State of Ohio Environmental Protection Agency

RE: DRAFT PERMIT TO INSTALL **CERTIFIED MAIL**
SUMMIT COUNTY

Street Address: Lazarus Gov. Center **TELE:** (614) 644-3020 **FAX:** (614) 644-2329 Mailing Address: Lazarus Gov. Center

Application No: 16-02500
Fac ID: 1677020009

DATE: 8/21/2007

PPG Industries Inc Barberton Plant
Irene Raiber
PO Box 31 4829 Fairland Road
Barberton, OH 44203

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43216-1049.

A Permit to Install may be issued in proposed of final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **$500** will be due. Please do not submit any payment now.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.
Sincerely,

Michael W. Ahern
Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

CC: **USEPA** **ARAQMD** **Akron Metro Area Trans. Study** **WV** **PA**

DRAFT PERMIT TO INSTALL 16-02500

Application Number:	16-02500
Facility ID:	1677020009
Permit Fee:	**To be entered upon final issuance**
Name of Facility:	PPG Industries Inc Barberton Plant
Person to Contact:	Irene Raiber
Address:	PO Box 31 4829 Fairland Road Barberton, OH 44203

Location of proposed air contaminant source(s) [emissions unit(s)]:
4829 Fairland Rd
Barberton, Ohio

Description of proposed emissions unit(s):
Teslin Line 4, Mixer, Extruder, Calender, Extractor, Drying Oven.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

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Chris Korleski
Director

Part I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Permit-To-Install General Terms and Conditions

1. Monitoring and Related Recordkeeping and Reporting Requirements

a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

i. The date, place (as defined in the permit), and time of sampling or measurements.

ii. The date(s) analyses were performed.

iii. The company or entity that performed the analyses.

iv. The analytical techniques or methods used.

v. The results of such analyses.

vi. The operating conditions existing at the time of sampling or measurement.

b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written

reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 below if no deviations occurred during the quarter.

iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

iv. If this permit is for an emissions unit located at a Title V facility, then each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

d. The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06**.**

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the

permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

6. General Requirements

a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification

b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c. This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d. This permit does not convey any property rights of any sort, or any exclusive privilege.

e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.

iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of

the Ohio EPA. Progress reports shall contain the following:

i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit-To-Operate Application

a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this permit is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

12. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

13. Permit-To-Install

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in

this permit.

B. State Only Enforceable Permit-To-Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

4. Authorization To Install or Modify

If applicable, authorization to install or modify any new or existing emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of

installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

5. Construction of New Sources(s)

This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

6. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

7. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

8. Construction Compliance Certification

If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) that the facility has been constructed in accordance with the permit-to-install application and the terms and conditions of the permit-to-install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

9. Additional Reporting Requirements When There Are No Deviations of <u>Federally Enforceable</u> Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly (i.e., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

C. Permit-To-Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons Per Year
OC/TCE	39.4
PM	16.4

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

None

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

Emissions Unit ID: P115

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment -(P115) - Teslin Line 4 - synthetic printing sheet production

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-28, 40 CFR Part 63, OAC rule 3745-17-07, OAC rule 3745-17-11 and OAC rule 3745-21-07(G)(2). 9.0 lbs/hr trichloroethylene/organic compounds (TCE/OC) (combined stack and fugitive emissions) 39.4 tpy TCE/OC (combined stack and fugitive emissions) See A.I.2.a - A.I.2.c below. 90% reduction of TCE, as a 30-day rolling average calculated on a daily basis (combined stack and fugitive emissions) 99% control efficiency of carbon adsorption unit, or 5 ppm outlet gas concentration Primary process enclosures (mixer, extractor, dryer oven) See A.II.1 and A.II.2 below. Leak detection and repair program (LDAR) See A.I.2.d below. See A.I.2.e - A.I.2.g below.
OAC rule 3745-31-05(C)	9.9 tons particulate emissions (PE) per year (See A.2.h.)

Emissions Unit ID: P115

OAC rule 3745-31-28 and 40 CFR Part 63 (Sections 112(g) & 112(j) of the Clean Air Amendments of 1990)	90% reduction of TCE, as a 30-day rolling average calculated on a daily basis (combined stack and fugitive emissions) 99% control efficiency of carbon adsorption unit, or 5 ppm outlet gas concentration Primary process enclosures (mixer, extractor, dryer oven) See A.II.2 and A.II.3 below. Leak detection and repair program (LDAR) See A.I.2.d below. See A.I.2.e - A.I.2.g below.
OAC rule 3745-17-07(A)	Visible PE from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
OAC rule 3745-17-11(B)	PE shall not exceed 3.75 pounds per hour (based on Table 1 allowable)
OAC rule 3745-21-07(G)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-28 for TCE (all OC emitted is TCE).

