



**FG-MACT T-DEGREASER**  
**EMISSION UNIT CONDITIONS**  
**40 CFR Part 63, Subpart T covers major and area sources of HAPs.**

Red text identifies options. Select the option that applies to the source and change the text to black. Delete red text that does not apply and renumber conditions if necessary.

Blue text is guidance or notes on the use of the template. Delete all blue text prior to issuing the final permit or submitting it with a permit application. Read through all conditions. Select the appropriate conditions for the existing, (or future if the permittee wants the option to change) control equipment.

If this template is being used for an ROP Reopening or Renewal, and the MACT conditions were established in a PTI, the appropriate footnotes which reference enforceability must be added to each applicable condition in the template.

NOTE: These conditions do not address continuous web cleaning machines. This method is currently not used by any source in Michigan. Check Subpart T for additional requirements and reference the appropriate regulations.

**DESCRIPTION**

Each individual batch vapor, in-line vapor, in-line cold and batch cold solvent cleaning machine (EU-SOLVCLEANER) that uses any solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, or chloroform or any combination of these halogenated HAP solvents in a total concentration greater than 5 percent by weight as a cleaning and/or drying agent as specified in 40 CFR Part 63, Subpart T, 63.460(a).

The following information may be incorporated into the staff report as it applies to the source:

- A solvent cleaning machine exists if the construction or reconstruction commenced on or before November 29, 1993. (40 CFR 63.461)
- A solvent cleaning machine is new if the construction or reconstruction commenced after November 29, 1993. (40 CFR 63.461)

There are no future compliance dates.

Emission Units: Identify Emission Units in this Flexible Group

**POLLUTION CONTROL EQUIPMENT**

Identify specific control equipment used by the facility.

I. **EMISSION LIMIT(S)** Select the appropriate limits for the facility from this table if the source is complying with the idling emission limit in 40 CFR 63.463, or the overall emission limit in 40 CFR 63.464. If the source is using one of the control combinations to comply with 40 CFR 63.463, use the options in Part III. Renumber items in table and subsequent conditions.

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
-----------	-------	------------------------------------	-----------	-------------------------------	--

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Solvent	0.045 lb/hr/sq ft	Continuous/ Idling	New and Existing Batch Vapor Solvent Cleaning Machine (SCM)	SC V.1, VI.1, VI.2 & VI.4	<b>40 CFR 63.463(b)(1)(ii) 40 CFR 63.463(b)(2)(ii)</b>
2. Solvent	30.6 lb/mo/sq ft	3-month rolling	New and Existing Batch Vapor SCM	SC V.1, VI.1 & VI.4	<b>40 CFR 63.464(a)(1)(ii)</b>
3. Solvent	0.021 lb/hr/sq ft	Continuous/ Idling	Existing In-Line Vapor and In-Line Cold SCM	SC V.1, VI.1, VI.2 & VI.4	<b>40 CFR 63.463(c)(1)(ii)</b>
4. Solvent	31.3 lb/mo/sq ft	3-month rolling	Existing In-Line Vapor and In-Line Cold SCM	SC V.1, VI.1 & VI.4	<b>40 CFR 63.464(a)(1)(ii)</b>
5. Solvent	0.021 lb/hr/sq ft	Continuous/ Idling	New In-Line Vapor and In-Line Cold SCM	SC V.1, VI.1, VI.2 & VI.4	<b>40 CFR 63.463(c)(2)(ii)</b>
6. Solvent	20.2 lb/mo/sq ft	3-month rolling	New In-Line Vapor and In-Line Cold SCM	SC V.1, VI.1 & VI.4	<b>40 CFR 63.464(a)(1)(ii)</b>
7. Solvent	XX lb/mo	3-month rolling	Batch vapor SCM without a solvent/ air interface	SC V.1, VI.1 & VI.4	<b>40 CFR 63.464(2)</b>
<ul style="list-style-type: none"> <li>• 1, 3 and 5 are limits for machines with a solvent/air interface (sq ft) as defined in 40 CFR 63.461.</li> <li>• 2, 4, and 6 are alternatives to meeting the requirements of 40 CFR 63.463.</li> <li>• 7 is an alternative to meeting the requirements of 40 CFR 63.463 for batch vapor cleaning machines without a solvent/air interface. The emission limit (EL) is calculated using Equation 1 in 40 CFR 63.464(2). Equation 1: <math>EL(\text{lb/mo}) = 727.6 \times (\text{Cleaning capacity cu ft})^{0.6}</math></li> </ul>					

