AIR POLLUTION CONTROL DISTRICT
COUNTY OF SAN DIEGO

Air Pollution Control Board
Greg Cox District 1
Dianne Jacob District 2
Pam Slater District 3
Ron Roberts District 4
Bill Horn District 5

Air Pollution Control District
R. J. Sommerville Director

ADVISORY

FEDERAL REPORTING REQUIREMENTS FOR HALOGENATED SOLVENT CLEANING MACHINES

This Advisory is to inform you about federal reporting requirements for facilities using halogenated solvents for cleaning and degreasing operations.

On December 4, 1994, the United States Environmental Protection Agency (EPA) promulgated National Emission Standards for Hazardous Air Pollutants (NESHAP) for Halogenated Solvent Cleaning and Degreasing. They apply to new and existing batch vapor, batch cold, vapor in-line, and cold in-line solvent cleaning machines using halogenated solvents identified as Hazardous Air Pollutants (HAPs). For your information, a five-page summary of the federal regulation, which has also a list of affected solvents, a glossary of terms used in this package, and an informational pamphlet from EPA, are attached. In addition, the full text of the NESHAP will be included in an Appendix to District Rules and Regulations.

The San Diego Air Pollution Control District will implement this NESHAP in the future without adopting it as a local regulation, according to a new procedure approved by the District Board on July 25, 1995. In the near future, the District will issue a workshop notice and will hold a public workshop to discuss all the NESHAP requirements.

Please note that halogenated solvent cleaning operations remain subject to local District Rule 67.6 - Solvent Cleaning Operations and to the conditions listed in their existing permit to operate.

As the first implementation step, the federal NESHAP regulation requires the owner or operator of a halogenated solvent cleaning machine to submit to EPA an initial notification report for new machines by January 31, 1995, and for existing machines by August 29, 1995. However, EPA has extended the reporting deadline for existing machines until September 29, 1995. You will need to fulfill the EPA initial notification report requirements and, if applicable, any compliance reporting requirements.

The District has volunteered to coordinate the distribution and return of the notification report forms on behalf of EPA. For your convenience, you may use the enclosed forms to report the information required by EPA. Notification forms must be submitted for all affected solvent cleaning machines with a capacity of 2 gallons or greater.

We encourage you to fill out the forms. Pursuant to federal regulations, failure to submit the required information could result in an enforcement action by EPA.

If you are in the process of replacing your solvent and/or equipment, and were using a halogenated solvent as of August 29, 1995, you are still required to submit the Initial Notification Report Forms. Once the changeover is complete, you will need to submit a follow-up letter to EPA notifying them that the change has occurred. If you intend to substitute solvents, substitute or modify cleaning devices, you must notify the District and submit an application for an Authority to Construct. If you remove the equipment which would be subject to the NESHAP requirements, or if you switch to cleaning materials which contain less than 10% of volatile organic compounds by weight (in accordance with District Rule 11 (d)(37)), please notify the District so your permit to operate can be retired.

If you are <u>not</u> presently subject to, or <u>will not</u> be subject to this NESHAP, please complete the APCD Update Form, also provided in this package, to update the District files.

Please fill out and return the complete applicable forms as soon as possible to:

San Diego Air Pollution Control District
9150 Chesapeake Drive
San Diego, CA 92123
Attn.: Debbie Ryan
Fax: (619) 694-2730

If you have any questions about this new federal regulation or the reporting requirements, please call Debbie Ryan at (619) 694-3838. If you would like to discuss the regulations directly with EPA Region IX, please call Mr. Michael Stenburg at (415) 744-1182.

AD:jo
9/26/95
Modified: 8/19/97

Summary of the NESHAP Regulation for Solvent Cleaning Operations Using Hazardous Air Pollutants (HAPs)

WILL THIS NEW RULE APPLY TO MY OPERATION?

The NESHAP regulates the emissions of the following halogenated HAPs:

- methylene chloride (CAS No. 75-09-2)
- carbon tetrachloride (CAS No. 56-23-5)
- trichloroethylene (CAS No. 79-01-6)
- perchloroethylene (CAS No. 127-18-4)
- 1,1,1 -trichloroethane (CAS No. 71-55-6)
- chloroform (CAS No. 67-66-3)
- any combination of these halogenated HAP solvents, in a total concentration that is greater than 5 percent by weight.

