



Environmental Protection Agency

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

7/11/2011

John Hannah
Veolia ES Technical Solutions, L.L.C.
4301 Infirmiry Road
P.O. Box 453
West Carrollton, OH 45449-0453

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

Facility ID: 0857751346
Permit Number: P0106686
Permit Type: Initial Installation
County: Montgomery

Certified Mail

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

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install and Operate (PTIO) for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, Dayton Daily News. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Issued Air Pollution Control Permits" link. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
122 South Front Street
Columbus, Ohio 43215

and Regional Air Pollution Control Agency
117 South Main Street
Dayton, OH 45422-1280

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Regional Air Pollution Control Agency at (937)225-4435.

Sincerely,

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

Cc: U.S. EPA Region 5 Via E-Mail Notification
RAPCA; Indiana; Kentucky



Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description:

This permit is being issued as a Federally Enforceable Permit to Install and Operate (FEPTIO) for installation of 48 new emissions units. The new equipment is for reclaiming spent solvents and blending organic fuels (gas boiler, processing units, and tanks).

3. Facility Emissions and Attainment Status:

Veolia ES Technical Solution specializes in fuel blending and solvent reclamation and is located in West Carrollton, Montgomery County, Ohio which is currently in attainment for all criteria pollutants except for PM_{2.5}. They reclaim spent solvents and blend organic fuels. In addition, Veolia receives, repackages and ships wastes to other Treatment, Storage, and Disposal Facilities (TSDF). The primary operations at the facility are: thin film evaporation, distillation, molecular sieve separation, blending of materials in tanks, aerosol can processing, and drum processing.

4. Source Emissions:

Uncontrolled potential emissions of volatile organic compounds (VOC) and hazardous air pollutants (HAPs) for the facility would be above Title V permitting and MACT major source thresholds, and below PSD applicability thresholds. This permit will be issued in draft and will have federally enforceable requirements to use and maintain air pollution control equipment to control OC emissions for all emissions units this permit, except B004. The control equipment must achieve a total OC (less methane and ethane) or total HAP destruction efficiency of 95% or more, on a total weight-basis, or an outlet total OC concentration less than or equal to 20 ppmv, whichever is less stringent, which mirrors federal rule standards that apply to the facility. The permittee has accepted an annual facility-wide emissions OC limitation of 19.37 tons/year, as a rolling 12-month summation to avoid Title V permitting requirements. As result the facility HAPs emissions will be well below major threshold. In order to demonstrate compliance with this limitation, the permittee shall maintain monthly records of the total OC emission from all emissions units at the facility. Quarterly deviation reports shall be submitted to identify any exceedances of the 12-month rolling annual OC emissions limitation.

5. Conclusion:

The terms and conditions in this Federally Enforceable Permit to Install and Operate will require use of control equipment to control OC emissions and limit the OC emissions from the facility to 19.37 tons/year and prevent the facility from triggering Title V permit requirements.



6. Please provide additional notes or comments as necessary:

This permit establishes federally enforceable requirements for using control equipment with a minimum overall OC/HAP control efficiency of 95%, which is used to establish the potential to emit of OC/HAPs emissions for the following emissions units:

| | | | | |
|------|------|------|------|---------|
| P012 | T071 | T081 | T091 | T101 |
| P013 | T072 | T082 | T092 | T102 |
| P014 | T073 | T083 | T093 | T103 |
| P015 | T074 | T084 | T094 | T104 |
| P016 | T075 | T085 | T095 | T105 |
| P017 | T076 | T086 | T096 | 1. T106 |
| P018 | T077 | T087 | T097 | T107 |
| P019 | T078 | T088 | T098 | |
| T069 | T079 | T089 | T099 | |
| T070 | T080 | T090 | T100 | |

Emissions for the new emissions units contained in this permit and existing emissions units currently located at the facility are summarized in the table below.

| Summary of Facility Emissions | | | | | | | |
|--|-----------|----------|-----------|----------|-----------|--------------------------------|---------------------------------------|
| | NOx (TPY) | CO (TPY) | SO2 (TPY) | PM (TPY) | VOC (TPY) | Total OC (includes HAPs) (TPY) | Highest Individual HAP (hexane) (TPY) |
| Emissions from existing EUs (B005, B006, B007, B008, P001, P002, & P003) | 3.38 | 0.73 | 0.22 | 0.24 | 2.51 | 3.58 | 1.42 |
| New sources in permit P0106686 | 12.80 | 10.80 | 0.08 | 1.00 | 13.15 | 15.80 | 5.16 |
| Facility PTE | 16.2 | 11.5 | 0.3 | 1.2 | 15.6 | 19.4 | 6.6 |

7. Total Permit Allowable Emissions Summary (for informational purposes only):

| <u>Pollutant</u> | <u>Tons Per Year</u> |
|-------------------|----------------------|
| Organic compounds | 19.37 |

PUBLIC NOTICE
Issuance of Draft Air Pollution Permit-To-Install and Operate
Veolia ES Technical Solutions, L.L.C.

Issue Date: 7/11/2011

Permit Number: P0106686

Permit Type: Initial Installation

Permit Description: Installation of new equipment (48 emissions units) for reclaiming spent solvents and blending organic fuels (gas boiler, processing units, and tanks). Facility was classified as Title V until explosion in late 2009. While facility was recovering, it was classified as Non-title V. Redesign of facility and operations reclassifies the facility as Synthetic Minor with this Installation Permit.

Facility ID: 0857751346

Facility Location: Veolia ES Technical Solutions, L.L.C.
4301 Infirmery Road,
Miamisburg, OH 45342-1278

Facility Description: All Other Basic Organic Chemical Manufacturing, Hazardous Waste Treatment and Disposal

The Director of the Ohio Environmental Protection Agency, 50 West Town Street, Columbus Ohio has issued a draft action of an air pollution control, federally enforceable permit-to-install and operate (PTIO) for the facility at the location identified above on the date indicated. Comments concerning this draft action, or a request for a public meeting, must be sent in writing no later than thirty (30) days from the date this notice is published. All comments, questions, requests for permit applications or other pertinent documentation, and correspondence concerning this action must be directed to Dale Davidson at Regional Air Pollution Control Agency, 117 South Main Street, Dayton, OH 45422-1280 or (937)225-4435. The permit can be downloaded from the Web page: www.epa.ohio.gov/dapc

Ohio

**Environmental
Protection Agency**

DRAFT

**Division of Air Pollution Control
Permit-to-Install and Operate
for
Veolia ES Technical Solutions, L.L.C.**

| | |
|----------------|-----------------------------------|
| Facility ID: | 0857751346 |
| Permit Number: | P0106686 |
| Permit Type: | Initial Installation |
| Issued: | 7/11/2011 |
| Effective: | To be entered upon final issuance |
| Expiration: | To be entered upon final issuance |



Division of Air Pollution Control
Permit-to-Install and Operate
for
Veolia ES Technical Solutions, L.L.C.

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Authorization

Facility ID: 0857751346

Application Number(s): A0039725, A0041414

Permit Number: P0106686

Permit Description: Installation of new equipment (48 emissions units) for reclaiming spent solvents and blending organic fuels (gas boiler, processing units, and tanks). Facility was classified as Title V until explosion in late 2009. While facility was recovering, it was classified as Non-title V. Redesign of facility and operations reclassifies the facility as Synthetic Minor with this Installation Permit.

Permit Type: Initial Installation

Permit Fee: \$9,750.00 *DO NOT send payment at this time, subject to change before final issuance*

Issue Date: 7/11/2011

Effective Date: To be entered upon final issuance

Expiration Date: To be entered upon final issuance

Permit Evaluation Report (PER) Annual Date: To be entered upon final issuance

This document constitutes issuance to:

Veolia ES Technical Solutions, L.L.C.
4301 Infirmary Road
Miamisburg, OH 45342-1278

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:

Regional Air Pollution Control Agency
117 South Main Street
Dayton, OH 45422-1280
(937)225-4435

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: P0106686

Permit Description: Installation of new equipment (48 emissions units) for reclaiming spent solvents and blending organic fuels (gas boiler, processing units, and tanks). Facility was classified as Title V until explosion in late 2009. While facility was recovering, it was classified as Non-title V. Redesign of facility and operations reclassifies the facility as Synthetic Minor with this Installation Permit.

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

- Emissions Unit ID: B004
Company Equipment ID: Heater 1
Superseded Permit Number:
General Permit Category and Type: Not Applicable
Emissions Unit ID: P013
Company Equipment ID: Unit 2
Superseded Permit Number:
General Permit Category and Type: Not Applicable
Emissions Unit ID: P015
Company Equipment ID: Molecular Sieve
Superseded Permit Number:
General Permit Category and Type: Not Applicable
Emissions Unit ID: P016
Company Equipment ID: Drum Dispersion Unit
Superseded Permit Number:
General Permit Category and Type: Not Applicable
Emissions Unit ID: P017
Company Equipment ID: Drum Pumping Operation
Superseded Permit Number:
General Permit Category and Type: Not Applicable
Emissions Unit ID: P018
Company Equipment ID: Loading Racks
Superseded Permit Number:
General Permit Category and Type: Not Applicable
Emissions Unit ID: P019
Company Equipment ID: Tank Truck Cleaning
Superseded Permit Number:
General Permit Category and Type: Not Applicable

Group Name: Distillation Columns

Table with 2 columns: Emissions Unit ID and details. Rows include P012 (Unit 1) and P014 (Unit 3).

Group Name: Tanks

| | |
|-----------------------------------|----------------|
| Emissions Unit ID: | T069 |
| Company Equipment ID: | Tank TK-2001 |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |
| Emissions Unit ID: | T070 |
| Company Equipment ID: | Tank TK-2002 |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |
| Emissions Unit ID: | T071 |
| Company Equipment ID: | Tank TK-2003 |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |
| Emissions Unit ID: | T072 |
| Company Equipment ID: | Tank TK-2004 |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |
| Emissions Unit ID: | T073 |
| Company Equipment ID: | Tank TK-1001 |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |
| Emissions Unit ID: | T074 |
| Company Equipment ID: | Tank TK-1002 |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |
| Emissions Unit ID: | T075 |
| Company Equipment ID: | Tank TK-2012 |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |
| Emissions Unit ID: | T076 |
| Company Equipment ID: | Tank TK-2013 |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |
| Emissions Unit ID: | T077 |
| Company Equipment ID: | Tank TK-2014 |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |
| Emissions Unit ID: | T078 |
| Company Equipment ID: | Tank TK-2015 |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |
| Emissions Unit ID: | T079 |
| Company Equipment ID: | Tank TK-2016 |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |
| Emissions Unit ID: | T080 |
| Company Equipment ID: | Tank TK-2009 |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |
| Emissions Unit ID: | T081 |
| Company Equipment ID: | Tank TK-2010 |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |

Draft Permit-to-Install and Operate

Veolia ES Technical Solutions, L.L.C.

Permit Number: P0106686**Facility ID:** 0857751346**Effective Date:** To be entered upon final issuance

| | |
|----------------------------------|----------------|
| Emissions Unit ID: | T082 |
| Company Equipment ID: | Tank TK-2011 |
| Superseded Permit Number: | |
| General Permit Category andType: | Not Applicable |
| Emissions Unit ID: | T083 |
| Company Equipment ID: | Tank TK-2005 |
| Superseded Permit Number: | |
| General Permit Category andType: | Not Applicable |
| Emissions Unit ID: | T084 |
| Company Equipment ID: | Tank TK-2006 |
| Superseded Permit Number: | |
| General Permit Category andType: | Not Applicable |
| Emissions Unit ID: | T085 |
| Company Equipment ID: | Tank TK-2007 |
| Superseded Permit Number: | |
| General Permit Category andType: | Not Applicable |
| Emissions Unit ID: | T086 |
| Company Equipment ID: | Tank TK-2008 |
| Superseded Permit Number: | |
| General Permit Category andType: | Not Applicable |
| Emissions Unit ID: | T087 |
| Company Equipment ID: | Tank TK-1020 |
| Superseded Permit Number: | |
| General Permit Category andType: | Not Applicable |
| Emissions Unit ID: | T088 |
| Company Equipment ID: | Tank TK-1021 |
| Superseded Permit Number: | |
| General Permit Category andType: | Not Applicable |
| Emissions Unit ID: | T089 |
| Company Equipment ID: | Tank TK-1022 |
| Superseded Permit Number: | |
| General Permit Category andType: | Not Applicable |
| Emissions Unit ID: | T090 |
| Company Equipment ID: | Tank TK-1023 |
| Superseded Permit Number: | |
| General Permit Category andType: | Not Applicable |
| Emissions Unit ID: | T091 |
| Company Equipment ID: | Tank TK-1017 |
| Superseded Permit Number: | |
| General Permit Category andType: | Not Applicable |
| Emissions Unit ID: | T092 |
| Company Equipment ID: | Tank TK-1004 |
| Superseded Permit Number: | |
| General Permit Category andType: | Not Applicable |
| Emissions Unit ID: | T093 |
| Company Equipment ID: | Tank TK-1005 |
| Superseded Permit Number: | |
| General Permit Category andType: | Not Applicable |
| Emissions Unit ID: | T094 |
| Company Equipment ID: | Tank TK-1006 |
| Superseded Permit Number: | |
| General Permit Category andType: | Not Applicable |
| Emissions Unit ID: | T095 |
| Company Equipment ID: | Tank TK-1007 |
| Superseded Permit Number: | |
| General Permit Category andType: | Not Applicable |

Draft Permit-to-Install and Operate

Veolia ES Technical Solutions, L.L.C.

