

State of New Jersey

Department of Environmental Protection
Air Quality Permitting

**General Permit
for
Degreasing Operations using Non-HAP Volatile Organic
Compounds (VOCs)**

This General permit allows for the construction, installation, reconstruction, modification and operation of one or more or any combination of non-HAP VOCs solvent degreasers of the following types:

- Cold cleaning machine that uses a VOC solvent with a vapor pressure of less than 0.02 Psi (1 mm Hg) at 20 degrees centigrade (68 degrees Fahrenheit);
- Heated cleaning machine that uses a VOC solvent with a vapor pressure of less than 0.02 Psi (1 mm Hg) at 20 degrees centigrade (68 degrees Fahrenheit);
- Batch vapor cleaning machine; or
- In-line (conveyorized) vapor cleaning machine;

Typical non-HAP VOC solvents used in these operations include, but are not limited to; Stoddard Solvent, N. Propyl Bromide, and Mineral Spirits. 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 defined 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.
- **“Cold Cleaning Machine”** means a solvent cleaning machine, containing and/or using an unheated liquid which contains greater than five percent VOC by weight, into which parts are placed for the purpose of removing dirt, grease, oil or other contaminants and coatings from the surfaces of the parts. This term includes both immersion cold cleaning machines and remote reservoir cold cleaning machines.
- **“Fill line”** means the maximum level of solvent prior to placing parts in the machine for cleaning.
- **“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.
- **“Heated Cleaning Machine”** means a solvent cleaning machine, containing and/or using heated liquid which contains greater than five percent VOC by weight, into which parts are placed for the purpose of removing dirt, grease, oil or other contaminants and coatings from the surfaces of the parts. The temperature of the liquid may not exceed the boiling point of the liquid. This term includes both immersion heated cleaning machines and remote reservoir heated cleaning machines.
- **“High level mark”** means the maximum level of solvent at any time.
- **“Immersion cold cleaning machine”** means a cold cleaning machine in which the parts or parts to be cleaned are immersed in the solvent during the cleaning process.
- **“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
- **“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.
- **“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.
- **“Psig”** means pounds per square inch gauge.
- **“Remote reservoir cold cleaning machine”** means a cold cleaning machine in which liquid solvent is pumped to a sink-like work area where the cleaning of parts occurs but from which the solvent is immediately drained back into an enclosed container or reservoir, so that no solvent is allowed to pool in the work area.

- **“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 August 18, 2003.

III. GENERAL PERMIT APPLICABILITY

This General permit allows for the construction, installation, reconstruction, modification and operation of one or more or any combination of non-HAP VOCs solvent degreasers of the following types that meet the requirements for each type of equipment referenced in section V, Equipment/Control device Specifications and Requirements:

- A. Cold cleaning machine that uses a VOC solvent with a vapor pressure of less than 0.02 Psi (1mm Hg) at 20 degrees centigrade (68 degrees Fahrenheit);
- B. Heated cleaning machine that uses a VOC solvent with a vapor pressure of less than 0.02 Psi (1mm Hg) at 20 degrees centigrade (68 degrees Fahrenheit);
- C. Batch vapor cleaning machine; or
- D. In-line Vapor (conveyorized) cleaning machine;

Typical non-HAP VOC solvents used in these operations include, but are not limited to; Stoddard Solvent, N. Propyl Bromide, and Mineral Spirits.

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.

IV. EXCLUSIONS

1. This general permit cannot be used for solvent degreasers that use HAP's which include, but are not limited to; Methylene Chloride, Perchloroethylene, Trichloroethylene, 1,1,1-Trichloroethane, Carbon Tetrachloride and Chloroform or other HAP listed in the General Procedure for General Permits.
2. This general permit cannot be used for cold or heated cleaning machines that use a VOC solvent with a vapor pressure of one (1) millimeter of mercury or greater (0.02 pounds per square inch).
3. This general permit cannot be used for solvent degreasers that use solvents that are not classified as VOC solvents.
4. This general permit cannot be used for solvent degreasers that are not listed in section III applicability.