2. Additional Terms and Conditions

2.a The mixer shall be adequately enclosed and shall vent all PE to a baghouse.

2.b Calender rollers and extruder shall be equipped with a Smog Hog or equivalent device to control PE generated from plastic sheet formation.

2.c The extruder, oil separator, extractor, drying oven, and TCE/OC stripping unit shall be vented to a carbon adsorption unit to control organic emissions.

2.d The leak detection and repair program pertains to any type of pump, compressor, pressure relief device, sampling connection system, open-ended valve, flange, connector, closed vent system, and any other device or system in volatile organic compound (VOC) service within the Teslin Line #4 equipment and any equipment shared between Teslin Line #4 and any other Teslin line(s).

2.e The extractor and dryer operating-zone lids shall be enclosed with a hood and vented to the carbon adsorption unit (CAU).

2.f All doors and lids on the extractor, dryer, and oven shall be equipped with gaskets, water seals, or toggle clamps.

2.g The entrance to the extractor and the exit from the dryer shall be adequately elevated above the unit to minimize fugitive emissions of TCE/OC.

2.h Permit to Install 16-02500 for this air contaminant source takes into account the use of a baghouse system, whenever this air contaminant source is in operation, with a minimum control efficiency of 90%, by weight for PE, as a voluntary restriction as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3).

II. Operational Restrictions

1. The primary process enclosures, defined as the mixer, extractor, dryer, and oven, shall be totally enclosed such that TCE/OC emissions are captured and contained for discharge to the carbon adsorption unit. Compliance with the following criteria, identified by USEPA Method 204, shall satisfy the total enclosure requirement:

   a. Any natural draft opening (NDO) shall be at least four equivalent opening diameters from each TCE/OC emitting point unless otherwise specified by the Administrator.

   b. The total area of all NDO's shall not exceed 5 percent of the surface area of the enclosure's four walls, floor, and ceiling.

   c. The average facial velocity (FV) of air through all NDO's shall be at least 3,600 m/hr (200 fpm). The direction of air flow through all NDO's shall be into the enclosure.

   d. All access doors and windows whose areas are not included in section (b) and are not included in the calculation in section (c) shall be closed during routine operation of the process.

   e. All TCE/OC emissions must be captured and contained for discharge through a control device.

2. The primary process enclosures shall be maintained under negative pressure, at a minimum pressure differential that is not less than 0.007 inch of water, whenever the emissions unit is in operation. This value has been determined to be equivalent to 200 fpm average facial velocity at standard temperature.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the pressure drop, in inches of water, across the baghouse during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer''s recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop on a daily basis.

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Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

Except for an initial operating period after filter media replacement to attain design filtering efficiency, the acceptable range for the pressure drop across the baghouse is 0.5 to 6.0 inches of water.

This range is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the pressure drop range based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the pressure drop range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of administrative modification.

2. The permittee shall calculate and record, on a daily basis, the combined stack and fugitive emissions and overall control efficiency for organic compounds (combined stack and fugitive emissions) for this emissions unit. The combined stack and fugitive

emissions, and overall control efficiency shall be calculated based upon the methodology specified in section A.V.1 of this permit.

3. The permittee shall maintain and operate monitoring devices and a recorder which simultaneously measure and record the pressure inside and outside the primary process enclosures. The monitoring and recording devices shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals, and any modifications deemed necessary by the permittee.

4. The permittee shall record and maintain the following information on a daily basis:

   a. the difference in pressure between the primary process enclosures and the surrounding area(s); and

   b. a log or record of downtime for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit was in operation.

5. The permittee shall calculate and record, on an annual basis, the fugitive and stack emissions of TCE/OC from the emissions unit. Fugitive emissions shall be calculated using the methodology specified in section A.V.1.e.