Permit Number: P0106686

Facility ID: 0857751346

Effective Date: To be entered upon final issuance

| | |
|----------------------------------|----------------|
| Emissions Unit ID: | T096 |
| Company Equipment ID: | Tank TK-1008 |
| Superseded Permit Number: | |
| General Permit Category andType: | Not Applicable |
| Emissions Unit ID: | T097 |
| Company Equipment ID: | Tank TK-1009 |
| Superseded Permit Number: | |
| General Permit Category andType: | Not Applicable |
| Emissions Unit ID: | T098 |
| Company Equipment ID: | Tank TK-1010 |
| Superseded Permit Number: | |
| General Permit Category andType: | Not Applicable |
| Emissions Unit ID: | T099 |
| Company Equipment ID: | Tank TK-1011 |
| Superseded Permit Number: | |
| General Permit Category andType: | Not Applicable |
| Emissions Unit ID: | T100 |
| Company Equipment ID: | Tank TK-1012 |
| Superseded Permit Number: | |
| General Permit Category andType: | Not Applicable |
| Emissions Unit ID: | T101 |
| Company Equipment ID: | Tank TK-1013 |
| Superseded Permit Number: | |
| General Permit Category andType: | Not Applicable |
| Emissions Unit ID: | T102 |
| Company Equipment ID: | Tank TK-1014 |
| Superseded Permit Number: | |
| General Permit Category andType: | Not Applicable |
| Emissions Unit ID: | T103 |
| Company Equipment ID: | Tank TK-1015 |
| Superseded Permit Number: | |
| General Permit Category andType: | Not Applicable |
| Emissions Unit ID: | T104 |
| Company Equipment ID: | TankTK-1016 |
| Superseded Permit Number: | |
| General Permit Category andType: | Not Applicable |
| Emissions Unit ID: | T105 |
| Company Equipment ID: | Tank TK-1003 |
| Superseded Permit Number: | |
| General Permit Category andType: | Not Applicable |
| Emissions Unit ID: | T106 |
| Company Equipment ID: | Tank TK-1018 |
| Superseded Permit Number: | |
| General Permit Category andType: | Not Applicable |
| Emissions Unit ID: | T107 |
| Company Equipment ID: | Tank TK-1019 |
| Superseded Permit Number: | |
| General Permit Category andType: | 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 Regional Air Pollution Control Agency 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.

¹Permittees 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

Draft Permit-to-Install and Operate

Veolia ES Technical Solutions, L.L.C.

Permit Number: P0106686

Facility ID: 0857751346

Effective Date: To be entered upon final issuance

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) B.13 through B.16.
 - 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) B.2 through B.12, B.17 through B.19.

2. 40 CFR Part 60, Subpart A, General Provisions of the Standards of Performance for New Stationary Sources

The permittee is subject to the requirements specified in 40 CFR Part 60, Subpart A, General Provisions of the Standards of Performance for New Stationary Sources (NSPS), including notification and recordkeeping, testing, and monitoring requirements (including the table(s) and appendices referenced in Subpart A).

The permittee shall comply with the applicable provisions of 61.1 – 61.19 of 40 CFR Part 60, Subpart A, and the requirements referenced therein. The complete NSPA General Provisions may be accessed via the internet from the Electronic Code of Federal Regulation (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the Ohio EPA Division of Air Pollution Control or the Regional Air Pollution Control Agency.

3. 40 CFR Part 60, Subpart VVa, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006

This facility is subject to 40 CFR Part 60, Subpart VVa, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006. This facility has the design capacity to produce more than 1,102 ton per year of an applicable chemical listed in 40 CFR Part 60.489. Subpart VVa applies to each pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, and flange or other connector in VOC service and any devices or systems required by this subpart at synthetic organic chemicals manufacturing industry (SOCMI) facilities.

In addition to this NSPS the facility is subject to 40 CFR Part 61, Subpart J, National Emission Standard for Equipment Leaks (Fugitive Emission Sources) of Benzene and Subpart V, National Emission Standard for Equipment Leaks (Fugitive Emission Sources). In accordance with section 61.110(d) of Subpart J and 61.240(c) of Subpart V, a source to which those subparts apply that is also subject to the provisions of 40 CFR Part 60 only will be required to comply with the provisions of Subparts J and V. Compliance with this subpart shall be achieved by complying with 40 CFR Part 61, Subpart V, National Emission Standard for Equipment Leaks (Fugitive Emission Sources). The complete requirements, including the NSPS General Provisions, may be accessed via the internet from the Electronic Code of

Federal Regulation (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the Ohio EPA Division of Air Pollution Control or the Regional Air Pollution Control Agency.

4. 40 CFR Part 61 Subpart A, General Provisions of the National Emission Standards for Hazardous Air Pollutants

The permittee is subject to the requirements specified in 40 CFR Part 61 Subpart A, General Provisions of the National Emission Standards for Hazardous Air Pollutants (NESHAP), including notification and recordkeeping, testing, and monitoring requirements (including the table(s) and appendices referenced in Subpart A).

The permittee shall comply with the applicable provisions of 61.01 – 61.19 of 40 CFR Part 61, Subpart A, and the requirements referenced therein. The complete NESHAP General Provisions may be accessed via the internet from the Electronic Code of Federal Regulation (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the Ohio EPA Division of Air Pollution Control or the Regional Air Pollution Control Agency.

5. 40 CFR Part 61, Subpart J, National Emission Standard for Equipment Leaks (Fugitive Emission Sources) of Benzene

This facility is subject to 40 CFR Part 61, Subpart J, National Emission Standard for Equipment Leaks (Fugitive Emission Sources) of Benzene. This subpart applies to equipment (including pumps, compressors, pressure relief devices, sampling connection systems, open ended valves or lines, valves, connectors, surge control vessels, bottom receivers, and control devices) operating in benzene service (liquid or gas with at least 10% benzene by weight). This facility has design capacity to produce more than 1,102 ton per year of benzene and would be subject regulation.

In accordance with section 61.112(a) of Subpart J, an owner or operator subject to this subpart shall comply with the requirements of 40 CFR Part 61, Subpart V, National Emission Standard for Equipment Leaks (Fugitive Emission Sources). Compliance with this subpart shall be achieved by complying with 40 CFR Part 61, Subpart V, National Emission Standard for Equipment Leaks (Fugitive Emission Sources).

The permittee shall comply with the applicable standards, monitoring recordkeeping and requirements of 61.110 – 61.112 of 40 CFR Part 61, Subpart J, and the requirements referenced therein, including the following sections:

| | |
|-------------------|--|
| 61.110(b) and (c) | Exemptions. |
| 61.110(d) | Specification that for sources to which this subpart applies that is also subject to provisions of 40 CFR Part 61 will only be required to comply with provisions of this subpart. |
| 61.112(a) | Specification that for source subject to provisions of this rule shall comply with 40 CFR Part 61 Subpart V. |

The complete NESHAP requirements, including the NESHAP General Provisions may be accessed via the internet from the Electronic Code of Federal Regulation (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the Ohio EPA Division of Air Pollution Control or the Regional Air Pollution Control Agency.

6. 40 CFR Part 61, Subpart V, National Emission Standard for Equipment Leaks (Fugitive Emission Sources)

This facility is subject to 40 CFR Part 61, Subpart V, National Emission Standard for Equipment Leaks (Fugitive Emission Sources). This subpart applies to each of the following sources that are intended to operate in volatile hazardous air pollutant (VHAP) service: pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, and control devices or systems required by this subpart. The regulation specifies requirements to prevent and minimize leaks as well as requirements for leak detection and repair (LDAR). The permittee will comply with the requirements of the subpart by implementation of a (LDAR) program.

The permittee shall comply with the applicable standards, monitoring recordkeeping and requirements of 61.240 – 61.247 of 40 CFR Part 61, Subpart V, and the requirements and appendices referenced therein. The complete NESHAP requirements, including the NESHAP General Provisions may be accessed via the internet from the Electronic Code of Federal Regulation (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the Ohio EPA Division of Air Pollution Control or the Regional Air Pollution Control Agency.

7. 40 CFR Part 61, Subpart FF, National Emission Standard for Benzene Waste Operations

This facility is subject to 40 CFR Part 61, Subpart FF, National Emission Standard for Benzene Waste Operations, including the table(s) and appendices referenced in Subpart FF. This subpart applies to owners and operators that receive benzene-containing hazardous waste from waste generated by chemical manufacturing plants, coke by-product recovery plants, and petroleum refineries. The permittee must keep records of the following information if the facility receives any of the specified benzene-containing hazardous waste from any facility listed in 40 CFR, Part 61 Section 61.340(a) and it is not a waste-type specified in Sections 61.340(c)(1) or 61.340(c)(2):

- a) the total annual benzene (TAB) quantity received on-site, in tons;
- b) the % benzene and water, by weight, of each benzene-containing material received;
- c) the name of the generator of the benzene-containing waste material; and
- d) whether or not the generator of the benzene containing waste material exceeded the 11.0 TPY (10 Mg/yr) TAB benzene limitation.

The facility shall handle all on-site benzene-containing waste received, as described above, in accordance with 40 CFR, Part 61, Subpart FF. If once the annual quantity of benzene received at the facility exceeds 11 tons or if the facility receives benzene-containing waste from a generator of benzene-containing waste materials with an annual quantity of benzene greater than 11.0 TPY, the permittee shall submit a plan detailing how compliance with the control requirements established pursuant to the subpart, will be achieved.

The permittee shall comply with the applicable standards, monitoring recordkeeping and requirements of 61.340 – 61.358 of 40 CFR Part 61, Subpart FF, and the requirements, tables, and appendices referenced therein, including the following sections:

| | |
|--------------|--|
| 61.342(a) | Exemption for facility with total annual benzene quantity is less than 11 ton/year. |
| 61.342(b) | Compliance requirements for facility with total annual benzene quantity from waste greater than 11 ton/year. |
| 61.355(a) | Procedure for determining total annual benzene quantity from facility waste. |
| 61.355(a)(3) | Compliance requirements if total annual benzene is \geq 11 ton/year. |
| 61.355(a)(4) | Compliance requirements if total annual benzene is $<$ 11 ton/year but \geq 1.1 ton/year. |
| 61.355(a)(5) | Compliance requirements if total annual benzene is $<$ 1.1 ton/year. |
| 61.357(b) | Reporting and notification requirements if total annual benzene is $<$ 1.1 ton/year. |
| 61.357(c) | Reporting and notification requirements if total annual benzene is $<$ 11 ton/year but \geq 1.1 ton/year. |
| 61.357(d) | Reporting and notification requirements if total annual benzene is \geq 11 ton/year. |

The complete NESHAP requirements, including the NESHAP General Provisions may be accessed via the internet from the Electronic Code of Federal Regulation (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the Ohio EPA Division of Air Pollution Control or the Regional Air Pollution Control Agency.

8. 40 CFR Part 63, Subpart A, General Provisions of the National Emission Standards for Hazardous Air Pollutants

The permittee is subject to the requirements specified in 40 CFR Part 63, Subpart A, General Provisions of the National Emission Standards for Hazardous Air Pollutants (NESHAP), including notification and recordkeeping, testing, and monitoring requirements (including the table(s) and appendices referenced in Subpart A).

The permittee shall comply with the applicable provisions of 63.1 – 63.16 of 40 CFR Part 63, Subpart A, and the requirements, tables, and appendices referenced therein. The complete NESHAP General Provisions may be accessed via the internet from the Electronic Code of Federal Regulation (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the Ohio EPA Division of Air Pollution Control or the Regional Air Pollution Control Agency.

9. 40 CFR Part 63, Subpart GGG, National Emissions Standards for Pharmaceuticals Production

This facility is subject to 40 CFR Part 63, Subpart GGG, National Emissions Standards for Pharmaceuticals Production. This subpart applies to pharmaceutical manufacturing operations, which

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are the facility wide collection of pharmaceutical manufacturing process units and any other equipment such as heat exchanger systems, wastewater and waste management units, or cooling towers located at a facility for the purpose of manufacturing pharmaceutical products.