Degreasing Operations using
Non-HAP Volatile Organic Compounds (VOCs)
General Permit

5. This general permit cannot be used for solvent degreasers that do not meet the control options listed in section V equipment/control device specifications.
6. This general permit cannot be used for solvent degreasers that use carbon adsorption as air pollution control.
7. This general permit cannot be used for Batch vapor or In-line vapor cleaning machines with a lip exhaust.
8. This general permit cannot be used for Batch vapor cleaning machines that are not free from the influence of any local exhaust ventilation system.
9. This general permit cannot be used for Batch vapor cleaning machines 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 solvent degreasers with an air agitated solvent bath.
11. This general permit cannot be used for solvent degreasers that clean sponges, fabric, leather, paper products and other absorbent materials.

V. **EQUIPMENT/CONTROL DEVICE SPECIFICATIONS AND REQUIREMENTS**

The following specifications and requirements are applicable in accordance with N.J.A.C. 7:27-16.6 "Control and Prohibition of Air Pollution by VOC". 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 (GP010).

A. **Requirements for cold cleaning machines.**

1. The machine shall have a freeboard ratio of 0.75 or greater (only for immersion cold cleaning machine).
2. The machine shall have a tightly working-mode cover that completely covers the machine's opening.
3. The solvent spray shall be a continuous fluid stream, not an atomized or shower spray and be at a pressure less than 10 Psig.

B. **Requirements for heated cleaning machine.**

1. The machine shall have a freeboard ratio of 0.75 or greater.
2. The machine shall have a tightly working-mode cover that completely covers the machine's opening.
3. The machine must install and operate a thermostat.
4. The solvent spray shall be a continuous fluid stream, not an atomized or shower spray and be at a pressure less than 10 Psig.

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

1. Batch vapor cleaning machines with solvent/air interface area of 13 ft square feet or less must meet all the requirements below.

- (a)** The machine shall have a freeboard ratio of 0.75 or greater.
- (b)** The machine must be equipped with a tightly fitting working-mode cover.
- (c)** The machine must be equipped with a safety switch (thermostat and condenser flow switch).
- (d)** The machine must be equipped with a control switch
- (e)** The machine must be equipped with a primary condenser.
- (f)** The machine must be equipped with a device that shut off the sump heat.
- (g)** The machine shall have an automated part handling system, which moves the parts and/or parts baskets at a speed of 11 feet (3.4meter) per minute or less when the parts are entering or exiting the vapor zone. 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 (1meter) per minute.

2. Batch vapor-cleaning machines with solvent/air interface area of 13 square feet or less must meet all of the requirements in C 1. (a) through (g) and one of the control requirements below.

- (a)** A working-mode cover, freeboard ratio of 1.0 or greater, and superheated vapor system to heat the parts and evaporate liquid solvent on the parts before they are withdrawn from the cleaning machine. or
- (b)** A freeboard refrigeration device operated to ensure that the chilled air blanket temperature is no greater than 30 percent of the solvent's boiling point and superheated vapor system to heat the parts and evaporate liquid solvent on the parts before they withdrawn from the cleaning machine. or
- (c)** A working-mode cover and a freeboard refrigeration device operated to ensure that the chilled air blanket temperature is no greater than 30 percent of the solvent's boiling point. or
- (d)** Reduced room draft, a freeboard ratio of 1.0 or greater and superheated vapor system to heat the parts and evaporate liquid solvent on the parts before they withdrawn from the cleaning machine. or
- (e)** A freeboard refrigeration device operated to ensure that the chilled air blanket temperature is no greater than 30 percent of the solvent's boiling point and reduced room draft. or
- (f)** A freeboard refrigeration device operated to ensure that the chilled air blanket temperature is no greater than 30 percent of the solvent's boiling point and a freeboard ratio of 1.0 or greater. or
- (g)** A freeboard refrigeration device operated to ensure that the chilled air blanket temperature is no greater that 30 percent of the solvent's boiling point and dwell time.

