

## *State of New Jersey*

Department of Environmental Protection  
Air Quality Permitting

### **General Permit For Degreasing operations using only Methylene Chloride or 1,1,1 Trichloroethane Solvents**

This General permit allows for the construction, installation, reconstruction, modification and operation of one or more or any combination of solvent degreasers using only Methylene Chloride or 1,1,1-Trichloroethane of the following types:

- Batch vapor cleaning machine(s); or
- In-line vapor cleaning machine(s);

The potential-to-emit (PTE) for the equipment covered under this General Permit shall be established by the permittee after reviewing the options in section VI and recording the selected option on the Registration Form.

## I. DEFINITIONS

The terms used in this General Permit shall have the meanings given to them in N.J.A.C. 7:27-8 and/or N.J.A.C. 7:27-16, and/or as listed below:

- **“Batch vapor cleaning machine”** means a vapor cleaning machine in which the individual parts or a set of parts that are being cleaned move through the entire cleaning cycle before new parts are introduced into the 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.
- **“Dwell time”** means the period of time that begins when a parts basket is placed above the vapor zone of the vapor cleaning machine and which ends when solvent dripping ceases.
- **“Emission point”** means the location where air contaminants are physically released into the atmosphere. An emission point can be, but is not limited to, a stack, a wall vent, the general building ventilation exhaust, a door, or a window.
- **“Fill line,”** means the maximum level of solvent prior to placing parts in the machine for cleaning.
- **“Freeboard height”** means (1) for a batch machine, the distance from the solvent/air interface to the top of the solvent cleaning machine as measured during idling mode, or (2) for an in-line machine, 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 a ratio of the machine’s freeboard height to the width of the tank (that is to the tank’s narrower dimension at the tank lip).
- **“HAP”** means an air contaminant listed in section B of the General Procedure for General Permits.
- **“High level mark”** means the maximum level of solvent at any time.
- **“In-line vapor cleaning machine”** means a vapor cleaning machine that uses automated parts handling system, typically a conveyor, to automatically provide a supply of parts to be cleaned and which is fully enclosed except for the conveyor inlet and exit portals.
- **“Local exhaust ventilation”** means a system for capturing air contaminants within 36 inches (91.4 centimeter) of the points at which they emerge from a source operation.
- **“Positive pressure ventilation”** means any ventilation system in which pressurized air from a compressed air manifold, fan, or similar device is blown into a work area.
- **“Property line distance”** means the distance from an emission point(s) in any direction to the nearest property line.
- **“Psig”** means pounds per square inch gauge.
- **“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 N.J.A.C. 7:27-16.6. 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. The flow or movement of air across the top of the freeboard area of the machine or within the machine enclosure is  $\leq 15.2$  meters per minute (50 feet per minute);

and establish and maintain the operating conditions under which the wind speed demonstrated to be  $\leq$  15.2 meters per minute (50 feet per minute).

- **“Sufficient dwell time”** means holding the parts within the freeboard area (but above the vapor zone) after cleaning to allow liquid solvent to drain from the parts or parts baskets back into the machine (rather than into the work area). Sufficient dwell time shall be at least 35% of the dwell time determined for each specific part or parts basket
- **“Vapor cleaning machine”** means a solvent cleaning machine that uses either solvent vapor generated by boiling liquid solvent or heated liquid solvent as part of the cleaning or drying cycle.
- **“VOC”** means air contaminants listed in section B of the General Procedure for General Permits (as defined in N.J.A.C 7:27-16 and 8).
- **“Working-mode cover”** means any cover or cleaning machine design that shields the machine opening from outside air disturbances while parts are being cleaned.

## II. AUTHORITY

This General Permit is issued under the authority N.J.S.A. 26:2C-9.2. This General Permit shall allow for inspection and evaluation to assure conformance with all provision of N.J.A.C. 7:27 et seq. An opportunity for public comment on this General Permit was provided on July 6, 2004.

## III. APPLICABILITY

This General Permit allows for the construction, installation, reconstruction, modification and operation of one or more or any combination of solvent degreasers using only Methylene Chloride or 1,1,1-Trichloroethane of the following types:

- Batch vapor cleaning machine(s); or
- In-line vapor cleaning machine(s);

## IV. EXCLUSIONS

1. This General Permit cannot be used for solvent degreasers that use solvents other than Methylene Chloride or 1,1,1-Trichloroethane.
2. This General Permit cannot be used for solvent degreaser types that are not listed in section III applicability above.
3. This General Permit cannot be used for solvent degreasers that do not meet the equipment/control device specification and requirements listed in Section V below.
4. This General Permit cannot be used for solvent degreasers that use carbon adsorption as an air pollution control.
5. This General Permit cannot be used for solvent degreasers with a lip exhaust.
6. This General Permit cannot be used for solvent degreasers with an air agitated solvent bath.
7. This General Permit cannot be used for solvent degreasers that clean sponges, fabric, leather, paper products and other absorbent materials.
8. This General Permit cannot be used for solvent degreasers that are not free from the influence of any local exhaust ventilation system.