In accordance with 40 CFR Part 63.1256(a)(5), if this facility receives regulated wastewater the permittee shall comply with management and treatment requirements of the subpart, and the requirements referenced therein, as the “transferee” and shall have submitted written certification to US EPA that the waste will be managed and treated in accordance with the rule. The rule includes control requirements for tanks, surface impoundments, containers, drain systems, oil-water separators, and treatment processes. If the permittee is notified by a pharmaceutical client that a regulated wastewater will be sent to this facility, the permittee shall comply with the certification and control requirements of the subpart for affected units. The permittee shall comply by implementing a leak detection and repair (LDAR) program, and controlling emissions from units processing the wastewater with a vapor balance system and a cryogenic solvent recovery system that achieves a total organic compound (less methane and ethane) or total HAP destruction efficiency of 95% or more, on a total weight-basis, or an outlet total OC concentration less than or equal to 20 ppmv, whichever is less stringent.

The permittee shall comply with the applicable standards, monitoring recordkeeping and requirements of 61.1250 – 61.1261 of 40 CFR Part 63, Subpart GGG, and the requirements, tables, and appendices referenced therein, including the following sections:

| | |
|---------------|---|
| 63.1256 | Wastewater standards for facilities affected by 40 CFR Part 63 Subpart GGG. |
| 63.1256(a)(5) | Offsite management and treatment option. |

The complete NESHAP requirements, including the NESHAP General Provisions may be accessed via the internet from the Electronic Code of Federal Regulation (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the Ohio EPA Division of Air Pollution Control or the Regional Air Pollution Control Agency.

10. 40 CFR Part 63, Subpart FFFF National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing

This facility could be subject to 40 CFR Part 63, Subpart FFFF, National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing (MON NESHAP). This subpart applies to miscellaneous organic chemical manufacturing process units that are located at, or are part of, a major source of hazardous air pollutants (HAP) emissions. The Veolia facility will not be a major source of HAP emissions. However, the MON NESHAP includes requirements for offsite management and treatment options of wastewater and residuals. If this facility receives regulated wastewater from a facility affected by the MON NESHAP, the permittee must meet the requirements of part 63.2485(i) of Subpart FFFF and comply with management, treatment and control provisions specified in part 63.132(g) of 40 CFR Part 63 Subpart G, the NESHAP for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations.

If this facility receives regulated wastewater the permittee shall comply with treatment options specified in part 63.132(g), and the requirements referenced therein, as the “transferee” and shall have submitted written certification to US EPA that the waste will be managed and treated in accordance with the rule. The rule includes control requirements for tanks, surface impoundments, containers, drain systems, oil-

water separators, and treatment processes. The permittee shall comply with this requirement by controlling emissions from units processing the wastewater with a vapor balance system and an cryogenic solvent recovery system with a total organic compound (less methane and ethane) or total HAP destruction efficiency of 95% or more, on a total weight-basis, or an outlet total OC concentration less than or equal to 20 ppmv, whichever is less stringent.

The permittee shall comply with the applicable standards, monitoring recordkeeping and requirements of 63.2430 – 63.2550 of 40 CFR Part 63, Subpart FFFF and of 40 CFR Part 63 Subpart FFFF, and the requirements, tables, and appendices referenced therein, including the following sections:

| | |
|---|--|
| 63.2485(a) and Table 7 of 40 CFR Part 63 Subpart FFFF | Facilities affected by 40 CFR Part 63 Subpart FFFF must meet the following requirements of Table 7 of Subpart FFFF that apply to their wastewater streams. |
| 63.2485(i) of 40 CFR Part 63 Subpart FFFF | Offsite management and treatment option. |
| 63.132 of 40 CFR Part 63 Subpart G | Process wastewater provisions – general. |

The complete NESHAP requirements, including the NESHAP General Provisions may be accessed via the internet from the Electronic Code of Federal Regulation (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the Ohio EPA Division of Air Pollution Control or the Regional Air Pollution Control Agency.

11. 40 CFR Part 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (Area Source RICE MACT)

The Ohio EPA has determined that this facility is subject to the requirements of 40 CFR Part 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (Area Source RICE MACT). The permittee will not be installing a new RICE but the facility includes an existing 436 horsepower compression ignition engine for an emergency fire pump engine, emissions unit ID B008. This subpart specifies operating limitations, inspection and maintenance requirements, and work/management practices for existing emergency stationary RICE located at an area source (non-major for HAPs). Although Ohio EPA has determined that this area source MACT (also known as the GACT) applies, at this time Ohio EPA does not have the authority to enforce this standard. Instead, U.S. EPA has the authority to enforce this standard. Please be advised, that all requirements associated with this rule are in effect and shall be enforced by U.S. EPA. For more information on the area source rules, please refer to the follow U.S. EPA website: <http://www.epa.gov/ttn/atw/area/arearules.html>.

12. 40 CFR Part 63, Subpart VVVVV, National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources (Area Source MACT)

The Ohio EPA has determined that this facility is subject to the requirements of 40 CFR Part 63, Subpart VVVVV, National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources. This subpart applies to chemical manufacturing process units (CMPU) located at an area source of HAP emissions that uses as feedstock, generate as byproducts, or produce as products any of the HAP listed in Table 1 of the subpart. Although Ohio EPA has determined that this area source MACT (also known as the GACT) applies, at this time Ohio EPA does

not have the authority to enforce this standard. Instead, U.S. EPA has the authority to enforce this standard. Please be advised, that all requirements associated with this rule are in effect and shall be enforced by U.S. EPA. For more information on the area source rules, please refer to the follow U.S. EPA website: <http://www.epa.gov/ttn/atw/area/arearules.html>.

13. For the PTIO application the permittee conducted a review of historical records of incoming solvents to characterize and evaluate the emissions for the sources contained in this permit and the facility, and determined a percentage split between four surrogate HAP compounds (hexane-40%, MTBE-20%, methylene chloride-30%, acetaldehyde-10%). The PTIO application and emissions units contained in this permit P0106686 were evaluated based on the amount of emissions that correspond to the percentage split for each compound and the design parameters of the emissions units' exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to these emissions units 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):
 - (1) 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
 - (2) 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., "24" hours per day and "7" 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):
$$\text{TLV}/10 \times 8/24 \times 5/7 = \text{MAGLC}$$
- d) 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: acetaldehyde (CAS 75-07-0)

TLV (mg/m3): 3.32

Maximum Hourly Emission Rate (lbs/hr): 0.696

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 563.3

MAGLC (ug/m3): 790.4

Toxic Contaminant: MTBE (CAS 1634-04-4)

TLV (mg/m3): 18.03

Maximum Hourly Emission Rate (lbs/hr): 0.856

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 685.0

MAGLC (ug/m3): 4292.1

Toxic Contaminant: hexane (CAS 110-54-3)

TLV (mg/m3): 17.63

Maximum Hourly Emission Rate (lbs/hr): 1.603

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1283.3

MAGLC (ug/m3): 4196.1

The permittee, has demonstrated that emissions of acetaldehyde, methylene chloride, MTBE, and hexane from the emissions units contained in this permit, were 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).

14. 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 PTIO 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.

- 15. 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.

- 16. The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

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.

- 17. The total OC emissions from the facility from all permitted, de minimus, permit exempt, and permit by rule air contaminate air sources combined shall not exceed 19.37 tons per year, based upon a rolling, 12-month summation of the monthly emissions. To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the emission levels specified in the following table:

| <u>Month(s)</u> | <u>Maximum Allowable Cumulative Emissions of OC (Tons)</u> |
|-----------------|--|
| 1 | 1.61 |
| 1-2 | 3.23 |
| 1-3 | 4.84 |
| 1-4 | 6.46 |
| 1-5 | 8.07 |
| 1-6 | 9.69 |
| 1-7 | 11.30 |
| 1-8 | 12.91 |
| 1-9 | 14.53 |
| 1-10 | 16.14 |
| 1-11 | 17.76 |
| 1-12 | 19.37 |

After the first 12 calendar months following the issuance of this permit, compliance with the annual emissions limitation for OC shall be based upon a rolling, 12-month summation of the monthly emissions. The permittee shall calculate and maintain monthly records of the OC emissions and the rolling 12-month emissions of OC. Compliance shall be based upon the record keeping requirements specified in B.18 of this.

18. The permittee shall maintain monthly records of the following information:
- a) the controlled OC emissions for emissions units controlled by the cryogenic solvent recovery system when the control system was operating; and the uncontrolled OC emissions for when the control system was not operating;
 - b) the controlled OC emissions for emissions units controlled by the carbon canister adsorption system when the control system was operating; and the uncontrolled OC emissions for when the control system was not operating;
 - c) the OC emissions for emissions units not controlled by either the cryogenic solvent recovery or the carbon canister adsorption systems;
 - d) the total monthly OC emission rate [summation of 18.a) through plus 18.c)] for each month of operation; and

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- e) beginning after the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the monthly emissions.

Also, during the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative OC emissions for each calendar month.

- 19. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month emission limitation for OC and for the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative emission levels. These reports are due by the date prescribed in the Standard Terms and Conditions of this permit under Section A.
- 20. The permittee shall submit annual reports that specify the OC emissions from the facility for the previous calendar year. The reports shall be submitted by April 15th of each year. This reporting requirement may be satisfied by including the specific emission data from this facility in the annual Fee Emissions Report.

C. Emissions Unit Terms and Conditions

1. B004, Heater 1

Operations, Property and/or Equipment Description:

12 MMBTU/hr Natural Gas Heater

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)e. and b)(2)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), as effective 11/30/01 | The nitrogen oxides (NO _x) emissions from this emissions unit shall not exceed 1.20 lb/hr or 5.26 tons per year. The carbon monoxide (CO) emissions from this emissions unit shall not exceed 1.01 lb/hr of 4.42 ton per year. See b)(2)d. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(B)(1) and 3745-17-07. See b)(2)a. |
| b. | OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06 | See b)(2)b. |

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| | | |
|----|--|---|
| c. | OAC rule 3745-17-10(B)(1) | The particulate emissions (PE) from this emissions unit shall not exceed 0.020 pound per million Btu of actual heat input. See b)(2)c and c)(1). |
| d. | OAC rule 3745-17-07 | This unit is considered an inherently clean emission unit. See b)(2)c and c)(1). |
| e. | OAC rule 3745-31-05(D) Synthetic Minor to avoid Title V permitting requirements | See B.17 of Facility-Wide Terms and Conditions. |

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, these emission limitations/control measures no longer apply.
- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.
- The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE, NO_x, SO₂, VOC, and CO emissions from this air contaminant source since the uncontrolled potential to emit for each is less than 10 tons/year.
- c. This unit is considered an inherently clean emissions unit and will not be subject to these rules so long as it is operated in compliance with the terms of this permit. An inherently clean emissions unit means: an uncontrolled emissions unit that burns only natural gas and/or number two fuel oil, the particulate emissions from the emissions unit are due solely to the combustion of the fuel(s), and under normal operating conditions the emissions will not exceed the particulate or visible emissions limitations.
- d. Based on the information and data submitted by the permittee in the application for permit P0106686, the hourly NO_x and CO emission limitations reflect the emissions unit's potential to emit. Therefore, no monitoring, record keeping, and reporting requirements are necessary to ensure ongoing compliance with this emission limitation.

c) Operational Restrictions

- (1) The permittee shall burn only natural gas in this emissions unit.

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
- (2) 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.
- (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 and include any deviations (excursions) or exceedances of the emission limitations, operational restrictions and/or control device operating parameter limitations in his permit.

f) Testing Requirements

- (1) Compliance with the emission limitations in section b)(1) of the terms and conditions for this emissions unit shall be determined in accordance with the following method(s):

a. Emission Limitation:

The NO_x emissions from this emissions unit shall not exceed 1.20 lb/hr.

Applicable Compliance Method:

Compliance shall be demonstrated by dividing the lb-NO_x/mmscf emission factor (100 lb/mmscf) from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-1 (7/98) by the heating value of natural gas (1000 mmBTU/mmscf), and then multiplying by the maximum rated heat input capacity of the emissions unit (12 mmBtu/hr).

If required, compliance with the hourly NO_x limitation shall be determined in accordance with the U.S. EPA Reference Methods 1 – 4 and & 7E of 40 CFR Part 60, Appendix A.

b. Emission Limitation:

The NO_x emissions from this emissions unit shall not exceed 5.26 tons per year.

Applicable Compliance Method:

Compliance with the annual NO_x emission limitation shall be demonstrated by multiplying the hourly NO_x emission rate by 8760 hrs/yr and then dividing by 2000 lbs/ton.

c. Emission Limitation:

The CO emissions from this emissions unit shall not exceed 1.01 lb/hr.

