

COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Southwest Regional Office
March 10, 2010

OFFICIAL FILE COPY

SUBJECT: Review of Title V Permit Renewal Application
Summerill Tube Corporation
Scottdale Plant
Scottdale Borough, Westmoreland County

RENEW

TO: Air Quality Permit File TV-65-00173

THROUGH: Mark A. Wayner, P.E. *MAW*
Program Manager
Air Quality Program

Barbara R. Hatch, P.E. *BRH*
Environmental Engineer Manager
Air Quality Program

FROM: Alan A. Binder *A.A.B.*
Air Quality Engineering Specialist
Air Quality Program

BACKGROUND

Summerill Tube Corporation (STC) has submitted a Title V permit application to renew their Title V Operating Permit (TVOP) for their Scottdale Plant located in Scottdale Borough, Westmoreland County. STC is a specialty producer of stainless and other alloy steel tubing. The facility is located on the northeastern side of the town of Scottdale within a residential area. Residences are located within 100 feet of the property line. Facility-wide emissions reported for the 2008 calendar year were approximately 30.8 tons of Trichloroethylene (TCE), 3.87 tons of Toluene, 34.7 tons of VOCs, 0.4 tons of Hydrofluoric Acid, 0.2 tons of Nitric Acid, and less than one ton for all other air contaminants. This facility is classified as a major source of HAPs and TCE in particular.

The facility currently includes the following sources:

- Process Acid Dip Tank (Nitric and Hydrofluoric Acid)
- Finish Acid Dip Tank (Nitric and Hydrofluoric Acid)
- Degreasing Bath and Still (TCE Vapor Degreaser)
- Lubricant Coating Area (Toluene-containing Lubricant)
- Misc. small natural gas-fired boilers, cutting saws, parts washers, tanks, drying ovens, a wet abrasive polishing system, wastewater pretreatment, and groundwater treatment

The following controls are in operation at the facility:

- Process Line Scrubber
- Finish Line Scrubber

STC receives stainless steel and other alloy tubes which are cut and cold-drawn to reduce their size to desired specifications. As the tubes are drawn to smaller diameters, they are annealed in a hydrogen atmosphere within electric annealing furnaces to restore ductility. Tubol 467 is applied as a lubricant to the interior of some tube products before being drawn. Cleaning processes include degreasing, acid and alkaline cleaning, and water and de-ionized water rinsing. Degreasing of the lubricating oil is performed in batches by a TCE vapor degreaser. Natural gas-fired boilers are used to generate process heat for the vapor degreaser as well as space heat when necessary. Acid cleaning to remove oxides and chrome depleted layers is also performed in batches in (12-14%) nitric and (4-5%) hydrofluoric acids tanks during processing and finishing. Wet scrubbers have been installed to control emissions from the process and finish acid tanks. Cleaned tubes are sometimes polished with a wet abrasive system before final inspection and shipping. Markets for finished tube products include the aerospace and nuclear industry.

Teledyne Rodney Metals, Inc. originally owned and operated this facility under OP-65-173A. A Synthetic Minor Permit Application was submitted in 1995 with the intention to replace 1,1,1 trichloroethane used in their degreaser with a non-HAP material. Teledyne submitted a Title V Permit Application in February, 1997 when they could not find a suitable replacement. While under review, ownership transferred to Dynamic Metal Forming, Inc. who submitted a Title V application modification in June, 1998 to formally change ownership. During this same time period a new vapor degreaser was installed under plan approval PA-65-173A in 1999. This new vapor degreaser replaced 1,1,1 trichloroethane with TCE as production of 1,1,1 trichloroethane was being phased out worldwide due to its classification by the Montreal Protocol as a substance that depletes the ozone. The initial TVOP TV-65-00173 was issued on February 28, 2001 with an expiration date of February 28, 2006. Ownership was transferred again to the current owner, Summerill Tube Corporation, via an Administrative Amendment performed in 2003.

This Title V Renewal Application was received on August 30, 2005 and was determined to be administratively complete. STC's existing TVOP expired on February 28, 2006 and they have been operating under a permit shield since then. The only notable change at this facility since the TVOP was amended in 2003 is the replacement of the original 10.46 MMBtu/hr natural gas-fired boiler with two smaller natural gas-fired boilers. Two Rite Steam Boiler Model P 48 SG 1.95 MMBtu/hr natural gas-fired boilers were installed under Department approval by RFD 65-00173B on July 18, 2008. No operating permit violations have been noted at this facility since the renewal application was originally filed and operations have remained essentially unchanged since the TVOP was originally issued. The most recent operating permit compliance inspection was completed on June 12, 2009.