6. Except as otherwise provided in sections A.III.7 and A.III.8, equipment shall be monitored for leaks in accordance with the method specified in OAC rule 3745-21-10(F), as follows:

   a. Any pump in light liquid service shall be monitored monthly.

   b. Any valve in gas/vapor service or in light liquid service shall be monitored monthly, except that quarterly monitoring may be employed anytime after no leaks are detected during two consecutive months. The quarterly monitoring shall begin with the next calendar quarter following the two consecutive months of no detected leaks and shall be conducted in the first month of each calendar quarter. The quarterly monitoring may continue until a leak is detected, at which time monthly monitoring shall be employed again.

   c. Any of the following equipment shall be monitored within five calendar days after evidence of a leak or potential leak from the equipment by visual, audible, olfactory, or other detection method:

      i. any pump in heavy liquid service;
      ii. any valve in heavy liquid service;
      iii. any pressure relief device in light liquid service or in heavy liquid service; and
      iv. any flange or other connector.

d. Any equipment in which a leak is detected as described in section A.III.11 shall be monitored within five working days after each attempt to repair, unless the owner or operator believes that the equipment was not successfully repaired.

7. For any valve in gas/vapor service or in light liquid service, an alternative monitoring schedule may be employed in lieu of the monitoring schedule specified in section A.III.6.b provided the valve is designated as unsafe to monitor and is monitored as frequently as practical during safe to monitor times, provided the following conditions are met:

   a. the permittee of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of monitoring on a monthly basis; and

   b. the permittee of the valve adheres to a written plan that requires monitoring of the valve as frequently as practical during safe to monitor times.

8. Excluded from the monitoring requirements of section A.III.6 are the following equipment:

   a. any pump that has no externally actuated shaft penetrating the pump housing and that is designated for no detectable emissions as provided in section A.III.21;

   b. any pump that is equipped with a dual mechanical seal which has a barrier fluid system and sensor that comply with the requirements specified in section A.III.22;

   c. any valve that has no externally actuated stem penetrating the valve and that is designated for no detectable emissions as provided in section A.III.21.

9. Any pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

10. Any sensor employed pursuant to section A.III.8.b or A.III.17.b shall be checked daily, unless the sensor is equipped with an audible alarm.

11. A leak is detected:

   a. when a concentration of ten thousand ppmv or greater is measured from a potential leak interface of any equipment that is monitored for leaks using the method in OAC rule 3745-21-10(F);

b. when there is an indication of liquids dripping from the seal of a pump in light liquid service; or

c. when a sensor employed pursuant to section A.III.8.b or A.III.17.b indicates failure of the seal system, the barrier fluid system, or both.

12. When a leak is detected as described in section A.III.11, the following procedures shall be followed:

a. a weatherproof and readily visible identification tag, marked with the equipment identification number, is immediately attached to the leaking equipment;

b. a record of the leak and any attempt to repair the leak is entered into the leak repair log kept pursuant to section A.III.15;

c. the identification tag attached to the leaking equipment, other than a valve that is monitored pursuant to section A.III.6.b, may be removed after the leaking equipment is repaired; and

d. the identification tag attached to a leaking valve that is monitored pursuant to section A.III.6.b may be removed after the leaking valve is repaired, monitored for leaks for two consecutive months as specified in section A.III.6.b, and found to have no detected leaks during those two consecutive months.

13. When a leak is detected as described in section A.III.11, the leaking equipment shall be repaired as soon as practicable, but no later than fifteen calendar days after the leak is detected, except for a delay of repair as provided in section A.III.24. Leaking equipment shall be deemed repaired if the maximum concentration measured pursuant to section A.III.6.d is less than ten thousand ppmv.

14. When a leak is detected as described in section A.III.11, a first attempt at repair shall be made no later than five calendar days after the leak is detected; and the first attempts at repair shall include, but are not limited to, the following best practices where practicable:

a. tightening of bonnet bolts;

b. replacement of bonnet bolts;

c. tightening of packing gland nuts; and

d. injection of lubricant into lubricated packing.

