



John R. Kasich, Governor
 Mary Taylor, Lt. Governor
 Craig W. Butler, Director

1/4/2017

Certified Mail

Gerald Schill
 The Chemical Solvents, Inc.
 3751 Jennings Road
 Cleveland, OH 44109

No	TOXIC REVIEW
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MODELING SUBMITTED
Yes	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 1318007651
 Permit Number: P0121364
 Permit Type: Renewal
 County: Cuyahoga

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

- How to appeal this permit
- How to save money, reduce pollution and reduce energy consumption
- How to give us feedback on your permitting experience
- How to get an electronic copy of your permit
- What should you do if you notice a spill or environmental emergency?

How to appeal this permit

The issuance of this PTIO is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
 77 South High Street, 17th Floor
 Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging 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 Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/survey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

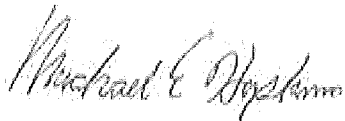
This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

What should you do if you notice a spill or environmental emergency?

Any spill or environmental emergency which may endanger human health or the environment should be reported to the Emergency Response 24-HOUR EMERGENCY SPILL HOTLINE toll-free at (800) 282-9378. Report non-emergency complaints to the appropriate district office or local air agency.

If you have any questions regarding your permit, please contact Cleveland Division of Air Quality at (216)664-2297 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Michael E. Hopkins, P.E.
Assistant Chief, Permitting Section, DAPC

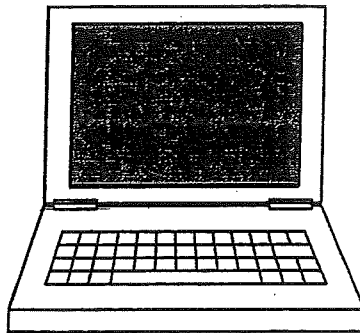
Cc: CDAQ



How are we doing?

We want to know if you are a satisfied customer. Please take an online survey designed to give us feedback on how we did processing your request.

www.epa.ohio.gov/survey.aspx



Please use this opportunity to tell us what you liked, what difficulties you encountered, and how we can improve your experience.

Thank you!





Response to Comments

Facility ID:	1318007651
Facility Name:	The Chemical Solvents, Inc.
Facility Description:	Solvent recycler and blender.
Facility Address:	1010 Old Denison Ave. Cleveland, OH 44109 Cuyahoga County
Permit:	P0121364, Permit-To-Install and Operate - Renewal
A public notice for the draft permit issuance was published in the Ohio EPA Weekly Review and appeared in the The Plain Dealer on 11/23/2016. The comment period ended on 12/23/2016.	
Hearing date (if held)	No
Hearing Public Notice Date (if different from draft public notice)	NA

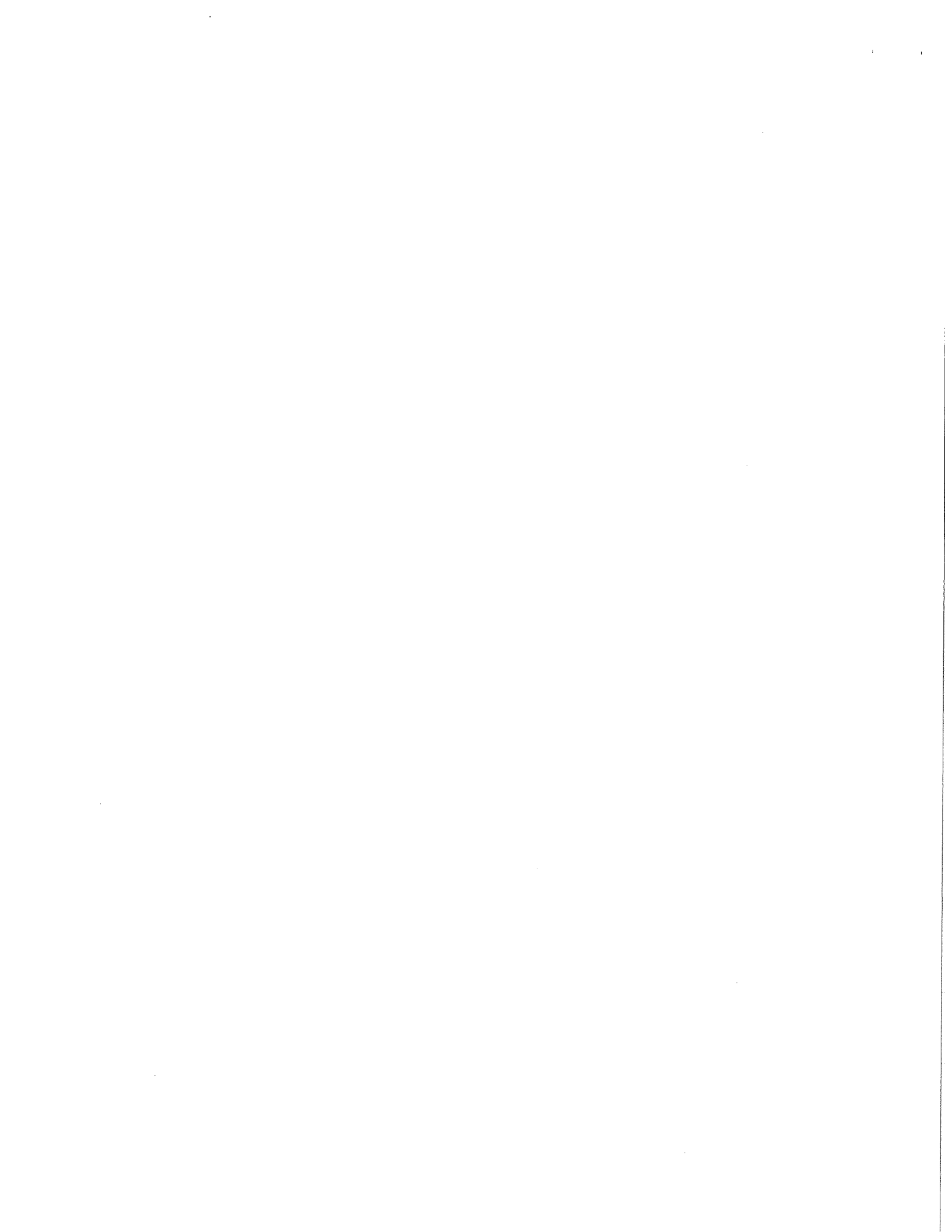
The following comments were received during the comment period specified. Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health. Often, public concerns fall outside the scope of that authority. For example, concerns about zoning issues are addressed at the local level. Ohio EPA may respond to those concerns in this document by identifying another government agency with more direct authority over the issue.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format. PDF copies of the original comments in the format submitted are available upon request.