8. For each batch vapor or in-line cleaning machine complying with the idling emission limits specified in 40 CFR 63.463(b)(1)(ii), (b)(2)(ii), (c)(1)(ii) or (c)(2)(ii), the permittee shall comply with the requirements specified in 40 CFR 63.463(f)1 through (5). **(40 CFR 63.463(f))**

## II. MATERIAL LIMIT(S)

The permittee shall meet the material limits specified in the following table:

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA
<p><b>NOTE:</b> A material limit in gal/yr based on a 12-month rolling average, may have been established in the PTI. The amount of solvent used is on a “net usage” basis. This is defined as the amount of solvent added to the cleaner to bring the solvent levels up to starting levels, less any amount of solvent removed as waste.</p>					

## III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall operate the solvent cleaning machine using one of the control combinations listed in the following table or an equivalent method of control as determined using the procedures in 40 CFR 63.469.

Select the appropriate machine type and include all control combinations for that machine type.

Machine Type	Control Combination
New and Existing Batch vapor with solvent/air interface area $\leq$ 13 sq ft <b>40 CFR 63.463(b)(1)(i)</b>	<ul style="list-style-type: none"> <li>a. Working-mode cover, freeboard ratio of 1.0, superheated vapor</li> <li>b. Freeboard refrigeration device, superheated vapor</li> <li>c. Working-mode cover, freeboard refrigeration device</li> </ul>

Machine Type	Control Combination
	<ul style="list-style-type: none"> <li>d. Reduced room draft, freeboard ratio of 1.0, superheated vapor</li> <li>e. Freeboard refrigeration device, reduced room draft</li> <li>f. Freeboard refrigeration device, freeboard ratio of 1.0</li> <li>g. Freeboard refrigeration device, dwell</li> <li>h. Reduced room draft, dwell, freeboard ratio of 1.0</li> <li>i. Freeboard refrigeration device, carbon adsorber</li> <li>j. Freeboard ratio of 1.0. superheated vapor, carbon adsorber</li> </ul>
<p>New and Existing Batch vapor with solvent/air interface area &gt; 13 sq ft <b>40 CFR 63.463(b)(2)(i)</b></p>	<ul style="list-style-type: none"> <li>a. Freeboard refrigeration device, freeboard ratio of 1.0, superheated vapor</li> <li>b. Dwell, freeboard refrigeration device, reduced room draft</li> <li>c. Working-mode cover, freeboard refrigeration device, superheated vapor</li> <li>d. Freeboard ratio of 1.0, reduced room draft, superheated vapor</li> <li>e. Freeboard refrigeration device, reduced room draft, superheated vapor</li> <li>f. Freeboard refrigeration device, reduced room draft, freeboard ratio of 1.0</li> <li>g. Freeboard refrigeration device, superheated vapor, carbon adsorber</li> </ul>
<p>Existing In-Line Vapor and In-Line Cold <b>40 CFR 63.463(c)(1)(i)</b></p>	<ul style="list-style-type: none"> <li>a. Superheated vapor, freeboard ratio of 1.0</li> <li>b. Freeboard refrigeration device, freeboard ratio of 1.0</li> <li>c. Dwell, freeboard refrigeration device</li> <li>d. Dwell, carbon adsorber</li> </ul>
<p>New In-Line Vapor and In-Line Cold <b>40 CFR 63.463(c)(2)(i)</b></p>	<ul style="list-style-type: none"> <li>a. Superheated vapor, freeboard refrigeration device</li> <li>b. Freeboard refrigeration device, carbon adsorber</li> <li>c. Superheated vapor, carbon adsorber</li> </ul>