Additional information regarding vapor degreaser controls, scrubber stack testing results, and potential emission estimates was requested from the applicant via email on January 6, 2010. Complete responses were received from the project consultant Matt Grandinette on January 19, 2010. A final set of information regarding potential VOC emissions from all insignificant sources as the support for a facility-wide VOC limit was requested from the applicant via email on January 21, 2010. Complete responses and the preliminary acceptance of a facility-wide VOC limit was received on March 3, 2010.

REGULATORY ANALYSIS

Per Pa. Code Title 25 Section 127.402(a), a permit is required to operate a stationary air contamination source.

National Emissions Standards for Hazardous Air Pollutants (NESHAPS) National Emission Standards for Halogenated Solvent Cleaning from 40 CFR Part 63 Subpart T applies to the vapor degreaser at this facility. Applicability has been determined during review of the initial TVOP Application and the appropriate regulatory requirements are already included in the permit. Requirements relating to the use of reduced room draft as a

control for the vapor degreaser were added to the initial TVOP. STC has chosen acceptable methods of controlling their vapor degreaser per 40 CFR 63.463(b)(2)(i) which do not include the use of reduced room draft as confirmed by their consultant. Requirements referencing the use of reduced room draft as a control shall be removed from this permit.

Per 40 CFR 63.471, solvent cleaning machines used in the manufacture of narrow tubing are not considered affected sources with regards to the facility-wide annual emission limits required by Table 1 under 40 CFR 63.471(b)(2). STC is classified as a narrow tube manufacturer and is not subject to facility-wide annual emission limits for TCE. 40 CFR Part 63 Subpart T has been amended on December 19, 2005 and May 3, 2007, but no additional sections of this subpart are applicable to this facility. The applicant anticipates that this exemption for narrow tube manufacturers will soon change but no such amendment has yet been proposed or finalized. Any revisions required by changes to 40 CFR Part 63 Subpart T shall be addressed through Pa. Code Title 25 Section 127.463 as appropriate.

Per Pa. Code Title 25 Section 129.63(b), "Except for those subject to the Federal NESHAP for halogenated solvent cleaners under 40 CFR Part 63, this subsection applies to batch vapor cleaning machines that use solvent containing greater than 5% VOC by weight for the cleaning of metal parts." STC is subject to 40 CFR Part 63 Subpart T for halogenated solvent cleaning and is therefore exempt from Pa. Code Title 25 Section 129.63(b). Requirements from this section were included in the original TVOP and shall be removed from the renewed permit.

Per Pa. Code Title 25 Section 129.57, "The provisions of this section apply to above ground stationary storage tanks with a capacity greater than 2,000 gallons which contain volatile organic compounds..." The existing TCE storage tank located at this facility has a capacity of 1,500 gallons and is exempt from Pa. Code Title 25 Section 129.57.

Per the applicant and multiple inspection reports, the existing Safety Kleen parts washer utilizes compliant Premium Gold Solvent and is exempt from regulatory requirements. Records from the previous three years of operation show 15 gallons of mineral spirits lost each year from the parts washer.

This facility is not subject to RACT or NSR requirements because potential emission rates for NO_x or VOCs do not exceed 50 tons per year. Title V Permitting of this facility is necessary because the potential emission rates for HAPs and TCE as an individual HAP are above major source thresholds.

EMISSIONS & CONTROLS

The only change authorized to the air contamination sources or controls at the facility since the previous permit renewal has been the replacement of the original natural gas-fired boiler with two small capacity natural gas-fired boilers. The previous owner submitted potential emission rates for the primary air contaminants for each source with the original application. These rates were calculated using AP-42 factors for the natural gas-fired boiler, predictive model and stack test demonstrated emission rates for the acid dip tanks, mass balance methods for lubricant coating and the TCE vapor degreaser, and tested concentrations of TCE for the groundwater treatment system. AP-42 factor emission estimates for the two new Rite Steam boilers replace the estimation for the original boiler. Yearly emission rates reflect a worst case operating scenario of 8760 hours per year. Potential emission rates for each non-trivial source at the facility are listed in tables 1-4 below:

Table 1: Rite Steam Boilers Combined Potential Emission Rates

Air Contaminant	Potential Emission Rate (tpy)
NO _x	1.63
CO	1.37
PM ₁₀	0.12
VOC	0.089
SO _x	0.010

The Rite Steam Boiler Model P 48 SG natural gas-fired boilers are used to provide process steam for the vapor degreaser. According to STC, only one boiler is to be in operation while the other is in standby for backup purposes. Under the above operating scenario actual yearly emissions will be less than half of the potential.