1. Topic: None

- a. Comment: None
- b. Response: None

We did not receive any comments on the Draft permit that was issued on 11/21/2016 and we have not made any further changes to the permit recommendation.

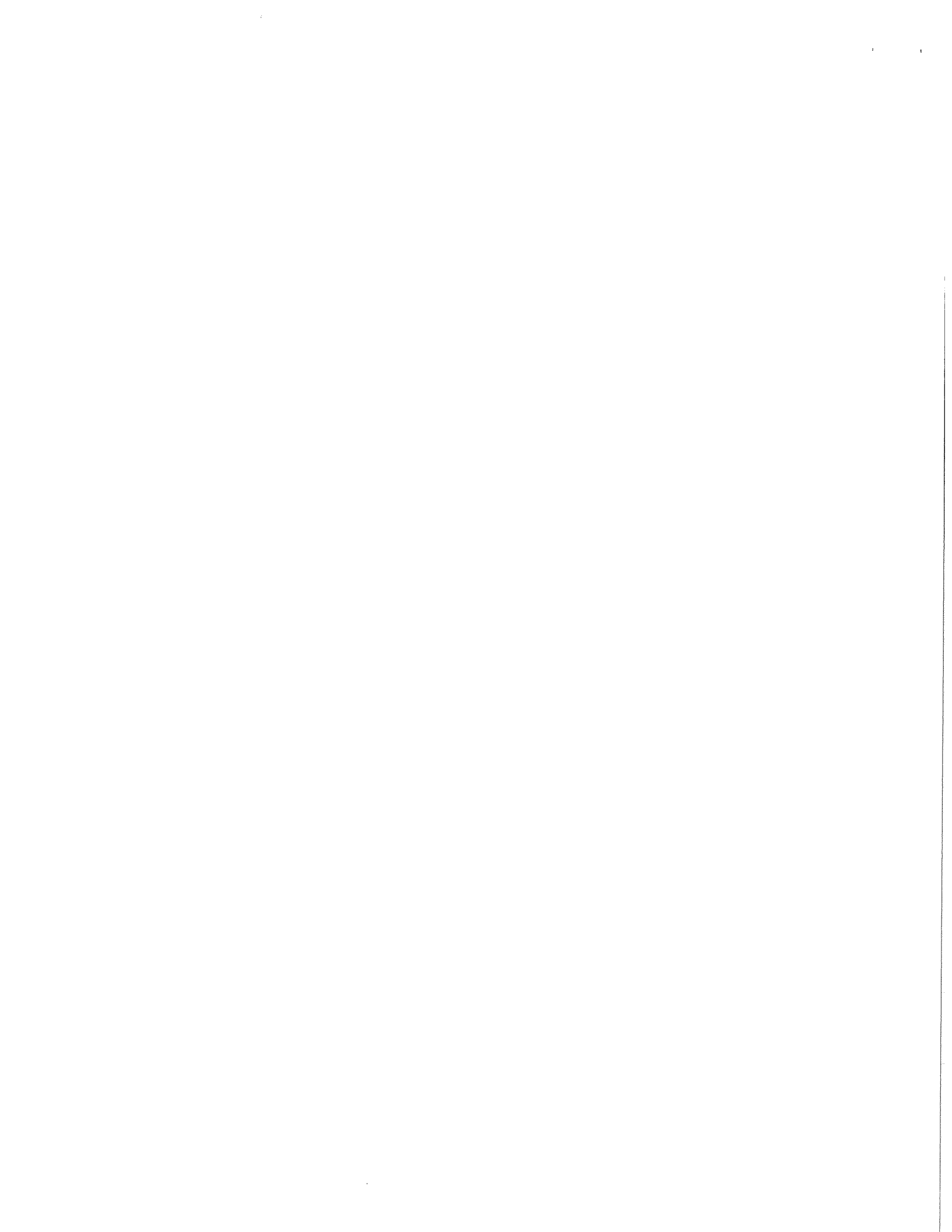




FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