2. For each batch vapor or in-line cleaning machine complying with the idling emission limits specified in 40 CFR 63.463(b)(1)(ii), (b)(2)(ii), (c)(1)(ii) or (c)(2)(ii), the permittee shall establish parameters that will be monitored to demonstrate compliance. If a control device is used that is listed in 40 CFR 63.463(e)(2), the requirements for that control device are listed in the following table: **(40 CFR 63.463(f)(1)(ii))**

Control Device	Operating Requirement
Freeboard refrigeration device	<ul style="list-style-type: none"> <li>a. The chilled air blanket temperature, measured at the center of the air blanket, shall be no greater than 30% of the solvent's boiling point. <b>(40 CFR 63.463(e)(2)(i))</b></li> </ul>
Reduced room draft	<ul style="list-style-type: none"> <li>a. The flow or movement of air across the top of the freeboard area or within the enclosure shall not exceed 15.2 meters (50 feet) per minute at any time. <b>(40 CFR 63.463(e)(2)(ii)(A))</b></li> <li>b. The operating conditions under which the wind speed was demonstrated to be 15.2 meters (50 feet) per minute or less shall be established and maintained. <b>(40 CFR 63.463(e)(2)(ii)(B))</b></li> </ul>
Cover	<ul style="list-style-type: none"> <li>a. A working-mode cover shall be opened only for part entry and removal; must completely cover the machine openings when closed; and must be maintained free of cracks, holes, and other defects. <b>(40 CFR 63.463(e)(2)(iii))</b></li> <li>b. An idling-mode cover shall be in place whenever parts are not in the machine; must completely cover the machine openings when in place; and must be maintained free of cracks, holes, and other defects. <b>(40 CFR 63.463(e)(2)(iv))</b></li> </ul>
Dwell	<ul style="list-style-type: none"> <li>a. The appropriate dwell time for each type of part, or the maximum dwell time using the most complex part type or parts basket shall be</li> </ul>

	<p>determined as described in 40 CFR 63.465(d). <b>(40 CFR 63.463(e)(2)(v)(A))</b></p> <p>b. After cleaning, each part shall be held in the freeboard area above the vapor zone for the dwell time determined for that part or parts basket, or for the maximum dwell time determined using the most complex part type or parts basket. <b>(40 CFR 63.463(e)(2)(v)(B))</b></p>
Superheated vapor system	<p>a. The temperature of the solvent vapor at the center of the superheated vapor zone shall be at least 10°F above the solvent's boiling point. <b>(40 CFR 63.463(e)(2)(vi)(A))</b></p> <p>b. The manufacturer's specifications for determining the minimum proper dwell time within the superheated vapor shall be followed. <b>(40 CFR 63.463(e)(2)(vi)(B))</b></p> <p>c. Parts shall remain within the superheated vapor for at least the minimum proper dwell time. <b>(40 CFR 63.463(e)(2)(vi)(C))</b></p>
Carbon adsorber (in conjunction with a lip exhaust)	<p>a. The concentration of organic solvent in the exhaust shall not exceed 100 ppm of any halogenated HAP compound as measured using the procedure in 40 CFR 63.466(e)</p> <p>b. If halogenated HAP solvent concentration exceeds 100 ppm, the desorption schedule shall be adjusted or the disposable canister shall be replaced. <b>(40 CFR 63.463(e)(2)(vii)(A))</b></p> <p>c. The carbon adsorber bed shall not be bypassed during desorption. <b>(40 CFR 63.463(e)(2)(vii)(B))</b></p> <p>The lip exhaust shall be located above the solvent cleaning machine cover so that the cover closes below the lip exhaust level. <b>(40 CFR 63.463(e)(2)(vii)(C))</b></p>