9. This General Permit cannot be used for solvent degreasers with the influence of any positive pressure source located within 20 feet (6.1 meters) of the tank rim.
10. This General Permit cannot be used for continuous web cleaning machine

**V. EQUIPMENT/CONTROL SPECIFICATIONS**

The following specification and requirements are applicable in accordance with N.J.A.C. 7:27-16.6 “Control and Prohibition of Air Pollution by VOC” and in accordance with federal MACT subpart T regulations in 40 CFR 63.460. All cleaning machines that are applicable to Subchapter 16.6 are subject to the following specifications and requirements whether they obtain a conventional permit or use this General Permit (GP011).

**A. Requirements for batch vapor cleaning machines with solvent/air interface area of 13 square feet or less.**

**Table 1.  
CONTROL OPTIONS FOR BATCH MACHINES <=13 SQ FT.**

OPTION	Work mode cover	0.75 ratio	Safety switch	Control switch	Primary condenser	Shut-off switch	Auto handling system	Super-heat vapor	Freeboard refrigeration	Sufficient dwell	Reduced room draft	1.0 ratio
footnote	i	ii	iii	iv	v	vi	vii	viii	ix	x	xi	xii
(a)	✓		✓	✓	✓	✓	✓	✓				✓
(b)	✓	✓	✓	✓	✓	✓	✓	✓	✓			
(c)	✓	✓	✓	✓	✓	✓	✓		✓			
(d)	✓		✓	✓	✓	✓	✓	✓			✓	✓
(e)	✓	✓	✓	✓	✓	✓	✓		✓		✓	
(f)	✓		✓	✓	✓	✓	✓		✓			✓
(g)	✓	✓	✓	✓	✓	✓	✓		✓	✓		
(h)	✓		✓	✓	✓	✓	✓			✓	✓	✓

**You must refer to footnotes on page 5 of this General Permit for detailed specifications on these control requirements.**

**B. Requirements for batch vapor cleaning machines with solvent/air interface area greater than 13 square feet.**

**Table 2.  
CONTROL OPTIONS FOR BATCH MACHINES > 13 SQ FT.**

OPTION	Work mode cover	0.75 ratio	Safety switch	Control switch	Primary condenser	Shut-off switch	Auto handling system	Super-heat vapor	Freeboard refrigeration	Sufficient dwell	Reduced room draft	1.0 ratio
footnote	i	ii	iii	iv	v	vi	vii	viii	ix	x	xi	xii
(a)	✓		✓	✓	✓	✓	✓	✓	✓			✓
(b)	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	
(c)	✓	✓	✓	✓	✓	✓	✓	✓	✓			
(d)	✓		✓	✓	✓	✓	✓	✓			✓	✓
(e)	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	
(f)	✓		✓	✓	✓	✓	✓		✓		✓	✓

You must refer to footnotes on page 5 of this General Permit for detailed specifications on these control requirements.

**C. Requirements for an in-line vapor cleaning machines.**

**Table 3.  
CONTROL REQUIREMENTS FOR ALL IN-LINE VAPOR MACHINES**

	Work mode cover	0.75 ratio	Safety switch	Control switch	Primary condenser	Shut-off switch	Auto handling system	Super-heat vapor	Freeboard Refrigeration
footnote	i	ii	iii	iv	v	vi	vii	viii	ix
Required:	✓	✓	✓	✓	✓	✓	✓	✓	✓

You must refer to footnotes on page 5 of this General Permit for detailed specifications on these control requirements.

**FOOTNOTES:**

- I. Work mode cover means the machine must be equipped with a tightly fitting working-mode cover. The cover shall: completely covers the machine's opening; be free of cracks, holes and other defects; and be kept closed at all times except when parts (or solvent) are being placed into or being removed from the machine; and be readily opened and closed without disturbing the vapor zone; and that shall be opened and closed by a powered mechanism if the machine opening is >10 sq. ft.
- II. 0.75 ratio means the machine shall have a freeboard ratio of 0.75 or greater.

- III. Safety switch means the machine must be equipped with a safety switch (thermostat and condenser flow switch) which shuts off the sump heat if the coolant is not circulating.
- IV. Control switch means the machine shall have a control switch, which shuts off the spray pump if vapor is not present in the vapor section of the machine.
- V. Primary condenser means the machine shall have a primary condenser.
- VI. Shut-off switch means the machine shall have a device that shuts off the sump heat if the sump liquid solvent level drops to the sump heater coil, or if the vapor level in the machine rises above the height of the primary condenser.
- VII. Auto handling system means the machine shall have an automated parts handling system which moves the parts or baskets at a speed of 11 feet (3.4 meters) per minute or less when the parts are entering or exiting the vapor zone. If the parts basket or parts being cleaner occupy more than 50% of the solvent/air interface area, the speed of the parts basket or parts shall not exceed 3 feet (1 meter) per minute.
- VIII. Super-heat vapor means the machine shall have a superheated vapor system to heat the parts and evaporate liquid solvent on the parts before they are withdrawn from the cleaning machine and freeboard refrigeration device. It is a system that heats the solvent vapor, either passively or actively, to a temperature above the solvent's boiling point. Parts are then held in the machine before exiting the machine to evaporate the liquid solvent on them. Hot vapor recycle is an example of a superheated vapor system.
- IX. Freeboard refrigeration means a device operated to ensure that the chilled air blanket temperature is not greater than 30% of the solvent's boiling point.
- X. Sufficient dwell time means holding the parts within the freeboard area (but above the vapor zone) after cleaning to allow liquid solvent to drain from the parts or parts baskets back into the machine (rather than into the work area). Sufficient dwell time shall be at least 35% of the dwell time determined for each specific part or parts basket.
- XI. 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 N.J.A.C. 7:27-16.6. 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. The flow or movement of air across the top of the freeboard area of the machine or within the machine enclosure is  $\leq 15.2$  meters per minute (50 feet per minute); and establish and maintain the operating conditions under which the wind speed demonstrated to be  $\leq 15.2$  meters per minute (50 feet per minute).