The Chemical Solvents, Inc.**

Facility ID:	1318007651
Permit Number:	P0121364
Permit Type:	Renewal
Issued:	1/4/2017
Effective:	1/4/2017
Expiration:	1/4/2022

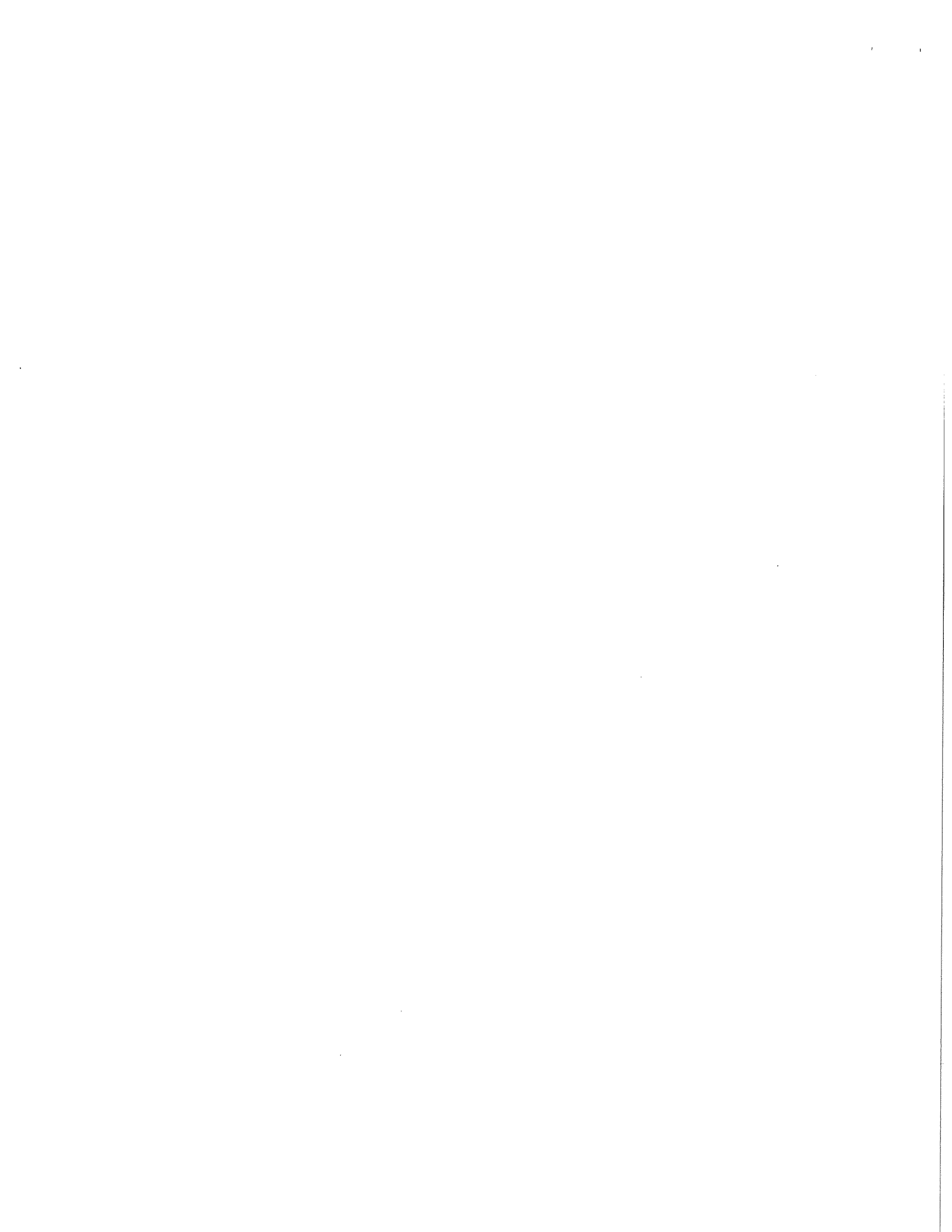




Division of Air Pollution Control
Permit-to-Install and Operate
for
The Chemical Solvents, Inc.