Applicable Compliance Method:

Compliance shall be demonstrated by dividing the lb-CO/mmscf emission factor (84 lb/mmscf) from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-1 (7/98) by the heating value of natural gas (1000 mmBTU/mmscf), and then multiplying by the maximum rated heat input capacity of the emissions unit (12 mmBtu/hr).

If required, compliance with the hourly CO limitation shall be determined in accordance with the U.S. EPA Reference Methods 1 – 4 and 10 of 40 CFR Part 60, Appendix A.

d. Emission Limitation:

The CO emissions from this emissions unit shall not exceed 4.42 ton per year.

Applicable Compliance Method:

Compliance with the annual CO emission limitation shall be demonstrated by multiplying the hourly CO emission rate by 8760 hrs/yr and then dividing by 2000 lbs/ton.

e. Emission Limitation:

The PE from this emissions unit shall not exceed 0.020 pound per million Btu of actual heat input.

Applicable Compliance Method:

Compliance with this emission limitation shall be demonstrated by operating the emissions unit in compliance with the terms of this permit.

g) Miscellaneous Requirements

(1) None.

2. P013, Unit 2

Operations, Property and/or Equipment Description:

Unit 2 - Thin Film Evaporator, Fractionating Column, and Primary Condenser controlled by cryogenic solvent 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. through b)(1)f., b)(2)c., b)(2)d., c)(1), c)(2), and d)(1) through d)(3) and e)(1).

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), as effective 11/30/01 | The organic compounds (OC) emissions from this emissions unit shall not exceed 0.37 lb/hr or 1.62 tons per year. See b)(2)c. See b)(2)a. |
| b. | OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06 | See b)(2)b. |
| c. | 40 CFR Part 60, Subparts A and VVa | See Section B. Facility-Wide Terms and Conditions. |
| d. | 40 CFR Part 61, Subparts A, J, N and FF | See Section B. Facility-Wide Terms and Conditions. |
| e. | 40 CFR Part 63 Subparts A, GGG, FFFF, and VVVVV | See Section B. Facility-Wide Terms and Conditions. |
| f. | OAC rule 3745-31-05(D) Synthetic Minor to avoid Title V permitting requirements | See B.17 of Facility-Wide Terms and Conditions. |

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|-------------------------------|---|
| g. | OAC rule 3745-21-09(DD) | The limitations and requirements specified by this rule are less stringent than the limitations and requirements established pursuant to OAC rule 3745-31-05(A)(3), 40 CFR Part 60, 40 CFR Part 61, and 40 CFR Part 63. |
| h. | OAC 3745-21-07(M)(3)(c)(ii) | The requirements of this rule shall not apply to any source, including any new source as defined in rule 3745-15-01 of the Administrative Code, for which installation commenced after the effective date of this rule. |

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, these emission limitations/control measures no longer apply.

- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE, NOx, SO2, and CO emissions from this air contaminant source since the uncontrolled potential to emit for each is less than 10 tons/year.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the OC emissions from this air contaminant source since the calculated annual emission rate for OC is less than 10 tons/year, taking into account the following federally enforceable limitations:

- i. The emissions from this emissions unit shall be vented to and controlled by a cryogenic solvent recovery system that achieves a total organic compound (less methane and ethane) or total HAP destruction efficiency of 95% or more, on a total weight-basis, or an outlet total OC concentration less than or equal to 20 ppmv, whichever is less stringent.

- c. Based on the information and data submitted by the permittee in the application for permit P0106686, the hourly OC emissions limit was established to reflect the after control potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this short term emissions limitation. Based on this hourly potential emissions rate, the unrestricted potential to emit for OC emissions from this emissions unit, based on 8,760 hours/365 days of operation per year, is 1.62 tons per year. Record keeping of the process emissions is not required since the emissions unit is permitted at its potential to emit.
 - d. The emissions from this emissions unit shall be vented to and controlled by a cryogenic solvent recovery system that achieves a total organic compound (less methane and ethane) or total HAP destruction efficiency of 95% or more, on a total weight-basis, or an outlet total OC concentration less than or equal to 20 ppmv, whichever is less stringent.
 - e. All equipment and components associated with this emissions unit, the vapor balance system, and the cryogenic solvent recovery system must comply with the applicable requirements included in Section B. Facility-Wide Terms and Conditions.
- c) Operational Restrictions
- (1) All of the emissions from this emissions unit shall be vented to the cryogenic solvent recovery system that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation.
 - (2) The average temperature of the exhaust gases from the cryogenic solvent recovery system, for any 3-hour block of time shall not exceed the average temperature(s) measured during the most recent design evaluation conducted in accordance with 40 CFR 63.1257(a)(1)(iii) that demonstrates the cryogenic solvent recovery system has a minimum overall control efficiency of 95%, on a total weight-basis, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent.
- d) Monitoring and/or Recordkeeping Requirements
- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average temperature(s) of the exhaust gases from the cryogenic solvent recovery system, for any 3-hour block of time, shall not be more than the average temperature measured during the most recent design evaluation conducted in accordance with 40 CFR 63.1257(a)(1)(iii) that demonstrates the cryogenic solvent recovery system has a minimum overall control efficiency of 95%, on a total weight-basis, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent. Until testing has been conducted, the cryogenic solvent recovery system shall be operated and maintained in accordance with the manufacturer's recommendations.
 - (2) The permittee shall install, operate, and maintain a continuous temperature monitor and recorder which measures and records the temperature(s) of the exhaust gases from the cryogenic solvent recovery system when the emissions unit(s) is/are in operation, including periods of startup and shutdown. 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 installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee.

Following compliance testing, the permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:

- a. all 3-hour blocks of time, when the emissions unit(s) controlled by the cryogenic solvent recovery system was/were in operation, during which the average temperature(s) of the exhaust gases from the cryogenic solvent recovery system was/were more than the average temperature measured during the most recent design evaluation conducted in accordance with 40 CFR 63.1257(a)(1)(iii) that demonstrates the cryogenic solvent recovery system has a minimum overall control efficiency of 95%, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent.; and
- b. a log or record of operating time for the capture (collection) system, cryogenic solvent recovery system, monitoring equipment, and the associated emissions unit(s).

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

- (3) Whenever the monitored temperature(s) of the exhaust gases from the cryogenic solvent recovery system deviates from the range/limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

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

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- a. a description of the corrective action;
- b. the date corrective action was completed;
- c. the date and time the deviation ended;

- d. the total period of time (in minutes) during which there was deviation;
- e. the temperature readings of the exhaust gas from the cryogenic solvent recovery system immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

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

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

- (4) Record keeping of the process emissions is not required since the emissions unit is permitted at its potential to emit.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. each period of time (start time and date, and end time and date) when the average temperature of the exhaust gases from the cryogenic solvent recovery system was outside of the range specified by the manufacturer and/or outside of the acceptable range following any required compliance demonstration;
 - b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the cryogenic solvent recovery system;
 - c. each incident of deviation described in “a” or “b” (above) where a prompt investigation was not conducted;
 - d. each incident of deviation described in “a” or “b” where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature of the exhaust gases from the cryogenic solvent recovery system into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - e. each incident of deviation described in “a” or “b” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

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).

- (2) 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.
- (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 and include any deviations (excursions) or exceedances of the emission limitations, operational restrictions and/or control device operating parameter limitations in his permit.

f) Testing Requirements

- (1) Compliance with the emission limitations in section b)(1) of the terms and conditions for this emissions unit shall be determined in accordance with the following method(s):

a. Emission Limitation:

The OC emissions from this emissions unit shall not exceed 0.37 lb/hr.

Applicable Compliance Method:

The hourly OC emission limitation is determined by multiplying the maximum hourly liquid processing rate (605 gallons per hour) by the estimated average density of the liquid (7.42 lbs/gal) and dividing by 2000 lbs/ton, then multiplying by the emission factor (3.3 lbs/ton VOC) from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 4.7, Table 4.7-1 (2/80) and the control efficiency of (1-0.95) for the cryogenic solvent recovery system.

If required, compliance with the hourly OC limitation shall be determined in accordance with the U.S. EPA Reference Methods 1 – 4 and & 18, 25 or 25A of 40 CFR Part 60, Appendix A.

b. Emission Limitation:

The OC emissions from this emissions unit shall not exceed 1.62 tons per year.

Applicable Compliance Method:

Compliance with the annual OC emission limitation may be demonstrated by multiplying the hourly OC emission rate by 8760 hrs/yr and then dividing by 2000 lbs/ton.

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- (2) The permittee shall conduct, or have conducted, a design evaluation of the cryogenic solvent recovery system to measure and establish the maximum temperature(s) for the outlet gas stream at which the system can maintain a minimum overall control efficiency of 95%, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent. The design evaluation shall be performed in accordance with 40 CFR 63.1257(a)(1)(iii). A comprehensive written report on the results of the testing shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency following completion of the test(s) and prior to start up and operation of the emissions unit(s).
- g) Miscellaneous Requirements
- (1) None.

3. P015, Molecular Sieve

Operations, Property and/or Equipment Description:

Molecular Sieve controlled by a cryogenic solvent 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. through b)(1)f., b)(2)c., b)(2)d., c)(1), c)(2), and d)(1) through d)(3) and e)(1).

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), as effective 11/30/01 | The organic compounds (OC) emissions from this emissions unit shall not exceed 0.06 lb/hr or 0.18 tons per year. See b)(2)c. See b)(2)a. |
| b. | OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06 | See b)(2)b. |
| c. | 40 CFR Part 60, Subparts A and VVa | See Section B. Facility-Wide Terms and Conditions. |
| d. | 40 CFR Part 61, Subparts A, J, N and FF | See Section B. Facility-Wide Terms and Conditions. |
| e. | 40 CFR Part 63 Subparts A, GGG, FFFF, and VVVVVV | See Section B. Facility-Wide Terms and Conditions. |
| f. | OAC rule 3745-31-05(D) Synthetic Minor to avoid Title V permitting requirements | See B.17 of Facility-Wide Terms and Conditions. |

| | | |
|----|---------------------------------|---|
| g. | OAC rule 3745-21-09(DD) | The limitations and requirements specified by this rule are less stringent than the limitations and requirements established pursuant to OAC rule 3745-31-05(A)(3), 40 CFR Part 60, 40 CFR Part 61, and 40 CFR Part 63. |
| h. | OAC rule 3745-21-07(M)(3)(c)(i) | The requirements of this rule shall not apply to any source, including any new source as defined in rule 3745-15-01 of the Administrative Code, for which installation commenced after the effective date of this rule. |

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, these emission limitations/control measures no longer apply.

b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE, NOx, SO2, and CO emissions from this air contaminant source since the uncontrolled potential to emit for each is less than 10 tons/year.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the OC emissions from this air contaminant source since the calculated annual emission rate for OC is less than 10 tons/year, taking into account the following federally enforceable limitations:

i. The emissions from this emissions unit shall be vented to and controlled by a cryogenic solvent recovery system that achieves a total organic compound (less methane and ethane) or total HAP destruction efficiency of 95% or more, on a total weight-basis, or an outlet total OC concentration less than or equal to 20 ppmv, whichever is less stringent.

- c. Based on the information and data submitted by the permittee in the application for permit P0106686, the hourly OC emissions limit was established to reflect the after control potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this short term emissions limitation. This emissions unit operates as a batch process with a maximum annual operating capacity of 6000 hours/year. Based on the hourly potential emissions rate and the maximum annual operating capacity, the annual potential to emit for OC emissions from this emissions unit is 0.18 tons per year. Record keeping of the process emissions is not required since the emissions unit is permitted at its potential to emit.
- d. The emissions from this emissions unit shall be vented to and controlled by a cryogenic solvent recovery system that achieves a total organic compound (less methane and ethane) or total HAP destruction efficiency of 95% or more, on a total weight-basis, or an outlet total OC concentration less than or equal to 20 ppmv, whichever is less stringent.
- e. All equipment and components associated with this emissions unit, the vapor balance system, and the cryogenic solvent recovery system must comply with the applicable requirements included in Section B. Facility-Wide Terms and Conditions.

c) **Operational Restrictions**

- (1) All of the emissions from this emissions unit shall be vented to the vapor balance system and cryogenic solvent recovery system that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation.
- (2) The average temperature of the exhaust gases from the cryogenic solvent recovery system, for any 3-hour block of time shall not exceed the average temperature(s) measured during the most recent design evaluation conducted in accordance with 40 CFR 63.1257(a)(1)(iii) that demonstrates the cryogenic solvent recovery system has a minimum overall control efficiency of 95%, on a total weight-basis, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent.

d) **Monitoring and/or Recordkeeping Requirements**

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average temperature(s) of the exhaust gases from the cryogenic solvent recovery system, for any 3-hour block of time, shall not be more than the average temperature measured during the most recent design evaluation conducted in accordance with 40 CFR 63.1257(a)(1)(iii) that demonstrates the cryogenic solvent recovery system has a minimum overall control efficiency of 95%, on a total weight-basis, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent. Until testing has been conducted, the cryogenic solvent recovery system shall be operated and maintained in accordance with the manufacturer's recommendations.

