



Environmental Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

8/16/2011

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

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

Facility ID: 1318007651
Permit Number: P0094783
Permit Type: Renewal
County: Cuyahoga

Certified Mail

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

Dear Permit Holder:

Enclosed please find a final 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. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

The issuance of this PTI 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
309 South Fourth Street, Room 222
Columbus, OH 43215

If you have any questions, please contact Cleveland Division of Air Quality at (216)664-2297 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPC Web page, www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: CDAQ



Response to Comments

Response to comments for: Permit-To-Install and Operate

Facility ID:	1318007651
Facility Name:	The Chemical Solvents, Inc.
Facility Description:	Solvent recycler and blender.
Facility Address:	3751 Jennings Road Cleveland, OH 44109 Cuyahoga County
Permit #:	P0094783, 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 06/24/2011. The comment period ended on 07/24/2011.	
Hearing date (if held)	NA
Hearing Public Notice Date (if different from draft public notice)	

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: **P013**

- a. Comment: **The draft lists the high solids mixing operation as dedicated to isopropyl alcohol yet the test describes the use of any non HAP solvent. The operation is not being restricted to IPA only, but can also utilize VOC exempt solvents such as methyl acetate, acetone and other non HAP VOC's. Therefore, it is requested the draft be amended to remove reference to "dedicated to isopropyl alcohol"**.
- b. Response: The description of P013 as a "High solids solvent blending unit dedicated to isopropyl alcohol" will be changed to "High solids solvent blending unit".

2. Topic: **L001/L002**

- a. Comment: **The operations suggested in b)(2)b.ii. do not exist and are more applicable to a wash sink type degreaser.**
- b. Response: The option provided in b)(2)b.ii will be removed as requested.

3. Topic: **L001/L002**

- a. Comment: **The operations suggested at b)(2)d. are specific to vapor degreaser and not applicable to the stripping operation.**
- b. Response: The section b)(2)d. will remain because the third option, b)(2)d.iii, provides for the use of the Euromatic balls as an equivalent control which has been "approved by the director".

4. Topic: **L001/L002**

- a. Comment: **Item d)(1)c. makes reference to 95% coverage. Is this measure by surface area? How would this be measured in an enclosed system?**
- b. Response: The 95% coverage refers to the surface area of the solvent in the dip tank. The side/top opens up and the surface can be seen completely as demonstrated during the facility tour. The "95%" is less stringent than 100% coverage and allows for limited gaps in the coverage.

5. Topic: **P001/P002**

- a. Comment: **In b)(2)a, the condenser is sealed. No knowledge of "double coil" so remove reference to "double coil".**
- b. Response: The "double coil" was in the initial PTI 13-1124 but will be removed in this paragraph as requested.

6. Topic: **P001/P002**

- a. Comment: **Item b)(2)a. references a coolant flow rate of 500 GPM. The actual rate is determined by heat load, which is best measured by the return temperature of the coolant. As long as the return temperature of the coolant is acceptable then the flow of the coolant is acceptable. Therefore the requirement for a specified flow rate of coolant should be removed from the PTIO.**
- b. Response: The flow rate for the two emission units will be removed from the paragraph.

7. Topic: **P001/P002**

- a. Comment: **Item b)(2)d(1)a. references company ID for each material. What is meant by ID? These materials are often just references as acetone, or MEK, etc. Some are referenced by customer name which would be a trade secret.**
- b. Response: The section referenced is actually d)(1)a. The company identification of the material is just that, the actual chemical, or customer name or any identification that can be reviewed if necessary.

8. Topic: **P001/P002**

- a. Comment: **Item b)(4) requires the weekly monitoring of pumps, seals etc. This equipment is visually inspected daily, with a quarterly inspection for emission releases as required by 40 CFR 264 Subpart BB. A weekly monitoring would be excessive for this equipment.**
- b. Response: The actual item is d)(4). It is agreed that a daily visual inspection and quarterly testing is sufficient. The item will read: "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)."