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Final Permit-to-Install and Operate
The Chemical Solvents, Inc.
Permit Number: P0121364
Facility ID: 1318007651
Effective Date: 1/4/2017

Authorization

Facility ID: 1318007651
Application Number(s): A0056142, A0056556, A0056574, A0056576
Permit Number: P0121364
Permit Description: FEPTIO renewal permit for two loading racks equipped with vapor recovery system (J001 and J002), two thin film evaporation units equipped with condensers (P001 and P002), high solids solvent blending unit (P013), and a high solids mixer and blend tank (P014).
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 1/4/2017
Effective Date: 1/4/2017
Expiration Date: 1/4/2022
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

The Chemical Solvents, Inc.
1010 Old Denison Ave.
Cleveland, OH 44109

of a Permit-to-Install and Operate for the emissions unit(s) identified on the following page.

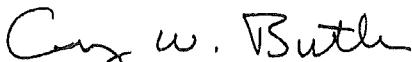
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Cleveland Division of Air Quality
2nd Floor
75 Erieview Plaza
Cleveland, OH 44114
(216)664-2297

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section 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 described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency


Craig W. Butler
Director



Final Permit-to-Install and Operate
 The Chemical Solvents, Inc.
 Permit Number: P0121364
 Facility ID: 1318007651
 Effective Date: 1/4/2017

Authorization (continued)

Permit Number: P0121364

Permit Description: FEPTIO renewal permit for two loading racks equipped with vapor recovery system (J001 and J002), two thin film evaporation units equipped with condensers (P001 and P002), high solids solvent blending unit (P013), and a high solids mixer and blend tank (P014).

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	P013
Company Equipment ID:	mixing
Superseded Permit Number:	P0094783
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P014
Company Equipment ID:	High Solid Mixer 2
Superseded Permit Number:	P0114908
General Permit Category and Type:	Not Applicable

Group Name: loading racks

Emissions Unit ID:	J001
Company Equipment ID:	Solvent Loading Rack
Superseded Permit Number:	P0094783
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	J002
Company Equipment ID:	VOC Solvent Loading Rack and Drum Filling Stations
Superseded Permit Number:	P0094783
General Permit Category and Type:	Not Applicable

Group Name: thin film evaporation units

Emissions Unit ID:	P001
Company Equipment ID:	LUWA I
Superseded Permit Number:	P0094783
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P002
Company Equipment ID:	LUWA II (steam)
Superseded Permit Number:	P0094783
General Permit Category and Type:	Not Applicable



Final Permit-to-Install and Operate
The Chemical Solvents, Inc.
Permit Number: P0121364
Facility ID: 1318007651
Effective Date: 1/4/2017

A. Standard Terms and Conditions



Final Permit-to-Install and Operate

The Chemical Solvents, Inc.

Permit Number: P0121364

Facility ID: 1318007651

Effective Date: 1/4/2017

1. What does this permit-to-install and operate ("PTIO") allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. When does my PTIO expire, and when do I need to submit my renewal application?

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is



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The Chemical Solvents, Inc.
Permit Number: P0121364
Facility ID: 1318007651
Effective Date: 1/4/2017

very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions of this permit will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.



10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the [DO/LAA] in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emission unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.



Final Permit-to-Install and Operate
The Chemical Solvents, Inc.
Permit Number: P0121364
Facility ID: 1318007651
Effective Date: 1/4/2017

13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.



Final Permit-to-Install and Operate
The Chemical Solvents, Inc.
Permit Number: P0121364
Facility ID: 1318007651
Effective Date: 1/4/2017

B. Facility-Wide Terms and Conditions



Final Permit-to-Install and Operate
The Chemical Solvents, Inc.
Permit Number: P0121364
Facility ID: 1318007651
Effective Date: 1/4/2017

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
 - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (1) None.



Final Permit-to-Install and Operate
The Chemical Solvents, Inc.
Permit Number: P0121364
Facility ID: 1318007651
Effective Date: 1/4/2017

C. Emissions Unit Terms and Conditions



1. Emissions Unit Group - loading racks: J001 - J002

EU ID	Operations, Property and/or Equipment Description
J001	Solvent loading rack at Denison with vapor recovery system
J002	Solvent loading rack at Jennings with a vapor recovery system

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)c., c)(2) and (3), d)(1)b., d)(1)c., d)(2), e)(2), and f)(1)b.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI #13-1454 dated 6/18/1986 for J001 and J002	Volatile Organic Compound (VOC) emissions shall not exceed 15 lbs/day for J001 and J002 combined. See b)(2)b. below.
b.	OAC rule 3745-21-07(M)	See b)(2)a. below.
c.	OAC rule 3745-31-05(D)(1)(b) FEPTIO to avoid Title V	VOC emissions shall not exceed 1.95 tons per rolling, 12-month summation for J001 and J002 combined. Single HAP and combined HAP emissions shall not exceed 1.95 tons per rolling, 12-month summation combined for J001 and J002 (assumes all VOC is



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		HAP). See c)(2) below.