If you use any of these solvents in a solvent cleaning machine, you must now comply with the new federal law, and complete the federal notification forms. If you are not using one of the solvents listed above, you do not have to complete the federal notification forms, but please complete the APCD Update Form in order to keep the District files current.

ARE THERE ANY EXEMPTIONS?

The NESHAP exempts solvent cleaning machines with a capacity less than 2 gallons from the new standards. The NESHAP exemption criterion is different from those in APCD Rule 67.6 (Solvent Cleaning Operations).

WHAT ARE THE NEW REQUIREMENTS?

The requirements in the NESHAP are different from APCD's Rule 67.6 requirements for solvent degreasers. The District intends to include the NESHAP in an Appendix to the District Rules and Regulations, and implement the federal requirements locally. Effective immediately, there are a number of things that you must do to stay in compliance with the federal law:

- Submit the Initial Notification Report Forms (by September 29, 1995 or as soon as new equipment which uses halogenated solvents specified above is installed) (See Table III)
- Submit an Initial Statement of Compliance, if due (See Table V)

- Comply with one of the following standards, when applicable:
  - Equipment control standards with work practices;
  - Idling emission limits with work practices; or,
  - Alternative standard (overall solvent emission limits).

These standards are described in the attached brochure and in detail in the federal regulation.

HOW ARE NEW OR EXISTING OPERATIONS CLASSIFIED?

Table I

Classification of New and Existing Machines

If construction, reconstruction or initial start-up date occurred:	The batch cold, vapor, or in-line solvent cleaning machine is classified as:
After November 29, 1993	New
On or before November 29, 1993	Existing

WHEN DO I NEED TO COMPLY WITH THE CONTROL OPTIONS?

The compliance date for your facility depends on whether your equipment is classified as new or existing.

Table II

Compliance Dates To Meet NESHAP Requirements

For batch cold, vapor, and in-line solvent cleaning machines that are classified as:	Compliance date:
New	At start-up or December 2, 1994, whichever is later
Existing	December 2, 1997

WHAT ARE NOTIFICATION FORMS AND TO WHOM DO I SUBMIT THESE FORMS?

All affected sources must submit an initial notification and a compliance report to the EPA. To assist your facility in completing this notification report, the following documents are enclosed:

- the initial notification forms
- glossary of definitions
- an EPA fact sheet on the NESHAP
- an APCD Update Form

You have to complete the forms for all solvent cleaning machines which have a capacity of 2 gallons or greater, if they use halogenated HAP solvents, even if they are not currently permitted by the District.

Please forward all completed and signed initial notification report forms to the District. The District will verify the information before forwarding it to EPA on your behalf. Please note that the deadline to submit the Initial Notification Form was August 29, 1995. The EPA has unofficially extended that deadline by 30 days.

WHICH FORMS DO I NEED TO SUBMIT?

Initial Notification Report Forms

This form is required for all new and existing solvent cleaning machines which have a capacity of 2 gallons or greater.

Table III

Initial Notification Report for Batch Vapor and In-Line Machines

	New	Existing
Solvent cleaning machines	Solvent cleaning machines installed or reconstructed after November 29, 1993	Solvent cleaning machines installed on or before November 29, 1993
Batch vapor and in-line cleaning machines	Part I - Form F-1* Part II - Form F-3 *	Part I - Form F-1* Part II - Form F-2 *
Due date	August 29, 1995 or as soon as it is installed	August 29, 1995 (Extended to September 29, 1995)

* One form per machine

Table IV

Initial Notification Report for Batch Cold Cleaning Machines

	New	Existing
Solvent cleaning machines	Solvent cleaning machines installed or reconstructed after November 29, 1993	Solvent cleaning machines installed on or before November 29, 1993
Batch cold cleaning machine	Part I - Form F-1* Part II - Form F-4 *	Part I - Form F-1* Part II - Form F-4 *
Due date	August 29, 1995 or as soon as it is installed	August 29, 1995 (Extended to September 29, 1995)

* One form per machine

Initial Compliance Report Forms

The initial compliance report form must indicate how the machines will comply or how they are in compliance with the NESHAP requirements.

Table V

Initial Compliance Report Forms

Compliance Options	Due Date New	Due Date Existing
Batch vapor and in-line machines: Equipment standard Alternative standard	150 days after start-up or May 5, 1995 whichever is later	May 1, 1998
Cold batch cleaners	150 days after start-up or May 5, 1995 whichever is later	May 1, 1998

If you would like a copy of the Initial Compliance Report Forms, please notify the District, and we will mail you a copy.