15. When a leak is detected as described section A.III.11, the following information shall be recorded in a leak repair log:

a. the identification number of the leaking equipment and, for leaks based on

monitoring, the identification numbers of the leak detection instrument and its operator;

b. the basis for the detection of the leak; for example, monitoring, visual inspection, or sensor;

c. the date on which the leak was detected and the date of each attempt to repair the leaking equipment;

d. the methods of repair applied in each attempt to repair the leaking equipment;

e. one of the following entries within five working days after each attempt to repair the leaking equipment:

i. "not monitored," denoting the leaking equipment was presumed to still be leaking and it was not monitored;

or

ii. if the leaking equipment was monitored with a leak detection instrument, the maximum concentration that was measured as follows:

(a) the actual reading in ppmv; or
(b) "below 10,000," denoting less than ten thousand ppmv; or
(c) "above 10,000," denoting not less than ten thousand ppmv;

f. if the leak is not repaired within fifteen calendar days after the date on which it was detected:

i. "repair delayed" and the reason for the delay;

ii. if repair is being delayed until the next process unit shutdown due to technical infeasibility of repair, the signature of the permittee whose decision it was that repair is technically infeasible without a process unit shutdown;

iii. the expected date of successful repair of the leak; and

iv. the dates of process unit shutdowns that occur while the leaking equipment is unrepaired; and

g. the date on which the leak was successfully repaired.

16. The leak repair log shall be retained by the permittee of the process unit in a readily accessible location for a minimum of two years after the date on which the record was made.

17. Monitoring requirements for compressors:

a. Except as otherwise provided in section A.III.17.c, any compressor in the process unit shall comply with the requirements specified in section A.III.17.b.

b. The compressor shall be equipped with a seal that has a barrier fluid system and sensor which comply with the requirements specified in section A.III.22.

c. Excluded from the requirements of section A.III.17.b is any compressor that is designated for no detectable emissions as provided in A.III.21.

18. Monitoring requirements for pressure relief devices in gas/vapor service.

a. Any pressure relief device in gas/vapor service in the process unit shall comply with the requirements specified in sections A.III.18.b to A.III.18.d.

b. Except during pressure releases, the pressure relief device shall be operated with no detectable emissions, as indicated by an instrument reading of less than five hundred ppmv above background, as measured by the method specified in OAC rule 3745-21-10(F).

c. No later than five calendar days after a pressure release, the pressure relief device shall be tested to confirm the condition of no detectable emissions in accordance with the method specified in OAC rule 3745-21-10(F).

d. After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions as soon as practicable, but no later than five calendar days after the pressure release, except for a delay of repair as provided in section A.III.24.

19. Monitoring requirements for sampling connection system.

a. Except as otherwise provided in section A.III.19.c, any sampling connection system in the process unit shall comply with the requirements specified in section A.III.19.b.

b. The sampling connection system shall be equipped with a closed purge system or a closed vent system that meets one of the following requirements:

i. the purged process fluid is returned directly to the process line with zero

VOC emissions to the ambient air;
or

ii. the purged process fluid is collected and recycled with zero VOC emissions to the ambient air.

c. Excluded from the requirements of section A.III.19.b is any sampling connection system that is an in-situ sampling system.

20. Monitoring requirements for open-ended valves or lines.

a. Any open-ended valve or line in the process unit shall be equipped with a cap, blind flange, plug, or second valve and shall comply with the requirements specified in sections A.III.20.b to A.III.20.d.

b. Except during operations requiring the flow of process fluid through the open-ended valve or line, the cap, blind flange, plug, or second valve shall seal the open end of the open-ended valve or line.

c. If equipped with a second valve, the open-ended valve or line shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.

d. If a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves, but shall comply with section A.III.20.b at all other times.

21. Monitoring requirements for equipment designated for no detectable emissions.

a. Any equipment (pump, valve, or compressor) designated for no detectable emissions pursuant to section A.III.8.a, A.III.8.c or A.III.17.c shall comply with the requirements specified in sections A.III.21.b to A.III.21.d.

b. The equipment shall be operated with no detectable emissions as indicated by an instrument reading of less than five hundred ppmv above background as measured by the method specified in OAC rule 3745-21-10(F).

c. The equipment shall be tested for compliance with section A.III.21.b initially upon designation and annually.

d. The designation of the equipment shall be signed by the permittee of the

equipment in the log kept pursuant to section A.III.25.

22. Monitoring requirements for barrier fluid systems and sensors for pumps and compressors.

    a. When a pump or compressor is equipped with a seal that has a barrier fluid system and sensor which are employed to meet the requirements of section A.III.8.b or A.III.17.a , the requirements of sections A.III.22.b to A.III.22.d shall be met.

    b. The barrier fluid system shall meet one of the following conditions:
        i. the barrier fluid system is operated with a barrier fluid at a pressure that is at all times greater than the stuffing box pressure of the pump or compressor;

        or

        ii. the barrier fluid system is equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the ambient air.

    c. The barrier fluid system shall be in heavy liquid service or shall not be in VOC service.

    d. The barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both based on criteria determined by the permittee from design considerations and operating experience.