(2) Additional Terms and Conditions

- a. There are no applicable requirements for loading racks in OAC rule 3745-21-07(M). In addition, the control efficiency established under OAC 3745-31-05(A)(3) is more stringent than the control efficiency required by OAC rule 3745-21-07(M).
- b. All of the VOC emissions from the emissions units listed above shall be vented to a vapor recovery system (refrigerated chiller) that shall meet the operational, monitoring, and record keeping requirements of this permit, when one or more of the emissions units are in operation. The overall control efficiency for volatile organic compound (VOC) emissions shall be greater than 90 percent, by weight.

c) Operational Restrictions

- (1) A means shall be provided to prevent drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected.
- (2) The maximum combined throughput for J001 and J002 of all organic materials shall not exceed 50,000 gallons per day and 13 million gallons per rolling, 12 month summation.
- (3) The average temperature of the cooling liquid from the vapor recovery system, for any 3-hour block of time, shall not be more than 6 degrees Fahrenheit above the normal operating temperature of 55 degrees Fahrenheit.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and maintain the following information, on a daily basis, while the emissions units are in operation:
 - a. the name and identification of each VOC product;
 - b. the volume throughput of each VOC product in gallons; and
 - c. the total VOC emission rate for all products, in pounds per day calculated using the formula in f)(1)a. below.
- (2) The permittee shall collect and maintain the following information on a monthly basis for J001 and J002 combined:
 - a. the total VOC emission rate for all products, in tons per rolling, 12-month period determined in accordance with f)(1)b below; and



Final Permit-to-Install and Operate

The Chemical Solvents, Inc.

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Effective Date: 1/4/2017

- b. the rolling, 12-month summation for all products, in gallons.
- (3) The permittee shall operate and maintain a continuous temperature monitor and electronic recorder which measures and records the temperature of the cooling liquid in the vapor recovery system when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within +/- 1 percent of the temperature being measured or +/- 5 degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
- (4) The permittee shall collect and record the following information each day:
 - a. the average temperature of the cooling liquid in the vapor recovery system during each of the eight 3-hour blocks of time during the day; and
 - b. a log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emission unit.
- (5) The permittee shall perform daily visual inspections and quarterly monitoring of all pumps seals, pipeline valves in liquid service and process drains in accordance with the method outlined in OAC rule 3745-21-10(F).

e) Reporting Requirements

- (1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

Emission limitations: 1.95 tons VOC/HAP per rolling, 12-month summation for J001 and J002 combined



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The Chemical Solvents, Inc.

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Operational limitations: 50,000 gallons per day and 13 million gallons per rolling, 12-month summation for J001 and J002 combined

Temperature limitations: all 3-hour blocks of time when the emissions unit was in operation during which the average temperature of the cooling liquid in the vapor recovery unit was more than 6 degrees Fahrenheit above the normal operating temperature of 55 degrees Fahrenheit.

- b. the probable cause of each deviation (excursion);
- c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Cleveland Division of Air Quality (Cleveland DAQ).

- (3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission limitation:

15 pounds of VOC per day (combined total for J001 and J002)

Applicable Compliance Method:

Compliance shall be based on the record keeping requirements as specified in (d)(1) and the following equation:

$$\text{lb/day} = F \times EF \times (1-CE)$$

Apply the above equation to each VOC product and then sum total the emissions to obtain total lbs/day of VOC emissions.



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F = daily throughput in gallons per day

EF = emission factor of 3.002 lbs/1000 gal as agreed upon in the 7/8/2004 memo

CE = chilled condenser control efficiency rated at 90%

b. Emission limitation:

1.95 tons of VOC per rolling, 12-month period (combined total for J001 and J002)

Applicable Compliance Method:

Compliance shall be based on a rolling 12-month summation of VOC emissions calculated as follows:

- i. sum total daily VOC emissions as calculated from d)(1) of these terms and conditions to obtain total lbs VOC emissions/month, then sum total the total lbs VOC emissions/month to obtain a rolling, 12-month summation, and divide the rolling, 12-month summation by 2000 lbs/ton. Each new month constitutes a new 12-month summation.

c. Emission Limitation:

1.95 tons of single and combined HAP per rolling, 12-month period (combined total for J001 and J002).

Applicable Compliance Method:

Compliance shall be determined assuming all VOC is HAP and using the method identified in f)(1)b. above

g) **Miscellaneous Requirements**

- (1) None.



2. Emissions Unit Group - thin film evaporation units: P001 - P002

EU ID	Operations, Property and/or Equipment Description
P001	LUWA I, thin film evaporation unit (hot oil) for spent solvents, including double condensers and chilled water
P002	LUWA II thin film evaporation unit (steam) for spent solvents including double condensers with chilled water.