Dwell time shall be not less than 35 percent of the dwell time determined for the part or parts. or

- (h)** Reduced room draft, sufficient dwell time to ensure that liquid solvent on and in the parts vaporizes within the machine confines or drains back into the machine rather than into the work area, and a freeboard ratio of 1.0 or greater.

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

1. Batch vapor cleaning machines with solvent/air interface area greater than 13 ft square feet must meet all the requirements below.

- (a)** The machine shall have a freeboard ratio of 0.75 or greater.
(b) The machine must be equipped with a tightly fitting working-mode cover.
(c) The machine must be equipped with a safety switch (thermostat and condenser flow switch).
(d) The machine must be equipped with a control switch
(e) The machine must be equipped with a primary condenser.
(f) The machine must be equipped with a device that shut off the sump heat.
(g) The machine shall have an automated part handling system, which moves the parts and/or parts baskets at a speed of 11 feet (3.4meter) per minute or less when the parts are entering or exiting the vapor zone. If the parts basket and parts being cleaning occupy more than 50 percent of the solvent/air interface area, the speed of the parts basket or parts shall not exceed three feet (1meter) per minute.

2. Batch vapor cleaning machines with solvent/air interface area greater than 13 square feet must meet all of the requirement in D 1. (a) through (g) and of the control requirements below.

- a)** A freeboard refrigeration device operated to ensure that the chilled air blanket temperature is no greater than 30 percent of the solvent's boiling point, a freeboard ratio of 1.0 or greater and superheated vapor system to heat the parts and evaporate liquid solvent on the parts before they withdrawn from the cleaning machine. or
b) Sufficient dwell time to ensure that liquid solvent on and in the parts vaporizes within the machine confines or drains back into the machine rather than into the work area, a freeboard refrigeration device operated to ensure that the chilled air blanket temperature is no greater than 30 percent of the solvent's boiling point, and reduced room draft. Dwell time shall not be less than 35 percent of the dwell time determined for the part or parts. or
c) A working mode cover and a freeboard refrigeration device operated to ensure that the chilled air blanket temperature is no greater than 30 percent of the solvent's boiling point and superheated vapor system to heat the parts and evaporate liquid solvent on the parts before they withdrawn from the cleaning machine. or
d) Reduced room draft, freeboard ratio of 1.0 or greater and superheated vapor system to heat the parts and evaporate liquid solvent on the parts before they withdrawn from the cleaning machine. Or

- e) A freeboard refrigeration device operated to ensure that the chilled air blanket temperature is no greater than 30 percent of the solvent's boiling point, reduced room draft and superheated vapor system to heat the parts and evaporate liquid solvent on the parts before they withdrawn from the cleaning machine. or
- f) A freeboard refrigeration device operated to ensure that the chilled air blanket temperature is no greater than 30 percent of the solvent's boiling point, reduced room draft and a freeboard ratio rate of 1.0 or greater.

E. Requirements for an in-line vapor cleaning machines.

All in-line vapor-cleaning machines must meet all the following requirements:

- (a) The machine shall have a freeboard ratio of 0.75 or greater.
- (b) The machine must be equipped with a tightly fitting working-mode cover.
- (c) 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.
- (d) A control switch which shuts off the spray pump.
- (e) A primary condenser.
- (f) 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.
- (g) The machine shall have an automated part 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 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 (1 meter) per minute.
- (h) Superheated vapor system to heat the parts and evaporate liquid solvent on the parts before they withdrawn from the cleaning machine and freeboard refrigeration device.

VI. POTENTIAL TO EMIT

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

- Potential to emit in tons per year (TPY) which assumes all solvent purchased is eventually emitted to the atmosphere, and
- Solvent usage in gallons per any 12 consecutive month period, which is equal to the sum of the annual usage for all degreasers, covered by this general permit.

