal chips).

*Cleaning capacity* means, for a cleaning machine without a solvent/air interface, the maximum volume of parts that can be cleaned at one time.

In most cases, the cleaning capacity is equal to the volume (length times width times height) of the cleaning chamber.

*Cold cleaning machine* means any device or piece of equipment that contains and/or uses liquid solvent, into which parts are placed to remove soils from the surfaces of the parts or to dry the parts. Cleaning machines that contain and use heated, nonboiling solvent to clean the parts are classified as cold cleaning machines.

*Combined squeegee and air-knife system* means a system consisting of a combination of a squeegee system and an air-knife system within a single enclosure.

*Consumption* means the amount of halogenated hazardous air pollutant solvent added to the solvent cleaning machine.

*Continuous web cleaning machine* means a solvent cleaning machine in which parts such as film, coils, wire, and metal strips are cleaned at speeds typically in excess of 11 feet per minute. Parts are generally uncoiled, cleaned such that the same part is simultaneously entering and exiting the solvent application area of the solvent cleaning machine, and then recoiled or cut. For the purposes of this subpart, all continuous web cleaning machines are considered to be a subset of in-line solvent cleaning machines.

*Cover* means a lid, top, or portal cover that shields the solvent cleaning machine openings from air disturbances when in place and is designed to be easily opened and closed without disturbing the vapor zone. Air disturbances include, but are not limited to, lip exhausts, ventilation fans, and general room drafts. Types of covers include, but are not limited to, sliding, biparting, and rolltop covers.

*Cross-rod solvent cleaning machine* means a batch solvent cleaning machine in which parts baskets are suspended from "cross-rods" as they are moved through the machine. In a cross-rod cleaning machine, parts are loaded semi-continuously, and enter and exit the machine from a single portal.

*Downtime mode* means the time period when a solvent cleaning machine is not cleaning parts and the sump heating coils, if present, are turned off.

*Dwell* means the technique of holding parts within the freeboard area but above the vapor zone of the solvent cleaning machine. Dwell occurs after cleaning to allow solvent to drain from the parts or parts baskets back into the solvent cleaning machine.

*Dwell time* means the required minimum length of time that a part must dwell, as determined by §63.465(d).

*Emissions* means halogenated hazardous air pollutant solvent consumed (i.e., halogenated hazardous air pollutant solvent added to the machine) minus the liquid halogenated hazardous air pollutant solvent removed from the machine and the halogenated hazardous air pollutant solvent removed from the machine in the solid waste.

*Existing* means any solvent cleaning machine the construction or reconstruction of which was commenced on or before November 29, 1993. A machine, the construction or reconstruction of which was commenced on or before November 29, 1993, but that did not meet the definition of a solvent cleaning machine on December 2, 1994, because it did not use halogenated HAP solvent liquid or vapor covered under this subpart to remove soils, becomes an existing source when it commences to use such liquid or vapor. A solvent cleaning machine moved within a contiguous facility or to another facility under the same ownership, constitutes an existing machine.

*Freeboard area* means; for a batch cleaning machine, the area within the solvent cleaning machine that extends from the solvent/air interface to the top of the solvent cleaning machine; for an in-line cleaning machine, it is the area within the solvent cleaning machine that extends from the solvent/air interface to the bottom of the entrance or exit opening, whichever is lower.

*Freeboard height* means; for a batch cleaning machine, the distance from the solvent/air interface, as measured during the idling mode, to the top of the cleaning machine; for an in-line cleaning machine, it is the distance from the solvent/air interface to the bottom of the entrance or exit opening, whichever is lower, as measured during the idling mode.

*Freeboard ratio* means the ratio of the solvent cleaning machine freeboard height to the smaller interior dimension (length, width, or diameter) of the solvent cleaning machine.

*Freeboard refrigeration device (also called a chiller)* means a set of secondary coils mounted in the freeboard area that carries a refrigerant or other chilled substance to provide a chilled air blanket above the solvent vapor. A primary condenser capable of meeting the requirements of §63.463(e)(2)(i) is defined as both a freeboard refrigeration device and a primary condenser for the purposes of these standards.