- (2) The permittee shall install, operate, and maintain a continuous temperature monitor and recorder which measures and records the temperature(s) of the exhaust gases from the cryogenic solvent recovery system when the emissions unit(s) is/are in operation, including periods of startup and shutdown. 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 installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee.

Following compliance testing, the permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:

- a. all 3-hour blocks of time, when the emissions unit(s) controlled by the cryogenic solvent recovery system was/were in operation, during which the average temperature(s) of the exhaust gases from the cryogenic solvent recovery system was/were more than the average temperature measured during the most recent design evaluation conducted in accordance with 40 CFR 63.1257(a)(1)(iii) that demonstrates the cryogenic solvent recovery system has a minimum overall control efficiency of 95%, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent.; and
- b. a log or record of operating time for the capture (collection) system, cryogenic solvent recovery system, monitoring equipment, and the associated emissions unit(s).

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

- (3) Whenever the monitored temperature(s) of the exhaust gases from the cryogenic solvent recovery system deviates from the range/limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
- a. the date and time the deviation began;
 - b. the magnitude of the deviation at that time;
 - c. the date the investigation was conducted;
 - d. the name(s) of the personnel who conducted the investigation; and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- a. a description of the corrective action;
- b. the date corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was deviation;
- e. the temperature readings of the exhaust gas from the cryogenic solvent recovery system immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

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

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

- (4) Record keeping of the process emissions is not required since the emissions unit is permitted at its potential to emit.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. each period of time (start time and date, and end time and date) when the average temperature of the exhaust gases from the cryogenic solvent recovery system was outside of the range specified by the manufacturer and/or outside of the acceptable range following any required compliance demonstration;
 - b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the cryogenic solvent recovery system;
 - c. each incident of deviation described in “a” or “b” (above) where a prompt investigation was not conducted;
 - d. each incident of deviation described in “a” or “b” where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature of the exhaust gases from the cryogenic solvent recovery system into compliance with the acceptable range, was determined to be necessary and was not taken; and

- e. each incident of deviation described in “a” or “b” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

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).

- (2) 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.
- (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 and include any deviations (excursions) or exceedances of the emission limitations, operational restrictions and/or control device operating parameter limitations in his permit.

f) **Testing Requirements**

- (1) Compliance with the emission limitations in section b)(1) of the terms and conditions for this emissions unit shall be determined in accordance with the following method(s):

- a. **Emission Limitation:**

The OC emissions from this emissions unit shall not exceed 0.06 lb/hr.

Applicable Compliance Method:

The hourly OC emission limitation is determined by multiplying the maximum hourly uncontrolled emissions rate (1.28 lb/hour) determined from testing of materials from previous facility operations by the control efficiency of (1-0.95) for the cryogenic solvent recovery system.

If required, compliance with the hourly OC limitation shall be determined in accordance with the USEPA Reference Methods 1 – 4 and & 18, 25 or 25A of 40 CFR Part 60, Appendix A.

- b. **Emission Limitation:**

The OC emissions from this emissions unit shall not exceed 0.18 tons per year.

Applicable Compliance Method:

Compliance with the annual OC emissions limitation shall be demonstrated by multiplying the hourly OC emission rate by the maximum annual operating

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capacity (6000 hrs/yr) and then dividing by 2000 lbs/ton. This emissions unit operates as a batch process. The annual emissions limitation represents the potential to emit based on the maximum annual operating capacity for the emission unit.

- (2) The permittee shall conduct, or have conducted, a design evaluation of the cryogenic solvent recovery system to measure and establish the maximum temperature(s) for the outlet gas stream at which the system can maintain a minimum overall control efficiency of 95%, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent. The design evaluation shall be performed in accordance with 40 CFR 63.1257(a)(1)(iii). A comprehensive written report on the results of the testing shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency following completion of the test(s) and prior to start up and operation of the emissions unit(s).

g) Miscellaneous Requirements

- (1) None.

4. P016, Drum Dispersion Unit

Operations, Property and/or Equipment Description:

Drum Dispersion Unit controlled by carbon canister adsorption 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. through b)(1)f., b)(2)c., b)(2)d., c)(1), c)(2), d)(1), d)(2) and e)(1).

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), as effective 11/30/01 | The organic compounds (OC) emissions from this emissions unit shall not exceed 0.52 lb/hr or 2.28 tons per year. See b)(2)c. See b)(2)a. |
| b. | OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06 | See b)(2)b. |
| c. | 40 CFR Part 60, Subparts A and VVa | See Section B. Facility-Wide Terms and Conditions. |
| d. | 40 CFR Part 61, Subparts A, J, N and FF | See Section B. Facility-Wide Terms and Conditions. |
| e. | 40 CFR Part 63 Subparts A, GGG, FFFF, and VVVVVV | See Section B. Facility-Wide Terms and Conditions. |
| f. | OAC rule 3745-31-05(D) Synthetic Minor to avoid Title V permitting requirements | See B.17 of Facility-Wide Terms and Conditions. |

| | | |
|----|---------------------------------|---|
| g. | OAC rule 3745-21-09(DD) | The limitations and requirements specified by this rule are less stringent than the limitations and requirements established pursuant to OAC rule 3745-31-05(A)(3), 40 CFR Part 60, 40 CFR Part 61, and 40 CFR Part 63. |
| h. | OAC rule 3745-21-07(M)(3)(c)(i) | The requirements of this rule shall not apply to any source, including any new source as defined in rule 3745-15-01 of the Administrative Code, for which installation commenced after the effective date of this rule. |

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, these emission limitations/control measures no longer apply.

b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE, NOx, SO2, and CO emissions from this air contaminant source since the uncontrolled potential to emit for each is less than 10 tons/year.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the OC emissions from this air contaminant source since the calculated annual emission rate for OC is less than 10 tons/year, taking into account the following federally enforceable limitations:

i. The emissions from this emissions unit shall be vented to and controlled by a carbon canister adsorption system that achieves a total organic compound (less methane and ethane) or total HAP destruction efficiency of 95% or more, on a total weight-basis, or an outlet total OC concentration less than or equal to 20 ppmv, whichever is less stringent.

c. Based on the information and data submitted by the permittee in the application for permit P0106686, the hourly OC emissions limit was established to reflect the

after control potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this short term emissions limitation. Based on this hourly potential emissions rate, the unrestricted potential to emit for OC emissions from this emissions unit, based on 8760 hours/year of operation, is 2.28 tons per year. Record keeping of the process emissions is not required since the emissions unit is permitted at its potential to emit.

- d. The emissions from this emissions unit shall be vented to and controlled by a carbon canister adsorption system that achieves a total organic compound (less methane and ethane) or total HAP destruction efficiency of 95% or more, on a total weight-basis, or an outlet total OC concentration less than or equal to 20 ppmv, whichever is less stringent.
- e. All equipment and components associated with this emissions unit and the carbon canister adsorption system must comply with the applicable requirements included in Section B. Facility-Wide Terms and Conditions.

c) Operational Restrictions

- (1) All of the emissions from this emissions unit shall be vented to a carbon canister adsorption system that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation.
- (2) Based upon the compliance option listed in f)(2) the permittee chooses to use to demonstrate the carbon canister adsorption system unit can maintain a minimum overall control efficiency of 95%, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent, the following corresponding operational restrictions apply:
 - a. If the permittee chooses "Option 1" in f)(2): The permittee shall perform the following testing and change out procedures for the carbon canister adsorption system:
 - i. a daily efficiency test on the carbon canister;
 - ii. a daily OC concentration measurement, in ppmv, in the air stream exiting the carbon canister; and
 - iii. if the test result shows that the control efficiency is less than 95%, the permittee shall change the carbon canister immediately.

The concentration, in ppmv, of the OC in the air stream exiting the carbon canister shall be maintained at a value that is no greater than the average hourly value established during the most recent emissions testing that demonstrated the emissions unit was in compliance. Until compliance testing has been conducted, the carbon canister adsorption system shall be operated and maintained in accordance with the manufacturer's recommendations.

- b. If the permittee chooses “Option 2” in f)(2): The time interval between replacement of the carbon canister shall not exceed the maximum time interval determined during the most recent design evaluation conducted in accordance with 40 CFR 63.1257(a)(1)(v) that demonstrates the carbon canister adsorption system has a minimum overall control efficiency of 95%, on a total weight-basis, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent.

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit when the carbon canister adsorption system is used to control emissions from this emissions unit, the permittee shall collect and record the following information each day when this emissions unit is operating based upon the compliance option listed in f)(2) the permittee chooses to demonstrate the carbon canister adsorption system unit can maintain a minimum overall control efficiency of 95%, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent using one of the following two options:

- a. If the permittee chooses “Option 1” in f)(2):
 - i. the OC concentration measurements of the air stream entering and exiting the carbon canister, in ppmv;
 - ii. the number of hours this emissions unit and any other source of emissions was vented to carbon canister when the source(s) was/were in operation;
 - iii. all time periods during which the carbon canister operated at a removal efficiency of less than 95%, and the carbon canister was not changed immediately;
 - iv. the number of drums (gallons) processed; and
 - v. the operating time for the capture (collection) system, carbon canister adsorption system, monitoring equipment, and the associated emissions unit(s).
- b. If the permittee chooses “Option 2” in f)(2):
 - i. the amount of time the carbon canister is used to control emissions from this or any other sources of emissions;
 - ii. the cumulative amount of time the canister has been used to control emissions from this or any other sources of emissions since the canister was last replaced;
 - iii. the number of drums (gallons) processed;
 - iv. each time the canister is replaced, the date and time of the replacement;

- v. the time interval (i.e., summation of the daily cumulative time from (1)b.ii) between each canister replacement;
- vi. anytime the time interval between canister replacement exceeds the maximum time interval determined during the most recent design evaluation conducted in accordance with 40 CFR 63.1257(a)(1)(v) that demonstrates the carbon canister adsorption system has a minimum overall control efficiency of 95%, on a total weight-basis, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent; and
- vii. a log of the operating time for the capture (collection) system, carbon canister adsorption system, monitoring equipment, and the associated emissions unit(s).

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

- (2) Whenever the monitored time interval between replacement of the carbon canister exceeds the maximum time interval established in accordance with this permit, the permittee shall promptly investigate the reason and the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

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

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable limitations specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- a. a description of the corrective action;
- b. the date the corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation; and
- e. the name(s) of the personnel who performed the work.

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

The established maximum time interval between replacements of the carbon canister is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revision to the permitted maximum canister replacement time interval based upon information obtained during future performance tests or design evaluations that demonstrate compliance with the required minimum control efficiency for the controlled emissions unit(s). In addition, approved revisions to the maximum replacement time interval will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

- (3) Record keeping of the process emissions is not required since the emissions unit is permitted at its potential to emit.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operations of the carbon adsorption canister system

- i. If the permittee chooses "Option 1" in f)(2):

- (a) an identification of all time periods during which the carbon canister adsorption canister operated at a removal efficiency of less than 95%, and the carbon canister was not changed immediately;
 - (b) any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to either the cryogenic solvent recovery system or the carbon canister adsorption system; and
 - (c) each incident of deviation described in "a" or "b" where proper records were not maintained as identified in the monitoring and record keeping requirements of this permit.

- ii. If the permittee chooses "Option 2" in f)(2):

- (a) an identification of all instances the time interval between canister replacement exceeded the maximum time interval determined during the most recent design evaluation conducted in accordance with 40 CFR 63.1257(a)(1)(v) that demonstrates the carbon canister adsorption system has a minimum overall control efficiency of 95%, on a total weight-basis, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent;
 - (b) any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to either the cryogenic solvent recovery system or the carbon canister adsorption system; and

- (c) each incident of deviation described in “a” or “b” where proper records were not maintained as identified in the monitoring and record keeping requirements of this permit.

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).

- (2) 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.
- (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 and include any deviations (excursions) or exceedances of the emission limitations, operational restrictions and/or control device operating parameter limitations in his permit.

f) Testing Requirements

- (1) Compliance with the emission limitations in section b)(1) of the terms and conditions for this emissions unit shall be determined in accordance with the following method(s):

- a. Emission Limitation:

The OC emissions from this emissions unit shall not exceed 0.52 lb/hr.