XII. 1.0 ratio means the machine shall have a freeboard ratio of 1.0 or greater.

**VI. POTENTIAL TO EMIT**

The following Potential to Emit table provides the Permittee with the following permit limits (based on the option selected):

- The equipment's potential to emit air contaminants shall be limited. Potential to emit in tons per year (TPY) assumes that all solvent used is eventually emitted, and
- The equipment's solvent usage shall be limited. Solvent usage (in gallons) for all degreasers covered in this General Permit shall not exceed the limit in the option chosen by the permittee from table A or table B, and
- The equipment's location shall be regulated. There shall be a minimum property line distance from the nearest emission point. An emission point is the location where air emissions are physically released into the atmosphere. An emission point can be a stack, a wall vent, the general building ventilation exhaust, a door, or a window, and
- In selecting an option (D-A1, D-A2 or D-B1 through D-B6), the Permittee is limiting its 12 month solvent usage to the amount shown in the row and is agreeing that the emission point is at least as far as the distance shown in that same row.

<b><u>Table A</u></b>			
<b><u>Option for : Methylene Chloride (CAS No. 75-09-2)</u></b>			
<b>General Permit Option Number</b>	<b>Methylene Chloride Usage Limit (gallons) (Per 12 month)</b>	<b>Methylene Chloride Potential to Emit (TPY)</b>	<b>Minimum Property Line Distance (ft)</b>
<b>D-A1</b>	<b>90</b>	<b>0.5</b>	<b>75</b>
<b>D-A2</b>	<b>180</b>	<b>1.0</b>	<b>150</b>

<b><u>Table B</u></b>			
<b><u>Option for : 1,1,1- Trichloroethane (CAS No. 71-55-6)</u></b>			
<b>General Permit Option Number</b>	<b>1,1,1-Trichloroethane Usage Limit (gallons) (Per 12 month)</b>	<b>1,1,1-Trichloroethane Potential to Emit (TPY)</b>	<b>Minimum Property Line Distance (ft)</b>
<b>D-B1</b>	<b>90</b>	<b>0.5</b>	<b>50</b>
<b>D-B2</b>	<b>180</b>	<b>1.0</b>	<b>50</b>
<b>D-B3</b>	<b>270</b>	<b>1.5</b>	<b>50</b>
<b>D-B4</b>	<b>360</b>	<b>2.0</b>	<b>50</b>
<b>D-B5</b>	<b>450</b>	<b>2.5</b>	<b>50</b>
<b>D-B6</b>	<b>540</b>	<b>3.0</b>	<b>50</b>

**VII. SUBMITTAL/CONTACT INFORMATION**

Unless otherwise instructed, any submittal or correspondence should be directed to the following addresses depending on the facility's physical location.

**NJDEP – Air Compliance and Enforcement**

**Metropolitan Office**

2 Babcock Place West Orange, NJ 07052-5504  
Enforcement Jurisdiction - Bergen, Essex, Hudson

**Northern Office**

1259 Route 46 East Bldg. #2, Parsippany NJ 07054-4191  
Enforcement Jurisdiction -Hunterdon, Morris, Passaic, Somerset, Sussex, Warren

**Central Office**

PO Box 407, Trenton, NJ 08625-0407  
Enforcement Jurisdiction - Mercer, Middlesex, Monmouth, Ocean, Union

**Southern Office**

One Port Center, 2 Riverside Drive, Suite 201, Camden, NJ 08103  
Enforcement Jurisdiction - Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Salem

**USEPA Region 2**

Air Division Administrator  
290 Broadway  
New York, New York 10007-1866

**VIII. COMPLIANCE PLAN**

The compliance plan reflects the equipment/control device specifications and requirements in section V. Each Solvent Cleaning operation covered by this General Permit is subject to the applicable requirements listed on the following pages