<u>POTENTIAL TO EMIT TABLE</u>		
General Permit Option Number	Solvent Usage Limit (gallons per 12 month period)	VOCs Potential to Emit (tpy)
SD-1	125	0.5
SD-2	250	1.0
SD-3	500	2.0
SD-4	750	3.0
SD-5	1,000	4.0
SD-6	1,250	5.0

*** In selecting an option (SD-1 through SD-6) you are limiting your 12 months usage to the amount shown in the row.**

VII. 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 All 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 SD-1<=125 gal. VOC Solvent, Option SD-2<=250 gal. VOC Solvent, Option SD-3<=500 gal. VOC Solvent, Option SD-4<=750 gal. VOC Solvent, Option SD-5<=1000 gal. VOC Solvent, Or Option SD-6<= 1250 gal. VOC Solvent [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 determines the total solvent purchased in the previous 12 months. [N.J.A.C. 7:27-8.13]</p>	<p>Each month during operation the permittee will: Record the amount of solvent purchased for all registered machines. Sum and record all monthly solvent purchased to determine the monthly total solvent purchased. Sum and Record the monthly total solvent purchased with the previous eleven- (11) month totals to determine the consecutive twelve- (12) month total. Records shall be maintained onsite in either a logbook or computer data system or readily Accessible computer memory for a minimum of five (5) years [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. [N.J.A.C. 7:27-8.13]</p>
2	<p>Each cleaning machine shall be fully enclosed, 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"> 1. Completely cover the machine's opening; 2. Be free of cracks, holes and other defects; and 3. If the machine is a batch or in-line vapor-cleaning machine it must be able to be readily opened or closed without disturbing the vapor zone. If the opening is > 10 square feet, the cover shall be opened and closed by a powered mechanism. [N.J.A.C. 7:27-16.6] 	<p>Each month during operation the permittee shall conduct a visual inspection to determine if the cover is opening and closing properly, completely covers the machine openings when closed, and is free of cracks, holes, and other defects. [N.J.A.C. 7:27-8.13]</p>	None	None

Compliance Plan for Degreasing Operations using Non-HAP Volatile Organic Compounds (VOCs) General Permit

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	<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 following areas:</p> <ol style="list-style-type: none"> 1. The freeboard area of the machine (cold or heated cleaning machines.) 2. The vapor zone or within a section of the machine that is not exposed to ambient air (batch or in-line vapor cleaning machines). <p>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). [N.J.A.C. 7:27-16.6]</p>	None	None	<p>Permittee shall report any non-compliance with any Applicable Requirement within three working days to the Regional Enforcement Office. [N.J.A.C. 7:27-8.13]</p>
4	<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. During the draining, tipping or rotating, the parts shall be positioned so that solvent drains directly back into the machine. [N.J.A.C. 7:27-16.6]</p>	None	None	<p>Permittee shall report any non-compliance with any Applicable Requirement within three working days to the Regional Enforcement Office. [N.J.A.C. 7:27-8.13]</p>
5	<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. [N.J.A.C. 7:27-16.6]</p>	None	None	<p>Permittee shall report any non-compliance with any Applicable Requirement within three working days to the Regional Enforcement Office. [N.J.A.C. 7:27-8.13]</p>

Compliance Plan for Degreasing Operations using Non-HAP Volatile Organic Compounds (VOCs) General Permit