Table 2: Process and Finish Acid Dip Tanks Combined Potential Emission Rates

Air Contaminant	Potential Emission Rate (tpy)
NO _x	14.89
Hydrofluoric Acid	0.36
Nitric Acid	0.17

A predictive model was used to estimate potential NO_x emissions from the acid tanks. This model was developed by the Bureau of Mines in Rolla, Missouri and takes into account the acid bath concentration, chromium concentration of the alloy, and surface area of the steel cleaned along with the assumption that one mole of NO_x is generated from every mole of iron cleaned from the steel. The applicant believes NO_x emissions are overestimated because bright annealing of their tubes does not generate a significant oxide layer. Potential emission rates for hydrofluoric and nitric acid are taken from stack tests performed on the process and finish line wet scrubbers in 1990. These emission rates should still be representative of the process as the acid concentration, controls, and operational parameters are essentially unchanged. Concentrations of nitric and hydrofluoric acid are maintained at 12-14% and 4-5% in both tanks. To ensure compliance, the pH level of the scrubbing medium is limited to between 7 and 10.5 as demonstrated by continuous monitoring and recordkeeping.

Table 3: TCE Vapor Degreaser and Lubricant Coating Permitted Emission Rates

Air Contaminant	Permitted Emission Rate (tpy)
VOC	47.0
TCE (HAP)	47.0
Toluene (HAP)	
HAP (Total)	47.0

TCE is the primary pollutant of concern at this facility. It is currently the only solvent STC finds effective to use as a degreaser for Tubol 467 and the only solvent allowed to be used by permit condition. Investigation of alternative solvents including n-propyl bromide is ongoing in an effort to reduce VOC and HAP emissions and possibly remove the facility from major classification. So far, alternative solvents have been proven to be insufficient to maintain product quality in STC's process. Potential emissions of TCE are calculated with Equation 6 under 40 CFR 63.465(e)(1). This equation assumes an operational time of 8760 hours per year and

multiplies this by a provided working mode uncontrolled emission rate of 1.95 kg/m²-hr and the solvent to air interface area of 8.36 m² for this particular vapor degreaser. However, emissions of TCE from the vapor degreaser have been previously limited to 41 tons in any consecutive 12 month period by permit condition. A collective TCE and Toluene emission limit of 47 tons per year for the vapor degreaser and lubricant coating will replace this limit. Actual emissions of TCE are determined by mass balance through recordkeeping of TCE purchases, storage tank volume, degreaser and still volume, and removal as hazardous waste.

STC controls the vapor degreaser by maintaining and using a freeboard ratio of 1.0 ft, freeboard refrigeration device, superheated vapor, and working mode cover. Hoist speed is also limited to a maximum of 11 ft per minute in order to reduce losses from vapor displacement and dragout.

STC uses a red plasticized lubricant called Tubol 467 when drawing some of its tube products. Toluene is the primary component of Tubol 467 and emissions are estimated assuming the worst case concentration of 70%. Emissions of Toluene have been previously limited to 8.7 tons in any consecutive 12 month period by permit condition. A collective Toluene and TCE limit of 47 tons per year for the vapor degreaser and lubricant coating will replace this limit. Actual emissions of toluene are recorded as the difference between purchased and disposed amounts based upon the concentration of toluene in Tubol 467 and the outgoing hazardous waste.

Table 4: Groundwater Treatment System Potential Emissions

Air Contaminant	Potential Emission Rate (tpy)
VOC	0.55
TCE (HAP)	0.55

Groundwater treatment is performed because introduction of TCE into the groundwater is a common method of human exposure. TCE emission estimates from the groundwater treatment system were based upon a measured concentration of 5 ppm TCE which is typical from groundwater sampling. The density of the groundwater samples along with the maximum gallons treated per day were also used in the calculation. The final yearly emission rate assumes no control and complete volatilization so actual emissions are expected to be much lower.