HOW CAN I OBTAIN A COPY OF THE ACTUAL REGULATION?

You may obtain a copy of the federal regulation, Subpart T - NESHAP for Halogenated Solvent Cleaning and the EPA Guidance Document for the NESHAP Solvent Cleaning Regulation by:

- accessing EPA's Electronic Bulletin Board System (BBS) (919) 541-5742, or
- by calling the local regional EPA office (415) 744-1182, or
- by calling the District (619) 694-8851.

I NEED HELP...

If you have any questions on the notification forms or the rule, please contact one of the following persons:

San Diego Air Pollution Control District
- Debbie Ryan (619) 694-3838

EPA Region IX (San Francisco)
- Michael Stenburg (415) 744-1182

EPA Headquarters
- Paul A. Almodovar (919) 541-0283

AD/jo
9/26/95
Modified 8/19/97

APCD UPDATE FORM

SOLVENT CLEANING AND DEGREASING OPERATIONS

Please complete this form and either mail it back to the District or fax it to the District "Attn.: Rule Development Section" at (619) 694-2730.

If you do not use any of the Hazardous Air Pollutant (HAP) solvents identified in the NESHAP or if the solvents are used in a less than 2 gallon capacity cleaning device, the federal NESHAP does not apply to your solvent cleaning operation.

The Federal NESHAP for solvent cleaning operations does not apply to my equipment because:

_____ I do not use any of the HAP solvents identified in the NESHAP. Instead, I use:

_____ an aqueous solvent *

_____ a semi-aqueous solvent *

_____ CFC-113

_____ HCFC - 141 (b)

_____ Perfluorocarbons *

_____ other (please specify) *

_____

_____

_____ Please review my new solvent and, if applicable, cancel my APCD Permits to Operate for the following permit numbers: _____

* Please send a copy of MSDS with this form

_____ The solvent cleaning devices that I use are each less than 2 gallons in capacity .

_____ I no longer conduct any degreasing or solvent cleaning operations at this facility as of _____ (please specify approximate date)

_____ Please cancel my APCD Permit to Operate for the following permit numbers:

_____

Facility's name: _____

Facility Address: _____

City: _____ Zip: _____

Contact Person: _____

Phone # : (____) (_____) Fax # : (____) (_____)

This information is correct to the best of my knowledge.

_____ _____

Signature Date

F - 1

HALOGENATED SOLVENT CLEANING AND DEGREASING NESHAP

Initial Notification Report Form for Solvent Cleaning Machines

PART ONE- General Information
(Make copies for additional machines as necessary)

Person Preparing Report:

_____ Date: _____
Last Name First Name Middle Initial

Company Name: _____

Mailing Address: _____
Street

_____
City State Zip

Equipment Address: _____
Street

_____
City State Zip

Cleaning Machine Summary

Permit Number Serial Number

_____ _____

Description: _____

HALOGENATED SOLVENT CLEANING AND DEGREASING NESHAP

Initial Notification Report for Existing* Batch Vapor and In-Line Machines

PART TWO- Information Required per Machine
(Make copies for additional machines as necessary)

Cleaner/degreaser Permit Number: _____

1. Type of machine to be constructed/reconstructed (check one):

   _____ Batch vapor _____ Cold In-line _____ Vapor In-line

2. Type of solvent: _____ Density:_____(pounds/gal)

3. Solvent/air interface area _____ square meters (or square inches)

4. Intended controls to comply with NESHAP (mark all that is applicable):

   _____ Freeboard ratio of 1.0
   _____ Freeboard refrigeration device
   _____ Super-heated vapor
   _____ Working-mode cover
   _____ Carbon adsorber
   _____ Reduced room draft
   _____ Dwell
   _____ Other _____ List Control

5. Date of installation (attach documentation): _____

6. Anticipated compliance approach:

   _____ Basic equipment standard
   _____ Alternative standard
   _____ Idling emission standard
   _____ Replace solvent and/or discard equipment.

