



**Missouri Department of Natural Resources**  
**Air Pollution Control Program**

## **PART 70**

# **PERMIT TO OPERATE**

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth herein.

**Operating Permit Number:** OP2011-062  
**Expiration Date:** DEC 18 2016  
**Installation ID:** 510-1460  
**Project Number:** 2004-11-100

**Installation Name and Address**

Allied Healthcare Products, Inc.  
1720 Sublette Avenue  
St. Louis, MO 63110  
St. Louis City County

**Parent Company's Name and Address**

Allied Health Care Products, Inc.  
1720 Sublette Avenue  
St. Louis, MO 63110

**Installation Description:**

Allied Healthcare manufactures medical gas construction equipment, respiratory therapy equipment, home health care products, and emergency medical supplies. The installation mainly consists of cold cleaners and vapor degreasers. The installation is subject to 40 CFR Part 63 Subpart T-National Emission Standards for Halogenated Solvent Cleaning.

DEC 19 2011

\_\_\_\_\_  
Effective Date

  
\_\_\_\_\_  
Director or Designee  
Department of Natural Resources

## Table of Contents

<b>I. INSTALLATION DESCRIPTION AND EQUIPMENT LISTING .....</b>	<b>3</b>
INSTALLATION DESCRIPTION .....	3
EMISSION UNITS WITH LIMITATIONS .....	3
EMISSION UNITS WITHOUT LIMITATIONS .....	4
DOCUMENTS INCORPORATED BY REFERENCE .....	4
<b>II. PLANT WIDE EMISSION LIMITATIONS.....</b>	<b>5</b>
<b>III. EMISSION UNIT SPECIFIC EMISSION LIMITATIONS .....</b>	<b>6</b>
TRICHLOROETHYLENE VAPOR DEGREASERS .....	6
PERMIT CONDITION (EU0010 through EU0020)-001 .....	6
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations and.....	6
40 CFR Part 63, Subpart A General Provisions and Subpart T National Emission Standards for Halogenated Solvent Cleaning ...	6
PERMIT CONDITION (EU0010 through EU0020)-002 .....	23
St. Louis City Source Registration, October 13, 1993 .....	23
SILK SCREENING.....	24
PERMIT CONDITION EU0030-001 .....	24
St. Louis City Source Registration, September 26, 1989 .....	24
<b>IV. CORE PERMIT REQUIREMENTS .....</b>	<b>25</b>
<b>V. GENERAL PERMIT REQUIREMENTS .....</b>	<b>33</b>
<b>VI. ATTACHMENTS .....</b>	<b>38</b>
ATTACHMENT A .....	39
Fugitive Emission Observations .....	39
ATTACHMENT B .....	40
Appendix A to Subpart T of Part 63—Test of Solvent Cleaning Procedures.....	40
ATTACHMENT C .....	43
Monthly and Yearly Trichloroethylene Usage.....	43
ATTACHMENT D .....	44
Monthly and Yearly Silk Screen Usage .....	44

## I. Installation Description and Equipment Listing

### INSTALLATION DESCRIPTION

Allied Healthcare manufactures medical gas construction equipment, respiratory therapy equipment, home health care products, and emergency medical supplies. The installation mainly consists of cold cleaners and vapor degreasers. The installation is subject to 40 CFR Part 63 Subpart T-National Emission Standards for Halogenated Solvent Cleaning

<b>Reported Air Pollutant Emissions, tons per year</b>					
Pollutants	2010	2009	2008	2007	2006
Particulate Matter ≤ Ten Microns (PM <sub>10</sub> )	0	0	0	0	0.03
Particulate Matter ≤ 2.5 Microns (PM <sub>2.5</sub> )	0	0	0	0	0.03
Sulfur Oxides (SO <sub>x</sub> )	0	0	0	0	0.01
Nitrogen Oxides (NO <sub>x</sub> )	0	0	0	0	0.29
Volatile Organic Compounds(VOC)	3.64	1.02	3.63	2.74	3.53
Carbon Monoxide (CO)	0	0	0	0	0.06
Lead (Pb)	0	0	0	0	0
Hazardous Air Pollutants (HAPs)-Trichloroethylene	2.66	1.02	3.51	2.74	3.45
Ammonia (NH <sub>3</sub> )	0	0	0	0	0

Note for HAPs: The installation reported the trichloroethylene (TCE) emissions as VOC, in compliance with 10 CSR 10-6.110. The VOC values shown in the table are as reported, which include the TCE emissions. The TCE values are shown separately in this table to clarify the type and amount of HAPs that are emitted.

### EMISSION UNITS WITH LIMITATIONS

The following list provides a description of the equipment at this installation that emits air pollutants and that are identified as having unit-specific emission limitations.

Emission Unit #	Description of Emission Unit
EU0010	Vapor Degreaser (EP #3)
EU0020	Vapor Degreaser (EP #6)
EU0030	Silk Screen Machine (EP #13)

### **EMISSION UNITS WITHOUT LIMITATIONS**

The following list provides a description of the equipment that does not have unit specific limitations at the time of permit issuance.

#### Description of Emission Source

---

10 gallon cold cleaner-installed 1994 under source registration CC37-94, uses isopropyl alcohol (EP #14)

Cylinder dryer-natural gas fired (EP #5)

Space heaters (8)-natural gas fired (EP #15)

Motor cleaning (EP #16)

Assembly Timeter-adhesive application, installed 1989 (EP #9)

Various machine shop equipment

Machine shop area solder booths (5)

Solvent recovery still

Liquid nitrogen storage tank

Liquid oxygen storage tank

### **DOCUMENTS INCORPORATED BY REFERENCE**

These documents have been incorporated by reference into this permit.

1. St. Louis City source registration dated October 13, 1993 (vapor degreasers)
2. St. Louis City source registration dated September 26, 1989 (silk screen printing)

## **II. Plant Wide Emission Limitations**

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

None

### III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

<b>Trichloroethylene Vapor Degreasers</b>			
Emission Unit	Description	Manufacturer/Model #	2010 EIQ Reference #
EU0010	Vapor Degreaser, 150 gallon capacity, installed 1965, with 0.21 MMBtu/hr natural gas fired heating unit	Detrex V5-800-G	EP #13
EU0020	Vapor Degreaser, 80 gallon capacity, installed 1981, with electric powered heating unit	Baron Blakeslee DPH-2430	

**PERMIT CONDITION (EU0010 through EU0020)-001**  
**10 CSR 10-6.075 Maximum Achievable Control Technology Regulations and**  
**40 CFR Part 63, Subpart A General Provisions and Subpart T National Emission Standards for**  
**Halogenated Solvent Cleaning**

**Emissions and Operational Standards:**

- (a) Except as provided in §63.464 for all cleaning machines, the permittee shall ensure that each solvent cleaning machine conforms to the design requirements specified in §63.463(a)(1) through (7). [§63.463(a)]
  - (1) Each cleaning machine shall be designed or operated to meet the control equipment or technique requirements in §63.463(a)(1)(i) or (a)(1)(ii). [§63.463(a)(1)]
    - (i) An idling and downtime mode cover, as described in §63.463(d)(1)(i), 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. [§63.463(a)(1)(i)]
    - (ii) A reduced room draft as described in §63.463(e)(2)(ii). [§63.463(a)(1)(ii)]
  - (2) Each cleaning machine shall have a freeboard ratio of 0.75 or greater. [§63.463(a)(2)]
  - (3) Each cleaning machine shall have an automated parts handling system capable of moving parts or parts baskets at a speed of 3.4 meters per minute (11 feet per minute) or less from the initial loading of parts through removal of cleaned parts. [§63.463(a)(3)]
  - (4) Each vapor cleaning 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 vapor cleaning machine that uses steam to heat the solvent. [§63.463(a)(4)]
  - (5) Each vapor cleaning machine shall be equipped with a vapor level control device that shuts off sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser. [§63.463(a)(5)]
  - (6) Each vapor cleaning machine shall have a primary condenser. [§63.463(a)(6)]
  - (7) Each cleaning machine that uses a lip exhaust shall be designed and operated to route all collected solvent vapors through a properly operated and maintained carbon adsorber that meets the requirements of §63.463(e)(2)(vii). [§63.463(a)(7)]

(b) Except as provided in §63.464, the permittee shall comply with either §63.463(b)(1) or (b)(2).  
 [§63.463(b)]

(1) If a batch vapor cleaning machine has a solvent/air interface area of 1.21 square meters (13 square feet) or less, the permittee shall comply with the requirements specified in either §63.463(b)(1)(i) or (b)(1)(ii). [§63.463(b)(1)]

(i) Employ one of the control combinations listed in Table 1 of this subpart or other equivalent methods of control as determined using the procedure in §63.469, equivalent methods of control. [§63.463(b)(1)(i)]

**§63.463 Table 1: Control Combinations for Batch Vapor Solvent Cleaning Machines with a Solvent/Air Interface Area of 1.21 square meters (13 square feet ) or less**

Option	Control Combinations
1	Working-mode cover, freeboard ratio of 1.0, superheated vapor
2	Freeboard refrigeration device, superheated vapor
3	Working-mode cover, freeboard refrigeration device
4	Reduced room draft, freeboard ration of 1.0, superheated vapor
5	Freeboard refrigeration device, reduced room draft
6	Freeboard refrigeration device, freeboard ratio of 1.0
7	Freeboard refrigeration device, dwell
8	Reduced room draft, dwell, freeboard ratio of 1.0
9	Freeboard refrigeration device, carbon adsorber
10	Freeboard ratio of 1.0, superheated vapor, carbon adsorber

(ii) Demonstrate that their solvent cleaning machine can achieve and maintain an idling emission limit of 0.22 kilograms per hour per square meter (0.045 pounds per hour per square foot) of solvent/air interface area as determined using the procedures in §63.465(a) and Appendix A to this part. [§63.463(b)(1)(ii)]

(2) If a batch vapor cleaning machine has a solvent/air interface area greater than 1.21 square meters (13 square feet), the permittee shall comply with the requirements specified in either §63.463(b)(2)(i) or (b)(2)(ii). [§63.463(b)(2)]

(i) Employ one of the control combinations listed in Table 2 of this subpart or other equivalent methods of control as determined using the procedure in §63.469, equivalent methods of control. [§63.463(b)(2)(i)]

**§63.463 Table 2: Control Combinations for Batch Vapor Solvent Cleaning Machines with a Solvent/Air Interface Area greater than 1.21 square meters (13 square feet )**

Option	Control Combinations
1	Freeboard refrigeration device, freeboard ratio of 1.0, superheated vapor
2	Dwell, freeboard refrigeration device, reduced room draft
3	Working-mode cover, freeboard refrigeration device, superheated vapor
4	Freeboard ratio of 1.0, reduced room draft, superheated vapor
5	Freeboard refrigeration device, reduced room draft, superheated vapor
6	Freeboard refrigeration device, reduced room draft, freeboard ratio of 1.0
7	Freeboard refrigeration device, superheated vapor, carbon adsorber

(ii) Demonstrate that their solvent cleaning machine can achieve and maintain an idling emission limit of 0.22 kilograms per hour per square meter (0.045 pounds per hour per square foot) of

solvent/air interface area as determined using the procedures in §63.465(a) and Appendix A of this part. [§63.463(b)(2)(ii)]

(c) Except as provided in §63.464 for all cleaning machines, the permittee shall meet all of the following required work and operational practices specified in §63.463(d)(1) through (12), as applicable.