9. Topic: **P001/P002**

- a. Comment: **Item b)(5) requires quarterly analysis of outlet gas concentration. How is it being proposed this be conducted? A measurement taken by FID or PID would simply reveal total OC's and not the presence of VOC exempt solvents like acetone, methyl acetate or TBA. The one inch vent line cannot be isokinetically sampled, how would it be cost effective to obtain samples in this manner. It is requested that this requirement be removed as it is unworkable, prohibitive in cost, and redundant based upon the other requirements ensuring that coolant temperature and leaks are controlled.**



- b. Response: The actual item is d)(5) The item was modified to specify that the emission testing is using FID/PID analysis to determine if significantly above baseline. "The permittee shall perform a quarterly analysis of outlet gas concentration from the vapor recovery system emission point using an FID/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.

10. Topic: **J001/J002**

- a. Comment: **After a second review, could the term d)(5) be changed to the same term that was changed for topic #8 for P001/P002 since it was the same term originally.**
- b. Response: The term d)(5) for J001/J002 was changed to reflect the change made to d)(4) for P001/P002 and will read "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)."

11. Topic: **P001/P002**

- a. Comment: **The emission unit description should delete "cooling tower" and replace with "chilled water".**
- b. Response: The description was changed to read "LUWA I, thin film evaporation unit (hot oil) for spent solvents, including double condensers with chilled water" and "LUWA II, thin film evaporation unit (steam) for spent solvents including double condensers with chilled water".

12. Topic: **P001/P002**

- a. Comment: **Add "cooled" before water to the first sentence for b)(2)a. additional terms and conditions.**
- b. Response: The sentence was changed to reflect this comment. The new sentence now reads "The LUWA I and II (P001 and P002) emission units must always employ water cooled shell and tube condensers...."



FINAL

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

Facility ID:	1318007651
Permit Number:	P0094783
Permit Type:	Renewal
Issued:	8/16/2011
Effective:	8/16/2011
Expiration:	8/16/2016



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

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Authorization

Facility ID: 1318007651
Application Number(s): A0026303, A0041143, A0041615
Permit Number: P0094783
Permit Description: FEPTIO renewal permit to limit HAP and VOC emissions below the Title V thresholds for Chemical Solvents Inc.a waste solvent recycler/solvent distributor. Emissions units include two tank truck loading racks and two thin film distillation units controlled with condensers and vapor recovery system, two paint stripping tanks and a high solids blending tank. Holding tanks at the facility are either deminimus or exempt.
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 8/16/2011
Effective Date: 8/16/2011
Expiration Date: 8/16/2016
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.

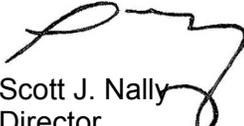
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

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


Scott J. Nally
Director



Authorization (continued)

Permit Number: P0094783
Permit Description: FEPTIO renewal permit to limit HAP and VOC emissions below the Title V thresholds for Chemical Solvents Inc.a waste solvent recycler/solvent distributor. Emissions units include two tank truck loading racks and two thin film distillation units controlled with condensers and vapor recovery system, two paint stripping tanks and a high solids blending tank. Holding tanks at the facility are either deminimus or exempt.

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: High solids solvent blending unit
Superseded Permit Number: 13-04400
General Permit Category and Type: Not Applicable

Group Name: Evaporators

Emissions Unit ID:	P001
Company Equipment ID:	LUWA I
Superseded Permit Number:	13-1124
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P002
Company Equipment ID:	LUWA II (steam)
Superseded Permit Number:	13-1420
General Permit Category and Type:	Not Applicable

Group Name: loading racks

Emissions Unit ID:	J001
Company Equipment ID:	Denison Solvent Loading Rack
Superseded Permit Number:	13-1454
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:	13-1454
General Permit Category and Type:	Not Applicable

Group Name: strip tanks

Emissions Unit ID:	L001
Company Equipment ID:	Hand Operated Dip Tanks
Superseded Permit Number:	13-03755
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	L002
Company Equipment ID:	Mechanized Wheel Stripping Operation
Superseded Permit Number:	13-03755
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

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. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. 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

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 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 Cleveland Division of Air Quality 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 submitting¹ 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 emissions 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.