Parts washer use, spot solvent cleaning, and a gasoline storage tank account for the remaining VOC emissions at the facility. VOC emissions from a 250 gallon gasoline storage tank were calculated through AP-42 TANKS modeling in the original Title V permit application. VOC emissions from solvent use are estimated on a mass balance approach assuming 15 gallons per year in the parts washer and 424 gallons per year for equipment maintenance. Table 6 below lists potential VOC emissions from the above sources.

Table 5: Remaining Misc VOC Source Potential Emissions

Air Contaminant	Potential Emission Rate (tpy)
VOC	1.5

Potential facility-wide emission rates are listed below in Table 7. A limit on potential VOC emissions of 47 tons per year from the vapor degreaser and lubricant coating will replace the individual limits on TCE and toluene of 41 and 8.7 tons respectively. Limiting emissions in this way ensures that STC does not exceed the 50 ton per year major source threshold for VOC emissions considering the potential VOC emissions from all remaining sources do not exceed 3 tons per year. This limit also allows for operational flexibility to use more or less TCE and toluene as needed as long as the combined emissions are less than 47 tons per year.

Table 6: Facility-Wide Potential Emissions

Air Contaminant	Potential Emission Rate (tpy)
NOx	16.52
CO	1.37
PM10	0.12
SOx	0.01
VOC	49.14
Nitric Acid	0.17
TCE (HAP)	47.55
Toluene (HAP)	
Hydrofluoric Acid (HAP)	0.36
Total HAP	47.91

RECOMMENDATIONS

Summerill Tube Corporation has submitted a complete application and I recommend renewing their TVOP for an additional 5 years. Special conditions in the permit will be modified or removed as indicated in the following sections. Recommendations acted on from the most recent facility inspection include the addition of a malfunction reporting condition, completion of permit source mapping, and detailing additional source information. Source #104, Degreasing Bath and Still, will be inactivated and replaced with Source #204, Vapor Degreaser. Source #204 has been previously entered as a sub facility when the TCE vapor degreaser was installed and it contains the current vapor degreaser information. Hourly emission limits of hydrofluoric and nitric acid will be removed from Source Group 1 because there is no regulatory basis for specific emission limits. Correct operation of the acid dips tanks is determined by compliance with an existing pH limit. Source #031, Boiler, will be removed from the site inventory list as it has been removed from the facility. The two new boilers will be listed as exempt sources in the miscellaneous section along with other insignificant sources which have been previously exempted.

SPECIAL CONDITIONS

Site Level Condition Addition

1. Malfunction reporting [Pa. Code Title 25 §127.442]
 - a. The Owner/Operator shall report each malfunction that may result in a potential exceedance of permit emission limits to the Department. For purposes of this condition a malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control or process equipment, or, operating in a non-permitted manner.
 - b. When the malfunction poses an imminent and substantial danger to the public health and safety or potential harm to the environment, the Owner/Operator shall report the incident to the Department within one hour.
 - i. The report shall describe the:

1. name and location of the facility;
2. nature and cause of the malfunction;
3. time when the malfunction or breakdown was first observed;
4. expected duration of excess emissions; and
5. estimated rate of emissions.

ii. The Owner/Operator shall notify the Department immediately when corrective measures have been accomplished.

- c. Unless otherwise required by specific reporting requirements, any malfunction that is not subject to the notice requirements of subsection (b) of this permit condition shall be reported to the Department within 24 hours (or the next business day) of discovery by telephone and in writing within 5 days of discovery. The report shall contain the same information required by subsection (b)(1).
- d. Malfunctions shall be reported to the Department at the following address:

PA DEP
Office of Air Quality
400 Waterfront Drive
Pittsburgh, PA 15222-4745
(412) 442-4000

**Source Group Level Condition to Be Added
(Vapor Degreaser and Lubricant Coating Area Source Group)**

1. VOC emissions from this source group shall be limited to 47 tons in any consecutive 12 month period. The Owner/Operator shall maintain records of the 12 month rolling total for VOC emissions from this source group. These records shall be maintained on site for a minimum of five years and shall be made available to the Department upon request [Pa. Code Title 25 §127.441(a)].