[§63.463(d)]

(1) Control air disturbances across the cleaning machine opening(s) by incorporating the control equipment or techniques in §63.463(d)(1)(i) or (d)(1)(ii). [§63.463(d)(1)]

(i) Cover(s) to each solvent cleaning machine shall 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.

[§63.463(d)(1)(i)]

(ii) A reduced room draft as described in §63.463(e)(2)(ii). [§63.463(d)(1)(ii)]

(2) The parts baskets or the parts being cleaned in an open-top batch vapor cleaning 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 0.9 meters per minute (3 feet per minute) or less. [§63.463(d)(2)]

(3) Any spraying operations shall be done within the vapor zone or within a section of the solvent cleaning machine that is not directly exposed to the ambient air (i.e., a baffled or enclosed area of the solvent cleaning machine). [§63.463(d)(3)]

(4) 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 removed from any solvent cleaning machine unless an equally effective approach has been approved by the Administrator. [§63.463(d)(4)]

(5) Parts baskets or parts shall not be removed from any solvent cleaning machine until dripping has stopped. [§63.463(d)(5)]

(6) During startup of each vapor cleaning machine, the primary condenser shall be turned on before the sump heater. [§63.463(d)(6)]

(7) During shutdown of each vapor cleaning machine, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off.

[§63.463(d)(7)]

(8) When solvent is added or drained from any solvent cleaning machine, the solvent shall be transferred using threaded or other leakproof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface. [§63.463(d)(8)]

(9) Each solvent cleaning machine and associated controls shall be maintained as recommended by the manufacturers of the equipment or using alternative maintenance practices that have been demonstrated to the Administrator's satisfaction to achieve the same or better results as those recommended by the manufacturer. [§63.463(d)(9)]

(10) Each operator of a solvent cleaning machine shall complete and pass the applicable sections of the test of solvent cleaning procedures in Appendix A to this part if requested during an inspection by the Administrator. [§63.463(d)(10)]

(11) Waste solvent, still bottoms, and sump bottoms shall be collected and stored in closed containers. The closed containers may contain a device that would allow pressure relief, but would not allow liquid solvent to drain from the container. [§63.463(d)(11)]

(12) Sponges, fabric, wood, and paper products shall not be cleaned. [§63.463(d)(12)]

(d) The permittee complying with §63.463(b) shall comply with the requirements specified in §63.463(e)(1) through (4). [§63.463(e)]

(1) Conduct monitoring of each control device used to comply with §63.463 of this subpart as provided in §63.466. [§63.463(e)(1)]

- 
- (2) Determine during each monitoring period whether each control device used to comply with these standards meets the requirements specified in §63.463(e)(2)(i) through (xi). [§63.463(e)(2)]
- (i) If a freeboard refrigeration device is used to comply with these standards, the permittee shall ensure that the chilled air blanket temperature (in °F), measured at the center of the air blanket, is no greater than 30 percent of the solvent's boiling point. [§63.463(e)(2)(i)]
  - (ii) If a reduced room draft is used to comply with these standards, the permittee shall comply with the requirements specified in §63.463(e)(2)(ii)(A) and (e)(2)(ii)(B). [§63.463(e)(2)(ii)]
    - (A) Ensure that the flow or movement of air across the top of the freeboard area of the solvent cleaning machine or within the solvent cleaning machine enclosure does not exceed 15.2 meters per minute (50 feet per minute) at any time as measured using the procedures in §63.466(d). [§63.463(e)(2)(ii)(A)]
    - (B) Establish and maintain the operating conditions under which the wind speed was demonstrated to be 15.2 meters per minute (50 feet per minute) or less as described in §63.466(d). [§63.463(e)(2)(ii)(B)]
  - (iii) If a working-mode cover is used to comply with these standards, the permittee shall comply with the requirements specified in §63.463(e)(2)(iii)(A) and (e)(2)(iii)(B). [§63.463(e)(2)(iii)]
    - (A) Ensure that the cover opens only for part entrance and removal and completely covers the cleaning machine openings when closed. [§63.463(e)(2)(iii)(A)]
    - (B) Ensure that the working-mode cover is maintained free of cracks, holes, and other defects. [§63.463(e)(2)(iii)(B)]
  - (iv) If an idling-mode cover is used to comply with these standards, the permittee shall comply with the requirements specified in §63.463(e)(2)(iv)(A) and (e)(2)(iv)(B). [§63.463(e)(2)(iv)]
    - (A) Ensure that the cover is in place whenever parts are not in the solvent cleaning machine and completely covers the cleaning machine openings when in place. [§63.463(e)(2)(iv)(A)]
    - (B) Ensure that the idling-mode cover is maintained free of cracks, holes, and other defects. [§63.463(e)(2)(iv)(B)]
  - (v) If a dwell is used to comply with these standards, the permittee shall comply with the requirements specified in §63.463(e)(2)(v)(A) and (e)(2)(v)(B). [§63.463(e)(2)(v)]
    - (A) Determine the appropriate dwell time for each type of part or parts basket, or determine the maximum dwell time using the most complex part type or parts basket, as described in §63.465(d). [§63.463(e)(2)(v)(A)]
    - (B) Ensure that, after cleaning, each part is held in the solvent cleaning 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. [§63.463(e)(2)(v)(B)]
  - (vi) If a superheated vapor system is used to comply with these standards, the permittee shall comply with the requirements specified in §63.463(e)(2)(vi)(A) through (e)(2)(vi)(C). [§63.463(e)(2)(vi)]
    - (A) Ensure that the temperature of the solvent vapor at the center of the superheated vapor zone is at least 10 °F above the solvent's boiling point. [§63.463(e)(2)(vi)(A)]
    - (B) Ensure that the manufacturer's specifications for determining the minimum proper dwell time within the superheated vapor system is followed. [§63.463(e)(2)(vi)(B)]
    - (C) Ensure that parts remain within the superheated vapor for at least the minimum proper dwell time. [§63.463(e)(2)(vi)(C)]

- (vii) If a carbon adsorber in conjunction with a lip exhaust or other exhaust internal to the cleaning machine is used to comply with these standards, the permittee shall comply with the following requirements: [§63.463(e)(2)(vii)]
  - (A) Ensure that the concentration of organic solvent in the exhaust from this device does not exceed 100 parts per million of any halogenated HAP compound as measured using the procedure in §63.466(e). If the halogenated HAP solvent concentration in the carbon adsorber exhaust exceeds 100 parts per million, the permittee shall adjust the desorption schedule or replace the disposable canister, if not a regenerative system, so that the exhaust concentration of halogenated HAP solvent is brought below 100 parts per million. [§63.463(e)(2)(vii)(A)]
  - (B) Ensure that the carbon adsorber bed is not bypassed during desorption. [§63.463(e)(2)(vii)(B)]
  - (C) Ensure that the lip exhaust is located above the solvent cleaning machine cover so that the cover closes below the lip exhaust level. [§63.463(e)(2)(vii)(C)]
- (3) If any of the requirements of §63.463(e)(2) are not met, the permittee shall determine whether an exceedance has occurred using the criteria in §63.463(e)(3)(i) and (e)(3)(ii). [§63.463(e)(3)]
  - (i) An exceedance has occurred if the requirements of §63.463(e)(2)(ii)(B), (e)(2)(iii)(A), (e)(2)(iv)(A), (e)(2)(v), (e)(2)(vi)(B), (e)(2)(vi)(C), (e)(2)(vii)(B), or (e)(2)(vii)(C) have not been met. [§63.463(e)(3)(i)]
  - (ii) An exceedance has occurred if the requirements of §63.463(e)(2)(i), (e)(2)(ii)(A), (e)(2)(iii)(B), (e)(2)(iv)(B), (e)(2)(vi)(A), or (e)(2)(vii)(A) have not been met and are not corrected within 15 days of detection. Adjustments or repairs shall be made to the solvent cleaning system or control device to reestablish required levels. The parameter must be remeasured immediately upon adjustment or repair and demonstrated to be within required limits. [§63.463(e)(3)(ii)]
- (4) The permittee shall report all exceedances and all corrections and adjustments made to avoid an exceedance as specified in §63.468(h). [§63.463(e)(4)]
- (e) Each permittee complying with the idling emission limit standards in §63.463(b)(1)(ii), (b)(2)(ii), shall comply with the requirements specified in §63.463(f)(1) through (f)(5). [§63.463(f)]
  - (1) Conduct an initial performance test to comply with the requirements specified in §63.463(f)(1)(i) and (f)(1)(ii). [§63.463(f)(1)]
    - (i) Demonstrate compliance with the applicable idling emission limit. [§63.463(f)(1)(i)]
    - (ii) Establish parameters that will be monitored to demonstrate compliance. If a control device is used that is listed in §63.463(e)(2), then the requirements for that control device as listed in §63.463(e)(2) shall be used unless the permittee can demonstrate to the Administrator's satisfaction that an alternative strategy is equally effective. [§63.463(f)(1)(ii)]
  - (2) Conduct the periodic monitoring of the parameters used to demonstrate compliance as described in §63.466(f). [§63.463(f)(2)]
  - (3) Operate the solvent cleaning machine within parameters identified in the initial performance test. [§63.463(f)(3)]
  - (4) If any of the requirements in §63.463(f)(1) through (f)(3) are not met, determine whether an exceedance has occurred using the criteria in §63.463(f)(4)(i) and (f)(4)(ii). [§63.463(f)(4)]
    - (i) If using a control listed in §63.463(e), the permittee shall comply with the appropriate parameter values in §63.463(e)(2) and the exceedance delineations in §63.463(e)(3)(i) and (e)(3)(ii). [§63.463(f)(4)(i)]
    - (ii) If using a control not listed in §63.463(e), the permittee shall indicate whether the exceedance of the parameters that are monitored to determine the proper functioning of this

control would be classified as an immediate exceedance or whether a 15 day repair period would be allowed. This information must be submitted to the Administrator for approval.

[§63.463(f)(4)(ii)]

- (5) The permittee shall report all exceedances and all corrections and adjustments made to avoid an exceedance as specified in §63.468(h). [§63.463(f)(5)]

**Alternative Emission and Operational Limitations:**

- (a) As an alternative to meeting the requirements in §63.463, the permittee can elect to comply with the requirements of §63.464. The permittee who elects to comply with §63.464 shall comply with the requirements specified in either §63.464(a)(1) or (a)(2). [§63.464(a)]

- (1) If the cleaning machine has a solvent/air interface, as defined in §63.461, the permittee shall comply with the requirements specified in §63.464(a)(1)(i) and (a)(1)(ii). [§63.464(a)(1)]

- (i) Maintain a log of solvent additions and deletions for each solvent cleaning machine.