**The following Requirements are for Batch and In-Line Vapor Cleaning Machines**

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	<p>Maximum solvent purchased for any 12 month period as follows:</p> <p>Option D-A1 &lt;= 90 gallons Methylene Chloride, Option D-A2 &lt;= 180 gallons Methylene Chloride,</p> <p>Option D-B1 &lt;= 90 gallons 1,1,1-Trichloroethane, Option D-B2 &lt;= 180 gallons 1,1,1-Trichloroethane, Option D-B3 &lt;= 270 gallons 1,1,1-Trichloroethane, Option D-B4 &lt;= 360 gallons 1,1,1-Trichloroethane, Option D-B5 &lt;= 450 gallons 1,1,1-Trichloroethane, or Option D-B6 &lt;= 540 gallons 1,1,1-Trichloroethane.</p> <p>[N.J.A.C. 7:27-8.13]</p>	<p>Each month during operation the permittee shall monitor the amount of solvent purchased for all cleaning machines covered by this general permit and determine the total solvent purchased in the past 12 months.</p> <p>[N.J.A.C. 7:27-8.13]</p>	<p>Each month during operation the permittee will:</p> <ol style="list-style-type: none"> <li>1. Record the amount of solvent purchased for all registered machines.</li> <li>2. Sum and record all monthly solvent purchased to determine the monthly total solvent purchased.</li> <li>3. Sum and Record the monthly total solvent purchased with the previous eleven- (11) month totals to determine the consecutive twelve- (12) month total.</li> </ol> <p>Records shall be maintained onsite in either a logbook or readily Accessible computer memory for a minimum of five (5) years</p> <p>[N.J.A.C. 7:27-8.13]</p>	<p>Permittee shall report any non-compliance with any Applicable Requirement, Monitoring Requirement, or Recordkeeping Requirement within three working days to the Regional Enforcement Office.</p> <p>[N.J.A.C. 7:27-8.13]</p>

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	<p>The minimum property line distance for each emission point covered by this general permit shall be limited as follows:</p> <p>Option D-A1 <math>\geq</math> 75 feet, Option D-A2 <math>\geq</math> 150 feet,</p> <p>Option D-B1 through D-B6 <math>\geq</math> 50 feet, [N.J.A.C. 7:27-8.13]</p>	<p>Once before starting operation or after any change to the location of the emission point, the permittee shall measure the property line distance from the nearest emission point for the degreasing equipment. [N.J.A.C. 7:27-8.13]</p>	<p>Once before starting operation or after any modification to the emission point, the permittee shall record the nearest property line distance. Records shall be maintained onsite for the life of the permit. [N.J.A.C. 7:27-8.13]</p>	None
3	<p>Each vapor cleaning machine shall be fully enclosed, with a tightly fitting working-mode cover that shall be kept closed at all times except when parts are placed into or being removed from the machine or when solvent is being added or removed. The cover shall:</p> <ol style="list-style-type: none"> <li>1. Completely cover the machine's opening;</li> <li>2. Be free of cracks, holes and other defects; and</li> <li>3. Be able to be readily opened or closed without disturbing the vapor zone. If the opening is &gt; 10 square feet, the cover shall be opened and closed by a powered mechanism.</li> </ol> <p>[N.J.A.C. 7:27-16.6]</p>	None	None	None
4	<p><b><u>In-line Vapor Cleaning Machines Only</u></b></p> <p>Each owner or operator of an in-line vapor cleaning machine shall minimize openings during operation so that entrances and exits silhouette workloads with an average clearance between the parts and the edge of the degreaser opening of &lt; 10 cm (4 in), or less than 10% of the width of the opening. [N.J.A.C. 7:27-16.6]</p>	None	None	None

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	<p>Each vapor cleaning machine shall be equipped with the following:</p> <ol style="list-style-type: none"> <li>1. A safety switch (thermostat and condenser flow switch) which shuts off the sump heat if the coolant is not circulating.</li> <li>2. A control switch that shuts off the spray pump if vapor is not present in the vapor section of the machine.</li> <li>3. A primary condenser</li> <li>4. A device that shuts off the sump heat if the sump liquid level drops to the sump heater coils or if the vapor level in the machine rises above the height of the primary condenser.</li> </ol> <p>[N.J.A.C. 7:27-16.6]</p>	None	None	None
6	<p>Each vapor cleaning machine shall have an automated parts handling system which:</p> <ol style="list-style-type: none"> <li>1. Moves the parts and or parts basket at a speed of 11 feet (3.4 meters) per minute or less when the parts are entering or exiting the vapor zone.</li> <li>2. If the parts basket and parts being cleaned occupy more than 50 percent of the solvent/air interface area, the speed of the parts basket or parts shall not exceed three feet (one meter) per minute.</li> </ol> <p>[N.J.A.C. 7:27-16.6]</p>	<p>Monitor semi-annually during operation: The permittee shall measure the time it takes the hoist of the automated parts handling system to travel a measured distance.</p> <p>[N.J.A.C. 7:27-8.13]</p>	<p>Record semi-annually:</p> <ol style="list-style-type: none"> <li>1. The date of the speed determination</li> <li>2. The calculated value of the speed of the automated parts handling system.</li> </ol> <p>[N.J.A.C. 7:27-8.13]</p>	None
7	<p>Each vapor cleaning machine shall meet requirements listed in the Tables in Section V. Equipment/Control Specifications above.</p> <p>[N.J.A.C. 7:27-16.6]</p>	None	None	None