3. The permittee shall operate the solvent cleaning machine within the parameters identified in the initial performance test. **(40 CFR 63.463(f)(3))**
4. For each batch cold solvent cleaning machine complying with 63.462(a)(2) or 63.462(b), the permittee shall comply with the following work and operational practice requirements:
  - a. All waste solvent shall be collected and stored in closed containers. **(40 CFR 63.462(c)(1))**
  - b. Flushing shall be performed only within the freeboard area. **(40 CFR 63.462(c)(2))**
  - c. Parts shall be drained for 15 seconds or until dripping has stopped, whichever is longer. Parts with cavities or blind holes shall be tipped or rotated while draining. **(40 CFR 63.462(c)(3))**
  - d. The solvent level shall not exceed the fill line. **(40 CFR 63.462(c)(4))**
  - e. Spills during solvent transfer shall be wiped up immediately and wipe rags shall be stored in a covered container. **(40 CFR 63.462(c)(5))**
  - f. When an air- or pump-agitated solvent bath is used, the agitator shall be operated to produce a rolling motion and not observable splashing against the walls or the parts. **(40 CFR 63.462(c)(6))**
  - g. When the cover is open, the machine shall not be exposed to drafts greater than 40 meters (132 feet) per minute. **(40 CFR 63.462(c)(7))**
  - h. Sponges, fabric, wood, and paper products shall not be cleaned. **(40 CFR 63.462(c)(8))**
5. For batch vapor or in-line cleaning machines using one of the control combinations, or the idling emission limit specified in 40 CFR 63.463, the permittee shall meet all of the following required work and operational practices, except as provided in 40 CFR 63.464:
  - a. Control air disturbances across machine openings by having cover(s) in place during idling mode and downtime mode or by reducing the room draft as described in 40 CFR 63.463(e)(2)(ii). **(40 CFR 63.463(d)(1))**

- b. The parts baskets or parts being cleaned in an open-top machine shall not occupy more than 50 percent of the solvent/air interface area unless the parts baskets or parts are introduced at a speed of 3 feet per minute or less. **(40 CFR 63.463(d)(2))**
- c. Any spraying operations shall be done within the vapor zone or within a section of the machine that is not directly exposed to the ambient air (i.e. a baffled or enclosed area of the machine). **(40 CFR 63.463(d)(3))**
- d. Parts shall be oriented so that the solvent drains from them freely. Parts having cavities or blind holes shall be tipped or rotated before being moved unless an equally effective approach has been approved by the AQD. **(40 CFR 63.463(d)(4))**
- e. Parts or parts baskets shall not be removed until dripping has stopped. **(40 CFR 63.463(d)(5))**
- f. During startup, the primary condenser shall be turned on before the sump heater. **(40 CFR 63.463(d)(6))**
- g. During shutdown, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off. **(40 CFR 63.463(d)(7))**
- h. When solvent is added or drained, the solvent shall be transferred using threaded or other leak-proof couplings and the end of the pipe in the solvent sump or waste drum shall be located beneath the liquid solvent surface. **(40 CFR 63.463(d)(8))**
- i. Each machine and associated controls shall be maintained as recommended by the manufacturer or by using alternate maintenance practices that have been demonstrated to the AQD to achieve the same or better results as those recommended by the manufacturer. **(40 CFR 63.463(d)(9))**
- j. Each operator must complete and pass applicable sections of the Test of Solvent Cleaning Procedures included in Appendix B of 40 CFR Part 63, Subpart T if requested. **(40 CFR 63.463(d)(10))**
- k. Waste solvent, still bottoms, and sump bottoms shall be collected and store in closed containers. **(40 CFR 63.463(d)(11))**
- l. Sponges, fabric, wood, and paper products shall not be cleaned. **(40 CFR 63.463(d)(12))**