¹ Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

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.

B. Facility-Wide Terms and Conditions

Final Permit-to-Install and Operate

The Chemical Solvents, Inc.

Permit Number: P0094783

Facility ID: 1318007651

Effective Date: 8/16/2011

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.

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 a 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)d., 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 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)d. below.
b.	OAC rule 3745-21-07(E)	See b)(2)a. below.
c.	OAC rule 3745-21-07(M)	See b)(2)c. below.
d.	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 HAP). See c)(2) below.

(2) Additional Terms and Conditions

- a. The maximum daily throughput of all volatile photochemically reactive materials shall not exceed 40,000 gallons per day or employ a control system which processes and recovers at least 90 percent by weight of all vapors and gasses from the loading rack.
- b. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The following terms and conditions shall become void after U.S. EPA approves the rule revision:

b)(1)b., b)(2)a.

The emission limitations and control requirements from the amended 21-07 rule, and the associated operational restrictions and the monitoring, record keeping, and reporting requirements contained in this permit, shall become federally enforceable on the date the U.S. EPA approves the revised OAC rule 3745-21-07 as a revision to the Ohio State Implementation Plan. The following terms shall become federally enforceable after U.S. EPA approves the rule revision:

b)(1)c., b)(2)c.

- c. 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).
- d. 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
 - 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) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (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

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The Chemical Solvents, Inc.

Permit Number: P0094783

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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

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) Annual Permit Evaluation Report (PER)forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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 limitation(s) in b)(1) of these terms and conditions shall be determinedin accordance with the following method(s):
 - a. Emission limitation:
15 poundsVOC 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.

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 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: sumtotal 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 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 -strip tanks: L001, L002,

EU ID	Operations, Property and/or Equipment Description
L001	Manual dip tank stripping operation with two dip tanks, each with a hood, using one blower, Euromatic sphere cover and vented to one stack.
L002	Mechanized wheel stripping operation with two 1700 gallon covered solvent tanks with floating Euromatic spheres and one 500 gallon rinse tank, using one blower and one stack.

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, 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 # 13-03755 dated 5/10/2001)	Volatile Organic Compound (VOC) emissions shall not exceed 5.15 lbs/hr for L001 and L002 combined. Volatile Organic Compound (VOC) emissions shall not exceed 22.5 tons per rolling, 12-month summation for L001 and L002 combined. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(O). See b)(2)a and b)(2)b. below.
b.	OAC rule 3745-21-09(O)	See b)(2)b. through b)(2)d. below.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-31-05(D)(1)(b) FEPTIO to avoid Title V	Single HAP shall not exceed 7.9 tons per rolling, 12-month summation for L001 and L002 combined. The combined HAP shall not exceed 13.5 tons per rolling, 12-month summation for L001 and L002 combined. 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 stripping solution used in this emission unit shall not contain more than 35% of glycol ether specifically and no more than 60% total HAPs.
- b. The emissions unit shall be operated with a cover, and if the solvent has a vapor pressure greater than 0.3 pounds per square inch absolute, measured at 100 degrees Fahrenheit or, if the solvent is heated or agitated, the cover shall be designed and constructed so that it can be easily operated with one hand.
- c. The emissions unit shall be equipped with a device for draining the cleaned parts; and if the solvent has a vapor pressure greater than 0.6 pound per square inch absolute, measured at 100 degrees Fahrenheit, the drainage area shall be constructed internally so that parts are enclosed under the cover during draining, unless an internal type drainage device cannot fit into the cleaning system.
- d. The permittee shall install one of the following devices if the solvent vapor pressure is greater than 0.6 pound per square inch absolute measured at one hundred degrees Fahrenheit, or if the solvent is heated above one hundred twenty degrees Fahrenheit:
 - i. freeboard that gives a freeboard ratio greater than or equal to 0.7;
 - ii. water cover (solvent must be insoluble in and heavier than water); or
 - iii. other systems of equivalent control, such as refrigerated chiller or carbon adsorption, approved by the director.