Source Level Condition to Be Removed

1. Source 104 Existing Condition #010 – [25 Pa. Code §129.63]
2. Source 104 Existing Condition #002 – The total hazardous air pollutant (HAP) emissions from this vapor degreaser shall not exceed 41 tons in any consecutive 12 month period.
3. Source 105 Existing Condition #001 – The total hazardous air pollutant (HAP) emissions from lubricant coating and drying process shall not exceed 8.7 tons in any consecutive 12 month period.

Source Level Conditions to Be Modified

(Note: Bolded text has been added while strikethrough text has been removed)

1. Source 104 Existing Condition #007

The permittee shall track and record on a weekly basis:

- the quantity of solvent purchased

- the quantity of solvent in the storage tank
- the quantity of solvent in the degreaser and still
- the quantity of solvent disposed of as hazardous waste

This information shall be used to determine compliance with the yearly VOC emission limit and shall be **made** available to the Department upon request.

2. Source 104 Existing Condition #008

(a) Each owner or operator of a batch vapor cleaning machine shall conduct monitoring and record the results on a weekly basis for the control devices specified in paragraph (a)(1 & 2), below.

(1) If a freeboard refrigeration device is used to comply with these standards, the owner or operator shall use a thermometer or thermocouple to measure the temperature at the center of the air blanket during the idling mode.

(2) If a superheated vapor system is used to comply with these standards, the owner or operator 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.

(b) Except as provided in paragraph (d) of this condition, each owner and operator of a batch vapor solvent cleaning machine complying with the equipment standards of Condition #004 [63.463(b)(2)(i)] shall conduct monitoring and record the results on a monthly basis for the control devices, as appropriate, specified in paragraphs (b)(1) of this section.

(1) If a cover (working-mode, downtime-mode, and/or idling-mode cover) is used to comply with these standards, the owner or operator 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.

(b) (c) Except as provided in paragraph (d) of this section, each owner or operator of a batch vapor cleaning machine shall monitor the hoist speed as described in paragraphs (b)(c)(1) through (b)(c)(4) of this section.

(1) The owner or operator 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).

(2) The monitoring shall be conducted monthly. If after the first year, no exceedances of the hoist speed are measured, the owner or operator may begin monitoring the hoist speed quarterly.

(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.

(4) If an owner or operator 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.

~~(c) Each owner or operator of a batch vapor cleaning machine using a reduced room draft shall conduct monitoring and record the results as specified in paragraph (c)(1) or (c)(2) of this section.~~

~~(1) If the reduced room draft is maintained by controlling room parameters (i.e., redirecting fans, closing doors and windows, etc.), the owner or operator 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 paragraphs (e)(1)(i) and (e)(1)(ii) of this section.~~

~~(i) Measure the windspeed within 6 inches above the top of the freeboard area of the solvent cleaning machine using the procedure specified in paragraphs (e)(1)(i)(A) through (e)(1)(i)(D) of this section.~~

~~(A) Determine the direction of the wind current by slowly rotating a velometer or similar device until the maximum speed is located.~~

~~(B) Orient a velometer in the direction of the wind current at each of the four corners of the machine.~~

~~(C) Record the reading for each corner.~~

~~(D) Average the values obtained at each corner and record the average wind speed.~~

~~(ii) Monitor on a weekly basis the room parameters established during the initial compliance test that are used to achieve the reduced room draft.~~

(d) Each owner or operator using a control device listed in paragraphs (a) through (c) of this section can use alternative monitoring procedures approved by the Administrator.

3. Source 104 Existing Condition #011

Each owner or operator of a batch vapor machine shall meet all of the following required work and operational practices specified in paragraphs (1) through (12) of this section as applicable.

(1) Control air disturbances across the cleaning machine opening(s) by incorporating a reduced room draft as described in Condition #013(2)(ii) [40 CFR 63.463(e)(2)(ii)], covering the solvent cleaning machine during idling mode, and during the downtime mode unless either the solvent have been removed from the machine or maintenance or monitoring is being performed that requires the cover to not be in place.

(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.

(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).

(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.

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

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

(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.

(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.

(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.

(10) Each operator of a solvent cleaning machine shall complete and pass the applicable sections of the test of solvent cleaning operating procedures in Appendix A of this permit if requested during an inspection.

(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.