[§63.464(a)(1)(i)]

- (ii) Ensure that the emissions from each solvent cleaning machine are equal to or less than the

applicable emission limit presented in Table 5 of this subpart, which is  $150 \frac{kg}{m^2 \cdot month}$ , as

determined using the procedures in §63.465(b) and (c). [§63.464(a)(1)(ii)]

- (2) If the cleaning machine is a batch vapor cleaning machine and does not have a solvent/air interface, the permittee shall comply with the requirements specified in §63.464(a)(2)(i) and (a)(2)(ii). [§63.464(a)(2)]

- (i) Maintain a log of solvent additions and deletions for each solvent cleaning machine.

[§63.464(a)(2)(i)]

- (ii) Ensure that the emissions from each solvent cleaning machine are equal to or less than the appropriate limits as described in §63.464(a)(2)(ii)(A) and (a)(2)(ii)(B). [§63.464(a)(2)(ii)]

(A) For cleaning machines with a cleaning capacity, as reported in §63.468(d), that is less than or equal to 2.95 cubic meters, the emission limit shall be determined using Table 6 or Equation 1. If using Table 6, and the cleaning capacity of the cleaning machine falls between two cleaning capacity sizes, then the lower of the two emission limits applies.

[§63.464(a)(2)(ii)(A)]

(B) For cleaning machines with a cleaning capacity as reported in §63.468(d), that is greater than 2.95 cubic meters, the emission limit shall be determined using Equation 1.

[§63.464(a)(2)(ii)(B)]

$$EL = 330(Vol)^{0.6}$$

(Equation 1)

where:

*EL* = the three-month rolling average monthly emission limit (kilograms/month).

*Vol* = the cleaning capacity of the solvent cleaning machine (cubic meters).

**§63.464 Table 6: Emission Limits for Solvent Cleaning Machines Without a Solvent/Air Interface**

Cleaning Capacity (cubic meters)	3-month rolling average monthly emission limit (kg/month)
0.00	0
0.05	55
0.10	83
0.15	106
0.20	126
0.25	144
0.30	160
0.35	176
0.40	190
0.45	204
0.50	218
0.55	231
0.60	243
0.65	255
0.70	266
0.75	278
0.80	289
0.85	299
0.90	310
0.95	320
1.00	330
1.05	340
1.10	349
1.15	359
1.20	368
1.25	377
1.30	386
1.35	395
1.40	404
1.45	412
1.50	421
1.55	429
1.60	438
1.65	446
1.70	454
1.75	462
1.80	470
1.85	477
1.90	485
1.95	493
2.00	500
2.05	508
2.10	515
2.15	522
2.20	530
2.25	537
2.30	544
2.35	551
2.40	558
2.45	565
2.50	572
2.55	579
2.60	585
2.65	592
2.70	599
2.75	605
2.80	612
2.85	619
2.90	625
2.95	632

- (b) The permittee complying with §63.464(a) shall demonstrate compliance with the applicable three-month rolling average monthly emission limit on a monthly basis as described in §63.465(b) and (c). [§63.464(b)]
- (c) If the applicable three-month rolling average emission limit is not met, an exceedance has occurred. All exceedances shall be reported as required in §63.468(h). [§63.464(c)]

**Equivalent Methods of Control:**

Upon written application, the Administrator may approve the use of equipment or procedures after they have been satisfactorily demonstrated to be equivalent, in terms of reducing emissions of trichloroethylene to the atmosphere, to those prescribed for compliance within a specified paragraph of this subpart. The application must contain a complete description of the equipment or procedure and the proposed equivalency testing procedure and the date, time, and location scheduled for the equivalency demonstration. [§63.469]

**Facility-wide Standards**

- (a) Each owner or operator of an affected facility shall comply with the requirements specified in this section. For purposes of this section, affected facility means all solvent cleaning machines, except solvent cleaning machines used in the manufacture and maintenance of aerospace products, solvent cleaning machines used in the manufacture of narrow tubing, and continuous web cleaning machines, located at a major source that are subject to the facility-wide limits in Paragraph (b)(2) of this section, and for area sources, affected facility means all solvent cleaning machines, except cold batch cleaning machines, located at an area source that are subject to the facility-wide limits in Paragraph (b)(2) of this section. [§63.471(a)]
- (b) The permittee must maintain a log of solvent additions and deletions for each solvent cleaning machine. [§63.471(b)(1)]
- (1) The permittee must ensure that the total emissions of trichloroethylene (TCE) used at the affected facility are equal to or less than the applicable facility-wide 12-month rolling total emission limit presented in Table 1, which is 14,100 kg for this installation, as determined using the procedures in §63.471(c). [§63.471(b)(2)]
- (c) The permittee shall on the first operating day of every month, demonstrate compliance with the applicable facility-wide emission limit on a 12-month rolling total basis using the procedures in §63.471(c)(1) through (5). For purposes of this paragraph, “each solvent cleaning machine” means each solvent cleaning machine that is part of an affected facility regulated by this section. [§63.471(c)]
- (1) The permittee shall, on the first operating day of every month, ensure that each solvent cleaning machine system contains only clean liquid solvent. This includes, but is not limited to, fresh unused solvent, recycled solvent, and used solvent that has been cleaned of soiled materials. A fill line must be indicated during the first month the measurements are made. The solvent level within the machine must be returned to the same fill-line each month, immediately prior to calculating monthly emissions as specified in §63.471(c)(2) and (3). The solvent cleaning machine does not have to be emptied and filled with fresh unused solvent prior to the calculations. [§63.471(c)(1)]
- (2) The permittee shall, on the first operating day of the month, using the records of all solvent additions and deletions for the previous month, determine solvent emissions  $E_{mit}$  from each solvent cleaning machine using Equation 10: [§63.471(c)(2)]

$$E_{unit} = SA_i - LSR_i - SSR_i \quad (\text{Equation 10})$$

Where:

$E_{unit}$  = the total halogenated HAP solvent emissions from the solvent cleaning machine during the most recent month i, (kilograms of solvent per month).

$SA_i$  = the total amount of halogenated HAP liquid solvent added to the solvent cleaning machine during the most recent month i, (kilograms of solvent per month).

$LSR_i$  = the total amount of halogenated HAP liquid solvent removed from the solvent cleaning machine during the most recent month i, (kilograms of solvent per month).

$SSR_i$  = the total amount of halogenated HAP solvent removed from the solvent cleaning machine in solid waste, obtained as described in Paragraph §63.471(c)(3), during the most recent month i, (kilograms of solvent per month).

- (3) The permittee shall, on the first operating day of the month, determine  $SSR_i$  using the method specified in §63.471(c)(3)(i) or (c)(3)(ii). [§63.471(c)(3)]
- (i) From tests conducted using EPA reference method 25d. [§63.471(c)(3)(i)]
- (ii) By engineering calculations included in the compliance report. [§63.471(c)(3)(ii)]
- (4) The permittee shall on the first operating day of the month, after 12 months of emissions data are available, determine the 12-month rolling total emissions,  $ET_{unit}$ , for the 12-month period ending with the most recent month using Equation 11: [§63.471(c)(4)]

$$ET_{unit} = \left[ \sum_{j=1}^{12} E_{unit} \right] \quad (\text{Equation 11})$$

Where:

$ET_{unit}$  = the total halogenated HAP solvent emissions over the preceding 12 months, (kilograms of solvent emissions per 12-month period).

$E_{unit}$  = halogenated HAP solvent emissions for each month (j) for the most recent 12 months (kilograms of solvent per month).

- (5) The permittee shall on the first operating day of the month, after 12 months of emissions data are available, determine the 12-month rolling total emissions,  $ET_{facility}$ , for the 12-month period ending with the most recent month using Equation 12: [§63.471(c)(5)]

$$ET_{facility} = \left[ \sum_{j=1}^i ET_{unit} \right] \quad (\text{Equation 12})$$

Where:

$ET_{facility}$  = the total halogenated HAP solvent emissions over the preceding 12 months for all cleaning machines at the facility, (kilograms of solvent emissions per 12-month period).

$ET_{unit}$  = the total halogenated HAP solvent emissions over the preceding 12 months for each unit j, where i equals the total number of units at the facility (kilograms of solvent emissions per 12-month period).

- (d) If the applicable facility-wide emission limit presented in Table 1 of §63.471(b)(2) is not met, an exceedance has occurred. All exceedances shall be reported as required in §63.468(h). [§63.471(d)]
- (e) The permittee shall maintain records specified in §63.471(e)(1) through (3) either in electronic or written form for a period of five years. For purposes of this paragraph, “each solvent cleaning machine” means each solvent cleaning machine that is part of an affected facility regulated by this section. [§63.471(e)]
- (1) The dates and amounts of solvent that are added to each solvent cleaning machine. [§63.471(e)(1)]
  - (2) The solvent composition of wastes removed from each solvent cleaning machines as determined using the procedure described in §63.471(c)(3). [§63.471(e)(2)]
  - (3) Calculation sheets showing how monthly emissions and the 12-month rolling total emissions from each solvent cleaning machine were determined, and the results of all calculations. [§63.471(e)(3)]
- (f) The permittee shall submit an initial notification report to the Administrator no later than May 3, 2010. This report shall include the information specified in §63.471(f)(1) through (5). [§63.471(f)]
- (1) The name and address of the permittee of the affected facility. [§63.471(f)(1)]
  - (2) The address (i.e., physical location) of the solvent cleaning machine(s) that is part of an affected facility regulated by this section. [§63.471(f)(2)]
  - (3) A brief description of each solvent cleaning machine at the affected facility including machine type (batch vapor, batch cold, vapor in-line or cold in-line), solvent/air interface area, and existing controls. [§63.471(f)(3)]
  - (4) The date of installation for each solvent cleaning machine. [§63.471(f)(4)]
  - (5) An estimate of annual halogenated HAP solvent consumption for each solvent cleaning machine. [§63.471(f)(5)]
- (g) The permittee shall submit to the Administrator an initial statement of compliance on or before May 3, 2010. The statement shall include the information specified in §63.471(g)(1) through (g)(3). [§63.471(g)]
- (1) The name and address of the permittee of the affected facility. [§63.471(g)(1)]
  - (2) The address (i.e., physical location) of each solvent cleaning machine that is part of an affected facility regulated by this section. [§63.471(g)(2)]
  - (3) The results of the first 12-month rolling total emissions calculation. [§63.471(g)(3)]
- (h) The permittee shall submit a solvent emission report every year. This solvent emission report shall contain the requirements specified in §63.471(h)(1) through (h)(3). [§63.471(h)]
- (1) The average monthly solvent consumption for the affected facility in kilograms per month. [§63.471(h)(1)]
  - (2) The 12-month rolling total solvent emission estimates calculated each month using the method as described in §63.471(c) of this section. [§63.471(h)(2)]
  - (3) This report can be combined with the annual report required in §63.468(f) and (g) into a single report for each facility. [§63.471(h)(3)]

**Testing:**

- (a) The permittee complying with an idling emission limit standard in §63.463(b)(1)(ii), (b)(2)(ii), (c)(1)(ii), or (c)(2)(ii) shall determine the idling emission rate of the solvent cleaning machine using Reference Method 307 in Appendix A of this part. [§63.465(a)]
- (b) The permittee complying with §63.464 shall, on the first operating day of every month ensure that the solvent cleaning machine system contains only clean liquid solvent. This includes, but is not limited to, fresh unused solvent, recycled solvent, and used solvent that has been cleaned of soils. A

fill line must be indicated during the first month the measurements are made. The solvent level within the machine must be returned to the same fill-line each month, immediately prior to calculating monthly emissions as specified in §63.465(c). The solvent cleaning machine does not have to be emptied and filled with fresh unused solvent prior to the calculations. [§63.465(b)]

- (c) The permittee complying with §63.464 shall, on the first operating day of the month, comply with the requirements specified in §63.465(c)(1) through (3). [§63.465(c)]
- (1) Using the records of all solvent additions and deletions for the previous monthly reporting period required under §63.464(a), determine solvent emissions,  $E_i$ , using Equation 2 for cleaning machines with a solvent/air interface and Equation 3 for cleaning machines without a solvent/air interface: [§63.465(c)(1)]

$$E_i = \frac{SA_i - LSR_i - SSR_i}{AREA_i} \quad \text{(Equation 2)}$$

$$E_n = SA_i - LSR_i - SSR_i \quad \text{(Equation 3)}$$

where:

$E_i$  = the total halogenated HAP solvent emissions from the solvent cleaning machine during the most recent monthly reporting period  $i$ , (kilograms of solvent per square meter of solvent/air interface area per month).