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)c., b)(2)a., b)(2)b., c)(1), c)(2), d)(1), d)(2), d)(3), e)(2), f)(1)c., and f)(1)d.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05 (A)(3) P001 - PTI #13-1124 dated 7/18/1984 P002 - PTI # 13-1420 dated 8/14/1985	OC emissions shall not exceed 3 lbs/hr combined total for P001 and P002. OC emissions shall not exceed 3.1 tons as a rolling, 12-month summation combined for P001 and P002. See b)(2)a. and b)(2)b. below.
b.	OAC rule 3745-21-07(M)	The control requirements of this rule are less stringent than the control requirements established under OAC rule 3745-31-05(A)(3).



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-31-05(D)(1)(b) FEPTIO to avoid Title V	3.1 tons of single and combined HAP per rolling, 12-month summation combined for P001 and P002 (assumes all VOC is HAP). The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

- a. The LUWA I and II (P001 and P002) emission units must always employ water-cooled shell and tube condensers in series with a minimum total heat exchange surface area of 1,700 square feet (P001) and 210 square feet (P002) and using cooling water maintained at 55 degrees Fahrenheit (or less). Each LUWA is equipped with a product recovery condenser which has been determined to have a 97.6% recovery from operational efficiency testing in May, 2007. Emissions from the product recovery condensers shall be vented to the vapor recovery system (refrigerated chiller).
- b. All of the VOC emissions from the emissions units listed above shall be vented to a vapor recovery system that shall meet the operational, monitoring, and record keeping requirements of this permit, when one or more of the emissions units are in operation. The overall control efficiency for volatile organic compound (VOC) emissions shall be greater than 90 percent, by weight.

c) Operational Restrictions

- (1) The average temperature of the cooling liquid in the vapor recovery system (refrigerated chiller), for any 3-hour block of time, shall not be more than 6 degrees Fahrenheit above the normal operating temperature of 55 degrees Fahrenheit.
- (2) The maximum amount of material processed for P001 and P002 combined shall not exceed 3.75 tons per hour (monthly average), 60 tons of material per day (monthly average), and 18,720 tons per rolling, 12-month summation.
- (3) These emissions units shall process only dipropylene glycol or other solvents but no glycol ethers.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information on a monthly basis for P001 and P002 combined:
 - a. the company identification for each material processed/recycled;



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- b. the total amount of all materials processed, in pounds and tons per month;
 - c. the rolling, 12-month summation of all materials processed, in pounds and tons;
 - d. the total operating hours for the emissions unit, in hours per month;
 - e. the average hourly amount of material processed (b/d), in tons per hour;
 - f. the total number of days of operation per month;
 - g. the average daily amount of material processed (b/f), in tons per day;
 - h. the total OC emission rate for all materials employed, in pounds per month, calculated using the formula from f)(1)a.;
 - i. the average hourly OC emission rate, in pounds per hour (h/d); and
 - j. the rolling, 12-month summation of OC emissions, in pound and tons.
- (2) The permittee shall operate and maintain a continuous temperature monitor and electronic recorder which measures and records the temperature of the cooling liquid in the vapor recovery system when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within +/- 1 percent of the temperature being measured or +/- 5 degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
- (3) The permittee shall collect and record the following information each day:
- a. the average temperature of the cooling liquid in the vapor recovery system during each of the eight 3-hour blocks of time during the day;
 - b. a log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emission unit.
- (4) The permittee shall perform daily visual inspections and quarterly monitoring of all pumps seals, pipeline valves in liquid service and process drains in accordance with the method outlined in OAC rule 3745-21-10(F).
- (5) The permittee shall perform a quarterly analysis of outlet gas concentration from the vapor recovery system emission point using an FID or PID to ensure that the overall concentration remains at baseline operating levels. These concentrations shall not be used in emission reporting. Records shall be maintained of the results of the quarterly analysis.
- e) Reporting Requirements
- (1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept



hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify:
- a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - Emission limitations: 3.1 tons OC emissions per rolling, 12-month summation for P001 and P002 combined
 - Operational Limitations: 72 tons material per day and 18,720 tons per rolling, 12-month summation for P001 and P002 combined
 - Temperature limitations: all 3-hour blocks of time when the emissions unit was in operation during which the average temperature of the cooling liquid in the vapor recovery unit was more than 6 degrees Fahrenheit above the normal operating temperature of 55 degrees Fahrenheit.
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Cleveland DAQ.



- (3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

OC emissions shall not exceed 3 lbs/hr (monthly average) combined total for P001 and P002.