23. Monitoring requirements for closed vent systems.

    a. Any closed vent system that is used to comply with the requirements of section A.III.22.b.ii shall comply with the requirements specified in sections A.III.23.b to A.III.23.d.

    b. The closed vent system shall be designed and operated with no detectable emissions, as indicated by an instrument reading of less than five hundred ppmv above background, as measured by the method specified in OAC rule 3745-21-10(F).

    c. The closed vent system shall be tested for compliance with section A.III.23.b initially and annually.

    d. The closed vent system shall be operated at all times when emissions may be vented to it.

24. Monitoring requirements for delay of repair.

a. A delay of repair that is employed pursuant to section A.III.13 or A.III.18.d shall be allowed only as provided in sections A.III.24.b to A.III.24.e.

b. A delay of repair shall be allowed if the repair is technically infeasible without a process unit shutdown. However, the repair shall occur before the end of the next process unit shutdown.

c. A delay of repair shall be allowed for a piece of equipment that is isolated from the process and that does not remain in VOC service (for example, isolated from the process and properly purged).

d. A delay of repair for a pump shall be allowed if:

i. the repair requires the use of a dual mechanical seal system and associated barrier fluid system; and
ii. the repair is completed as soon as practicable, but no later than six months after the leak was detected.

e. A delay of repair beyond a process unit shutdown shall be allowed for a valve if a valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. A delay of repair beyond the next process unit shutdown shall not be allowed for that valve unless the next process unit shutdown occurs sooner than six months after the first process unit shutdown.

25. The following information shall be recorded in a log that is kept in a readily accessible location:

a. a list of identification numbers for equipment subject to the requirements of sections A.I.2.e, and A.III.6 to A.III.23;

b. a list of identification numbers for equipment designated for no detectable emissions as provided in section A.III.21, and a signature of the permittee authorizing such designation;

c. a list of identification numbers for pressure relief devices subject to section A.III.18;

d. a list of identification numbers for closed vent systems subject to section A.III.23; and

e. for compliance tests required under sections A.III.18.c, A.III.21.c, and A.III.23.c:

i. the date of each compliance test;

ii. the background level measured during each compliance test; and

iii. the maximum instrument reading measured at the equipment during each compliance test.

26. The following information pertaining to valves subject to an alternative monitoring schedule, as provided in section A.III.7, shall be recorded in a log that is kept in a readily accessible location:

a. a list of identification numbers for valves designated as unsafe to monitor, an explanation for each valve stating why the valve is unsafe to monitor, and the plan for monitoring each valve;

b. a list of identification numbers for valves designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the schedule for monitoring each valve; and

c. a list of identification numbers for valves subject to the alternative monitoring schedule based on a skip period, a schedule for monitoring, and the percentage of valves leaking during each monitoring period.

27. The following information pertaining to barrier fluid systems and sensors described in section A.III.22 shall be recorded in a log that is kept in a readily accessible location:

a. a list of identification numbers of pumps and compressors equipped with such barrier fluid systems and sensors;

b. the criteria that indicate failure of the seal system, the barrier fluid system, or both, as required by section A.III.22.d and an explanation of the criteria; and

c. any changes to such criteria and the reasons for the changes.

28. The permittee shall calculate and record, on an annual basis, the mass emissions of particulates from emissions unit P115.

29. The permittee shall collect and record the following information for the equipment used to control organic compound emissions each operating day:

a. a log or record of downtime for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit(s) was (were) in operation.

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30. In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable total mass steam flow rate from the carbon adsorber, for any carbon bed regeneration cycle, shall not be more than 10 percent below the minimum total mass steam flow rate for any regeneration cycle conducted during the most recent emission test that demonstrated the emissions unit(s) to be in compliance. Until compliance testing has been conducted, the carbon adsorber shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manual.