(12) Sponges, fabric, wood, and paper products shall not be cleaned.

4. Source 104 Existing Condition #012

(a) Each owner or operator of a solvent cleaning machine shall ensure that each batch vapor conforms to the design requirements specified in paragraphs (a)(1) through (a)(6) of this condition.

(1) Each cleaning machine shall be designed and operated with a ~~reduced room draft as described in Condition #013 [63.463(e)(2)(ii)]~~, **an idling and downtime mode cover, as described in Condition #010 [63.463(d)(1)], 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.**

(2) Each cleaning machine shall have a freeboard ratio of 0.75 or greater.

(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.

(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.

(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.

(6) Each vapor cleaning machine shall have a primary condenser.

(b) Each owner or operator of a batch vapor cleaning machine with a solvent/air interface area greater than 1.21 square meters (13 square feet) shall employ one of the control combinations listed in table 2 of 40 CFR 63.463. This facility has chosen to comply with Option 6 3 in that table and will use the combination of a freeboard refrigeration device, ~~reduced room draft, and a freeboard ratio of 1.0~~ **working mode cover, and superheated vapor** to demonstrate compliance with 40 CFR 63.463(b)(2).

5. Source 104 Existing Condition #013

Each owner or operator of a solvent cleaning machine shall comply with the requirements specified in paragraphs (1) through (4) of this section.

(1) Conduct monitoring of each control device used to comply with Condition ~~#012~~ **#011** [63.463(a) and (b)] as provided in Condition #008 [63.466].

(2) Determine during each monitoring period whether each control device used to comply with these standards meets the requirements specified in paragraphs (2)(i) through (2)(ii) ~~(vi)~~ **(vi)** of this section.

(i) If a freeboard refrigeration device is used to comply with these standards, the owner or operator 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) corrected at 60 FR 29485, June 5, 1995]

~~(ii) If a reduced room draft is used to comply with these standards, the owner or operator shall comply with the requirements specified in paragraphs (2)(ii)(A) and (2)(ii)(B) of this section.~~

~~(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 Condition #008 [63.466(d)].~~

~~(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 Condition #008(e) [63.466(d)].~~

(ii) Not Applicable

(iii) If a working-mode cover is used to comply with these standards, the owner or operator shall comply with the requirements specified in paragraphs (e)(2)(iii)(A) and (e)(2)(iii)(B) of this section.

(A) Ensure that the cover opens only for part entrance and removal and completely covers the cleaning machine openings when closed.

(B) Ensure that the working-mode cover is maintained free of cracks, holes, and other defects.

(iv) If an idling-mode cover is used to comply with these standards, the owner or operator shall comply with the requirements specified in paragraphs (e)(2)(iv)(A) and (e)(2)(iv)(B) of this section.

(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.

(B) Ensure that the idling-mode cover is maintained free of cracks, holes, and other defects.

(v) Not Applicable

(vi) If a superheated vapor system is used to comply with these standards, the owner or operator shall comply with the requirements specified in paragraphs (e)(2)(vi)(A) through (e)(2)(vi)(C) of this section.

(A) Ensure that the temperature of the solvent vapor at the center of the superheated vapor zone is at least 10 degrees F above the solvent's boiling point.

(B) Ensure that the manufacturer's specifications for determining the minimum proper dwell time within the superheated vapor system is followed.

(C) Ensure that parts remain within the superheated vapor for at least the minimum proper dwell time.

(3) If any of the requirements of paragraph (2) of this section are not met, determine whether an exceedance has occurred using the criteria in paragraphs (3)(i) and (3)(ii) of this section.

(i) ~~An exceedance has occurred if the requirement of paragraph (2)(ii)(B) of this section has not been met.~~ **Not Applicable**

(ii) An exceedance has occurred if the requirements of paragraphs (2)(i) and/or (2)(ii)(A) of this section 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.

(4) The owner or operator shall report all exceedances and all corrections and adjustments made to avoid an exceedance as specified in Condition #09(b) [63.468(h)].

6. Source Group 1 Existing Condition #002

~~(a) Following emission limits apply:~~

~~.035 lbs/hr of Nitric acid~~

~~.070 lbs/hr of Hydrofluoric acid~~

~~(b)~~

~~pH of the scrubbing medium shall be between 7 and 10.5 or the level at which compliance has been demonstrated~~