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated based upon the record keeping requirements in d)(1) and the use of the following formula:

$$M \times EF \times (1-CE) = \text{lbs VOC/month}$$

$$(\text{lbs VOC/month} / (\text{hrs of operation/month})) = \text{lbs VOC/hr}$$

Where:

M = the amount of material processed per month, in tons (combined total for P001 and P002);

EF = AP 42 emission factor Table 4.7-1 condenser vent (3.3 lbs VOC/ton)

CE = 90% control efficiency of the vapor recovery system.

b. Emission Limitation:

OC emissions shall not exceed 40 lbs/day as a monthly average for each emissions unit.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements in d)(1). Also refer to b)(2)a. for applicability. The average lbs/day shall be determined by:

$$(\text{lbs VOC/month}) / (\text{days of operation/month}) = \text{lbs VOC/day}$$

c. Emission Limitation:

OC emissions shall not exceed 3.1 tons per rolling, 12 month period combined total for P001 and P002.



Applicable Compliance Method:

Compliance with the annual emission limitation shall be demonstrated by summing the monthly VOC emissions per rolling, 12-month period in d)(1)g. of these terms and conditions and dividing by 2000 lbs/ton.

d. Emission Limitation:

HAP emissions shall not exceed 3.1 tons single and combined HAP per rolling, 12-month period combined total for P001 and P002.

Applicable Compliance Method:

Compliance with the annual emission limitation shall be demonstrated the same as f)(1)c. assuming all VOC is HAP.

- (2) The permittee shall conduct, or have conducted, emission testing for these emissions units in accordance with the following requirements:
- a. The emission testing shall be conducted within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the overall control efficiency for organic compounds.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): mass balance method to determine the product recovery efficiency of the LUWA condensers over a determined time period with assumed control efficiency of 90% for the vapor recovery system (refrigerated chiller). 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 Cleveland DAQ.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland DAQ. 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 a notification for review and approval prior to the test(s) may result in the Cleveland DAQ refusal to accept the results of the emission test(s).

Personnel from the Cleveland DAQ 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.



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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 Cleveland DAQ within 30 days following the 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 Cleveland DAQ

g) Miscellaneous Requirements

- (1) Subpart AA of 40 CFR part 264 requires that (a) reduce the total organic emissions from all affected process vents at this facility below 3 lbs/hr and 3.1 tons/year or (b) reduce, by use of a control device, total organic emissions from all affected process vents at this facility by 95 percent weight. This rule does not apply if the site operates all emission controls in accordance with the process vent requirements under 40 CFR Part 60, 61 or 63 and shall be kept with or made readily available with the facility operating record.



3. P013, mixing

Operations, Property and/or Equipment Description:

High solids solvent blending unit

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. d)(3), d)(4) and d)(5).

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)a., b)(1)c., c)(1), c)(2), d)(1), e)(1), and f)(1)b.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 13-4400 dated 12/30/2004)	85.5 lbs OC/day 15.6 TPY OC per rolling, 12-month period
b.	OAC rule 3745-21-07(M)	See b)(2)a. below.
c.	OAC rule 3745-31-05(D)(1)(b) FEPTIO to avoid Title V	The requirements of this rule include compliance with the requirements of OAC rule 3745-31-05(A)(3). See c)(1) below.

(2) Additional Terms and Conditions

a. The requirements of OAC rule 3745-21-07(M) do not apply since the only operation occurring in this emission unit is mixing without chemical reaction.

c) Operational Restrictions



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- (1) The monthly average combined daily raw material usage shall not exceed 4,500 pounds for all products produced, and the maximum annual raw material throughput for this emissions unit shall not exceed 821 tons per year based upon a rolling, 12-month summation.
 - (2) The maximum amount of organic compound loss, as determined from mass balance analysis for a monthly average shall not exceed 0.019 pound of OC per pound of raw material processed.
 - (3) The permittee shall only use isopropyl alcohol or other approved non-HAP VOC material in this emissions unit.
- d) **Monitoring and/or Recordkeeping Requirements**
- (1) The permittee shall maintain monthly records of the following information:
 - a. the company identification for each formulation produced;
 - b. the total combined amount, in pounds, of all raw materials processed for all formulations;
 - c. total OC emissions for all formulations produced, in lbs OC/month ($b * EF(0.019)$);
 - d. the number of days the emission unit operated;
 - e. the average daily OC emission rate, in lbs OC/day (c/d);
 - f. the average daily combined raw material usage rate, in pounds raw material/day (b/d);
 - g. the rolling, 12-month summation for all raw material processed (sum of b); and
 - h. the rolling, 12-month summation of OC emissions, in tons (sum of c divided by 2000 lbs/ton).
 - (2) The permittee shall perform a mass balance analysis for any new formulation processed to determine the percent OC lost (lb OC/ lb raw material) and maintain records of the results of the mass balance analysis.
 - (3) The permittee shall maintain records of the monthly average percent OC lost (lb OC/ lb raw material) for all products processed.
 - (4) The permit to install application for this emissions unit, P013 was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable



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Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
 - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: isopropyl alcohol (IPA) - synonym isopropanol