    The permittee shall properly install, operate, and maintain a continuous monitor and recorder which measures and records the steam flow rate from the carbon adsorber serving the emissions unit(s) controlled by the carbon adsorber. The monitoring and recording devices shall be capable of accurately measuring the steam flow rate. The monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals. The permittee shall collect and record the following information each day:

    a. the total mass steam flow rate from the carbon adsorber during each carbon bed regeneration cycle; and

    b. a log or record of the operating time for the capture (collection) system, carbon adsorber, monitoring equipment, and the associated emissions unit(s).

    These records shall be maintained at the facility for a period of three years.

31. Whenever the monitored mass steam flow rate from the carbon adsorber deviates from the range/limit specified in this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

    a. the date and time the deviation began;
    b. the magnitude of the deviation at that time;
    c. the date the investigation was conducted;
    d. the name(s) of the personnel who conducted the investigation; and
    e. the findings and recommendations.

    In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the

reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

f. a description of the corrective action;
g. the date corrective action was completed;
h. the date and time the deviation ended;
i. the total period of time (in minutes) during which there was a deviation;
j. the mass steam flow rate readings immediately after the corrective action was implemented; and
k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The mass steam flow rate range/limit is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted mass steam flow rate range/limit based upon information obtained during future emission tests that demonstrate compliance with the allowable TCE emission rate for the controlled emissions unit(s). In addition, approved revisions to the mass steam flow rate range/limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of administrative modification.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:

   a. All periods of time during which the primary process enclosures were not maintained at the required differential pressure specified above.

   b. Each day during which the organic compound emissions were not reduced by at least 90%, and the actual reduction amount for each such day, as calculated based upon the methodology specified in section A.V.1.c.

      The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.ii of this permit.

2. The permittee shall submit annual reports that specify the total stack and fugitive emissions of TCE/OC, as calculated based upon the methodology specified in section A.V.1.e, and the total PE for this emissions unit for the previous calendar year. The reports shall include the emission calculations and shall be submitted by April 30 of

each year.

3. Semiannual reports shall be submitted to the Director (the Akron RAQMD) by the first day of February and August and shall include the following information for the preceding semiannual periods:

   a. the process unit identification;

   b. the number of pumps in light liquid service excluding those pumps designated for no detectable emissions under the provision of section A.III.8.a;

   c. the number of valves in gas/vapor service or in light liquid service excluding those valves designated for no detectable emission under the provision of section;

   d. the number of compressors excluding those compressors designated for no detectable emissions under the provision of section A.III.17.c;

   e. for each month during the semiannual period:

      i. the number of pumps in light liquid service for which leaks were detected as described in section A.III.11;

      ii. the number of pumps in light liquid service for which leaks were not repaired within fifteen calendar days after the date of leak detection;

      iii. the number of valves in gas/vapor service or in light liquid service for which leaks were detected as described in section A.III.11;

      iv. the number of valves in gas/vapor service or in light liquid service for which leaks were not repaired within fifteen calendar days after the date of leak detection;

      v. the number of compressors for which leaks were detected;

      vi. the number of compressors for which leaks were not repaired within fifteen calendar days after the date of leak detection; and

      vii. the facts that explain each delay of repair allowed pursuant to section A.III.24; and

f. the dates of process unit shutdowns that occurred within the semiannual period.

4. For compliance tests required under sections A.III.21.c and A.III.23.c, the requirements of paragraphs (A)(3) and (A)(4) of OAC rule 3745-21-10 (pertaining to notification of intent to test) shall be met. The results of such compliance tests shall be reported to the Akron RAQMD within thirty days after the test date.

5. The results of compliance tests required under section A.III.18.c shall be reported semiannually to the Akron RAQMD. The semiannual reports shall be submitted by the first day of February and August and shall include information for the preceding semiannual period.

6. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the pressure drop across the baghouse field was outside of the acceptable range;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

   These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

7. The permittee shall submit quarterly reports that identify the following information concerning the operation of the carbon adsorber during the operation of the emissions unit(s):

   a. each period of time when the total mass steam flow rate from the carbon adsorber was outside of the acceptable range;

   b. an identification of each incident of deviation described in "a" (above) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in "a" where prompt corrective action, that would bring the mass steam flow rate into compliance with the acceptable range, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in "a" where proper records were not maintained for the investigation and/or the corrective action(s).

