State of Ohio Environmental Protection Agency

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

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

Application No: 16-01955

DATE: 11/29/2001

PPG Industries Inc Barberton Plant
Irene Raiber
PO Box 31
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 modification for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit modification. 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 modification 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, 43266-0149.

A Permit to Install modification 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 modification a fee of **$ 200** 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.

Very truly yours,

Thomas G. Rigo
Field Operations and Permit Section
Division of Air Pollution Control

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

DRAFT MODIFICATION OF PERMIT TO INSTALL 16-01955

Application Number:	16-01955
APS Premise Number:	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 Barberton, OH 44203

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

Description of proposed emissions unit(s):
Modification of additional terms and conditions of PTI 16-01955 issued 6/07/00.

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification 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 source(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 included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

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 <u>emission limitations</u>, <u>operational restrictions</u>, <u>and control device operating parameter limitations</u>, 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 quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.10 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 to the appropriate Ohio EPA District Office or local air agency every six months, i.e., 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. 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.

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 reissuance, or modification, or for denial of a permit renewal application.

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, reopened, 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, reopening 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 this Permit To Install.

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 of 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, the State, and citizens 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. Source Operation and Operating Permit Requirements After Completion of Construction

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 To Install 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 thirty (30) 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.

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

1. Compliance Requirements

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

2. Reporting Requirements Related to Monitoring and Recordkeeping 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 quarterly, i.e., 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. 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.

5. Termination of Permit To Install

This permit to install shall terminate within eighteen months of the effective date of the permit to install 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.

6. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. 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 the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install 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.

7. 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.

8. 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).

9. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) 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.

10. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable 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., 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
TCE/OC	39.4
PM	2.2

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

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	Applicable Rules/Requirements	40 CFR Part 63
Teslin line 3 - production line 3 for teslin synthetic printing sheet - mixer, extruder, calender, extractor, dryer, drying oven, tce recovery	OAC rule 3745-31-05(A)(3)	
		OAC rule 3745-17-07
		OAC rule 3745-17-11
		OAC rule 3745-21-07(G)(2)
	OAC rule 3745-31-28 and	

Applicable Emissions Limitations/Control Measures	
	fugitive emissions)
5% opacity as a 6-minute average from stacks P108-S01 and P114-S02	99% control efficiency of carbon adsorption unit, or 5 ppm outlet gas concentration
0.03 gr/scf of exhaust gasses from baghouse controlling dry material handling (stack P108-S01)	Primary process enclosures (mixer, extractor, dryer oven) See A.II.3 - A.II.4 below.
0.5 lb/hr particulates (combined emissions from stacks P108-S01 and P114-S02) 2.2 tpy particulates	Leak detection and repair program (LDAR) See A.I.2.d below. See A.I.2.e - A.I.2.g below.
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.h below. See A.I.2.h below. 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).
See A.I.2.a - A.I.2.c below.	
The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-28.	
90% reduction of TCE, as a 30-day rolling average calculated on a daily basis (combined stack and	

2. Additional Terms and Conditions

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

2.b Calender rollers and extruder shall be equipped with a Smog Hog or equivalent device to control particulate emissions 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 #3 equipment and any equipment shared between Teslin line #3 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 The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 0.5 to 6.0 inches of water while the emissions unit is in operation.

2. Operation of the baghouse outside of the specified pressure drop range is not necessarily indicative of an emission violation, but rather serves as a trigger level for maintenance and/or repair activities, or further investigation to establish correct operation.

3. 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 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.

4. The primary process enclosures shall be maintained under negative pressure, at a minimum pressure differential that is not less than 0.007 inches of water, whenever the emissions unit is in

operation. This value has been determined to be equivalent to 200 fpm average facial velocity ~~as~~ ***at*** standard temperature.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s) and any modifications deemed necessary by the permittee. The permittee shall record the pressure drop across the baghouse on a daily basis.

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.5.~~e~~.

3. The permittee shall install, 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).

   b. A log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

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.5.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 paragraph (F) of rule 3745-21-10 of the Administrative Code, 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 owner or operator 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 owner or operator 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 paragraph (F) of rule 3745-21-10 of the Administrative Code;

    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.