c) Operational Restrictions

- (1) The maximum amount of solvent employed for L001 and L002 combined shall not exceed 30 tons per rolling, 12-month summation.
- (2) The emissions unit shall be operated and maintained in accordance with the following practices to minimize solvent evaporation.
 - a. provide a permanent, legible, conspicuous label, summarizing the operating requirements;

- b. maintain approximately 95% coverage with Euromatic floating spheres on the liquid surface inside the tank;
 - c. store waste solvent in covered containers;
 - d. close the cover whenever parts are not being handled in the cleaner;
 - e. idle the temperature below 140 degrees Fahrenheit over the weekend or when not in use;
 - f. drain the cleaned parts under the ventilation hood until dripping ceases;
 - g. if used, supply a solvent spray that is solid fluid stream (not a fine, atomized, or shower type spray) at a pressure that does not exceed 10 pounds per square inch gauge. clean only materials that are neither porous nor absorbent;
 - h. clean only materials that are neither porous nor absorbent, and
 - i. the solvent vapor pressure shall not exceed 1.0 mm Hg (0.019 psi) measured at twenty degrees Celsius (sixty-eight degrees Fahrenheit).
- d) **Monitoring and/or Recordkeeping Requirements**
- (1) The permittee shall maintain records of the following information:
 - a. the types of solvent employed in the emissions unit;
 - b. the vapor pressure of each solvent, in pound per square inch absolute, measured at 100 degrees Fahrenheit; and
 - c. each day when Euromatic spheres are added to the tank to maintain approximately 95% coverage on the liquid surface.
 - (2) The permittee shall maintain the following monthly records for all solvents employed in L001 and L002 combined:
 - a. the name, company identification, and chemical composition of each solvent employed;
 - b. the number of gallons and date of purchase of each solvent employed;
 - c. the density of each solvent employed, in pounds per gallon;
 - d. the number of gallons of solvent removed as waste;
 - e. the total VOC emissions for all solvents employed [summation of (c x (b-d-0.25b)) for all solvents], in pounds (accounts for 25% carryover of the solvent in the rinse tank);
 - f. the vapor pressure of the solvent measured in mmHg at 20 degrees C (68 degrees Fahrenheit) as determined by ASTM D2879097, "Standard Test Method

for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope”;

- g. the total number of hours the emission unit was operated;
- h. the total average hourly emissions in lbs/hr (e/g);
- i. the rolling, 12-month summation of VOC emissions in pounds and tons;
- j. the HAP content for each for each single HAP for each solvent employed, in percent by weight;
- k. the total single HAP emission for all solventsemployed, in pounds (summation of $[j \times (c \times (b-d-0.25b))]$ for all solvents for each single HAP);
- l. the rolling, 12-month summation of single HAP emissions, in pounds and tons;
- m. the combined HAP content for each solvent employed, in percent by weight;
- n. the total combined HAP emission for all solvents employed, in pounds (summation of $[m \times (c \times (b-d-0.25b))]$ for all solvents);
- o. the rolling, 12-month summation of combined HAP emissions, in pounds and tons; and
- p. the rolling, 12-month summation of the amount of solvent used, in pounds and tons.

(3) The permit to install for this emissions unit L001 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The "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 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).
- c. 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):

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

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):

Pollutant: MEA

TLV (mg/m³): 1,884.5

Maximum Hourly Emission Rate (lbs/hr): 4

Predicted 1-Hour Maximum Ground-Level Concentration (µg/m³): 1236

MAGLC (µg/m³): 44,863

- (4) 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.

(5) 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) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(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: 22.5 tons VOC, 7.9 tons single HAP and 13.5 tons combined HAP emissions per rolling, 12-month summation for L001 and L002 combined.

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Facility ID: 1318007651

Effective Date: 8/16/2011

Operational Limitations: 30 tons solvent per rolling, 12-month summation for L001 and L002 combined.

- 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 Director (the appropriate District Office or local air agency).

- (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) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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 emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following method:
 - a. Emission limitation:
5.15 lbs / hr of VOC as a monthly average (L001 and L002 combined).
Applicable Compliance Method:
Compliance shall be determined based on record keeping requirements in d)(2).
 - b. Emission Limitation:
22.5 tons of VOC per rolling, 12-month summation (L001 and L002 combined).