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	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. [N.J.A.C. 7:27-16.6]	None	None	Permittee shall report any non-compliance with any Applicable Requirement within three working days to the Regional Enforcement Office. [N.J.A.C. 7:27-8.13]
7	The machine shall be maintained as recommended by the manufacturer of the equipment. [N.J.A.C. 7:27-8.13] and/or [N.J.A.C. 7:27-16.6]	None	Maintain the manufacturers recommended maintenance instructions and a record of any maintenance performed on each machine Records shall be maintained onsite in either a logbook or computer data system or readily Accessible computer memory for a minimum of five (5) years [N.J.A.C. 7:27-8.13]	Permittee shall report any non-compliance with any Applicable Requirement or Recordkeeping Requirement within three working days to the Regional Enforcement Office. [N.J.A.C. 7:27-8.13]
8	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. 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. 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]	Test monthly according to the following procedure: 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. 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]	The Permittee shall maintain records of the monthly tests including: 1. The Dates the tests were conducted for each machine. 2. The speed at each corner of each machine 3. The average speed of the four corners of each machine. Records shall be maintained onsite in either a logbook or computer data system or readily Accessible computer memory for a minimum of five (5) years [N.J.A.C. 7:27-8.13]	Permittee shall report any non-compliance with any Applicable Requirement, Monitoring Requirement, or Recordkeeping Requirement within three working days to the Regional Enforcement Office. [N.J.A.C. 7:27-8.13]

Compliance Plan for Degreasing Operations using Non-HAP Volatile Organic Compounds (VOCs) General Permit

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	<p>Each solvent cleaning machine shall meet requirements listed in Section V. Equipment/Control Specifications above. [N.J.A.C. 7:27-16.6]</p>	None	None	<p>Permittee shall report any non-compliance with any Applicable Requirement within three working days to the Regional Enforcement Office. [N.J.A.C. 7:27-8.13]</p>
10	<p>The owner or operator of each cleaning machine shall have a permanent, conspicuous label placed in a prominent location on the machine listing the following:</p> <ol style="list-style-type: none"> 1. Applicable requirements 3 through 8 inclusively that are listed in Operating Scenario Summary (OS0) and, 2. For a cold or heated machine applicable requirements 3 through 5 inclusively, that are listed in Operating Scenario 1 (OS1) and, 3. For a vapor machine applicable requirements 3 through 5 inclusively, that are listed in Operating Scenario 2 (OS2). <p>[N.J.A.C. 7:27-16.6]</p>	None	None	<p>Permittee shall report any non-compliance with any Applicable Requirement within three working days to the Regional Enforcement Office. [N.J.A.C. 7:27-8.13]</p>

The following requirements are for Cold and Heated Cleaning Machines only

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	<p>The solvent used shall have a vapor pressure of < 1 millimeter of mercury, measured at 20 degrees centigrade (68 degrees Fahrenheit). [N.J.A.C. 7:27-16.6]</p>	None	<p>Maintain, on-site, for not less than two years, after the date of purchase of solvent for use in the machine, the following information:</p> <ol style="list-style-type: none"> (1) The name and address of the person selling the solvent. An invoice, bill of sale or a certificate that corresponds to a number of sales, if it has the seller's name and address on it, may be used to satisfy this requirement; (2) A list of VOC(s) and their concentration in the solvent; (3) Information about each VOC listed in (2) above. A Material Safety Data Sheet (MSDS) may be used to satisfy this requirement; (4) The solvents product number assigned by the manufacturer; and (5) The vapor pressure of the solvent measured in millimeters of mercury at 20 degrees centigrade (68 degrees Fahrenheit). <p>Provide this information to the Department upon request of the Department or its representative. [N.J.A.C. 7:27-16.6]</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. [N.J.A.C. 7:27-8.13]</p>
2	<p>Each cold and heated cleaning machine shall be equipped with the following:</p> <ol style="list-style-type: none"> 1. A visible fill line. 2. A visible high level liquid mark <p>[N.J.A.C. 7:27-16.6]</p>	None	None	<p>Permittee shall report any non-compliance with any Applicable Requirement within three working days to the Regional Enforcement Office. [N.J.A.C. 7:27-8.13]</p>

Compliance Plan for Degreasing Operations using Non-HAP Volatile Organic Compounds (VOCs) General Permit