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	<p>The owner or operator of each vapor cleaning machine shall have a permanent, conspicuous label placed in a prominent location on the machine listing the Applicable Requirements in conditions 9 through 16 below inclusively. [N.J.A.C. 7:27-16.6]</p>	None	None	None
9	<p>The working and downtime covers shall be closed at all times except during parts entry and exit from the machine, during maintenance of the machine when the solvent has been removed, and during addition of solvent to the machine.</p> <p>When the machine's cover is open, the machine shall not be exposed to drafts greater than 40 meters per minute (132 feet per minute), as measured between one and two meters (between 3.3 and 6.6 feet) upwind and at the same elevation as the tank lip.</p> <p>Work area fans shall be located and positioned so that they do not blow across the opening of the machine. [N.J.A.C. 7:27-16.6]</p>	<p>Test semi-annually according to the following procedure:</p> <ol style="list-style-type: none"> <li>1. Measure the draft within 6 inches above the freeboard area by determining the direction of the draft by slowly rotating a velometer or similar device until the maximum speed is located.</li> <li>2. Orient the velometer in the direction of the draft at each of the four corners of the machine, record the reading for each corner, and average the four readings and record the average draft. [N.J.A.C. 7:27-8.13]</li> </ol>	<p>The Permittee shall maintain records of the semi-annual tests including:</p> <ol style="list-style-type: none"> <li>1. The dates the tests were conducted for each machine.</li> <li>2. The speed at each corner of each machine</li> <li>3. The average speed of the four corners of each machine.</li> </ol> <p>Records shall be maintained onsite in either a logbook or readily accessible computer memory for a minimum of five (5) years [N.J.A.C. 7:27-8.13]</p>	None

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	<p>During startup of the machine the primary condenser shall be turned on before the sump heater.</p> <p>During shutdown of the machine, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off.</p> <p>[N.J.A.C. 7:27-16.6]</p>	None	None	None
11	<p>Flushing or spraying of parts with a solvent spray, using a spray head attached to a flexible hose or other flushing device, shall be performed within the vapor zone or within a section of the machine that is not exposed to ambient air. The solvent spray shall be a continuous fluid stream, not an atomized or shower spray, and shall be under a pressure that does not exceed 10 pounds per square inch gauge (psig).</p> <p>[N.J.A.C. 7:27-16.6]</p>	None	None	None
12	<p>Parts being cleaned shall be drained for at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be rotated while the part is draining.</p> <p>[N.J.A.C. 7:27-16.6]</p>	None	None	None
13	<p>Spills during solvent transfer and use of the machine shall be cleaned up immediately or the machine shall be shut down. Wipe rags or other sorbent material shall be immediately stored in covered containers with tightly fitting lids for disposal or recycling.</p> <p>[N.J.A.C. 7:27-16.6]</p>	None	None	None

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
14	<p>Waste solvent, still bottoms and sump bottoms shall be collected and stored in closed containers with tightly fitting lids. The closed containers may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container.</p> <p>[N.J.A.C. 7:27-16.6]</p>	None	None	None
15	<p>When solvent is added to or drained from the machine, the solvent shall be transferred using threaded or other leak-proof couplings. The end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.</p> <p>[N.J.A.C. 7:27-16.6]</p>	None	None	None
16	<p>This General Permit cannot be used for the following</p> <ol style="list-style-type: none"> <li>1. Solvent degreasers that use solvents other than Methylene Chloride or 1,1,1-Trichloroethane.</li> <li>2. Solvent degreaser types that are not listed in section III applicability above.</li> <li>3. Solvent degreasers that use carbon adsorption as an air pollution control device.</li> <li>4. Solvent degreasers with a lip exhaust.</li> <li>5. Solvent degreasers with an air agitated solvent bath</li> <li>6. Solvent degreasers that clean sponges, fabric, leather, paper products and other absorbent materials.</li> <li>7. Solvent degreasers that are not free from the influence of any local exhaust ventilation system.</li> <li>8. Solvent degreasers with the influence of any positive pressure source located within 20 feet (6.1 meters) of the tank rim.</li> <li>9. Continuous web cleaning machine</li> </ol> <p>[N.J.A.C. 7:27-16.6]</p>	None	None	None

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
17	<p>The machine shall be maintained as recommended by the manufacturer of the equipment. [N.J.A.C. 7:27-16.6]</p>	None	<p>Maintain the following records for the lifetime of the machine:</p> <ol style="list-style-type: none"> <li>1. Owner's manuals, or if not available, written maintenance and operating procedures, for the machine and control equipment; and</li> <li>2. The date of installation of the machine and all control devices; and</li> <li>3. Records of the Methylene Chloride or 1,1,1-Trichloroethane solvent for each solvent used in the machine.</li> <li>4. Maintain the manufacturers' recommended maintenance instructions and keep a record of any maintenance performed on each machine</li> </ol> <p>Records shall be maintained onsite in either a logbook or readily accessible computer memory for a minimum of five (5) years</p> <p>[N.J.A.C. 7:27-8.13]</p>	None