Applicable Compliance Method:

Compliance with the above annual VOC limitation shall be determined by the record keeping requirements contained in d)(2). The annual emissions shall be determined by summing the monthly emissions as calculated in d)(2)e. for each calendar year and dividing the total by 2000 lbs/ton.

c. Emission limitation:

7.9 tons single HAP per rolling, 12-month summation (L001 and L002 combined).

Applicable Compliance Method:

Compliance shall be determined based on the recordkeeping requirements in d)(2)k.

d. Emission limitation:

13.5 tons combined HAP per rolling, 12-month summation (L001 and L002 combined).

Applicable Compliance Method:

Compliance shall be determined based on the recordkeeping requirements in d)(2)m.

g) Miscellaneous Requirements

(1) None.

3. Emissions Unit Group -Evaporators: 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 with 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)(2)a., b)(2)c., c)(1), c)(2), d)(1), d)(2), d)(3) and e(2).

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 and 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)d. below.
b.	OAC rule 3745-21-07(G)(2)	OC emissions shall not exceed 40 lbs/day for each emissions unit or the permittee shall achieve an overall reduction of 85%, by weight, of the OCs foreach emissions unit The lb/hr emission limit under this rule is less stringent than the lb/hr emission limit established under OAC 3745-31-05(A)(3).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See b)(2)b. below.
c.	OAC rule 3745-21-07(M)	<p>The control requirements of this rule are less stringent than the control requirements established under OAC rule 3745-31-05(A)(3).</p> <p>See b)(2)b. below.</p>
d	OAC rule 3745-31-05(D)(1)(b) FEPTIO to avoid Title V	<p>3.1 tons of single and combined HAP per rolling, 12-month summation combined for P001 and P002 (assumes all VOC is HAP).</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(A)(3).</p>

(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. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The following terms and conditions shall become void after U.S. EPA approves the rule revision:

b)(1)b., f)(1)b.

The emission limitations and control requirements from the amended 21-07 rule, and the associated operational restrictions and the monitoring, record keeping, and reporting requirements contained in this permit, shall become federally enforceable on the date the U.S. EPA approves the revised OAC rule 3745-21-07 as a revision to the Ohio State Implementation Plan. The following terms shall become federally enforceable after U.S. EPA approves the rule revision:

b)(1)c.

- c. 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;
 - 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/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) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (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 tonsOC emissions per rolling, 12-month summation for P001 and P002 combined
Operational Limitations:	72tons material per day and 18,720tons 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 Director (the appropriate District Office or local air agency).

(3) Annual Permit Evaluation Report (PER)forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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 emission limitation(s) in b)(1) 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 this emissions unit 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

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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.

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.

4. P013, High solids solvent blending unit

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., 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(G)(2)	See b)(2)a. below.
c.	OAC rule 3745-21-07(M)	See b)(2)a. below.
d.	OAC rule 3745-1-05(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(G)(2) and 21-07(M) do not apply since the only operation occurring in this emission unit is mixing without chemical reaction.

- b. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The following terms and conditions shall become void after U.S. EPA approves the rule revision:

b)(1)b.

The emission limitations and control requirements from the amended 21-07 rule, and the associated operational restrictions and the monitoring, record keeping, and reporting requirements contained in this permit, shall become federally enforceable on the date the U.S. EPA approves the revised OAC rule 3745-21-07 as a revision to the Ohio State Implementation Plan. The following terms shall become federally enforceable after U.S. EPA approves the rule revision:

b)(1)c.

c) Operational Restrictions

- (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);

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- 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 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).
 - c. 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 isoproponal

TLV (mg/m³): 983

Maximum Hourly Emission Rate (lbs/hr): 19.9

Predicted 1-Hour Maximum Ground-Level Concentration (µg/m³): 35,861

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) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(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).

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) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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 emission limitation(s) in b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

- 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

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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.

g) Miscellaneous Requirements

(1) None