*Halogenated hazardous air pollutant solvent or halogenated HAP solvent* means methylene chloride (CAS No. 75-09-2), perchloroethylene (CAS No. 127-18-4), trichloroethylene (CAS No. 79-01-6), 1,1,1-trichloroethane (CAS No. 71-55-6), carbon tetrachloride (CAS No. 56-23-5), and chloroform (CAS No. 67-66-3).

*Hoist* means a mechanical device that carries the parts basket and the parts to be cleaned from the loading area into the solvent cleaning machine and to the unloading area at a controlled speed. A hoist may be operated by controls or may be programmed to cycle parts through the cleaning cycle automatically.

*Idling mode* means the time period when a solvent cleaning machine is not actively cleaning parts and the sump heating coils, if present, are turned on.

*Idling-mode cover* means any cover or solvent cleaning machine design that allows the cover to shield the cleaning machine openings during the idling mode. A cover that meets this definition can also be used as a working-mode cover if that definition is also met.

*Immersion cold cleaning machine* means a cold cleaning machine in which the parts are immersed in the solvent when being cleaned. A remote reservoir cold cleaning machine that is also an immersion cold cleaning machine is considered an immersion cold cleaning machine for purposes of this subpart.

*In-line cleaning machine or continuous cleaning machine* means a solvent cleaning machine that uses an automated

parts handling system, typically a conveyor, to automatically provide a continuous supply of parts to be cleaned. These units are fully enclosed except for the conveyor inlet and exit portals. In-line cleaning machines can be either cold or vapor cleaning machines.

*Leak-proof coupling* means a threaded or other type of coupling that prevents solvents from leaking while filling or draining solvent to and from the solvent cleaning machine.

*Lip exhaust* means a device installed at the top of the opening of a solvent cleaning machine that draws in air and solvent vapor from the freeboard area and ducts the air and vapor away from the solvent cleaning area.

*Monthly reporting period* means any calendar month in which the owner or operator of a solvent cleaning machine is required to calculate and report the solvent emissions from each solvent cleaning machine.

*New* means any solvent cleaning machine the construction or reconstruction of which is commenced after November 29, 1993.

*Open-top vapor cleaning machine* means a batch solvent cleaning machine that has its upper surface open to the air and boils solvent to create solvent vapor used to clean and/or dry parts.

*Part* means any object that is cleaned in a solvent cleaning machine. Parts include, but are not limited to, discrete parts, assemblies, sets of parts, and parts cleaned in a continuous web cleaning machine (i.e., continuous sheets of metal, film).

*Primary condenser* means a series of circumferential cooling coils on a vapor cleaning machine through which a chilled substance is circulated or recirculated to provide continuous condensation of rising solvent vapors and, thereby, create a concentrated solvent vapor zone.

*Reduced room draft* means decreasing the flow or movement of air across the top of the freeboard area of the solvent cleaning machine to meet the specifications of § 63.463(e)(2)(ii). Methods of achieving a reduced room draft include, but are not limited to, re-directing fans and/or air vents to not blow across the cleaning machine, moving the cleaning machine to a cor-

ner where there is less room draft, and constructing a partial or complete enclosure around the cleaning machine.

*Remote reservoir cold cleaning machine* means any device in which liquid solvent is pumped to a sink-like work area that drains solvent back into an enclosed container while parts are being cleaned, allowing no solvent to pool in the work area.

*Remote reservoir continuous web cleaning machine* means a continuous web cleaning machine in which there is no exposed solvent sump. In these units, the solvent is pumped from an enclosed chamber and is typically applied to the continuous web part through a nozzle or series of nozzles. The solvent then drains from the part and is collected and recycled through the machine, allowing no solvent to pool in the work or cleaning area.

*Soils* means contaminants that are removed from the parts being cleaned. Soils include, but are not limited to, grease, oils, waxes, metal chips, carbon deposits, fluxes, and tars.