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 9.

b. Emission Limitation:

PE shall not exceed 3.75 pounds per hour (based on Table 1 allowable)

Applicable Compliance Method:

If required, compliance shall be demonstrated by performing an emission test in accordance with the procedures specified in Methods 1 through 4, and 5 or 17 of 40 CFR Part 60, Appendix A.

c. Emission Limitation:

90% reduction of TCE, as a rolling, 30-day average calculated on a daily basis (combined stack and fugitive emissions)

Applicable Compliance Method:
Compliance with the 90% reduction for TCE shall be determined by the record

keeping requirements specified in A.III.2 and by emission testing in accordance with Methods 1 through 4 and 18 of 40 CFR Part 60, Appendix A.

Overall control efficiency shall be calculated daily in accordance with the following methodology:

Input Parameters:

D = density of TCE makeup pumped into day tank (lbs/gal) [handbook value]

M = virgin TCE makeup pumped into day tank (gallons) [tallied each time material is transferred]

W = waste TCE removed from process (lbs) [recorded on waste manifest for each drum of material removed]

Rads = TCE emission rate from carbon adsorber (lbs/hr) [the TCE emission rate measured during the most recent emission test]

H = time of Teslin production operation on the line that is in operation for the longer period of time (i.e., record the hours of operation for each line, and H = the higher of the two lines) (hrs) [production records]

R = TCE recovered from the carbon adsorber, in lbs/day

i. Calculate daily point source emissions from the combined operation of Lines 2, 3, and 4: (lbs)

Eads = H x Rads

ii. Perform daily calculation of TCE added to system (total emissions): (lbs)

Etot = MD - W

iii. Calculate total air emissions as a rolling, 30-day summation: (lbs)

Etot30 = Summation30(Etot) (for day plus previous 29 days)

iv. Calculate point source emissions as a rolling, 30-day summation: (lbs)

Eads30 = Summation30 Eads (for day plus previous 29 days)

v. Calculate fugitive emissions as a rolling, 30-day summation: (lbs)

Efug30 = Etot30 - Eads30

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vi. Calculate daily average fugitive emissions: (lbs)

Efug daily = Efug30 / 30

vii. Calculate daily average fugitive emissions from Line 2: (lbs)

Efug daily L2 = Efug daily / 3

viii. Calculate daily average fugitive emissions from Line 3: (lbs)

Efug daily L3 = Efug daily / 3

ix. Calculate daily average fugitive emissions from Line 4: (lbs)

Efug daily L4 = Efug daily / 3

If either Lines 2, 3, or 4 are not operating and does not contain TCE on a given operating day, no fugitive missions shall be allocated to that line for that operating day.

x. Calculate TCE recovered from the carbon adsorber as a rolling, 30-day summation: (lbs)

R30 = Summation30(R) (for day plus previous 29 days)

xi. Calculate daily average amount of TCE recovered from the carbon adsorber: (lbs)

Ravg daily = R30 / 30

xii. Overall removal efficiency (%) shall be calculated daily in accordance with the following methodology and compared to the allowable value of 90%:

Overall removal efficiency =[Ravg daily / (Ravg Daily + Etot30 / 30)]*100%

d. Emission Limitation:

99% control efficiency of carbon adsorption unit, or 5 ppm outlet gas concentration

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Applicable Compliance Method:

Compliance shall be demonstrated by performing emission tests in accordance with the procedures specified in Methods 1 through 4 and 18 of 40 CFR Part 60, Appendix A.

e. Emission Limitation:

39.4 tpy TCE/OC (combined stack and fugitive emissions)

Applicable Compliance Method:

Annual emissions shall be calculated in accordance with the following methodology:

Input Parameters:

D = density of TCE makeup pumped into day tank (lbs/gal) [handbook value]

M = virgin TCE makeup pumped into day tank (gallons) [tallied each time material is transferred]

W = waste TCE removed from process (lbs) [recorded on waste manifest for each drum of material removed]

Rads = TCE emission rate from carbon adsorber (lbs/hr) [the TCE emission rate measured during the most recent emission test]

H = time of Teslin production operation on the line that is in operation for the longer period of time (i.e., record the hours of operation for each line, and H = the higher of the three lines) (hrs) [production records]

R = TCE recovered from the carbon adsorber, in lbs/day

i. Calculate daily point source emissions from the combined operation of Lines 2, 3 and 4: (lbs)

Eads = H x Rads

ii. Perform daily calculation of TCE added to system (total emissions): (lbs)

Etot = MD - W

iii. Calculate total air emissions as a rolling, 30-day summation: (lbs)