    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 owner or operator whose decision it was that repair is technically infeasible without a process unit shutdown;

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

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 owner or operator 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 paragraph (F) of rule 3745-21-10 of the Administrative Code.

    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 paragraph (F) of rule 3745-21-10 of the Administrative Code.

    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;

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 sections 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 paragraph (F) of rule 3745-21-10 of the Administrative Code.

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 owner or operator 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.

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 owner or operator 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 paragraph (F) of rule 3745-21-10 of the Administrative Code.

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 owner or operator 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 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 P114.

IV. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse was less than 0.5 inches or more than 6.0 inches of water while the emissions unit was in operation.

2. The permittee shall submit pressure differential deviation (excursion) reports that identify all periods of time during which the primary process enclosures were not maintained at the required differential pressure specified above.

3. The permittee shall submit deviation (excursion) reports which include an identification of 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.5.c.

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

5. The permittee shall submit annual reports that specify the total stack and fugitive emissions of OC, as calculated based upon the methodology specified in section A.V.5.e. These reports shall include the emission calculations, shall be submitted by April 30, and shall contain information for the previous calendar year.

6. Semiannual reports shall be submitted to the director 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.

7. 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 rule 3745-21-10 of the Administrative Code (pertaining to notification of intent to test) shall be met. The results of such compliance tests shall be reported to the Ohio environmental protection agency district office or local air agency within thirty days after the test date.

8. The results of compliance tests required under section A.III.18.c shall be reported semiannually to the Ohio environmental protection agency district office or local air agency. The semiannual reports shall be submitted by the first day of February and August and shall include information for the preceding semiannual period.

V. Testing Requirements

1. 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 issuance of the permit.

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, Method 18 of 40 CFR Part 60, Appendix A and Part III, section (B)(V)(1)(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 appropriate Ohio EPA District Office or local air agency.

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.

2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

3. Personnel from the appropriate Ohio EPA District Office or local air agency 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.

4. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

5. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:
5% opacity as a 6-minute average from stacks P108-S01 and P114-S02

Applicable Compliance Method:
If required, OAC rule 3745-17-03(B)(1)

b. Emission Limitation:
0.03 gr/scf of exhaust gasses from baghouse controlling dry material handling (stack P108-S01)

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance by testing in accordance with Method 5, 40 CFR Part 60, Appendix A.

c. Emission Limitation:
90% reduction of TCE, as a 30-day rolling 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 stack testing in accordance with Method 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 source 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 Line 2 and Line 3: (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 2: (lbs)

Efug daily l2 = Efug daily / 2

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

Efug daily l3 = Efug daily / 2

If either line 2 or line 3 is 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.

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

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

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

Ravg daily = R30 / 30

xi. 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

Applicable Compliance Method:

Compliance shall be demonstrated by stack testing in accordance with Method 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 source 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 Line 2 and Line 3: (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 3: (lbs)

Efug daily l3 = Efug daily / 2

If either line 2 or line 3 is 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 3: (tons)

Efug ytd l3 = [SUMMATIONytd(Efug daily l3)] / 2000

ix. Calculate year-to-date combined fugitive and stack emissions from Line 3: (tons)

Ecom ytd l3 = Efug ytd l3 + [Rads * SUMMATIONytd(H)] / 2000

f.Emission Limitation:

0.5 lb/hr particulates (combined emissions from stacks P108-S01 and P114-S02) 2.2 tpy particulates

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance by testing in accordance with Method 5, 40 CFR Part 60, Appendix A.

g.Emission Limitation:

Emissions Unit ID: P114

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

Applicable Compliance Method:
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 source 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 Line 2 and Line 3: (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 3: (lbs/hr)

Efug hourly l3 = Efug hourly / 2

If either line 2 or line 3 is 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 3: (lbs/hr)

Avg Emissions = Efug hourly l3 + Rads

VI. Miscellaneous Requirements

None

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	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Teslin line 3 - production line 3 for teslin synthetic printing sheet - mixer, extruder, calender, extractor, dryer, drying oven, tce recovery	None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None