7. Annual estimate of halogenated HAP solvent consumption

   _____ kilograms/year (or pounds/year) (or gallons/year)

*** Existing cleaning machines are devices installed on or before November 29, 1993.**

HALOGENATED SOLVENT CLEANING AND DEGREASING NESHAP

Initial Notification Report for New* Machines (Application for Approval of Construction or Reconstruction)

PART TWO- Information Required per Machine
(Make copies for additional machines as necessary)

Cleaner/degreaser Permit Number: _____

1. Type of machine to be constructed/reconstructed (check one):

   _____ Batch vapor _____ Cold In-line _____ Vapor In-line

2. Type of solvent: _____ Density:_____(pounds/gal)

3. Solvent/air interface area _____ square meters (or square inches)

4. Intended controls to comply with NESHAP (mark all that is applicable):

   _____ Freeboard ratio of 1.0
   _____ Carbon adsorber
   _____ Freeboard refrigeration device
   _____ Reduced room draft
   _____ Super-heated vapor
   _____ Dwell
   _____ Working-mode cover
   _____ Other _____ List Control

4. Proposed construction or reconstruction commencement date: _____

5. Expected construction or reconstruction completion date: _____

6. Anticipated date of initial start-up: _____

7. Anticipated compliance approach:

   _____ Basic equipment standard
   _____ Idling emission standard
   _____ Alternative standard
   _____ Replace solvent and/or discard equipment.

8. Annual estimate of halogenated HAP solvent consumption

   _____ kilograms/year (or pounds/year) (or gallons/year)

*** New cleaning machines are cleaners installed after November 29, 1993.**

HALOGENATED SOLVENT CLEANING AND DEGREASING NESHAP

Initial Notification Report for Batch Cold Cleaners

PART TWO- Information Required per Machine
(Make copies for additional machines as necessary)

Cleaner/degreaser Permit Number: _____

1. Cleaning Machine Type (check one):

   _____ Immersion (dip tank) _____ Remote-Reservoir

2. Type of solvent: _____ Density:_____(pounds/gal)

3. Cleaner Installation Date:_____

4. Anticipated Equipment Control Combination Compliance Approach (check one)

   _____ Cover and Water Layer (only applicable to immersion tanks)

   _____ Cover, Freeboard Ratio of 0.75 or greater, and Work Practices (only applicable to immersion tanks)

   _____ Cover and Work Practices (only applicable to remote reservoirs)

5. Annual Solvent Consumption Estimate:

   _____kilograms/year (or pounds/year)(or gallons/year)

HALOGENATED SOLVENT CLEANING AND DEGREASING NESHAP

Initial Compliance Report Form for Solvent Cleaning Machines

PART ONE- General Information
(Make copies for additional machines as necessary)

Person Preparing Report:

_____ Date: _____
Last Name First Name Middle Initial

Company Name: _____

Mailing Address: _____
Street

_____
City State Zip

Equipment Address: _____
Street

_____
City State Zip

Cleaning Machine Summary

Permit Number Serial Number

_____ _____

Description: _____

HALOGENATED SOLVENT CLEANING AND DEGREASING NESHAP

Initial Compliance Report for Batch Vapor and In-Line Machines Complying with the Alternative Standard

PART TWO- Information Required per Machine
(Make copies for additional machines as necessary)

Cleaner/degreaser Permit Number: _____

1. Cleaning Machine Type (check one):

   _____ Immersion (dip tank) _____ Remote-Reservoir

2. a) Solvent/air interface area:_____ square meters (or square inches), or

   b) Cleaning capacity:_____ cubic meters (or cubic feet), if your cleaning machine does not have a solvent/air interface area (calculation method and results for this determination attached).

3. The first 3-month average emissions is _____ kilograms per month (or pounds per month) (calculation sheets are attached)

This batch vapor or in-line cleaner complies with the rule.

_____ _____
Signature Date

HALOGENATED SOLVENT CLEANING AND DEGREASING NESHAP

Initial Compliance Report for Batch Vapor and In-Line Machines Complying with the Equipment Standard

PART TWO- Information Required per Machine
(Make copies for additional machines as necessary)

Cleaner/degreaser Permit Number: _____

1. Type of machine (check one):

   _____ Batch vapor _____ Cold In-line _____ Vapor In-line

2. Solvent/air interface area _____ square meters (or square inches)

3. Equipment Standard Compliance Method chosen

   _____ Control combination

   _____ Idling emission limit (idling emission limit test report attached)

4. Intended controls to comply with NESHAP (mark all that is applicable):

   _____ Freeboard ratio of 1.0
   _____ Freeboard refrigeration device
   _____ Super-heated vapor
   _____ Working-mode cover
   _____ Carbon adsorber
   _____ Reduced room draft
   _____ Dwell
   _____ Other _____ List Control