#### **IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. Each batch vapor and in-line solvent cleaning machine shall be designed or equipped with the following:
  - a. An idling and downtime cover that may be readily opened or closed, that completely covers the machine openings when in place, and is free of cracks, holes and other defects OR a reduced room draft. **(40 CFR 63.463(a)(1))**
  - b. A freeboard ratio of at least 0.75. **(40 CFR 63.463(a)(2))**
  - c. An automated parts handling system capable of moving parts or parts baskets at 3.4 meters (11 ft) per minute or less from the initial loading of parts through removal of cleaned parts. **(40 CFR 63.463(a)(3))**
  - d. A device that shuts off the sump heat if the sump liquid solvent level drops to the sump heater coils. **(40 CFR 63.463(a)(4))**
  - e. A vapor level device that shuts off sump heat if the vapor level rises above the height of the primary condenser. **(40 CFR 63.463(a)(5))**
  - f. A primary condenser. **(40 CFR 63.463(a)(6))**
  - g. If lip exhaust is used, it shall be designed and operated to route all collected solvent vapors through a properly operated and maintained carbon adsorber. **(40 CFR 63.463(a)(7))**
2. The permittee shall not operate any immersion batch cold solvent cleaning machine unless the machine is equipped with a tight fitting cover, which shall be closed at all times except for entry and removal of parts and either:
  - a. A water layer at least 2.5 centimeters (1.0 inch) on the surface of the solvent within the machine, OR **(40 CFR 63.462(a)(1))**
  - b. A freeboard ratio of at least 0.75. **(40 CFR 63.462(a)(2))**

3. The permittee shall not operate any remote-reservoir batch cold solvent cleaning machine unless the machine is equipped with a tight fitting cover over the solvent sump which shall be closed at all times except when cleaning parts. **(40 CFR 63.462(b))**

**V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii), 40 CFR 63.467(b) and (c))**

1. For each batch vapor or in-line solvent cleaning machine, the permittee shall comply with the applicable testing requirements as specified in the following table:

Machine Type	Testing Requirements
Batch vapor, in-line vapor, and in-line cold machines using <u>idling</u> emission limits in 40 CFR 63.463(b)(1)(ii), (b)(2)(ii), (c)(1)(ii) or (c)(2)(ii)	<ol style="list-style-type: none"> <li>a. Conduct an initial performance test to comply with the requirements specified in 40 CFR 63.463(f)(1)(i) and (ii)</li> <li>b. Demonstrate compliance with the applicable idling emission limit. (40 CFR 63.463(f)(1)(i)).</li> <li>c. Determine the idling emission rate using Reference Method 307 in 40 CFR Part 63, Appendix A. (40 CFR 63.465(a))</li> </ol>
Batch vapor, in-line vapor, and in-line cold machines using <u>overall</u> emission limits specified in 40 CFR 63.464	<ol style="list-style-type: none"> <li>a. On the first operating day of every month, ensure that the machine system contains only clean liquid solvent. A fill line must be indicated during the first month the measurements are made. Immediately prior to calculating monthly emissions the solvent level must be returned to the fill-line. (40 CFR 63.465(b))</li> <li>b. On the first operating day of every month, determine solvent emissions using the records of all solvent additions and deletions for the previous monthly reporting period and Equation 2 or Equation 3 of 40 CFR 63.465(c)(1). (40 CFR 63.465(c)(1))</li> <li>c. On the first operating day of every month determine the total amount of halogenated HAP solvent removed in solid waste using the method specified in 40 CFR 63.465(c)(2)(i) or (ii). (40 CFR 63.465(c)(2))</li> <li>d. On the first operating day of every month, determine the monthly rolling average for the 3-month period ending with the most recent reporting period using Equation 4 or Equation 5 of 40 CFR 63.465(c)(3). (40 CFR 63.465(c)(3))</li> </ol>
Batch vapor, in-line vapor, and in-line cold machines using a dwell	<ol style="list-style-type: none"> <li>a. Determine the appropriate dwell time for each part or parts basket. (40 CFR 63.465(d))</li> </ol>
All machines	<ol style="list-style-type: none"> <li>a. Determine the potential to emit from all solvent cleaning operations. (40 CFR 63.465(e))</li> </ol>

See Appendix 5

**VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii), 40 CFR 63.467(b) and (c))**

1. For each solvent cleaning machine complying with the equipment standards specified in 40 CFR 63.463(b) or (c), the permittee shall conduct monitoring of each control device to determine whether each control device meets the requirements specified in 40 CFR 63.463(e)(2)(i) through (vii), as described in the following table: **(40 CFR 63.463(e))** **NOTE: Select all of following that correspond to the control options selected by the permittee.**