*Solvent/air interface* means, for a vapor cleaning machine, the location of contact between the concentrated solvent vapor layer and the air. This location of contact is defined as the mid-line height of the primary condenser coils. For a cold cleaning machine, it is the location of contact between the liquid solvent and the air.

*Solvent/air interface area* means; for a vapor cleaning machine, the surface area of the solvent vapor zone that is exposed to the air; for an in-line cleaning machine, it is the total surface area of all the sumps; for a cold cleaning machine, it is the surface area of the liquid solvent that is exposed to the air.

*Solvent cleaning machine* means any device or piece of equipment that uses halogenated HAP solvent liquid or vapor to remove soils from the surfaces of materials. Types of solvent cleaning machines include, but are not limited to, batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machines. Buckets, pails, and beakers with capacities of 7.6 liters (2 gallons) or less are not considered solvent cleaning machines.

*Solvent vapor zone* means; for a vapor cleaning machine, the area that extends from the liquid solvent surface to the level that solvent vapor is condensed. This condensation level is defined as the midline height of the primary condenser coils.

*Squeegee system* means a system that uses a series of pliable surfaces to remove the solvent film from the surfaces of the continuous web part. These pliable surfaces, called squeegees, are typically made of rubber or plastic media, and need to be periodically replaced to ensure continued proper function.

*Sump* means the part of a solvent cleaning machine where the liquid solvent is located.

*Sump heater coils* means the heating system on a cleaning machine that uses steam, electricity, or hot water to heat or boil the liquid solvent.

*Superheated part technology* means a system that is part of the continuous web process that heats the continuous web part either directly or indirectly to a temperature above the boiling point of the cleaning solvent. This could include a process step, such as a tooling die that heats the part as it is processed, as long as the part remains superheated through the cleaning machine.

*Superheated vapor system* means a system that heats the solvent vapor, either passively or actively, to a temperature above the solvent's boiling point. Parts are held in the superheated vapor before exiting the machine to evaporate the liquid solvent on them. Hot vapor recycle is an example of a superheated vapor system.

*Vapor cleaning machine* means a batch or in-line solvent cleaning machine that boils liquid solvent generating solvent vapor that is used as a part of the cleaning or drying cycle.

*Water layer* means a layer of water that floats above the denser solvent and provides control of solvent emissions. In many cases, the solvent used in batch cold cleaning machines is sold containing the appropriate amount of water to create a water cover.

*Working mode* means the time period when the solvent cleaning machine is actively cleaning parts.

*Working-mode cover* means any cover or solvent cleaning machine design that allows the cover to shield the cleaning machine openings from outside air disturbances while parts are being cleaned in the cleaning machine. A cover that is used during the working mode is opened only during parts entry and removal. A cover that meets this definition can also be used as an idling-mode cover if that definition is also met.

[59 FR 61805, Dec. 2, 1994; 60 FR 29485, June 5, 1995, as amended at 63 FR 24751, May 5, 1998; 64 FR 67798, Dec. 3, 1999]

#### § 63.462 Batch cold cleaning machine standards.

(a) Each owner or operator of an immersion batch cold solvent cleaning machine shall comply with the requirements specified in paragraph (a)(1) or (a)(2) of this section.

(1) Employ a tightly fitting cover that shall be closed at all times except during parts entry and removal, and a water layer at a minimum thickness of 2.5 centimeters (1.0 inch) on the surface of the solvent within the cleaning machine, or

(2) Employ a tightly fitting cover that shall be closed at all times except during parts entry and removal and a freeboard ratio of 0.75 or greater.

(b) Each owner or operator of a remote-reservoir batch cold solvent cleaning machine shall employ a tightly fitting cover over the solvent sump that shall be closed at all times except during the cleaning of parts.

(c) Each owner or operator of a batch cold solvent cleaning machine complying with paragraph (a)(2) or (b) of this section shall comply with the work and operational practice requirements specified in paragraphs (c)(1) through (c)(9) of this section as applicable.

(1) All waste solvent shall be collected and stored in closed containers. The closed container may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container.

(2) If a flexible hose or flushing device is used, flushing shall be performed only within the freeboard area of the solvent cleaning machine.