$E_n$  = the total halogenated HAP solvent emissions from the solvent cleaning machine during the most recent monthly reporting period  $i$ , (kilograms of solvent per month).

$SA_i$  = the total amount of halogenated HAP liquid solvent added to the solvent cleaning machine during the most recent monthly reporting period  $i$ , (kilograms of solvent per month).

$LSR_i$  = the total amount of halogenated HAP liquid solvent removed from the solvent cleaning machine during the most recent monthly reporting period  $i$ , (kilograms of solvent per month).

$SSR_i$  = the total amount of halogenated HAP solvent removed from the solvent cleaning machine in solid waste, obtained as described in Paragraph (c)(2) of this section, during the most recent monthly reporting period  $i$ , (kilograms of solvent per month).

$AREA_i$  = the solvent/air interface area of the solvent cleaning machine (square meters).

- (2) Determine  $SSR_i$  using the method specified in §63.465(c)(2)(i) or (c)(2)(ii). [§63.465(c)(2)]
- (i) From tests conducted using EPA reference method 25d. [§63.465(c)(2)(i)]
- (ii) By engineering calculations included in the compliance report. [§63.465(c)(2)(ii)]
- (3) Determine the monthly rolling average,  $EA$ , for the 3-month period ending with the most recent reporting period using Equation 4 for cleaning machines with a solvent/air interface or Equation 5 for cleaning machines without a solvent/air interface: [§63.465(c)(3)]

$$EA_i = \frac{\sum_{j=1}^3 E_i}{3} \quad \text{(Equation 4)}$$

$$EA_n = \frac{\sum_{j=1}^3 E_n}{3} \quad \text{(Equation 5)}$$

Where:

$EA_i$  = the average halogenated HAP solvent emissions over the preceding three monthly reporting periods, (kilograms of solvent per square meter of solvent/air interface area per month).

$EA_n$  = the average halogenated HAP solvent emissions over the preceding three monthly reporting periods (kilograms of solvent per month).

$E_i$  = halogenated HAP solvent emissions for each month (j) for the most recent three monthly reporting periods (kilograms of solvent per square meter of solvent/air interface area).

$E_n$  = halogenated HAP solvent emissions for each month (j) for the most recent three monthly reporting periods (kilograms of solvent per month).

j=1 = the most recent monthly reporting period.

j=2 = the monthly reporting period immediately prior to j=1.

j=3 = the monthly reporting period immediately prior to j=2.

- (d) The permittee using a dwell to comply with §63.463 shall determine the appropriate dwell time for each part or parts basket using the procedure specified in §63.465(d)(1) and (d)(2). [§63.465(d)]
- (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. [§63.465(d)(1)]
- (2) The proper dwell time for parts to remain in the freeboard area above the vapor zone is no less than 35 percent of the time determined in §63.465(d)(1). [§63.465(d)(2)]
- (e) The permittee shall determine their potential to emit from all solvent cleaning operations, using the procedures described in §63.465(e)(1) through (e)(3). A facility's total potential to emit is the sum of the HAP emissions from all solvent cleaning operations, plus all HAP emissions from other sources within the facility. [§63.465(e)]
- (1) Determine the potential to emit for each individual solvent cleaning using Equation 6. [§63.465(e)(1)]

$$PTE_i = H_i \times W_i \times SAI_i \quad (\text{Equation 6})$$

Where:

$PTE_i$  = the potential to emit for solvent cleaning machine i (kilograms of solvent per year).

$H_i$  = hours of operation for solvent cleaning machine i (hours per year), 8760 hours per year, unless otherwise restricted by a Federally enforceable requirement.

$W_i$  = the working mode uncontrolled emission rate (kilograms per square meter per hour), 1.95 kilograms per square meter per hour for batch vapor cleaning machine.

$SAI_i$  = solvent/air interface area of solvent cleaning machine i (square meters). Section 63.461 defines the solvent/air interface area for those machines that have a solvent/air interface. Cleaning machines that do not have a solvent/air interface shall calculate a solvent/air interface area using the procedure in §63.465(e)(2).

- (2) Cleaning machines that do not have a solvent/air interface shall calculate a solvent/air interface area using Equation 7. [§63.465(e)(2)]

$$SAI = 2.20(Vol)^{0.6} \quad (\text{Equation 7})$$

Where:

*SAI* = the solvent/air interface area (square meters).

*Vol* = the cleaning capacity of the solvent cleaning machine (cubic meters).

- (3) Sum the  $PTE_i$  for all solvent cleaning operations to obtain the total potential to emit for solvent cleaning operations at the facility. [§63.465(e)(3)]

**Monitoring:**

- (a) Except as provided in §63.466(g), each permittee complying with the equipment standards in §63.463(b)(1)(i), (b)(2)(i) shall conduct monitoring and record the results on a weekly basis for the control devices, as appropriate, specified in §63.466(a)(1) through (5). [§63.466(a)]
- (1) If a freeboard refrigeration device is used to comply with these standards, the permittee shall use a thermometer or thermocouple to measure the temperature at the center of the air blanket during the idling mode. [§63.466(a)(1)]
- (2) If a superheated vapor system is used to comply with these standards, the permittee shall use a thermometer or thermocouple to measure the temperature at the center of the superheated solvent vapor zone while the solvent cleaning machine is in the idling mode. [§63.466(a)(2)]
- (b) Except as provided in §63.466(g), each permittee complying with the equipment standards of §63.463 (b)(1)(i), or (b)(2)(i) shall conduct monitoring and record the results on a monthly basis for the control devices, as appropriate, specified in §63.466(b)(1) and (b)(2). [§63.466(b)]
- (1) If a cover (working-mode, downtime-mode, and/or idling-mode cover) is used to comply with these standards, the permittee shall conduct a visual inspection to determine if the cover is opening and closing properly, completely covers the cleaning machine openings when closed, and is free of cracks, holes, and other defects. [§63.466(b)(1)]
- (2) If a dwell is used, the permittee shall determine the actual dwell time by measuring the period of time that parts are held within the freeboard area of the solvent cleaning machine after cleaning. [§63.466(b)(2)]
- (c) Except as provided in §63.466(g), each permittee complying with the equipment or idling standards in §63.463 shall monitor the hoist speed as described in §63.466(c)(1) through (c)(4). [§63.466(c)]
- (1) The permittee shall determine the hoist speed by measuring the time it takes for the hoist to travel a measured distance. The speed is equal to the distance in meters divided by the time in minutes (meters per minute). [§63.466(c)(1)]
- (2) The monitoring shall be conducted monthly. If after the first year, no exceedances of the hoist speed are measured, the permittee may begin monitoring the hoist speed quarterly. [§63.466(c)(2)]
- (3) If an exceedance of the hoist speed occurs during quarterly monitoring, the monitoring frequency returns to monthly until another year of compliance without an exceedance is demonstrated. [§63.466(c)(3)]
- (4) If the permittee can demonstrate to the Administrator's satisfaction in the initial compliance report that the hoist cannot exceed a speed of 3.4 meters per minute (11 feet per minute), the required monitoring frequency is quarterly, including during the first year of compliance. [§63.466(c)(4)]
- (d) Except as provided in §63.466(g), the permittee complying with the equipment standards in §63.463 (b)(1)(i), or (b)(2)(i) using a reduced room draft shall conduct monitoring and record the results as specified in §63.466(d)(1) or (d)(2). [§63.466(d)]
- (1) If the reduced room draft is maintained by controlling room parameters (i.e., redirecting fans, closing doors and windows, etc.), the permittee shall conduct an initial monitoring test of the

- windspeed and of room parameters, quarterly monitoring of windspeed, and weekly monitoring of room parameters as specified in §63.466(d)(1)(i) and (d)(1)(ii). [§63.466(d)(1)]
- (i) Measure the windspeed within 6 inches above the top of the freeboard area of the solvent cleaning machine using the procedure specified in §63.466(d)(1)(i)(A) through (d)(1)(i)(D). [§63.466(d)(1)(i)]
    - (A) Determine the direction of the wind current by slowly rotating a velometer or similar device until the maximum speed is located. [§63.466(d)(1)(i)(A)]
    - (B) Orient a velometer in the direction of the wind current at each of the four corners of the machine. [§63.466(d)(1)(i)(B)]
    - (C) Record the reading for each corner. [§63.466(d)(1)(i)(C)]
    - (D) Average the values obtained at each corner and record the average wind speed. [§63.466(d)(1)(i)(D)]
  - (ii) Monitor on a weekly basis the room parameters established during the initial compliance test that are used to achieve the reduced room draft. [§63.466(d)(1)(ii)]
- (2) If an enclosure (full or partial) is used to achieve a reduced room draft, the permittee shall conduct an initial monitoring test and, thereafter, monthly monitoring tests of the windspeed within the enclosure using the procedure specified in §63.466(d)(2)(i) and (d)(2)(ii) and a monthly visual inspection of the enclosure to determine if it is free of cracks, holes and other defects. [§63.466(d)(2)]
- (i) Determine the direction of the wind current in the enclosure by slowly rotating a velometer inside the entrance to the enclosure until the maximum speed is located. [§63.466(d)(2)(i)]
  - (ii) Record the maximum wind speed. [§63.466(d)(2)(ii)]
- (e) Except as provided in §63.466(g), the permittee using a carbon adsorber to comply with this subpart shall measure and record the concentration of halogenated HAP solvent in the exhaust of the carbon adsorber weekly with a colorimetric detector tube. This test shall be conducted while the solvent cleaning machine is in the working mode and is venting to the carbon adsorber. The exhaust concentration shall be determined using the procedure specified in §63.466(e)(1) through (e)(3). [§63.466(e)]
- (1) Use a colorimetric detector tube designed to measure a concentration of 100 parts per million by volume of solvent in air to an accuracy of  $\pm 25$  parts per million by volume. [§63.466(e)(1)]
  - (2) Use the colorimetric detector tube according to the manufacturer's instructions. [§63.466(e)(2)]
  - (3) Provide a sampling port for monitoring within the exhaust outlet of the carbon adsorber that is easily accessible and located at least 8 stack or duct diameters downstream from any flow disturbance such as a bend, expansion, contraction, or outlet; downstream from no other inlet; and 2 stack or duct diameters upstream from any flow disturbance such as a bend, expansion, contraction, inlet or outlet. [§63.466(e)(3)]
- (f) The permittee complying with the idling emission limit standards of §63.463(b)(1)(ii), or (b)(2)(ii), shall comply with the requirements specified in §63.466(f)(1) and (f)(2). [§63.466(f)]
- (1) If using controls listed in §63.466(a) through (e), the permittee shall comply with the monitoring frequency requirements in §63.466(a) through (e). [§63.466(f)(1)]
  - (2) If using controls not listed in §63.466(a) through (e), the permittee shall establish the monitoring frequency for each control and submit it to the Administrator for approval in the initial test report. [§63.466(f)(2)]
- (g) The permittee using a control device listed in §63.466(a) through (e) can use alternative monitoring procedures approved by the Administrator. [§63.466(g)]