Control Device	Operating Requirement	Monitoring
Freeboard refrigeration device	<ol style="list-style-type: none"> <li>a. The chilled air blanket temperature, measured at the center of the air blanket, shall be no greater than 30% of the solvent's boiling point. <b>(40 CFR 63.463(e)(2)(i))</b></li> </ol>	<ol style="list-style-type: none"> <li>i. On a weekly basis, use a thermometer or thermocouple to measure the temperature at center of air blanket during idling mode. <b>(40 CFR 63.466(a)(1))</b></li> </ol>
Reduced room draft	<ol style="list-style-type: none"> <li>a. The flow or movement of air across</li> </ol>	<ol style="list-style-type: none"> <li>i. If reduced room draft is maintained by</li> </ol>

Control Device	Operating Requirement	Monitoring
	<p>the top of the freeboard area or within the enclosure shall not exceed 15.2 meters (50 feet) per minute at any time. <b>(40 CFR 63.463(e)(2)(ii)(A))</b></p> <p>b. The operating conditions under which the wind speed was demonstrated to be 15.2 meters (50 feet) per minute or less shall be established and maintained. <b>(40 CFR 63.463(e)(2)(ii)(B))</b></p>	<p>controlling room parameters:</p> <p>(1) Conduct an initial monitoring test of the windspeed and room parameters as specified in 40 CFR 63.466(d)(1)(i). <b>(40 CFR 63.466(d)(1))</b></p> <p>(2) On a weekly basis, monitor the room parameters established during the initial compliance test that are used to achieve the reduced room draft. <b>(40 CFR 63.466(d)(1)(ii))</b></p> <p>ii. If an enclosure is used to achieve a reduced room draft:</p> <p>(1). Conduct an initial monitoring test and, thereafter, monthly monitoring tests of the windspeed within the enclosure using the procedure specified in 40 CFR 63.466(d)(2)(i) and (ii). <b>(40 CFR 63.466(d)(2))</b></p> <p>(2). On a monthly basis, conduct a visual inspection of the enclosure to determine if it is free of cracks, holes and other defects. <b>(40 CFR 63.466(d)(2))</b></p> <p>(3) On a quarterly basis, monitor the windspeed. <b>(40 CFR 63.466(d)(1))</b></p>
Cover	<p>a. A working-mode cover shall be opened only for part entry and removal; must completely cover the machine openings when closed; and must be maintained free of cracks, holes, and other defects. <b>(40 CFR 63.463(e)(2)(iii))</b></p> <p>b. An idling-mode cover shall be in place whenever parts are not in the machine; must completely cover the machine openings when in place; and must be maintained free of cracks, holes, and other defects. <b>(40 CFR 63.463(e)(2)(iv))</b></p>	<p>i. On a monthly basis, conduct a visual inspection. <b>(40 CFR 63.466(b)(1))</b></p>
Dwell	<p>a. The appropriate dwell time for each type of part, or the maximum dwell time using the most complex part type or parts basket shall be determined as described in 40 CFR 63.465(d). <b>(40 CFR 63.463(e)(2)(v)(A))</b></p> <p>b. After cleaning, each part shall be held in the freeboard area above the vapor zone for the dwell time determined for that part or parts basket, or for the maximum dwell time determined using the most complex part type or parts basket.</p>	<p>i. On a monthly basis, determine the actual dwell time by measuring the period of time that parts are held within the freeboard area of the machine after cleaning. <b>(40 CFR 63.466(b)(2))</b></p>