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
18	<p>The machine shall be designed and operated with an idling and downtime mode cover, that may be readily opened or closed, that completely covers the cleaning machine openings when in place, and is free of cracks, holes, and other defects. The cover(s) must be in place during the idling mode, and during the downtime mode unless either the solvent has been removed from the machine or maintenance or monitoring is being performed that requires the cover(s) to not be in place.</p> <p>[40 CFR 63.463(a)(1)]</p>	<p>The owner or operator shall perform monitoring as required in 40 CFR 63.466.</p> <p>[40 CFR 63.466]</p>	<p>The owner or operator shall maintain all records as required in 40 CFR 63.467.</p> <p>[40 CFR 63.467]</p>	<p>The owner or operator shall submit reports as required in 40 CFR 63.468.</p> <p>[40 CFR 63.468]</p>
19	<p>Each machine shall have a freeboard ratio of <math>\geq 0.75</math>.</p> <p>[40 CFR 63.463(a)(2)]</p>	<p>The owner or operator shall perform monitoring as required in 40 CFR 63.466.</p> <p>[40 CFR 63.466]</p>	<p>The owner or operator shall maintain all records as required in 40 CFR 63.467.</p> <p>[40 CFR 63.467]</p>	<p>The owner or operator shall submit reports as required in 40 CFR 63.468.</p> <p>[40 CFR 63.468]</p>
20	<p>Each machine shall have an automated parts handling system capable of moving parts or parts baskets at a speed of <math>\leq 3.4</math> meters per minute (11 feet per minute) from the initial loading of the parts through the removal of cleaned parts.</p> <p>[40 CFR 63.463(a)(3)]</p>	<p>The owner or operator shall perform monitoring as required in 40 CFR 63.466.</p> <p>[40 CFR 63.466]</p>	<p>The owner or operator shall maintain all records as required in 40 CFR 63.467.</p> <p>[40 CFR 63.467]</p>	<p>The owner or operator shall submit reports as required in 40 CFR 63.468.</p> <p>[40 CFR 63.468]</p>
21	<p>Each machine shall be equipped with a device that shuts off the sump heat if the sump liquid solvent level drops to the sump heater coils. This requirement does not apply to a machine that uses steam to heat the solvent.</p> <p>[40 CFR 63.463(a)(4)]</p>	<p>The owner or operator shall perform monitoring as required in 40 CFR 63.466.</p> <p>[40 CFR 63.466]</p>	<p>The owner or operator shall maintain all records as required in 40 CFR 63.467.</p> <p>[40 CFR 63.467]</p>	<p>The owner or operator shall submit reports as required in 40 CFR 63.468.</p> <p>[40 CFR 63.468]</p>



Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
22	Each machine shall be equipped with a vapor control device that shuts off the sump heat if the vapor level in the machine rises above the height of the primary condenser.  [40 CFR 63.463(a)(5)]	The owner or operator shall perform monitoring as required in 40 CFR 63.466.  [40 CFR 63.466]	The owner or operator shall maintain all records as required in 40 CFR 63.467.  [40 CFR 63.467]	The owner or operator shall submit reports as required in 40 CFR 63.468.  [40 CFR 63.468]
23	Each machine shall have a primary condenser.  [40 CFR 63.463(a)(6)]	The owner or operator shall perform monitoring as required in 40 CFR 63.466.  [40 CFR 63.466]	The owner or operator shall maintain all records as required in 40 CFR 63.467.  [40 CFR 63.467]	The owner or operator shall submit reports as required in 40 CFR 63.468.  [40 CFR 63.468]
24	Each owner or operator of a batch vapor cleaning machine with a solvent/air interface area of 1.21 square meters (13 square feet) or less shall comply with the requirements specified in 40 CFR 63.463 (b) (1) (i)  <b>These requirements have been summarized in Table 1 of Section V of this General Permit.</b> [40 CFR 63.463(b)(1)]	The owner or operator shall perform monitoring as required in 40 CFR 63.466.  [40 CFR 63.466]	The owner or operator shall maintain all records as required in 40 CFR 63.467.  [40 CFR 63.467]	The owner or operator shall submit reports as required in 40 CFR 63.468.  [40 CFR 63.468]
25	Each owner or operator of a batch vapor cleaning machine with a solvent/air interface area greater than 1.21 square meters (13 square feet) shall comply with the requirements specified in 40 CFR 63.463 (b) (2) (i)  <b>These requirements have been summarized in Table 2 of Section V of this General Permit.</b> [40 CFR 63.463(b)(2)]	The owner or operator shall perform monitoring as required in 40 CFR 63.466.  [40 CFR 63.466]	The owner or operator shall maintain all records as required in 40 CFR 63.467.  [40 CFR 63.467]	The owner or operator shall submit reports as required in 40 CFR 63.468.  [40 CFR 63.468]