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	When a pump-agitated solvent bath is used, the agitator shall be operated to produce a rolling motion of the solvent with no observable splashing of solvent against the tank walls or the parts being cleaned. [N.J.A.C. 7:27-16.6]	None	None	Permittee shall report any non-compliance with any Applicable Requirement within three working days to the Regional Enforcement Office. [N.J.A.C. 7:27-8.13]
4	The solvent level in the machine: 1. Shall not exceed the fill line when there are no parts in the machine for cleaning and 2. Shall not exceed the high level liquid mark during cleaning operations [N.J.A.C. 7:27-16.6]	Monitor solvent level whenever solvent is added or when parts are placed in the machine for cleaning. [N.J.A.C. &:27-8.13]	None	Permittee shall report any non-compliance with any Applicable Requirement, or Monitoring Requirement within three working days to the Regional Enforcement Office. [N.J.A.C. 7:27-8.13]
5	<u>Heated Cleaning Machines Only</u> The solvent temperature shall be maintained below its boiling point. The thermostat for each heated machine shall be set to turn off the heater so that the solvent temperature never reaches the boiling point of the liquid in use. [N.J.A.C. 7:27-8.13]	Each heated cleaning machine shall be equipped with a temperature-monitoring device to monitor solvent temperature. [N.J.A.C. 7:27-8.13]	The permittee shall maintain the records of the boiling point for each solvent used in the machine. Records shall be maintained onsite in either a logbook or computer data system or readily Accessible computer memory for a minimum of five (5) years [N.J.A.C. 7:27-8.13]	Permittee shall report any non-compliance with any Applicable Requirement, Monitoring Requirement, or Recordkeeping Requirement within three working days to the Regional Enforcement Office. [N.J.A.C. 7:27-8.13]

The following requirements are for Vapor Cleaning Machines only

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	<p>Each vapor cleaning machine shall be equipped with the following:</p> <ol style="list-style-type: none"> 1. A safety switch (thermostat and condenser flow switch) which shuts off the sump heat if the coolant is not circulating. 2. A control switch that shuts off the spray pump if vapor is not present in the vapor section of the machine. 3. A primary condenser 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. <p>[N.J.A.C. 7:27-16.6]</p>	<p>Each month during operation the permittee shall conduct a visual inspection to determine if the sump heat safety switch, spray pump control switch, primary condenser and the sump heater shut off device are functioning properly.</p> <p>[N.J.A.C. 7:27-8.13]</p>	None	<p>Permittee shall report any non-compliance with any Applicable Requirement, or Monitoring Requirement within three working days to the Regional Enforcement Office.</p> <p>[N.J.A.C. 7:27-8.13]</p>
2	<p>Each vapor cleaning machine shall have an automated parts handling system which:</p> <ol style="list-style-type: none"> 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. 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. <p>[N.J.A.C. 7:27-16.6]</p>	<p>Each month 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>	None	<p>Permittee shall report any non-compliance with any Applicable Requirement, or Monitoring Requirement within three working days to the Regional Enforcement Office.</p> <p>[N.J.A.C. 7:27-8.13]</p>

Compliance Plan for Degreasing Operations using Non-HAP Volatile Organic Compounds (VOCs) General Permit

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	When solvent is added to or drained from the machine, the solvent shall be transferred using threaded or other leak-proof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface. [N.J.A.C. 7:27-16.6]	None	None	Permittee shall report any non-compliance with any Applicable Requirement within three working days to the Regional Enforcement Office. [N.J.A.C. 7:27-8.13]
4	During startup of the machine the primary condenser shall be turned on before the sump heater. 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. [N.J.A.C. 7:27-16.6]	None	None	Permittee shall report any non-compliance with any Applicable Requirement within three working days to the Regional Enforcement Office. [N.J.A.C. 7:27-8.13]
5	<u>In-line Vapor Cleaning Machines Only</u> Each owner or operator of a 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 < 10 cm (4 in) or less than 10% of the width of the opening. [N.J.A.C. 7:27-16.6]	None	None	Permittee shall report any non-compliance with any Applicable Requirement within three working days to the Regional Enforcement Office. [N.J.A.C. 7:27-8.13]