Applicable Compliance Method:

The hourly OC emissions limitation is determined by multiplying the maximum gallons material throughput of 1800 gallons/hour by an emission factor of 5.7845 lb/1000 gallons and multiplying by the control efficiency of (1-0.95) for the carbon canister adsorption system. The emissions factor was determined using 11.5 lb-OC/1000 gallons for splash filling of gasoline from Table 5.2-7 of AP-42 (6/08) and adjusted by multiplying by the ratio of the vapor pressure of the facility's material mixture (5.03 psia determined from TANKS model) to the vapor pressure of gasoline (10psia).

If required, compliance with the hourly OC limitation shall be determined in accordance with the USEPA Reference Methods 1 – 4 and & 18, 25 or 25A of 40 CFR Part 60, Appendix A.

b. Emission Limitation:

The OC emissions from this emissions unit shall not exceed 2.28 tons per year.

Applicable Compliance Method:

Compliance with the annual OC emission limitation shall be demonstrated by multiplying the hourly OC emission rate by 8760 hrs/yr and then dividing by 2000 lbs/ton.

(2) The permittee shall demonstrate the carbon canister adsorption system unit can maintain a minimum overall control efficiency of 95%, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent using one of the following two options:

a. Option 1: The permittee shall conduct, or have conducted, emissions compliance demonstration testing for this emissions and the carbon canister adsorption system unit in accordance with the following requirements:

- i. The testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of the emissions unit.
- ii. The testing shall be conducted to demonstrate compliance with the overall control efficiency limitation for OC and HAPs, or the total allowable OC or HAP concentration in the exhaust stream.
- iii. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control systems) shall be determined in accordance with the test methods and procedures specified in 3745-21-10, as specified by applicable federal rule requirements. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases. Alternative U.S. EPA approved test methods may be used with prior approval from the U.S. EPA and/or Ohio EPA.
- iv. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- v. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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- vi. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

- b. Option 2: The permittee shall conduct, or have conducted, a design evaluation of the carbon canister adsorption system to measure and establish the maximum time interval between replacement at which the system can maintain a minimum overall control efficiency of 95%, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent, based on worst-case conditions. The design evaluation shall be performed in accordance with 40 CFR 63.1257(a)(1)(v). A comprehensive written report on the results of the testing shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency following completion of the test(s) and prior to start up and operation of the emissions unit(s).

g) Miscellaneous Requirements

- (1) None.

5. P017, Drum Pumping Operation

Operations, Property and/or Equipment Description:

Drum Pumping Operation controlled by either a vapor balance system and cryogenic solvent recovery system or carbon canister adsorption 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. through b)(1)f., b)(2)c., b)(2)d., c)(1) through c)(3), d)(1) through d)(5), and e)(1).

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), as effective 11/30/01 | The organic compounds (OC) emissions from this emissions unit shall not exceed 0.05 lb/hr or 0.21 tons per year. See b)(2)c. See b)(2)a. |
| b. | OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06 | See b)(2)b. |
| c. | 40 CFR Part 60, Subparts A and VVa | See Section B. Facility-Wide Terms and Conditions. |
| d. | 40 CFR Part 61, Subparts A, J, N and FF | See Section B. Facility-Wide Terms and Conditions. |
| e. | 40 CFR Part 63 Subparts A, GGG, FFFF, and VVVVVV | See Section B. Facility-Wide Terms and Conditions. |

| | | |
|----|--|---|
| f. | OAC rule 3745-31-05(D) Synthetic Minor to avoid Title V permitting requirements | See B.17 of Facility-Wide Terms and Conditions. |
| g. | OAC rule 3745-21-09(DD) | The limitations and requirements specified by this rule are less stringent than the limitations and requirements established pursuant to OAC rule 3745-31-05(A)(3), 40 CFR Part 60, 40 CFR Part 61, and 40 CFR Part 63. |
| h. | OAC rule 3745-21-07(M)(3)(c)(i) | The requirements of this rule shall not apply to any source, including any new source as defined in rule 3745-15-01 of the Administrative Code, for which installation commenced after the effective date of this rule. |

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, these emission limitations/control measures no longer apply.

- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE, NOx, SO2, and CO emissions from this air contaminant source since the uncontrolled potential to emit for each is less than 10 tons/year.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the OC emissions from this air contaminant source since the calculated annual emission rate for OC is less than 10 tons/year, taking into account the following federally enforceable limitations:

- i. The emissions from this emissions unit shall be vented to either the vapor balance system and cryogenic solvent recovery system, or the carbon canister adsorption system. Each control system shall achieve a total organic compound (less methane and ethane) or total HAP destruction

efficiency of 95% or more, on a total weight-basis, or an outlet total OC concentration less than or equal to 20 ppmv, whichever is less stringent.

- c. Based on the information and data submitted by the permittee in the application for permit P0106686, the hourly OC emissions limit was established to reflect the after control potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this short term emissions limitation. Based on this hourly potential emissions rate, the unrestricted potential to emit OC emissions from this emissions unit, based on 8,760 hours/365 days of operation per year, is 0.21 tons per year. Record keeping of the process emissions is not required since the emissions unit is permitted at its potential to emit.
- d. The emissions from this emissions unit shall be vented to and controlled by either a cryogenic solvent recovery system, or a carbon canister adsorption system. Each system shall achieve a total organic compound (less methane and ethane) or total HAP destruction efficiency of 95% or more, on a total weight-basis, or an outlet total OC concentration less than or equal to 20 ppmv, whichever is less stringent.
- e. All equipment and components associated with this emissions unit including the vapor balance system and the cryogenic solvent recovery system, and the carbon canister adsorption system, must comply with the applicable requirements included in Section B. Facility-Wide Terms and Conditions.

c) Operational Restrictions

- (1) All of the emissions from this emissions unit shall be vented to the vapor balance system and cryogenic solvent recovery system, or the carbon canister adsorption system. Each system shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation.
- (2) When the cryogenic solvent recovery system is used to control emissions from this emissions unit, the average temperature of the exhaust gases from the cryogenic solvent recovery system, for any 3-hour block of time shall not exceed the average temperature(s) measured during the most recent design evaluation conducted in accordance with 40 CFR 63.1257(a)(1)(iii) that demonstrates the cryogenic solvent recovery system has a minimum overall control efficiency of 95%, on a total weight-basis, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent.
- (3) When the carbon canister adsorption system is used to control emissions from this emissions unit, based upon the compliance option listed in f)(2) the permittee chooses to use to demonstrate the carbon canister adsorption system unit can maintain a minimum overall control efficiency of 95%, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent, the following corresponding operational restrictions apply:

- a. If the permittee chooses "Option 1" in f)(2): The permittee shall perform the following testing and change out procedures for the carbon canister adsorption system:
 - i. a daily efficiency test on the carbon canister;
 - ii. a daily OC concentration measurement, in ppmv, in the air stream exiting the carbon canister; and
 - iii. if the test result shows that the control efficiency is less than 95%, the permittee shall change the carbon canister immediately.

The concentration, in ppmv, of the OC in the air stream exiting the carbon canister shall be maintained at a value that is no greater than the average hourly value established during the most recent emissions testing that demonstrated the emissions unit was in compliance. Until compliance testing has been conducted, the carbon canister adsorption system shall be operated and maintained in accordance with the manufacturer's recommendations.

- b. If the permittee chooses "Option 2" in f)(2): The time interval between replacement of the carbon canister shall not exceed the maximum time interval determined during the most recent design evaluation conducted in accordance with 40 CFR 63.1257(a)(1)(v) that demonstrates the carbon canister adsorption system has a minimum overall control efficiency of 95%, on a total weight-basis, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent.

d) **Monitoring and/or Recordkeeping Requirements**

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit when the cryogenic solvent recovery system is used to control emissions from this emissions unit, the acceptable average temperature(s) of the exhaust gases from the cryogenic solvent recovery system, for any 3-hour block of time, shall not be more than the average temperature measured during the most recent design evaluation conducted in accordance with 40 CFR 63.1257(a)(1)(iii) that demonstrates the cryogenic solvent recovery system has a minimum overall control efficiency of 95%, on a total weight-basis, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent. Until testing has been conducted, the cryogenic solvent recovery system shall be operated and maintained in accordance with the manufacturer's recommendations.
- (2) The permittee shall install, operate, and maintain a continuous temperature monitor and recorder which measures and records the temperature(s) of the exhaust gases from the cryogenic solvent recovery system when the emissions unit(s) is/are in operation, including periods of startup and shutdown. 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 installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee.

Following compliance testing, the permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:

- a. all 3-hour blocks of time, when the emissions unit(s) controlled by the cryogenic solvent recovery system was/were in operation, during which the average temperature(s) of the exhaust gases from the cryogenic solvent recovery system was/were more than the average temperature measured during the most recent design evaluation conducted in accordance with 40 CFR 63.1257(a)(1)(iii) that demonstrates the cryogenic solvent recovery system has a minimum overall control efficiency of 95%, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent.; and
- b. a log or record of operating time for the capture (collection) system, cryogenic solvent recovery system, monitoring equipment, and the associated emissions unit(s).

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

- (3) Whenever the monitored temperature(s) of the exhaust gases from the cryogenic solvent recovery system deviates from the range/limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

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

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- a. a description of the corrective action;
- b. the date corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was deviation;
- e. the temperature readings of the exhaust gas from the cryogenic solvent recovery system immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

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

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

- (4) In order to maintain compliance with the applicable emission limitation(s) contained in this permit when the carbon canister adsorption system is used to control emissions from this emissions unit, the permittee shall collect and record the following information each day when this emissions unit is operating based upon the compliance option listed in f)(2) the permittee chooses to demonstrate the carbon canister adsorption system unit can maintain a minimum overall control efficiency of 95%, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent using one of the following two options:
- a. If the permittee chooses “Option 1” in f)(2):
 - i. the OC concentration measurements of the air stream entering and exiting the carbon canister, in ppmv;
 - ii. the number of hours this emissions unit and any other source of emissions was vented to carbon canister when the source(s) was/were in operation;
 - iii. all time periods during which the carbon canister operated at a removal efficiency of less than 95%, and the carbon canister was not changed immediately;
 - iv. the number of drums (gallons) processed; and
 - v. the operating time for the capture (collection) system, carbon canister adsorption system, monitoring equipment, and the associated emissions unit(s).
 - b. If the permittee chooses “Option 2” in f)(2):
 - i. the amount of time the carbon canister is used to control emissions from this or any other sources of emissions;
 - ii. the cumulative amount of time the canister has been used to control emissions from this or any other sources of emissions since the canister was last replaced;

- iii. the number of drums (gallons) processed;
- iv. each time the canister is replaced, the date and time of the replacement;
- v. the time interval (i.e., summation of the daily cumulative time from (1)b.ii) between each canister replacement;
- vi. anytime the time interval between canister replacement exceeds the maximum time interval determined during the most recent design evaluation conducted in accordance with 40 CFR 63.1257(a)(1)(v) that demonstrates the carbon canister adsorption system has a minimum overall control efficiency of 95%, on a total weight-basis, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent; and
- vii. a log of the operating time for the capture (collection) system, carbon canister adsorption system, monitoring equipment, and the associated emissions unit(s).

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

- (5) Whenever the monitored time interval between replacement of the carbon canister exceeds the maximum time interval established in accordance with this permit, the permittee shall promptly investigate the reason and the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
- a. the date and time the deviation began;
 - b. the duration of the deviation at that time;
 - c. the date the investigation was conducted;
 - d. the name(s) of the personnel who conducted the investigation; and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable limitations specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- a. a description of the corrective action;
- b. the date the corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation; and
- e. the name(s) of the personnel who performed the work.