**Recordkeeping:**

- (a) The permittee complying with the provisions of §63.463 shall maintain records in written or electronic form specified in §63.467(a)(1) through (7) for the lifetime of the machine. [§63.467(a)]
- (1) Owner's manuals, or if not available, written maintenance and operating procedures, for the solvent cleaning machine and control equipment. [§63.467(a)(1)]
  - (2) The date of installation for the solvent cleaning machine and all of its control devices. If the exact date for installation is not known, a letter certifying that the cleaning machine and its control devices were installed prior to, or on, November 29, 1993, or after November 29, 1993, may be substituted. [§63.467(a)(2)]
  - (3) If a dwell is used to comply with these standards, records of the tests required in §63.465(d) to determine an appropriate dwell time for each part or parts basket. [§63.467(a)(3)]
  - (4) The permittee complying with the idling emission limit standards of §63.463(b)(1)(ii), or (b)(2)(ii) shall maintain records of the initial performance test, including the idling emission rate and values of the monitoring parameters measured during the test. [§63.467(a)(4)]
  - (5) Records of the halogenated HAP solvent content for each solvent used in a solvent cleaning machine subject to the provisions of this subpart. [§63.467(a)(5)]
- (b) The permittee complying with §63.463 shall maintain records specified in §63.467(b)(1) through (b)(4) either in electronic or written form for a period of 5 years. [§63.467(b)]
- (1) The results of control device monitoring required under §63.466. [§63.467(b)(1)]
  - (2) Information on the actions taken to comply with §63.463(e) and (f). This information shall include records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels. [§63.467(b)(2)]
  - (3) Estimates of annual solvent consumption for each solvent cleaning machine. [§63.467(b)(3)]
  - (4) If a carbon adsorber is used to comply with these standards, records of the date and results of the weekly measurement of the halogenated HAP solvent concentration in the carbon adsorber exhaust required in §63.466(e). [§63.467(b)(4)]
- (c) The permittee complying with the provisions of §63.464 shall maintain records specified in §63.467(c)(1) through (3) either in electronic or written form for a period of 5 years. [§63.467(c)]
- (1) The dates and amounts of solvent that are added to the solvent cleaning machine. [§63.467(c)(1)]
  - (2) The solvent composition of wastes removed from cleaning machines as determined using the procedure described in §63.465(c)(2). [§63.467(c)(2)]
  - (3) Calculation sheets showing how monthly emissions and the rolling 3-month average emissions from the solvent cleaning machine were determined, and the results of all calculations. [§63.467(c)(3)]
- (d) The permittee with a solvent cleaning machine without a solvent/air interface complying with the provisions of §63.464 shall maintain records on the method used to determine the cleaning capacity of the cleaning machine. [§63.467(d)]

**Reporting:**

- (a) The permittee shall submit an initial notification report to the Administrator no later than August 29, 1995. This report shall include the information specified in §63.468(a)(1) through (a)(6). [§63.468(a)]
- (1) The name and address of the permittee. [§63.468(a)(1)]
  - (2) The address (i.e., physical location) of the solvent cleaning machine(s). [§63.468(a)(2)]

- (3) A brief description of each solvent cleaning machine including machine type (batch vapor, batch cold, vapor in-line or cold in-line), solvent/air interface area, and existing controls. [§63.468(a)(3)]
- (4) The date of installation for each solvent cleaning machine or a letter certifying that the solvent cleaning machine was installed prior to, or after, November 29, 1993. [§63.468(a)(4)]
- (5) The anticipated compliance approach for each solvent cleaning machine. [§63.468(a)(5)]
- (6) An estimate of annual halogenated HAP solvent consumption for each solvent cleaning machine. [§63.468(a)(6)]
- (b) The permittee shall submit a compliance report to the Administrator. This report shall be submitted to the Administrator no later than 150 days after the compliance date specified in §63.460(d). This report shall include the requirements specified in Paragraphs (c)(1) through (c)(4) of this section. [§63.468(c)]
  - (1) The name and address of the permittee. [§63.468(c)(1)]
  - (2) The address (i.e., physical location) of the solvent cleaning machine(s). [§63.468(c)(2)]
  - (3) A statement, signed by the permittee, stating that the solvent cleaning machine for which the report is being submitted is in compliance with the provisions of this subpart. [§63.468(c)(3)]
  - (4) The compliance approach for each solvent cleaning machine. [§63.468(c)(4)]
- (c) The permittee shall submit to the Administrator an initial statement of compliance for each solvent cleaning machine. This report shall be submitted to the Administrator no later than 150 days after the compliance date specified in §63.460(d). This statement shall include the requirements specified in §63.468(d)(1) through (d)(6). [§63.468(d)]
  - (1) The name and address of the permittee. [§63.468(d)(1)]
  - (2) The address (i.e., physical location) of the solvent cleaning machine(s). [§63.468(d)(2)]
  - (3) A list of the control equipment used to achieve compliance for each solvent cleaning machine. [§63.468(d)(3)]
  - (4) For each piece of control equipment required to be monitored, a list of the parameters that are monitored and the values of these parameters measured on or during the first month after the compliance date. [§63.468(d)(4)]
  - (5) Conditions to maintain the wind speed requirements of §63.463(e)(2)(ii), if applicable. [§63.468(d)(5)]
  - (6) The permittee complying with the idling emission limit standards of §63.463(b)(1)(ii) or (b)(2)(ii) shall submit a test report for tests of idling emissions meeting the specifications in Method 307 of Appendix A to this subpart. This report shall comply with the requirements specified in §63.468(d)(6)(i) through (d)(6)(iv). [§63.468(d)(6)]
    - (i) This test must be on the same specific model cleaner used at the source. The test can be done by the permittee or can be supplied by the vendor of that solvent cleaning machine or a third party. [§63.468(d)(6)(i)]
    - (ii) This report must clearly state the monitoring parameters, monitoring frequency and the delineation of exceedances for each parameter. [§63.468(d)(6)(ii)]
    - (iii) If a solvent cleaning machine vendor or third party test report is used to demonstrate compliance, it shall include the following for the solvent cleaning machine tested: Name of person(s) or company that performed the test, model name, the date the solvent cleaning machine was tested, serial number, and a diagram of the solvent cleaning machine tested. [§63.468(d)(6)(iii)]
    - (iv) If a solvent cleaning machine vendor or third party test report is used, the permittee shall comply with the requirements specified in either §63.468(d)(6)(iv)(A) and (d)(6)(iv)(B). [§63.468(d)(6)(iv)]

- (A) Submit a statement by the solvent cleaning machine vendor that the unit tested is the same as the unit the report is being submitted for. [§63.468(d)(6)(iv)(A)]
- (B) Demonstrate to the Administrator's satisfaction that the solvent emissions from the solvent cleaning machine for which the test report is being submitted are equal to or less than the solvent emissions from the solvent cleaning machine in the vendor test report. [§63.468(d)(6)(iv)(B)]
- (7) If a carbon adsorber is used to comply with these standards, the date and results of the weekly measurement of the halogenated HAP solvent concentration in the carbon adsorber exhaust required in §63.466(e). [§63.468(d)(7)]
- (d) The permittee complying with the provisions of §63.464 shall submit to the Administrator an initial statement of compliance for each solvent cleaning machine. For existing sources, this report shall be submitted to the Administrator no later than 150 days after the compliance date specified in §63.460(d). The statement shall include the information specified in §63.468(e)(1) through (e)(4). [§63.468(e)]
  - (1) The name and address of the permittee. [§63.468(e)(1)]
  - (2) The address of the solvent cleaning machine(s). [§63.468(e)(2)]
  - (3) The solvent/air interface area for each solvent cleaning machine or, for cleaning machines without a solvent/air interface, a description of the method used to determine the cleaning capacity and the results. [§63.468(e)(3)]
  - (4) The results of the first 3-month average emissions calculation. [§63.468(e)(4)]
- (e) The permittee complying with the provisions of §63.463 shall submit an annual report by February 1 of the year following the one for which the reporting is being made. This report shall include the requirements specified in §63.468(f)(1) through (f)(3). [§63.468(f)]
  - (1) A signed statement from the permittee stating that, "All operators of solvent cleaning machines have received training on the proper operation of solvent cleaning machines and their control devices sufficient to pass the test required in §63.463(d)(10)." [§63.468(f)(1)]
  - (2) An estimate of solvent consumption for each solvent cleaning machine during the reporting period. [§63.468(f)(2)]
  - (3) The reports required under §63.468(f) and (g) can be combined into a single report for each facility. [§63.468(f)(3)]
- (f) The permittee complying with the provisions of §63.464 shall submit a solvent emission report every year. This solvent emission report shall contain the requirements specified in §63.468(g)(1) through (g)(4). [§63.468(g)]
  - (1) The size and type of each unit subject to this subpart (solvent/air interface area or cleaning capacity). [§63.468(g)(1)]
  - (2) The average monthly solvent consumption for the solvent cleaning machine in kilograms per month. [§63.468(g)(2)]
  - (3) The 3-month monthly rolling average solvent emission estimates calculated each month using the method as described in §63.465(c). [§63.468(g)(3)]
  - (4) The reports required under §63.468(f) and (g) can be combined into a single report for each facility. [§63.468(g)(4)]
- (g) The permittee shall submit an exceedance report to the Administrator semiannually except when, the Administrator determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source or, an exceedance occurs. Once an exceedance has occurred the permittee shall follow a quarterly reporting format until a request to reduce reporting frequency under §63.468(i) is approved. Exceedance reports shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. The

exceedance report shall include the applicable information in §63.468(h)(1) through (3).