TLV (mg/m³): 983

Maximum Hourly Emission Rate (lbs/hr): 19.9

Predicted 1-Hour Maximum Ground-Level Concentration (µg/m³): 5,861

MAGLC (µg/m³): 23,405

The permittee, has demonstrated that emissions of isopropyl alcohol, from emissions unit(s) P013, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall

not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

- (5) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum "ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV 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 toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
 - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" 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 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final FEPTIO prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

- (6) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):
- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
 - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
 - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F),



initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

- d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

e) Reporting Requirements

- (1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify:

- a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

Emission limitations: 85.5 lbs OC per day as a monthly average;
15.6 TPY of OC as a rolling, 12-month summation;
and
0.019 lb OC/lb raw material monthly average

Operational limitations: 4500 lbs product/day as a monthly average; and
821 tons per year as a rolling, 12-month summation

- b. the probable cause of each deviation (excursion);
- c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- d. the magnitude and duration of each deviation (excursion).



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If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by Cleveland DAQ.

- (3) The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration, in the annual Permit Evaluation Report (PER). If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.
- (4) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

85.5 lbs OC/day as a monthly average

Applicable Compliance Method:

Compliance shall be demonstrated based on the record keeping requirements contained in d)(1)e. of this permit and the following formula:

$$\text{Lbs OC/day} = P * \text{EF} / \text{number of days of operation per month}$$

P = pounds of raw material used per month

EF = 0.019 lbs OC/lb product

b. Emission Limitation:

15.6 TPY OC per rolling, 12-month period

Applicable Compliance Method:

Compliance shall be demonstrated based on the record keeping requirements contained in d)(1)h. of this permit.



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g) Miscellaneous Requirements

(1) None.



4. P014, High Solid Mixer 2

Operations, Property and/or Equipment Description:

High solids mixer and blend tank.

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T) OAC 3745-31-05(A)(3) June 30,2008 PTIO #P0114908 issued 9/19/2013	Volatile organic compound (VOC) emission shall not exceed 114.0 pounds of VOC per batch and 26.4 tons per year. VOC emissions from cleanup materials shall not exceed 1.0 ton/year. See c)(1) below.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The permittee shall not produce more than 6,000 pounds of material per batch in this emissions unit.



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- (2) Any mixing or blending tank containing material shall be equipped with a cover that completely covers the tank opening except for an opening no larger than necessary to allow for safe clearance of the mixing shaft.
 - (3) The tanks shall be kept covered at all times except when production, sampling, and inspection procedures require access.
 - (4) The cleaning of the tanks with organic solvents shall be done with the tank completely covered and enclosed to the extent possible.
- d) **Monitoring and/or Recordkeeping Requirements**
- (1) The permittee shall collect and record the following information each day that this emissions unit is in operation:
 - a. the name and identification number of each batch produced;
 - b. the total amount, in pounds, of each batch produced; and
 - c. the VOC emission rate, in pounds per batch, calculated in accordance with the equation located in f)(1)a. below.
 - (2) The permittee shall collect and record the following information each month for this emissions unit:
 - a. the name and identification number of each solvent cleanup material employed;
 - b. the total amount, in pounds, of each solvent cleanup material employed;
 - c. the total amount, in pounds, of each solvent cleanup material recovered;
 - d. the total VOC emission rate from all solvent cleanup materials employed, in pounds per month (b – c).
- e) **Reporting Requirements**
- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit..
 - (2) The permittee shall include in the annual PER, any record showing a deviation of the allowable production limitation. Such information shall include the following:
 - a. an identification of each day when the material blended exceeds the 6,000 pounds per batch limit; and
 - b. a description of any corrective actions taken to address the exceedances identified above.



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(3) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

VOC emissions shall not exceed 114.0 lbs VOC/batch.

Applicable Compliance Method:

Compliance shall be determined through the recordkeeping requirements located in d)(1) and the following equation:

$$(\text{lbs of material/batch}) \times (0.019 \text{ lb VOC/lb material})^* = \text{lbs of VOC lost/batch}$$

* Emission factor (0.019 lb VOC/lb material) obtained from facility mass balance information.

b. Emission Limitation:

VOC emissions shall not exceed 26.4 tons/year.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the recordkeeping requirements specified in d)(1) by summing total pounds of VOC/batch for each calendar year and dividing by 2,000 lbs/ton.

c. Emission Limitation:

VOC emissions from cleanup shall not exceed 1.0 ton/year.



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Applicable Compliance Method:

Compliance shall be determined through the recordkeeping requirements specified in d)(2). The ton per year emissions shall be calculated by summing the monthly emissions and dividing by 2,000 lbs/ton.

g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emission units maximum annual emissions for each air toxic contaminant, as identified in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials, that would cause the emissions of any toxic air contaminant to increase above 1.0 tons per year, may require the permittee to apply for and obtain a new PTIO.