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

The established maximum time interval between replacements of the carbon canister is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revision to the permitted maximum canister replacement time interval based upon information obtained during future performance tests or design evaluations that demonstrate compliance with the required minimum control efficiency for the controlled emissions unit(s). In addition, approved revisions to the maximum replacement time interval will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

- (6) Record keeping of the process emissions is not required since the emissions unit is permitted at its potential to emit.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operations of the cryogenic solvent recovery system:
 - a. each period of time (start time and date, and end time and date) when the average temperature of the exhaust gases from the cryogenic solvent recovery system was outside of the range specified by the manufacturer and/or outside of the acceptable range following any required compliance demonstration;
 - b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to either the cryogenic solvent recovery system or the carbon canister adsorption system;
 - c. each incident of deviation described in “a” or “b” (above) where a prompt investigation was not conducted;
 - d. each incident of deviation described in “a” or “b” where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature of the exhaust gases from the cryogenic solvent recovery system into compliance with the acceptable range, was determined to be necessary and was not taken;
 - e. each incident of deviation described in “a” or “b” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operations of the carbon adsorption canister system:

- i. If the permittee chooses to “Option 1” in f)(3):
 - (a) an identification of all time periods during which the carbon canister adsorption canister operated at a removal efficiency of less than 95%, and the carbon canister was not changed immediately;
 - (b) any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to either the cryogenic solvent recovery system or the carbon canister adsorption system; and
 - (c) each incident of deviation described in “a” or “b” where proper records were not maintained as identified in the monitoring and record keeping requirements of this permit.
- ii. If the permittee chooses to “Option 2” in f)(3):
 - (a) an identification of all instances time interval between canister replacement exceeded the maximum time interval determined during the most recent design evaluation conducted in accordance with 40 CFR 63.1257(a)(1)(v) that demonstrates the carbon canister adsorption system has a minimum overall control efficiency of 95%, on a total weight-basis, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent;
 - (b) any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to either the cryogenic solvent recovery system or the carbon canister adsorption system; and
 - (c) each incident of deviation described in “a” or “b” where proper records were not maintained as identified in the monitoring and record keeping requirements of this permit.
- (3) 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).
- (4) 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.
- (5) 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 and include any deviations (excursions) or exceedances of the emission limitations, operational restrictions and/or control device operating parameter limitations in his permit.

f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) of the terms and conditions for this emissions unit shall be determined in accordance with the following method(s):

a. Emission Limitation:

The OC emissions from this emissions unit shall not exceed 0.05 lb/hr.

Applicable Compliance Method:

The hourly OC emissions limitation was determined by the following:

- i. a loading loss emissions factor is determined from equation 1 in Section 5.2 from AP-42, "Compilation of Air Pollutant Emissions Factors", 5th Edition, Section 5.2 (06/2008) for each of three types of fuel mixtures processed (1.86 lb/1000-gal for standard fuels, 5.05 lbs/1000-gal for chlorinated, and 0.47 lb/1000-gal for aqueous fuels);
- ii. the maximum uncontrolled hourly emissions for each fuel mixture type (344 gal/hr for standard fuels, 34 gal/hr for chlorinated, and 309 gal/hr for aqueous fuels) is multiplied by its associated loading loss emission factor from i. above; and
- iii. the summation of the values determined in ii. above (0.96 lb/hr) is multiplied by the control efficiency of (1-0.95) for the cryogenic solvent recovery system or carbon adsorption system.

If required, compliance with the hourly OC limitation shall be determined in accordance with the USEPA Reference Methods 1 – 4 and & 18, 25 or 25A of 40 CFR Part 60, Appendix A.

b. Emission Limitation:

The OC emissions from this emissions unit shall not exceed 0.21 tons per year.

Applicable Compliance Method:

Compliance with the annual OC emission limitation shall be determined by multiplying the controlled hourly OC emission rate determined in a.iii. above by 8760 hrs/yr and then dividing by 2000 lbs/ton.

(2) The permittee shall conduct, or have conducted, a design evaluation of the cryogenic solvent recovery system to measure and establish the maximum temperature(s) for the outlet gas stream at which the system can maintain a minimum overall control efficiency of 95%, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent. The design evaluation shall be performed in accordance with 40 CFR

63.1257(a)(1)(iii). A comprehensive written report on the results of the testing shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency following completion of the test(s) and prior to start up and operation of the emissions unit(s).

- (3) The permittee shall demonstrate the carbon canister adsorption system unit can maintain a minimum overall control efficiency of 95%, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent using one of the following two options:
- a. Option 1: The permittee shall conduct, or have conducted, emissions compliance demonstration testing for this emissions and the carbon canister adsorption system unit in accordance with the following requirements:
 - i. The testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of the emissions unit.
 - ii. The testing shall be conducted to demonstrate compliance with the overall control efficiency limitation for OC and HAPs, or the total allowable OC or HAP concentration in the exhaust stream.
 - iii. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control systems) shall be determined in accordance with the test methods and procedures specified in 3745-21-10, as specified by applicable federal rule requirements. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases. Alternative U.S. EPA approved test methods may be used with prior approval from the U.S. EPA and/or Ohio EPA.
 - iv. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
 - v. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
 - vi. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a

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Veolia ES Technical Solutions, L.L.C.

Permit Number: P0106686

Facility ID: 0857751346

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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 emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

- b. Option 2: The permittee shall conduct, or have conducted, a design evaluation of the carbon canister adsorption system to measure and establish the maximum time interval between replacement at which the system can maintain a minimum overall control efficiency of 95%, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent, based on worst-case conditions. The design evaluation shall be performed in accordance with 40 CFR 63.1257(a)(1)(v). A comprehensive written report on the results of the testing shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency following completion of the test(s) and prior to start up and operation of the emissions unit(s).

g) Miscellaneous Requirements

- (1) None.

6. P018, Loading Racks

Operations, Property and/or Equipment Description:

North and South Loading Racks controlled with vapor balance system and cryogenic solvent 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. through b)(1)f., b)(2)c., b)(2)d., c)(1), c)(2), d)(1) through d)(3), and e)(1).

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), as effective 11/30/01 | The organic compounds (OC) emissions from this emissions unit shall not exceed 0.40 lb/hr or 1.75 tons per year. See b)(2)c. See b)(2)a. |
| b. | OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06 | See b)(2)b. |
| c. | 40 CFR Part 60, Subparts A and VVa | See Section B. Facility-Wide Terms and Conditions. |
| d. | 40 CFR Part 61, Subparts A, J, N and FF | See Section B. Facility-Wide Terms and Conditions. |
| e. | 40 CFR Part 63 Subparts A, GGG, FFFF, and VVVVVV | See Section B. Facility-Wide Terms and Conditions. |
| f. | OAC rule 3745-31-05(D) Synthetic Minor to avoid Title V permitting requirements | See B.17 of Facility-Wide Terms and Conditions. |

| | | |
|----|---------------------------------|---|
| g. | OAC rule 3745-21-09(DD) | The limitations and requirements specified by this rule are less stringent than the limitations and requirements established pursuant to OAC rule 3745-31-05(A)(3), 40 CFR Part 60, 40 CFR Part 61, and 40 CFR Part 63. |
| h. | OAC rule 3745-21-07(M)(3)(c)(i) | The requirements of this rule shall not apply to any source, including any new source as defined in rule 3745-15-01 of the Administrative Code, for which installation commenced after the effective date of this rule. |

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, these emission limitations/control measures no longer apply.

b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE, NOx, SO2, and CO emissions from this air contaminant source since the uncontrolled potential to emit for each is less than 10 tons/year.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the OC emissions from this air contaminant source since the calculated annual emission rate for OC is less than 10 tons/year, taking into account the following federally enforceable limitations:

i. The emissions from this emissions unit shall be vented to the vapor balance system and controlled by a cryogenic solvent recovery system that achieves a total organic compound (less methane and ethane) or total HAP destruction efficiency of 95% or more, on a total weight-basis, or an outlet total OC concentration less than or equal to 20 ppmv, whichever is less stringent.

- c. Based on the information and data submitted by the permittee in the application for permit P0106686, the hourly OC emissions limit was established to reflect the after control potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this short term emissions limitation. Based on this hourly potential emissions rate, the unrestricted potential to emit OC emissions from this emissions unit, based on 8,760 hours/365 days of operation per year, is 1.74 tons per year. Record keeping of the process emissions is not required since the emissions unit is permitted at its potential to emit.
 - d. The emissions from this emissions unit shall be vented to and controlled by a cryogenic solvent recovery system that achieves a total organic compound (less methane and ethane) or total HAP destruction efficiency of 95% or more, on a total weight-basis, or an outlet total OC concentration less than or equal to 20 ppmv, whichever is less stringent.
 - e. All equipment and components associated with this emissions unit, the vapor balance system, and the cryogenic solvent recovery system must comply with the applicable requirements included in Section B. Facility-Wide Terms and Conditions.
- c) Operational Restrictions
- (1) All of the emissions from this emissions unit shall be vented to the vapor balance system and cryogenic solvent recovery system that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation.
 - (2) The average temperature of the exhaust gases from the cryogenic solvent recovery system, for any 3-hour block of time shall not exceed the average temperature(s) measured during the most recent design evaluation conducted in accordance with 40 CFR 63.1257(a)(1)(iii) that demonstrates the cryogenic solvent recovery system has a minimum overall control efficiency of 95%, on a total weight-basis, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent.
- d) Monitoring and/or Recordkeeping Requirements
- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average temperature(s) of the exhaust gases from the cryogenic solvent recovery system, for any 3-hour block of time, shall not be more than the average temperature measured during the most recent design evaluation conducted in accordance with 40 CFR 63.1257(a)(1)(iii) that demonstrates the cryogenic solvent recovery system has a minimum overall control efficiency of 95%, on a total weight-basis, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent. Until testing has been conducted, the cryogenic solvent recovery system shall be operated and maintained in accordance with the manufacturer's recommendations.
 - (2) The permittee shall install, operate, and maintain a continuous temperature monitor and recorder which measures and records the temperature(s) of the exhaust gases from the cryogenic solvent recovery system when the emissions unit(s) is/are in operation, including periods of startup and shutdown. 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 installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee.

Following compliance testing, the permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:

- a. all 3-hour blocks of time, when the emissions unit(s) controlled by the cryogenic solvent recovery system was/were in operation, during which the average temperature(s) of the exhaust gases from the cryogenic solvent recovery system was/were more than the average temperature measured during the most recent design evaluation conducted in accordance with 40 CFR 63.1257(a)(1)(iii) that demonstrates the cryogenic solvent recovery system has a minimum overall control efficiency of 95%, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent.; and
- b. a log or record of operating time for the capture (collection) system, cryogenic solvent recovery system, monitoring equipment, and the associated emissions unit(s).

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

- (3) Whenever the monitored temperature(s) of the exhaust gases from the cryogenic solvent recovery system deviates from the range/limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

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

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- a. a description of the corrective action;
- b. the date corrective action was completed;
- c. the date and time the deviation ended;

- d. the total period of time (in minutes) during which there was deviation;
- e. the temperature readings of the exhaust gas from the cryogenic solvent recovery system immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

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

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

- (4) Record keeping of the process emissions is not required since the emissions unit is permitted at its potential to emit.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. each period of time (start time and date, and end time and date) when the average temperature of the exhaust gases from the cryogenic solvent recovery system was outside of the range specified by the manufacturer and/or outside of the acceptable range following any required compliance demonstration;
 - b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the cryogenic solvent recovery system;
 - c. each incident of deviation described in “a” or “b” (above) where a prompt investigation was not conducted;
 - d. each incident of deviation described in “a” or “b” where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature of the exhaust gases from the cryogenic solvent recovery system into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - e. each incident of deviation described in “a” or “b” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

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).

- (2) 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.
- (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 and include any deviations (excursions) or exceedances of the emission limitations, operational restrictions and/or control device operating parameter limitations in his permit.

f) Testing Requirements

- (1) Compliance with the emission limitations in section b)(1) of the terms and conditions for this emissions unit shall be determined in accordance with the following method(s):

a. Emission Limitation:

The OC emissions from this emissions unit shall not exceed 0.40 lb/hr.

Applicable Compliance Method:

The hourly OC emissions limitation is determined by multiplying the waste solvent throughput of 26 mm-gal/year by average waste solvent density of 7.4145 lb/gal, dividing by 2000 lbs/ton and multiplying by the emissions factor of 0.72 lbs-OC/ton from AP-42, "Compilation of Air Pollutant Emissions Factors", 5th Edition, Section 4.7 (2/1980), and then multiplying by the control efficiency of (1-0.95) for the cryogenic solvent recovery system and dividing by 8760 hours/year.

If required, compliance with the hourly OC limitation shall be determined in accordance with the USEPA Reference Methods 1 – 4 and & 18, 25 or 25A of 40 CFR Part 60, Appendix A.

b. Emission Limitation:

The OC emissions from this emissions unit shall not exceed 1.75 tons per year.

Applicable Compliance Method:

Compliance with the annual OC emission limitation shall be demonstrated by multiplying the hourly OC emission rate 8760 hrs/yr and then dividing by 2000 lbs/ton.

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- (2) The permittee shall conduct, or have conducted, a design evaluation of the cryogenic solvent recovery system to measure and establish the maximum temperature(s) for the outlet gas stream at which the system can maintain a minimum overall control efficiency of 95%, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent. The design evaluation shall be performed in accordance with 40 CFR 63.1257(a)(1)(iii). A comprehensive written report on the results of the testing shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency following completion of the test(s) and prior to start up and operation of the emissions unit(s).
- g) Miscellaneous Requirements
- (1) None.