[§63.468(h)]

- (1) Information on the actions taken to comply with §63.463 (e) and (f). This information shall include records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels. [§63.468(h)(1)]
  - (2) If an exceedance has occurred, the reason for the exceedance and a description of the actions taken. [§63.468(h)(2)]
  - (3) If no exceedances of a parameter have occurred, or a piece of equipment has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report. [§63.468(h)(3)]
- (h) A permittee who is required to submit an exceedance report on a quarterly (or more frequent) basis may reduce the frequency of reporting to semiannual if the conditions in §63.468(i)(1) through (i)(3) are met. [§63.468(i)]
- (1) The source has demonstrated a full year of compliance without an exceedance. [§63.468(i)(1)]
  - (2) The permittee continues to comply with all relevant recordkeeping and monitoring requirements specified Subpart A (General Provisions) and in this subpart. [§63.468(i)(2)]
  - (3) The Administrator does not object to a reduced frequency of reporting for the affected source as provided in §63.468(e)(3)(iii) of Subpart A (General Provisions). [§63.468(i)(3)]
- (i) The permittee requesting an equivalency determination, as described in §63.469 shall submit an equivalency request report to the Administrator. For existing sources, this report must be submitted to the Administrator no later than June 3, 1996. [§63.468(k)]

**PERMIT CONDITION (EU0010 through EU0020)-002**

**St. Louis City Source Registration, October 13, 1993**

*This permit condition is not federally or state enforceable.*

**Operational Limitation**

- (a) The permittee shall not use more than 450 gallons (monthly) or 4,800 gallons (12 month rolling sum) of trichloroethylene. (Condition I. F.)
- (b) The permittee shall not operate each degreaser more than 4,992 hours per 12 month rolling sum. (Condition I. F.)

**Monitoring/Recordkeeping:**

- (a) The permittee shall record the monthly and yearly amounts of trichloroethylene used. (Condition II. B.)
- (b) The permittee shall record the operational hours of each degreaser. (Condition II. C)
- (c) These records shall be kept for five (5) years and made available for inspection by the City of St. Louis Air Pollution Control Program and/or Department of Natural Resources' personnel upon request.

**Reporting:**

- (a) The permittee shall report to the City of St. Louis Air Pollution Control Program, Enforcement Section, 1520 Market Street, Room 4058, St. Louis, MO 63103, and to the Missouri Department of Natural Resources Air Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of the terms imposed by this permit condition.

- (b) Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted semiannually, in the semi-annual monitoring report and annual compliance certification, as required by Section IV of this permit.

<b>Silk Screening</b>			
Emission Unit	Description	Manufacturer/Model #	2010 EIQ Reference #
EU0030	Silk Screening Machine	N/A	EP #3

**PERMIT CONDITION EU0030-001**  
**St. Louis City Source Registration, September 26, 1989**

*This permit condition is not federally or state enforceable.*

**Operational Limitation**

The permittee shall not use more than 40 gallons per year of Timeter silk screen.

**Monitoring/Recordkeeping:**

- (a) The permittee shall record the amounts of Timeter silk screen used.
- (b) These records shall be kept for five (5) years and made available for inspection by the City of St. Louis Air Pollution Control Program and/or Department of Natural Resources' personnel upon request.

**Reporting:**

- (a) The permittee shall report to the City of St. Louis Air Pollution Control Program, Enforcement Section, 1520 Market Street, Room 4058, St. Louis, MO 63103, and to the Missouri Department of Natural Resources Air Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of the terms imposed by this permit condition.
- (b) Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted semiannually, in the semi-annual monitoring report and annual compliance certification, as required by Section IV of this permit

## IV. Core Permit Requirements

The installation shall comply with each of the following regulations or codes. Consult the appropriate sections in the Code of Federal Regulations (CFR), the Code of State Regulations (CSR), and local ordinances for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued. The following is only an excerpt from the regulation or code, and is provided for summary purposes only.

### 10 CSR 10-6.045 Open Burning Requirements

- 1) General Provisions. The open burning of tires, petroleum-based products, asbestos containing materials, and trade waste is prohibited, except as allowed below. Nothing in this rule may be construed as to allow open burning which causes or constitutes a public health hazard, nuisance, a hazard to vehicular or air traffic, nor which violates any other rule or statute.
- 2) Refer to the regulation for a complete list of allowances. The following is a listing of exceptions to the allowances:
  - a) Burning of household or domestic refuse. Burning of household or domestic refuse is limited to open burning on a residential premises having not more than four dwelling units, provided that the refuse originates on the same premises, with the following exceptions:
    - i) Kansas City metropolitan area. The open burning of household refuse must take place in an area zoned for agricultural purposes and outside that portion of the metropolitan area surrounded by the corporate limits of Kansas City and every contiguous municipality;
    - ii) Springfield-Greene County area. The open burning of household refuse must take place outside the corporate limits of Springfield and only within areas zoned A-1, Agricultural District;
    - iii) St. Joseph area. The open burning of household refuse must take place within an area zoned for agricultural purposes and outside that portion of the metropolitan area surrounded by the corporate limits of St. Joseph; and
    - iv) St. Louis metropolitan area. The open burning of household refuse is prohibited;
  - b) Yard waste, with the following exceptions:
    - i) Kansas City metropolitan area. The open burning of trees, tree leaves, brush or any other type of vegetation shall require an open burning permit;
    - ii) Springfield-Greene County area. The City of Springfield requires an open burning permit for the open burning of trees, brush or any other type of vegetation. The City of Springfield prohibits the open burning of tree leaves;
    - iii) St. Joseph area. Within the corporate limits of St. Joseph, the open burning of trees, tree leaves, brush or any other type of vegetation grown on a residential property is allowed during the following calendar periods and time-of-day restrictions:
      - (1) A three (3)-week period within the period commencing the first day of March through April 30 and continuing for twenty-one (21) consecutive calendar days;
      - (2) A three (3)-week period within the period commencing the first day of October through November 30 and continuing for twenty-one (21) consecutive calendar days;
      - (3) The burning shall take place only between the daytime hours of 10:00 a.m. and 3:30 p.m.; and
      - (4) In each instance, the twenty-one (21)-day burning period shall be determined by the Director of Public Health and Welfare of the City of St. Joseph for the region in which

- the City of St. Joseph is located provided, however, the burning period first shall receive the approval of the Department Director; and
- iv) St. Louis metropolitan area. The open burning of trees, tree leaves, brush or any other type of vegetation is limited to the period beginning September 16 and ending April 14 of each calendar year and limited to a total base area not to exceed sixteen (16) square feet. Any open burning shall be conducted only between the hours of 10:00 a.m. and 4:00 p.m. and is limited to areas outside of incorporated municipalities;
  - 3) Certain types of materials may be open burned provided an open burning permit is obtained from the Director. The permit will specify the conditions and provisions of all open burning. The permit may be revoked if the owner or operator fails to comply with the conditions or any provisions of the permit.
  - 4) Allied Healthcare Products, Inc. may be issued an annually renewable open burning permit for open burning provided that an air curtain destructor or incinerator is utilized and only tree trunks, tree limbs, vegetation or untreated wood waste are burned. Open burning shall occur at least two hundred (200) yards from the nearest occupied structure unless the owner or operator of the occupied structure provides a written waiver of this requirement. Any waiver shall accompany the open burning permit application. The permit may be revoked if Allied Healthcare Products, Inc. fails to comply with the provisions or any condition of the open burning permit.
    - a) In a nonattainment area, as defined in 10 CSR 10-6.020, Paragraph (2)(N)5., the Director shall not issue a permit under this section unless the owner or operator can demonstrate to the satisfaction of the Director that the emissions from the open burning of the specified material would be less than the emissions from any other waste management or disposal method.
  - 5) Reporting and Recordkeeping. New Source Performance Standard (NSPS) 40 CFR Part 60 Subpart CCCC establishes certain requirements for air curtain destructors or incinerators that burn wood trade waste. These requirements are established in 40 CFR 60.2245-60.2260. The provisions of 40 CFR Part 60 Subpart CCCC promulgated as of September 22, 2005, shall apply and are hereby incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401. To comply with NSPS 40 CFR 60.2245-60.2260, sources must conduct an annual Method 9 test. A copy of the annual Method 9 test results shall be submitted to the Director.
  - 6) Test Methods. The visible emissions from air pollution sources shall be evaluated as specified by 40 CFR Part 60, Appendix A–Test Methods, Method 9–Visual Determination of the Opacity of Emissions from Stationary Sources. The provisions of 40 CFR Part 60, Appendix A, Method 9 promulgated as of December 23, 1971, is incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401.

#### **10 CSR 10-6.050 Start-up, Shutdown and Malfunction Conditions**

- 1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the Director within two business days, in writing, the following information:
  - a) Name and location of installation;
  - b) Name and telephone number of person responsible for the installation;
  - c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
  - d) Identity of the equipment causing the excess emissions;
  - e) Time and duration of the period of excess emissions;
  - f) Cause of the excess emissions;
  - g) Air pollutants involved;

- h) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
  - i) Measures taken to mitigate the extent and duration of the excess emissions; and
  - j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
- 2) The permittee shall submit the Paragraph 1 information list to the Director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the Director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
  - 3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under Section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the Paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the Director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under Section 643.080 or 643.151, RSMo.
  - 4) Nothing in this rule shall be construed to limit the authority of the Director or commission to take appropriate action, under Sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
  - 5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

#### **10 CSR 10-6.060 Construction Permits Required**

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.

#### **10 CSR 10-6.065 Operating Permits**

The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than eighteen months. [10 CSR 10-6.065(6)(B)1.A(V)] The permittee shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065(6)(C)1.C(II)] The permittee shall immediately make such permit available to any Missouri Department of Natural Resources' personnel upon request. [10 CSR 10-6.065(6)(C)3.B]

#### **10 CSR 10-6.100 Alternate Emission Limits**

Proposals for alternate emission limitations shall be submitted on Alternate Emission Limits Permit forms provided by the Department. An installation owner or operator must obtain an Alternate Emission Limits Permit in accordance with 10 CSR 10-6.100 before alternate emission limits may become effective.

**10 CSR 10-6.110 Submission of Emission Data, Emission Fees and Process Information**

- 1) The permittee shall submit full emissions report either electronically via MoEIS, which requires Form 1.0 signed by an authorized company representative, or on Emission Inventory Questionnaire (EIQ) paper forms on the frequency specified in this rule and in accordance with the requirements outlined in this rule. Alternate methods of reporting the emissions, such as spreadsheet file, can be submitted for approval by the Director.
- 2) The permittee may be required by the Director to file additional reports.
- 3) Public Availability of Emission Data and Process Information. Any information obtained pursuant to the rule(s) of the Missouri Air Conservation Commission that would not be entitled to confidential treatment under 10 CSR 10-6.210 shall be made available to any member of the public upon request.
- 4) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079.
- 5) The fees shall be payable to the Department of Natural Resources and shall be accompanied by the emissions report.
- 6) The permittee shall complete required reports on state supplied EIQ forms or electronically via MoEIS. Alternate methods of reporting the emissions can be submitted for approval by the Director. The reports shall be submitted to the Director by April 1 after the end of each reporting year. If the full emissions report is filed electronically via MoEIS, this due date is extended to May 1.
- 7) The reporting period shall end on December 31 of each calendar year. Each report shall contain the required information for each emission unit for the twelve (12)-month period immediately preceding the end of the reporting period.
- 8) The permittee shall collect, record and maintain the information necessary to complete the required forms during each year of operation of the installation.

**10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential**

This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or emergency (maroon) and the associated procedures and emission reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

**10 CSR 10-6.150 Circumvention**

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

**10 CSR 10-6.170**

**Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin**

**Emission Limitation:**

- 1) The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the Director.
- 2) The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain

visible in the ambient air beyond the property line of origin.