Control Device	Operating Requirement	Monitoring
Superheated vapor system	<p><b>(40 CFR 63.463(e)(2)(v)(B))</b></p> <p>a. The temperature of the solvent vapor at the center of the superheated vapor zone shall be at least 10°F above the solvent's boiling point. <b>(40 CFR 63.463(e)(2)(vi)(A))</b></p> <p>b. The manufacturer's specifications for determining the minimum proper dwell time within the superheated vapor shall be followed. <b>(40 CFR 63.463(e)(2)(vi)(B))</b></p> <p>c. Parts shall remain within the superheated vapor for at least the minimum proper dwell time. <b>(40 CFR 63.463(e)(2)(vi)(C))</b></p>	<p>i. On a weekly basis, use a thermometer or thermocouple to measure the temperature at the center of superheated solvent vapor zone during idling mode <b>(40 CFR 63.466(a)(2))</b></p>
Carbon adsorber (in conjunction with a lip exhaust)	<p>a. The concentration of organic solvent in the exhaust shall not exceed 100 ppm of any halogenated HAP compound as measured using the procedure in 40 CFR 63.466(e)</p> <p>b. If halogenated HAP solvent concentration exceeds 100 ppm, the desorption schedule shall be adjusted or the disposable canister shall be replaced. <b>(40 CFR 63.463(e)(2)(vii)(A))</b></p> <p>c. The carbon adsorber bed shall not be bypassed during desorption. <b>(40 CFR 63.463(e)(2)(vii)(B))</b></p> <p>d. The lip exhaust shall be located above the solvent cleaning machine cover so that the cover closes below the lip exhaust level. <b>(40 CFR 63.463(e)(2)(vii)(C))</b></p>	<p>i. On a weekly basis, while the machine is in the working mode and is venting to the carbon adsorber, measure the concentration of halogenated HAP solvent in the exhaust of the carbon adsorber with a colorimetric detector tube. Determine the concentration using the procedure specified in 40 CFR 63.466(e)(1) through (3) <b>(40 CFR 63.466(e))</b></p>
Hoist	N/A	<p>i. Determine the hoist speed as described in 40 CFR 63.466(c)(1). <b>(40 CFR 63.466(c)(1))</b></p> <p>ii. On a monthly basis, monitor the hoist speed as described in 40 CFR 63.466(c)(2). If after the first year, no exceedances of the hoist speed are measured, the monitoring may be done on a quarterly basis. <b>(40 CFR 63.466(c)(2))</b></p> <p>iii. If an exceedance occurs during quarterly monitoring, the monitoring frequency shall return to monthly until another year of compliance is demonstrated. <b>(40 CFR 63.466(c)(3))</b></p> <p>iv. If the permittee demonstrates in the initial compliance report that the hoist cannot exceed a speed of 3.4 meters (11 feet)</p>

Control Device	Operating Requirement	Monitoring
		per minute, all monitoring can be on a quarterly basis. <b>(40 CFR 63.466(c)(4))</b>

2. For each batch vapor or in-line cleaning machine complying with the idling emission limits specified in 40 CFR 63.463(b)(1)(ii), (b)(2)(ii), (c)(1)(ii) or (c)(2)(ii), the permittee shall monitor and keep all records as required by 40 CFR 63.466(f). **(40 CFR 63.466(f))**
3. The permittee may use alternative monitoring procedures that are approved by the USEPA. **(40 CFR 63.466(g))**
4. For each batch vapor or in-line cleaning machine the permittee shall maintain all applicable records for the specified timeframes as described in the following table:

Machine Type	Lifetime of Machine	5 years
Batch vapor and in-line cleaning machines using control combinations or idling mode emission limit specified in 40 CFR 63.463	<ol style="list-style-type: none"> <li>a. Owner's manuals or written maintenance and operating procedures for machine and control devices. <b>(40 CFR 63.467(a)(1))</b></li> <li>b. Date of installation of machine and all control devices. <b>(40 CFR 63.467(a)(2))</b></li> <li>c. Records of tests required in 40 CFR 63.465(d) to determine an appropriate dwell time for each part or parts basket. <b>(40 CFR 63.467(a)(3))</b></li> <li>d. Records of initial performance test of idling emission rate and values of monitoring parameters measured during test. <b>(40 CFR 63.467(a)(4))</b></li> <li>e. Records of halogenated HAP solvent content for each solvent used. <b>(40 CFR 63.467(a)(5))</b></li> </ol>	<ol style="list-style-type: none"> <li>i. Results of control device monitoring required under 40 CFR 63.466. <b>(40 CFR 63.467(b)(1))</b></li> <li>ii. Information on the actions taken to comply with 40 CFR 63.463(e) and (f). <b>(40 CFR 63.467(b)(2))</b></li> <li>iii. Estimated annual solvent consumption for each machine. <b>(40 CFR 63.467(b)(3))</b></li> <li>iv. Records of the date and results of weekly measurement of halogenated HAP solvent concentration in carbon adsorber exhaust required in 40 CFR 63.466(e). <b>(40 CFR 63.467(b)(4))</b></li> </ol>
Batch vapor and in-line cleaning machines using overall emission limits specified in 40 CFR 63.464	N/A	<ol style="list-style-type: none"> <li>i. Dates and amounts of solvent added to each machine. <b>(40 CFR 63.467(c)(1))</b></li> <li>ii. Solvent composition of wastes removed from machines as determined using procedures in 40 CFR 63.465(c)(2). <b>(40 CFR 63.467(c)(2))</b></li> <li>iii. Calculation sheets showing how monthly emissions and the rolling 3-month average emissions were determined, and results of all calculations. <b>(40 CFR 63.467(c)(3))</b></li> </ol>
Machines without solvent/air interface using overall emission limits to specified in 40 CFR 63.464	<ol style="list-style-type: none"> <li>a. Records of the method used to determine the cleaning capacity of the machine. <b>(40 CFR 63.467(d))</b></li> </ol>	N/A

See Appendices {Enter 3, 4, and/or 7}

**VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit all applicable reports to the AQD District Office as described in the following table:

<b>Machine Type</b>	<b>Report Type/Due Date</b>
All machines	a. Initial notification report submitted as soon as practical before construction. <b>(40 CFR 63.468(a) and (b))</b>
Batch cold	a. Compliance report submitted no later than 150 days after startup. <b>(40 CFR 63.468(c))</b>
Batch vapor, in-line vapor and in-line cold using control combinations or idling mode emission limits to comply	a. Initial statement of compliance submitted no later than 150 days after startup. <b>(40 CFR 63.468(d))</b> b. Annual report submitted by Feb 1 of year following that for which the report is being made. <b>(40 CFR 63.468(f))</b> c. Exceedance report submitted semiannually if no exceedances occur; quarterly if exceedances occur. <b>(40 CFR 63.468(h))</b>
Batch vapor, in-line vapor and in-line cold using overall emission limits to comply	a. Initial statement of compliance submitted no later than 150 days after startup. <b>(40 CFR 63.468(e))</b> b. Solvent emission report submitted annually. <b>(40 CFR 63.468(g))</b> c. Exceedance report submitted semiannually if no exceedances occur; quarterly if exceedances occur. <b>(40 CFR 63.468(h))</b>
Machines requesting equivalency determination	a. Equivalency request report submitted and approved prior to startup. <b>(40 CFR 63.468(k))</b>

5. If any of the requirements in 40 CFR 63.463(e)(2) or 40 CFR 63.463(f)(1) through (3) are not met, the permittee shall determine whether an exceedance has occurred using the criteria in 40 CFR 63.463(e)(3)(i) and (ii) or 40 CFR 63.463(f)(4)(i) and (ii). **(40 CFR 63.463(e)(3))**
6. The permittee shall report all exceedances and all corrections and adjustments made to avoid an exceedance as specified in 40 CFR 63.468(h). **(40 CFR 63.463(e)(4))**

See Appendix 8

**VIII. STACK/VENT RESTRICTION(S)**

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
NA	NA	NA	NA

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart T for Halogenated Solvent Cleaning by the initial compliance date. **(40 CFR Part 63, Subparts A and T)**

**Footnotes:**

<sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

<sup>2</sup>This condition is federally enforceable and was established pursuant to Rule 201(1)(a).