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
26	<p>Each owner or operator of an in-line vapor cleaning machine shall comply with the requirements specified in 40 CFR 63.463 (c) (2) (i)</p> <p><b>These requirements have been summarized in Table 3 of Section V of this General Permit.</b> [40 CFR 63.463(c)]</p>	<p>The owner or operator shall perform monitoring as required in 40 CFR 63.466.</p> <p>[40 CFR 63.466]</p>	<p>The owner or operator shall maintain all records as required in 40 CFR 63.467.</p> <p>[40 CFR 63.467]</p>	<p>The owner or operator shall submit reports as required in 40 CFR 63.468.</p> <p>[40 CFR 63.468]</p>
27	<p>Each owner or operator of a vapor cleaning machine shall comply with the work and operation practices specified in 40 CFR 63.463 (d).</p> <p><b>These work and operation practices are also required under N.J.A.C. 7:27-16.6</b> [40 CFR 63.463(d)]</p>	<p>The owner or operator shall perform monitoring as required in 40 CFR 63.466.</p> <p>[40 CFR 63.466]</p>	<p>The owner or operator shall maintain all records as required in 40 CFR 63.467.</p> <p>[40 CFR 63.467]</p>	<p>The owner or operator shall submit reports as required in 40 CFR 63.468.</p> <p>[40 CFR 63.468]</p>
28	<p>If a freeboard refrigeration device is used to comply, the owner or operator shall ensure that the chilled air blanket temperature, measured at the center of the air blanket, is <math>\leq</math> 30 percent of the solvent's boiling point.</p> <p>[40 CFR 63.463(e)(2)(i)]</p>	<p>The owner or operator shall perform monitoring as required in 40 CFR 63.466.</p> <p>[40 CFR 63.466]</p>	<p>The owner or operator shall maintain all records as required in 40 CFR 63.467.</p> <p>[40 CFR 63.467]</p>	<p>The owner or operator shall submit reports as required in 40 CFR 63.468.</p> <p>[40 CFR 63.468]</p>
29	<p>If a reduced room draft is used to comply, the owner or operator shall ensure the following:</p> <ol style="list-style-type: none"> <li>1. The flow or movement of air across the top of the freeboard area of the machine or within the machine enclosure is <math>\leq</math> 15.2 meters per minute (50 feet per minute); and</li> <li>2. The operating conditions under which the wind speed was demonstrated to be <math>\leq</math> 15.2 meters per minute (50 feet per minute) are maintained.</li> </ol> <p>[40 CFR 63.463(e)(2)(ii)]</p>	<p>The owner or operator shall perform monitoring as required in 40 CFR 63.466.</p> <p>[40 CFR 63.466]</p>	<p>The owner or operator shall maintain all records as required in 40 CFR 63.467.</p> <p>[40 CFR 63.467]</p>	<p>The owner or operator shall submit reports as required in 40 CFR 63.468.</p> <p>[40 CFR 63.468]</p>

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
30	<p>If a working-mode cover is used to comply, the owner or operator shall ensure the following:</p> <ol style="list-style-type: none"> <li>1. The cover opens only for part entrance and removal and completely covers the machine openings when closed; and</li> <li>2. The cover is maintained free of cracks, holes and other defects.</li> </ol> <p>[40 CFR 63.463(e)(2)(iii)]</p>	<p>The owner or operator shall perform monitoring as required in 40 CFR 63.466.</p> <p>[40 CFR 63.466]</p>	<p>The owner or operator shall maintain all records as required in 40 CFR 63.467.</p> <p>[40 CFR 63.467]</p>	<p>The owner or operator shall submit reports as required in 40 CFR 63.468.</p> <p>[40 CFR 63.468]</p>
31	<p>If an idling-mode cover is used to comply, the owner or operator shall ensure the following:</p> <ol style="list-style-type: none"> <li>1. The cover is in place whenever parts are not in the machine and completely covers the machine openings when in place; and</li> <li>2. The cover is maintained free of cracks, holes and other defects.</li> </ol> <p>[40 CFR 63.463(e)(2)(iv)]</p>	<p>The owner or operator shall perform monitoring as required in 40 CFR 63.466.</p> <p>[40 CFR 63.466]</p>	<p>The owner or operator shall maintain all records as required in 40 CFR 63.467.</p> <p>[40 CFR 63.467]</p>	<p>The owner or operator shall submit reports as required in 40 CFR 63.468.</p> <p>[40 CFR 63.468]</p>
32	<p>If a dwell is used to comply, the owner or operator shall ensure the following:</p> <ol style="list-style-type: none"> <li>1. Determine the amount of time for the part or parts basket to cease dripping once placed in the vapor zone. ( The part or parts basket used for this determination must be at room temperature before being placed in the vapor zone); and</li> <li>2. The proper dwell time for parts to remain in the freeboard area above the vapor zone is <math>\geq 35\%</math> of the time determined in 1 above; and</li> <li>3. Ensure that, after cleaning, each part is held in the machine freeboard area above the vapor zone for the dwell time determined for that particular part or parts basket, or for the maximum dwell time determined using the most complex part type or parts basket.</li> </ol> <p>[40 CFR 63.463(e)(2)(v)]</p>	<p>The owner or operator shall perform monitoring as required in 40 CFR 63.466.</p> <p>[40 CFR 63.466]</p>	<p>The owner or operator shall maintain all records as required in 40 CFR 63.467.</p> <p>[40 CFR 63.467]</p>	<p>The owner or operator shall submit reports as required in 40 CFR 63.468.</p> <p>[40 CFR 63.468]</p>