- 3) Should it be determined that noncompliance has occurred, the Director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
  - a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
  - b) Paving or frequent cleaning of roads, driveways and parking lots;
  - c) Application of dust-free surfaces;
  - d) Application of water; and
  - e) Planting and maintenance of vegetative ground cover.

**Monitoring:**

The permittee shall conduct inspections of its facilities sufficient to determine compliance with this regulation. If the permittee discovers a violation, the permittee shall undertake corrective action to eliminate the violation. The permittee shall maintain the following monitoring schedule:

- 1) The permittee shall conduct weekly observations for a minimum of eight (8) consecutive weeks after permit issuance.
- 2) Should no violation of this regulation be observed during this period then-
  - a) The permittee may observe once every two (2) weeks for a period of eight (8) weeks.
  - b) If a violation is noted, monitoring reverts to weekly.
  - c) Should no violation of this regulation be observed during this period then-
    - i) The permittee may observe once per month.
    - ii) If a violation is noted, monitoring reverts to weekly.
- 3) If the permittee reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner to the initial monitoring frequency.

**Recordkeeping:**

The permittee shall document all readings on Attachment A, or its equivalent, noting the following:

- 1) Whether air emissions (except water vapor) remain visible in the ambient air beyond the property line of origin.
- 2) Whether the visible emissions were normal for the installation.
- 3) Whether equipment malfunctions contributed to an exceedance.
- 4) Any violations and any corrective actions undertaken to correct the violation.

<b>10 CSR 10-6.180 Measurement of Emissions of Air Contaminants</b>
---

- 1) The Director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The Director may specify testing methods to be used in accordance with good professional practice. The Director may observe the testing. All tests shall be performed by qualified personnel.
- 2) The Director may conduct tests of emissions of air contaminants from any source. Upon request of the Director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.
- 3) The Director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

**10 CSR 10-5.040 Use of Fuel in Hand-Fired Equipment Prohibited**

It shall be unlawful to operate any hand-fired fuel-burning equipment in the St. Louis, Missouri metropolitan area. This regulation shall apply to all fuel-burning equipment including, but not limited to, furnaces, heating and cooking stoves and hot water furnaces. It shall not apply to wood-burning fireplaces and wood-burning stoves in dwellings, nor to fires used for recreational purpose, nor to fires used solely for the preparation of food by barbecuing. Hand-fired fuel-burning equipment is any stove, furnace, or other fuel-burning device in which fuel is manually introduced directly into the combustion chamber.

**10 CSR 10-5.060 Refuse Not to be Burned in Fuel Burning Installations  
(Contained in State Implementation Plan)**

No person shall burn or cause or permit the burning of refuse in any installation which is designed for the primary purpose of burning fuel.

**10 CSR 10-5.120 Information on Sales of Fuels to be Provided and Maintained**

Every delivery of coal or residual fuel oil when first delivered to a consumer or wholesaler in the St. Louis metropolitan area must be accompanied by a ticket prepared in triplicate and containing at least the name and address of the seller and the buyer; the grade of fuel; ash content of coal, the source of the fuel, which must be an approved source, and such other information as the Air Conservation Commission may require. One copy of each ticket shall be kept by the person delivering the fuel and be retained for one year; one copy is to be given to the recipient of the fuel to be retained for one year; and, upon request, within 30 days after delivery of the fuel, the delivering party shall mail one copy to the Air Conservation Commission.

**10 CSR 10-6.165 Restriction of Emission of Odors**

**This requirement is not federally enforceable.**

No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour. This odor evaluation shall be taken at a location outside of the installation's property boundary.

**10 CSR 10-5.240 Additional Air Quality Control Measures May be Required When Sources Are Clustered in a Small Land Area**

The Air Conservation Commission may prescribe more restrictive air quality control requirements that are more restrictive and more extensive than provided in regulations of general application for:

- 1) Areas in which there are one or more existing sources and/or proposed new sources of particulate matter in any circular area with a diameter of two miles (including sources outside metropolitan area) from which the sum of particulate emissions allowed from these sources by regulations of general application are or would be greater than 2000 tons per year or 500 pounds per hour.
- 2) Areas in which there are one or more existing sources and/or proposed new sources of sulfur dioxide in any circular area with a diameter of two miles from which the sum of sulfur dioxide emissions from these sources allowed by regulations of general application are or would be greater than 1000 tons for any consecutive three months or 1000 pounds per hour.

**Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone**

- 1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
  - a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
  - b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
  - c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
  - d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
- 2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
  - a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
  - b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
  - c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
  - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
  - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
  - f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- 3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.
- 4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.
- 5) The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR Part 82*

**10 CSR 10-6.280 Compliance Monitoring Usage**

- 1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:

- a) Monitoring methods outlined in 40 CFR Part 64;
  - b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
  - c) Any other monitoring methods approved by the Director.
- 2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:
- a) Monitoring methods outlined in 40 CFR Part 64;
  - b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
  - c) Compliance test methods specified in the rule cited as the authority for the emission limitations.
- 3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
- a) Applicable monitoring or testing methods, cited in:
    - i) 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
    - ii) 10 CSR 10-6.040, "Reference Methods";
    - iii) 10 CSR 10-6.070, "New Source Performance Standards";
    - iv) 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
  - b) Other testing, monitoring, or information gathering methods, if approved by the Director, that produce information comparable to that produced by any method listed above.

## V. General Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued,

### **10 CSR 10-6.065(6)(C)1.B Permit Duration**

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed.

### **10 CSR 10-6.065(6)(C)1.C General Recordkeeping and Reporting Requirements**

- 1) Recordkeeping
  - a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
  - b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.
- 2) Reporting
  - a) All reports shall be submitted to the Air Pollution Control Program, Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
  - b) The permittee shall submit a report of all required monitoring by:
    - i) October 1st for monitoring which covers the January through June time period, and
    - ii) April 1st for monitoring which covers the July through December time period.
    - iii) Exception. Monitoring requirements which require reporting more frequently than semi annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
  - c) Each report shall identify any deviations from emission limitations, monitoring, recordkeeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances.
  - d) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
    - i) Notice of any deviation resulting from an emergency (or upset) condition as defined in Paragraph (6)(C)7.A of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.

- ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.
- iii) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semiannual report shall be reported on the schedule specified in this permit, and no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.
- e) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.
- f) The permittee may request confidential treatment of information submitted in any report of deviation.

#### **10 CSR 10-6.065(6)(C)1.D Risk Management Plan Under Section 112(r)**

The permittee shall comply with the requirements of 40 CFR Part 68, Accidental Release Prevention Requirements. If the permittee has more than a threshold quantity of a regulated substance in process, as determined by 40 CFR Section 68.115, the permittee shall submit a Risk Management Plan in accordance with 40 CFR Part 68 no later than the latest of the following dates:

- 1) June 21, 1999;
- 2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or
- 3) The date on which a regulated substance is first present above a threshold quantity in a process.

#### **10 CSR 10-6.065(6)(C)1.F Severability Clause**

In the event of a successful challenge to any part of this permit, all uncontested permit conditions shall continue to be in force. All terms and conditions of this permit remain in effect pending any administrative or judicial challenge to any portion of the permit. If any provision of this permit is invalidated, the permittee shall comply with all other provisions of the permit.

#### **10 CSR 10-6.065(6)(C)1.G General Requirements**

- 1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
- 2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit
- 3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- 4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
- 5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to

the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 10 CSR 10-6.065(6)(C)1.

**10 CSR 10-6.065(6)(C)1.H Incentive Programs Not Requiring Permit Revisions**

No permit revision will be required for any installation changes made under any approved economic incentive, marketable permit, emissions trading, or other similar programs or processes provided for in this permit.

**10 CSR 10-6.065(6)(C)1.I Reasonably Anticipated Operating Scenarios**

None

**10 CSR 10-6.065(6)(C)3 Compliance Requirements**

- 1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
- 2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
  - a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
  - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
  - d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
- 3) All progress reports required under an applicable schedule of compliance shall be submitted semiannually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
  - a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
  - b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
- 4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to EPA Region VII, 901 North 5th Street, Kansas City, Kansas 66101, as well as the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and Part 64 exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:
  - a) The identification of each term or condition of the permit that is the basis of the certification;
  - b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;

- c) Whether compliance was continuous or intermittent;
- d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
- e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

#### **10 CSR 10-6.065(6)(C)6 Permit Shield**

- 1) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:
  - a) The applicable requirements are included and specifically identified in this permit, or
  - b) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation, and this permit expressly includes that determination or a concise summary of it.
- 2) Be aware that there are exceptions to this permit protection. The permit shield does not affect the following:
  - a) The provisions of Section 303 of the Act or Section 643.090, RSMo concerning emergency orders,
  - b) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,
  - c) The applicable requirements of the acid rain program,
  - d) The authority of the Environmental Protection Agency and the Air Pollution Control Program of the Missouri Department of Natural Resources to obtain information, or
  - e) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.

#### **10 CSR 10-6.065(6)(C)7 Emergency Provisions**

- 1) An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7.A shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
  - a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
  - b) That the installation was being operated properly,
  - c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
  - d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- 2) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

#### **10 CSR 10-6.065(6)(C)8 Operational Flexibility**

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable

under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, at least seven days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

- 1) Section 502(b)(10) changes. Changes that, under Section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), recordkeeping, reporting or compliance requirements of the permit.
  - a) Before making a change under this provision, The permittee shall provide advance written notice to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and the Air Pollution Control Program shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the Air Pollution Control Program as above at least seven days before the change is to be made. If less than seven days notice is provided because of a need to respond more quickly to these unanticipated conditions, the permittee shall provide notice to the EPA and the Air Pollution Control Program as soon as possible after learning of the need to make the change.
  - b) The permit shield shall not apply to these changes.

#### **10 CSR 10-6.065(6)(C)9 Off-Permit Changes**

- 1) Except as noted below, the permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:
  - a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is subject to any requirements under Title IV of the Act or is a Title I modification;
  - b) The permittee must provide written notice of the change to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, no later than the next annual emissions report. This notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(6)(B)3. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.
  - c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and

- d) The permit shield shall not apply to these changes.

**10 CSR 10-6.020(2)(R)12 Responsible Official**

The application utilized in the preparation of this permit was signed by Dennis W. Allen, Vice President-Operations. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

**10 CSR 10-6.065(6)(E)6 Reopening-Permit for Cause**

This permit may be reopened for cause if:

- 1) The Missouri Department of Natural Resources (MDNR) receives notice from the Environmental Protection Agency (EPA) that a petition for disapproval of a permit pursuant to 40 CFR § 70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination,
- 2) The Missouri Department of Natural Resources or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
- 3) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
  - a) The permit has a remaining term of less than three years;
  - b) The effective date of the requirement is later than the date on which the permit is due to expire;  
or
  - c) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
- 4) The installation is an affected source under the acid rain program and additional requirements (including excess emissions requirements), become applicable to that source, provided that, upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit;  
or
- 5) The Missouri Department of Natural Resources or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

**10 CSR 10-6.065(6)(E)1.C Statement of Basis**

This permit is accompanied by a statement setting forth the legal and factual basis for the permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

## VI. Attachments

Attachments follow.