Etot30 = Summation30(Etot) (for day plus previous 29 days)

iv. Calculate point source emissions as a rolling, 30-day summation: (lbs)

Eads30 = Summation30 Eads (for day plus previous 29 days)

v. Calculate fugitive emissions as a rolling, 30-day summation: (lbs)

Efug30 = Etot30 - Eads30

vi. Calculate daily average fugitive emissions: (lbs)

Efug daily = Efug30 / 30

vii. Calculate daily average fugitive emissions from Line 4: (lbs)

Efug daily L4 = Efug daily / 3

If either Lines 2, 3, or 4 are not operating and does not contain TCE on a given operating day, no fugitive emissions shall be allocated to that line for that operating day.

viii. Calculate year-to-date fugitive emissions from Line 4: (tons)

Efug ytd L4 = [SUMMATIONytd(Efug daily L4)] / 2000

ix. Calculate year-to-date combined fugitive and stack emissions from Line 4: (tons)

Ecom ytd L4 = Efug ytd L4 + [Rads * SUMMATIONytd(H)] / 2000

f. Emission Limitations:

9.0 lbs/hr TCE/OC (combined stack and fugitive emissions)

Applicable Compliance Method:

Emissions Unit ID: P115

Combined stack and fugitive emissions shall be calculated daily in accordance with the following methodology:

Input Parameters:

D = density of TCE makeup pumped into day tank (lbs/gal) [handbook value]

M = virgin TCE makeup pumped into day tank (gallons) [tallied each time material is transferred]

W = waste TCE removed from process (lbs) [recorded on waste manifest for each drum of material removed]

Rads = TCE emission rate from carbon adsorber (lbs/hr) [the TCE emission rate measured during the most recent emission test]

H = time of Teslin production operation on the line that is in operation for the longer period of time (i.e., record the hours of operation for each line, and H = the higher of the two lines) (hrs) [production records]

R = TCE recovered from the carbon adsorber, in lbs/day

i. Calculate daily point source emissions from the combined operation of Lines 2, 3, and 4: (lbs)

   Eads = H x Rads

ii. Perform daily calculation of TCE added to system (total emissions): (lbs)

   Etot = MD - W

iii. Calculate total air emissions as a rolling, 30-day summation: (lbs)

   Etot30 = Summation30(Etot) (for day plus previous 29 days)

iv. Calculate point source emissions as a rolling, 30-day summation: (lbs)

   Eads30 = Summation30 Eads (for day plus previous 29 days)

v. Calculate fugitive emissions as a rolling, 30-day summation: (lbs)

   Efug30 = Etot30 - Eads30

vi. Calculate hourly average fugitive emissions: (lbs/hr)

   Efug hourly = Efug30 / (summation30 H)

vii. Calculate hourly average fugitive emissions from Line 4: (lbs/hr)

Efug hourly L4 = Efug hourly / 3

If either Lines 2, 3 or 4 are not operating and does not contain TCE on a given operating day, no fugitive emissions shall be allocated to that line for that operating day.

viii. Calculate hourly average combined stack and fugitive emissions for Line 4: (lbs/hr)

Avg Emissions = Efug hourly L4 + Rads

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 3 months after the startup of this emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the allowable overall control efficiency and mass emission rate for organic compounds.

c. The following test method(s) shall be employed to demonstrate compliance: for organic compounds, Methods 1 through 4 and 18 of 40 CFR Part 60, Appendix A and Part III, section (A)(V)(2)(e); and for verification of permanent total enclosure for each primary process enclosure, Method 204 of 40 CFR Part 51, Appendix M.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Akron RAQMD.

e. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the

diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

f. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)

g. During testing, the permittee shall also record the total mass steam flow rate, in pounds/hr, from the carbon adsorber, for the carbon bed regeneration cycle.

3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Akron RAQMD. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Akron RAQMD's refusal to accept the results of the emission test(s).

   Personnel from the Akron RAQMD shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

   A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Akron RAQMD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Akron RAQMD.

VI. Miscellaneous Requirements

None

Emissions Unit ID: P115

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (P115) - Teslin Line 4

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 114-01 ORC 3704.03(F)	See section III.

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit P115 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

   Pollutant: trichloroethylene

   TLV (mg/m3): 269

   Maximum Hourly Emission Rate (lbs/hr): 9.0

   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 232.4

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MAGLC (ug/m3): 6404

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None