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
33	<p>If a superheated vapor system is used to comply, the owner or operator shall ensure the following:</p> <ol style="list-style-type: none"> <li>1. The temperature of the solvent vapor at the center of the superheated vapor zone is <math>\geq 10</math> degrees F above the solvent's boiling point; and</li> <li>2. The manufacturer's specifications for determining the minimum proper dwell time within the superheated vapor system is followed; and</li> <li>3. The parts remain within the superheated vapor for at least the minimum proper dwell time.</li> </ol> <p>[40 CFR 63.463(e)(2)(vi)]</p>	<p>The owner or operator shall perform monitoring as required in 40 CFR 63.466.</p> <p>[40 CFR 63.466]</p>	<p>The owner or operator shall maintain all records as required in 40 CFR 63.467.</p> <p>[40 CFR 63.467]</p>	<p>The owner or operator shall submit reports as required in 40 CFR 63.468.</p> <p>[40 CFR 63.468]</p>
34	<p>The owner or operator of each vapor cleaning machine shall comply with the initial performance testing requirements of 40 CFR 63.463(f).</p> <p>[40 CFR 63.463(f)]</p>	<p>The owner or operator shall perform monitoring as required in 40 CFR 63.466.</p> <p>[40 CFR 63.466]</p>	<p>The owner or operator shall maintain all records as required in 40 CFR 63.467.</p> <p>[40 CFR 63.467]</p>	<p>The owner or operator shall submit reports as required in 40 CFR 63.468.</p> <p>[40 CFR 63.468]</p>
35	<p>The owner or operator of each vapor cleaning machine shall determine their potential to emit in accordance with the procedures described in of 40 CFR 63.465(e).</p> <p>[40 CFR 63.465(e)]</p>	<p>The owner or operator shall perform monitoring as required in 40 CFR 63.466.</p> <p>[40 CFR 63.466]</p>	<p>The owner or operator shall maintain all records as required in 40 CFR 63.467.</p> <p>[40 CFR 63.467]</p>	<p>The owner or operator shall submit reports as required in 40 CFR 63.468.</p> <p>[40 CFR 63.468]</p>

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
36	<p>Maintain the following records for the lifetime of the machine:</p> <ol style="list-style-type: none"> <li>1. Owner's manuals, or if not available, written maintenance and operating procedures, for the machine and control equipment;</li> <li>2. The date of installation of the machine and all control devices. If the exact date is not known, a letter certifying that the machine and its control devices were install prior to, or on, November 29,1993, or after November 29,1993, may be substituted; and</li> <li>3. Records of the Methylene Chloride or 1,1,1-Trichloroethane solvent for each solvent used in the machine.</li> </ol> <p>[40 CFR 63.467(a)]</p>	<p>The owner or operator shall perform monitoring as required in 40 CFR 63.466.</p> <p>[40 CFR 63.466]</p>	<p>The owner or operator shall maintain all records as required in 40 CFR 63.467.</p> <p>[40 CFR 63.467]</p>	<p>The owner or operator shall submit reports as required in 40 CFR 63.468.</p> <p>[40 CFR 63.468]</p>
37	<p>The owner or operator of each vapor cleaning machine shall submit an initial notification to the Department and US EPA pursuant to 40 CFR 63.468(a)&amp;(b).</p> <p>[40 CFR 63.468]</p>	None.	None.	<p>Submit a report once initially: The owner or operator of each vapor cleaning machine shall submit an initial notification to the Department and US EPA pursuant to 40 CFR 63.468(a)&amp;(b)</p> <p>[40 CFR 63.468]</p>
38	<p>The owner or operator of each vapor cleaning machine shall submit an initial compliance report to US EPA pursuant to 40 CFR 63.468(d)</p> <p>[40 CFR 63.468(d)]</p>	None.	None.	<p>Submit a report once initially: The owner or operator of each vapor cleaning machine shall submit an initial compliance report to US EPA pursuant to 40 CFR 63.468(d)</p> <p>[40 CFR 63.468(d)]</p>

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
39	<p>The owner or operator of each vapor cleaning machine shall submit an annual report to the US EPA pursuant to 40 CFR 63.468(f)</p> <p>[40 CFR 63.468(d)]</p>	None.	None.	<p>Submit a report annually: The owner or operator of each vapor cleaning machine shall submit an annual report to the US EPA pursuant to 40 CFR 63.468(f)</p> <p>[40 CFR 63.468(d)]</p>
40	<p>The owner or operator of each vapor cleaning machine shall submit an exceedance report to the US EPA pursuant to 40 CFR 63.468(h)</p> <p>[40 CFR 63.468(h)]</p>	None.	None.	<p>Submit a report upon occurrence of event: The owner or operator of each vapor cleaning machine shall submit an exceedance report to the US EPA pursuant to 40 CFR 63.468(h)</p> <p>[40 CFR 63.468(h)]</p>
41	<p>The owner or operator of each vapor cleaning machine wishing to reduce the frequency of reporting shall submit their request to the US EPA pursuant to 40 CFR 63.468(i)</p> <p>[40 CFR 63.468(d)]</p>	None.	None.	<p>Submit a report upon occurrence of event: The owner or operator of each vapor cleaning machine wishing to reduce the frequency of reporting shall submit their request to the US EPA pursuant to 40 CFR 63.468(i)</p> <p>[40 CFR 63.468(d)]</p>