OVER

5. Monitored Parameters and Values:

Control (check all that apply)	Measured Parameter	Compliance Parameter Value
_____ Freeboard Refrigeration Device	• Temperature at the center of the air blanket while idling	• </= 30 percent of the solvent boiling point
_____ Cover (Working mode and idling-mode)	• Use, function and integrity	• Opens and closes properly • Closed except during parts entry and removal • Closes completely • Free of cracks, holes, or other defects
_____ Dwell	• Period of time parts are held in the solvent cleaning freeboard area above the vapor zone after being cleaned	• Determined for each of your parts or parts baskets you clean, or • Determined using the most complex part type or parts baskets you clean
_____ Superheated Vapor System	• Temperature at the center of the super- heated vapor zone while idling	• At least 10°F above the solvent's boiling point
_____ Reduced Room Draft	• Windspeed- Room parameters (e.g., enclosure*) 1. _____ 2. _____ 3. _____ 4. _____	• </= 15.2 meters per minute (50 feet per minute) 1. _____ 2. _____ 3. _____ 4. _____
* If a full or partial enclosure is used to achieve the reduced room draft for your cleaning machine, attach the initial monitoring test.		
_____ Carbon Adsorber	• Working-mode exhaust halogenated solvent concentration (weekly measurement records of the exhaust halogenated solvent concentration attached)	• </= 100 ppm
_____ Other		

This batch vapor or in-line cleaner complies with the rule.

_____ _____

Signature Date

HALOGENATED SOLVENT CLEANING AND DEGREASING NESHAP

Initial Compliance Report Form for Batch Cold Cleaners

PART TWO- Information Required per Machine
(Make copies for additional machines as necessary)

Cleaner/degreaser Permit Number: _____

1. Cleaning Machine Type (check one):

   _____ Immersion (dip tank) _____ Remote-Reservoir

Method of Compliance (check one):

_____ Cover and Water Layer (only applicable to immersion tanks)

_____ Cover, Freeboard Ratio of 0.75 or greater, and Work Practices (only applicable to immersion tanks)

_____ Cover and Work Practices (only applicable to remote reservoirs)

This batch cold cleaner complies with the rule.

_____ _____
Signature Date

GLOSSARY

HALOGENATED SOLVENT CLEANING MACHNES

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 machine.

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.

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, non-boiling solvent to clean the parts are classified as cold cleaning machines.

Construction means the on-site fabrication, erection, or installation of an affected source.

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

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 roll-top covers.

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.

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 regulation 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. For example, if the height of the freeboard is 2 meters and the smaller interior dimension is 1.8 meters, the freeboard ratio would be 2 meters/1.8 meters or 1.1.

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.

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 and parts baskets 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.

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 regulation.

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.

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.

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

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 controlled vapor zone.

Reconstruction, as defined in 40 CFR Part 63, Subpart A, means the replacement of components of an affected or a previously unaffected stationary source to such an extent that:

(1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new source; and

(2) It is technologically and economically feasible for the reconstructed source to meet the relevant standard(s) established by the Administrator (or a State) pursuant to Section 112 of

the Act. Upon reconstruction, an affected source, or a stationary source that becomes an affected source, is subject to relevant standards for new sources, including compliance dates, irrespective of any change in emissions of hazardous air pollutants from that source.

Reduced room draft means decreasing the flow or movement of air across the top of the freeboard area of the solvent cleaning machine to less than or equal to 15.2 meters per minute (50 feet per minute). Methods of achieving a reduced room draft include, but are not limited to, redirecting fans and/or air vents to not blow across the cleaning machine, moving the cleaning machine to a corner 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.

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, for the purposes of this regulations, any device or piece of equipment that uses halogenated HAP solvent liquid or vapor to remove soils from the surface 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 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 mid-line height of the primary condenser coils.

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

Superheated vapor system means a system that heats the solvent vapor, either passively or actively, to a temperature of at least 10 degrees Fahrenheit above the solvent's boiling point, at the center of the superheated vapor zone. 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 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.

AD/jo
9/26/95