---

---

**Attachment B**

**Appendix A to Subpart T of Part 63—Test of Solvent Cleaning Procedures**

General Questions

\_\_\_ 1. What is the maximum allowable speed for parts entry and removal?

- A. 8.5 meters per minute (28 feet per minute).
- B. 3.4 meters per minute (11 feet per minute).
- C. 11 meters per minute (36 feet per minute).
- D. No limit.

\_\_\_ 2. How do you ensure that parts enter and exit the solvent cleaning machine at the speed required in the regulation?

- A. Program on computerized hoist monitors speed.
- B. Can judge the speed by looking at it.
- C. Measure the time it takes the parts to travel a measured distance.

\_\_\_ 3. Identify the sources of air disturbances.

- A. Fans
- B. Open doors
- C. Open windows
- D. Ventilation vents
- E. All of the above

\_\_\_ 4. What are the three operating modes?

- A. Idling, working and downtime
- B. Precleaning, cleaning, and drying
- C. Startup, shutdown, off
- D. None of the above

\_\_\_ 5. When can parts or parts baskets be removed from the solvent cleaning machine?

- A. When they are clean
- B. At any time
- C. When dripping stops
- D. Either A or C is correct

\_\_\_ 6. How must parts be oriented during cleaning?

- A. It does not matter as long as they fit in the parts basket.
- B. So that the solvent pools in the cavities where the dirt is concentrated.
- C. So that solvent drains from them freely.

\_\_\_ 7. During startup, what must be turned on first, the primary condenser or the sump heater?

- A. Primary condenser
- B. Sump heater
- C. Turn both on at same time
- D. Either A or B is correct

---

---

**Appendix A to Subpart T of Part 63—Test of Solvent Cleaning Procedures (continued)**

\_\_\_ 8. During shutdown, what must be turned off first, the primary condenser or the sump heater?

- A. Primary condenser
- B. Sump heater
- C. Turn both off at same time
- D. Either A or B is correct

\_\_\_ 9. In what manner must solvent be added to and removed from the solvent cleaning machine?

- A. With leak proof couplings
- B. With the end of the pipe in the solvent sump below the liquid solvent surface.
- C. So long as the solvent does not spill, the method does not matter.
- D. A and B

\_\_\_ 10. What must be done with waste solvent and still and sump bottoms?

- A. Pour down the drain
- B. Store in closed container
- C. Store in a bucket
- D. A or B

\_\_\_ 11. What types of materials are prohibited from being cleaned in solvent cleaning machines using halogenated HAP solvents?

- A. Sponges
- B. Fabrics
- C. Paper
- D. All of the above

Control Device Specific Questions  
Freeboard Refrigeration Device

\_\_\_ 1. What temperature must the FRD achieve?

- A. Below room temperature
- B. 50 °F
- C. Below the solvent boiling point
- D. 30 percent below the solvent boiling point

Working-Mode Cover

\_\_\_ 2. When can a cover be open?

- A. While parts are in the cleaning machine
- B. During parts entry and removal
- C. During maintenance
- D. During measurements for compliance purposes
- E. A and C
- F. B, C, and D

**Appendix A to Subpart T of Part 63—Test of Solvent Cleaning Procedures (continued)**

\_\_\_ 3. Covers must be maintained in what condition?

- A. Free of holes
- B. Free of cracks
- C. So that they completely seal cleaner opening
- D. All of the above

Dwell

\_\_\_ 4. Where must the parts be held for the appropriate dwell time?

- A. In the vapor zone
- B. In the freeboard area above the vapor zone
- C. Above the cleaning machine
- D. In the immersion sump

Answers

General Questions

- 1. B
- 2. A or C
- 3. E
- 4. A
- 5. C
- 6. C
- 7. A
- 8. B
- 9. D
- 10. B
- 11. D

Control Device Specific Questions

- 1. D
- 2. F
- 3. D
- 4. B





## STATEMENT OF BASIS

### Permit Reference Documents

These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

- 1) Part 70 Operating Permit Application, received January 6, 2005;
- 2) 2010 Emissions Inventory Questionnaire, received April 25, 2011; and
- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition.
- 4) Source Registration Permit CC37-94-10 gallon cold cleaner
- 5) Permit termination letter from St. Louis City Local Agency dated September 6, 2005
- 6) Construction Permit #96-03-024-Burlytic Deburring Process
- 7) Source Registration dated September 14, 1988-Binks Spray Booth

### Applicable Requirements Included in the Operating Permit but Not in the Application or Previous Operating Permits

In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

None

### Other Air Regulations Determined Not to Apply to the Operating Permit

The Air Pollution Control Program (APCP) has determined the following requirements to not be applicable to this installation at this time for the reasons stated.

#### 10 CSR 10-5.300-Control of Emissions From Solvent Metal Cleaning

The units at this installation are exempt from this regulation because they are either subject to 40 CFR Part 63 Subpart T-National Emission Standards for Halogenated Solvent Cleaning, or they are used to clean medical devices, see 5.300(1)(D)C. and D., respectively.

#### 10 CSR 10-5.445-Control of emission From Solvent Cleanup Operations

This regulation does not apply to the installation because cleaning solvent VOC's are emitted at less than 500 lbs/day, see 5.455(2)(B).

#### 10 CSR 10-6.260-Restriction of Emission of Sulfur Compounds

All combustion equipment at the installation uses only natural gas and is therefore exempt from this regulation per 6.260(1)(A)2.

### Construction Permit and Source Registration Revisions

This installation does not have any construction permits. On September 6, 2005, the St. Louis City Local Agency terminated Construction Permit #96-03-024 for the Burlytic Deburring Process and the Source Registration issued on September 14, 1988, for the Binks Spray Booth because these units have been rendered inoperable and retired in place.

Source Registration dated September 26, 1989

This registration is for the silk screen process and contains a limit of 40 gallons per year on Timeter silk screen. Monitoring, recordkeeping, and reporting requirements have been added by this Operating Permit to assure compliance with the throughput limitation.

Source Registration dated October 13, 1993

This is a registration to switch the degreaser solvent from 1-1-1 trichloroethane to trichloroethylene in three vapor degreasing units: the 150 gallon Detrex (V5-800-G), the 80 gallon Baron Blakeslee (DPH-2430) and the eight gallon Baron Blakslee (MSR). The eight gallon unit has been removed from the site. This registration contains the following conditions which do not appear in this Operating Permit because these units are subject to 40 CFR Part 63 Subpart T -National Emission Standards for Halogenated Solvent Cleaning, which is more stringent.

Condition I.C. requires the installation to ensure the water is circulating in the cooling coils prior to parts entering the degreaser.

Condition I. D. requires the degreasers to comply with 10 CSR 10-5.300-Control of Emission from Solvent Metal Cleaning

Condition I.E. requires the degreasers to comply with various St. Louis City Ordinances

Additionally, the recordkeeping requirement has been changed from two years to five years to comply with 10 CSR 10-6.065-Operating Permits.

Source Registration #CC37-94

This registration is for the ten gallon cold cleaner. It states that the unit must comply with 10 CSR 10-5.300-Control of Emission from Solvent Metal Cleaning. However, this rule contains an exemption for the cleaning of medical devices, see 5.300(1)(D)1.D.

#### **New Source Performance Standards (NSPS) Applicability**

None

#### **Maximum Achievable Control Technology (MACT) Applicability**

40 CFR Part 63 Subpart T-National Emission Standards for Halogenated Solvent Cleaning

The installation uses trichloroethylene in the vapor degreasers and is therefore subject to this regulation.

#### **National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability**

In the permit application and according to Air Pollution Control Program records, there was no indication that any Missouri Air Conservation Law, Asbestos Abatement, 643.225 through 643.250; 10 CSR 10-6.080, Emission Standards for Hazardous Air Pollutants, Subpart M, National Standards for Asbestos; and 10 CSR 10-6.250, Asbestos Abatement Projects - Certification, Accreditation, and Business Exemption Requirements apply to this installation. The installation is subject to these regulations if they undertake any projects that deal with or involve any asbestos containing materials. None of the installation's operating projects underway at the time of this review deal with or involve asbestos containing material. Therefore, the above regulations were not cited in the operating permit. If the installation should undertake any construction or demolition projects in the future that deal with or involve any asbestos containing materials, the installation must follow all of the applicable requirements of the above rules related to that specific project.

### **Compliance Assurance Monitoring (CAM) Applicability**

#### *40 CFR Part 64, Compliance Assurance Monitoring (CAM)*

According to 64.2(b)(1)(i), CAM does not apply to emission limitations or standards proposed by the Administrator after November 15, 1990, pursuant to section 111 or 112 of the Act. The vapor degreasers are subject to 40 CFR Part 63 Subpart T- National Emission Standards for Halogenated Solvent Cleaning, which was proposed on November 29, 1995 (58 FR 62566). Since the proposal date is after the 1990 cutoff, CAM does not apply.

### **Greenhouse Gas Emissions**

This installation is not a major source of greenhouse gas emissions. While the installation does have various natural gas combustion units, the total heat input on an installation basis is less than ten MMBtu/hr. There are no other sources of greenhouse gases at this installation.

### **Other Regulatory Determinations**

10 CSR 10-5.030-Maximum Allowable Emission of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating

10 CSR 10-6.220-Restriction of Emission of Visible Air Contaminants

These regulations are not listed in the permit because all combustion equipment uses only natural gas and therefore will not violate any of the emission limitations in these regulations.

Since issuance of the previous Operating Permit, the installation has made the following equipment changes:

Burlytic Deburring Process

Binks Spray Booth

Both of these units remain on site, however they have been rendered inoperable and their permits and source registrations have been terminated by the St. Louis City Local Agency.

20 gallon capacity AH Blend Solvent Cleaner

Safety Cans

These units have been removed from site.

### **Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis**

Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one or more of the following reasons:

- 1) The specific pollutant regulated by that rule is not emitted by the installation;
- 2) The installation is not in the source category regulated by that rule;
- 3) The installation is not in the county or specific area that is regulated under the authority of that rule;
- 4) The installation does not contain the type of emission unit which is regulated by that rule;
- 5) The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the Air Pollution Control Program's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the Air Pollution Control Program a schedule for achieving compliance for that regulation(s).

Prepared by:

---

Nicole Weidenbenner, P.E.  
Environmental Engineer

CERTIFIED MAIL: 70093410000190188650  
RETURN RECEIPT REQUESTED

Mr. Dennis W. Allen  
Allied Healthcare Products, Inc.  
1720 Sublette Avenue  
St. Louis, MO 63110

Re: Allied Healthcare Products, Inc., 510-1460  
Permit Number: **OP2011-062**

Dear Mr. Allen:

Enclosed with this letter is your Part 70 operating permit. Please review this document carefully. Operation of your installation in accordance with the rules and regulations cited in this document is necessary for continued compliance. It is very important that you read and understand the requirements contained in your permit.

You may appeal this permit to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.078.16 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you have any questions or need additional information regarding this permit, please do not hesitate to contact Nicole Weidenbenner, P.E., at the Department's Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, or by telephone at (573) 751-4817. Thank you for your time and attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Michael J. Stansfield, P.E.  
Operating Permit Unit Chief

MJS:nwk

Enclosures

c: St. Louis Regional Office  
PAMS File: 2004-11-100