7. P019, Tank Truck Cleaning

Operations, Property and/or Equipment Description:

Tank Truck Cleaning controlled with vapor balance system and cryogenic solvent 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. through b)(1)f., b)(2)c., b)(2)d., c)(1), c)(2), d)(1) through d)(3), and e)(1).

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), as effective 11/30/01 | The organic compounds (OC) emissions from this emissions unit shall not exceed 0.02 lb/hr or 0.09 tons per year. See b)(2)c. See b)(2)a. |
| b. | OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06 | See b)(2)b. |
| c. | 40 CFR Part 60, Subparts A and VVa | See Section B. Facility-Wide Terms and Conditions. |
| d. | 40 CFR Part 61, Subparts A, J, N and FF | See Section B. Facility-Wide Terms and Conditions. |
| e. | 40 CFR Part 63 Subparts A, GGG, FFFF, and VVVVVV | See Section B. Facility-Wide Terms and Conditions. |
| f. | OAC rule 3745-31-05(D) Synthetic Minor to avoid Title V permitting requirements | See B.17 of Facility-Wide Terms and Conditions. |

| | | |
|----|---------------------------------|---|
| g. | OAC rule 3745-21-09(DD) | The limitations and requirements specified by this rule are less stringent than the limitations and requirements established pursuant to OAC rule 3745-31-05(A)(3), 40 CFR Part 60, 40 CFR Part 61, and 40 CFR Part 63. |
| h. | OAC rule 3745-21-07(M)(3)(c)(i) | The requirements of this rule shall not apply to any source, including any new source as defined in rule 3745-15-01 of the Administrative Code, for which installation commenced after the effective date of this rule. |

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, these emission limitations/control measures no longer apply.

b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE, NOx, SO2, and CO emissions from this air contaminant source since the uncontrolled potential to emit for each is less than 10 tons/year.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the OC emissions from this air contaminant source since the calculated annual emission rate for OC is less than 10 tons/year, taking into account the following federally enforceable limitations:

i. The emissions from this emissions unit shall be vented to the vapor balance system and controlled by a cryogenic solvent recovery system that achieves a total organic compound (less methane and ethane) or total HAP destruction efficiency of 95% or more, on a total weight-basis, or an outlet total OC concentration less than or equal to 20 ppmv, whichever is less stringent.

- ii. The annual OC emissions from this emissions unit shall not exceed 0.02 tons per year based on maximum cleaning capacity of 1460 trucks per year (approximately 1 truck per hour) for total of 1460 hours of operation.
 - c. Based on the information and data submitted by the permittee in the application for permit P0106686, the hourly OC emissions limit was established to reflect the after control potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this short term emissions limitation. Record keeping of the process emissions is not required since the emissions unit is permitted at its potential to emit.
 - d. The emissions from this emissions unit shall be vented to and controlled by a cryogenic solvent recovery system that achieves a total organic compound (less methane and ethane) or total HAP destruction efficiency of 95% or more, on a total weight-basis, or an outlet total OC concentration less than or equal to 20 ppmv, whichever is less stringent.
 - e. All equipment and components associated with this emissions unit, the vapor balance system, and the cryogenic solvent recovery system must comply with the applicable requirements included in Section B. Facility-Wide Terms and Conditions.
- c) Operational Restrictions
 - (1) All of the emissions from this emissions unit shall be vented to the vapor balance system and cryogenic solvent recovery system that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation.
 - (2) The average temperature of the exhaust gases from the cryogenic solvent recovery system, for any 3-hour block of time shall not exceed the average temperature(s) measured during the most recent design evaluation conducted in accordance with 40 CFR 63.1257(a)(1)(iii) that demonstrates the cryogenic solvent recovery system has a minimum overall control efficiency of 95%, on a total weight-basis, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent.
- d) Monitoring and/or Recordkeeping Requirements
 - (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average temperature(s) of the exhaust gases from the cryogenic solvent recovery system, for any 3-hour block of time, shall not be more than the average temperature measured during the most recent design evaluation conducted in accordance with 40 CFR 63.1257(a)(1)(iii) that demonstrates the cryogenic solvent recovery system has a minimum overall control efficiency of 95%, on a total weight-basis, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent. Until testing has been conducted, the cryogenic solvent recovery system shall be operated and maintained in accordance with the manufacturer's recommendations.
 - (2) The permittee shall install, operate, and maintain a continuous temperature monitor and recorder which measures and records the temperature(s) of the exhaust gases from the

cryogenic solvent recovery system when the emissions unit(s) is/are in operation, including periods of startup and shutdown. 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 installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee.

Following compliance testing, the permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:

- a. all 3-hour blocks of time, when the emissions unit(s) controlled by the cryogenic solvent recovery system was/were in operation, during which the average temperature(s) of the exhaust gases from the cryogenic solvent recovery system was/were more than the average temperature measured during the most recent design evaluation conducted in accordance with 40 CFR 63.1257(a)(1)(iii) that demonstrates the cryogenic solvent recovery system has a minimum overall control efficiency of 95%, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent.; and
- b. a log or record of operating time for the capture (collection) system, cryogenic solvent recovery system, monitoring equipment, and the associated emissions unit(s).

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

- (3) Whenever the monitored temperature(s) of the exhaust gases from the cryogenic solvent recovery system deviates from the range/limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
 - a. the date and time the deviation began;
 - b. the magnitude of the deviation at that time;
 - c. the date the investigation was conducted;
 - d. the name(s) of the personnel who conducted the investigation; and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- a. a description of the corrective action;
- b. the date corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was deviation;
- e. the temperature readings of the exhaust gas from the cryogenic solvent recovery system immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

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

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

- (4) Record keeping of the process emissions is not required since the emissions unit is permitted at its potential to emit.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. each period of time (start time and date, and end time and date) when the average temperature of the exhaust gases from the cryogenic solvent recovery system was outside of the range specified by the manufacturer and/or outside of the acceptable range following any required compliance demonstration;
 - b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the cryogenic solvent recovery system;
 - c. each incident of deviation described in “a” or “b” (above) where a prompt investigation was not conducted;
 - d. each incident of deviation described in “a” or “b” where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature of the exhaust gases from the cryogenic solvent recovery system into compliance with the acceptable range, was determined to be necessary and was not taken; and

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- e. each incident of deviation described in “a” or “b” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

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).

- (2) 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.
- (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 and include any deviations (excursions) or exceedances of the emission limitations, operational restrictions and/or control device operating parameter limitations in his permit.

f) Testing Requirements

- (1) Compliance with the emission limitations in section b)(1) of the terms and conditions for this emissions unit shall be determined in accordance with the following method(s):

- a. Emission Limitation:

The OC emissions from this emissions unit shall not exceed 0.02 lb/hr.

Applicable Compliance Method:

The hourly OC emissions limitation is determined by multiplying the tank truck cleaning emissions factor of 0.474 lb/truck (for perchloroethylene) from Table 4.8-2 from AP-42, Compilation of Air Pollutant Emissions Factors”, 5th Edition, Section 4.8 (2/1980) by the number of trucks cleaned per hour (1 truck/hour) and then multiplying by the control efficiency of (1-0.95) for the cryogenic solvent recovery system and dividing by 8760 hours/year.

If required, compliance with the hourly OC limitation shall be determined in accordance with the USEPA Reference Methods 1 – 4 and & 18, 25 or 25A of 40 CFR Part 60, Appendix A.

- b. Emission Limitation:

The OC emissions from this emissions unit shall not exceed 0.09 tons per year.

Applicable Compliance Method:

Compliance with the annual OC emission limitation shall be demonstrated by multiplying the hourly OC emission rate by 8760 hrs/yr and then dividing by 2000 lbs/ton.

- (2) The permittee shall conduct, or have conducted, a design evaluation of the cryogenic solvent recovery system to measure and establish the maximum temperature(s) for the outlet gas stream at which the system can maintain a minimum overall control efficiency of 95%, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent. The design evaluation shall be performed in accordance with 40 CFR 63.1257(a)(1)(iii). A comprehensive written report on the results of the testing shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency following completion of the test(s) and prior to start up and operation of the emissions unit(s).

g) Miscellaneous Requirements

- (1) None.

8. Emissions Unit Group -Distillation Columns: P012, P014

| EU ID | Operations, Property and/or Equipment Description |
|--------------|---|
| P012 | Unit 1 – Pot Still, Distillation Column, and Primary Condenser controlled by cryogenic solvent recovery system |
| P014 | Unit 3 – Pot Still, Two Distillation Columns, and Primary Condenser controlled by cryogenic solvent 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. through b)(1)f., b)(2)c., b)(2)d., c)(1), c)(2), d)(1) through d)(3), and e)(1).

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), as effective 11/30/01 | The organic compounds (OC) emissions shall not exceed 0.56 lb/hr or 2.45 tons per year from each emissions unit. See b)(2)c. See b)(2)a. |
| b. | OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06 | See b)(2)b. |
| c. | 40 CFR Part 60, Subparts A and VVa | See Section B. Facility-Wide Terms and Conditions. |
| d. | 40 CFR Part 61, Subparts A, J, N and FF | See Section B. Facility-Wide Terms and Conditions. |
| e. | 40 CFR Part 63 Subparts A, GGG, FFFF, and VVVVVV | See Section B. Facility-Wide Terms and Conditions. |

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|----|--|---|
| f. | OAC rule 3745-31-05(D) Synthetic Minor to avoid Title V permitting requirements | See B.17 of Facility-Wide Terms and Conditions. |
| g. | OAC rule 3745-21-09(DD) | The limitations and requirements specified by this rule are less stringent than the limitations and requirements established pursuant to OAC rule 3745-31-05(A)(3), 40 CFR Part 60, 40 CFR Part 61, and 40 CFR Part 63. |
| h. | OAC rule 3745-21-07(M)(3)(c)(i) | The requirements of this rule shall not apply to any source, including any new source as defined in rule 3745-15-01 of the Administrative Code, for which installation commenced after the effective date of this rule. |

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, these emission limitations/control measures no longer apply.

- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE, NO_x, SO₂, and CO emissions from these air contaminant sources since the uncontrolled potential to emit for each is less than 10 tons/year.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the OC emissions from each of these air contaminant sources since the calculated annual emission rate for OC is less than 10 tons/year, taking into account the following federally enforceable limitations:

- i. The emissions from this emissions unit shall be vented to and controlled by a cryogenic solvent recovery system that achieves a total organic compound (less methane and ethane) or total HAP destruction efficiency of 95% or more, on a total weight-basis, or an outlet total OC concentration less than or equal to 20 ppmv, whichever is less stringent.

- c. Based on the information and data submitted by the permittee in the application for permit P0106686, the hourly OC emissions limit was established to reflect the after control potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this short term emissions limitation. Based on this hourly potential emissions rate, the unrestricted potential to emit OC emissions from each emissions unit, based on 8,760 hours/365 days of operation per year, is 2.45 tons per year. Record keeping of the process emissions is not required since the emissions units are permitted at its potential to emit.
 - d. The emissions from this emissions unit shall be vented to and controlled by a cryogenic solvent recovery system that achieves a total organic compound (less methane and ethane) or total HAP destruction efficiency of 95% or more, on a total weight-basis, or an outlet total OC concentration less than or equal to 20 ppmv, whichever is less stringent.
 - e. All equipment and components associated with this emissions unit and the cryogenic solvent recovery system must comply with the applicable requirements included in Section B. Facility-Wide Terms and Conditions.
- c) Operational Restrictions
- (1) All of the emissions from this emissions unit shall be vented to the cryogenic solvent recovery system that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation.
 - (2) The average temperature of the exhaust gases from the cryogenic solvent recovery system, for any 3-hour block of time shall not exceed the average temperature(s) measured during the most recent design evaluation conducted in accordance with 40 CFR 63.1257(a)(1)(iii) that demonstrates the cryogenic solvent recovery system has a minimum overall control efficiency of 95%, on a total weight-basis, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent.
- d) Monitoring and/or Recordkeeping Requirements
- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average temperature(s) of the exhaust gases from the cryogenic solvent recovery system, for any 3-hour block of time, shall not be more than the average temperature measured during the most recent design evaluation conducted in accordance with 40 CFR 63.1257(a)(1)(iii) that demonstrates the cryogenic solvent recovery system has a minimum overall control efficiency of 95%, on a total weight-basis, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent. Until testing has been conducted, the cryogenic solvent recovery system shall be operated and maintained in accordance with the manufacturer's recommendations.
 - (2) The permittee shall install, operate, and maintain a continuous temperature monitor and recorder which measures and records the temperature(s) of the exhaust gases from the cryogenic solvent recovery system when the emissions unit(s) is/are in operation, including periods of startup and shutdown. 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 installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee.

Following compliance testing, the permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:

- a. all 3-hour blocks of time, when the emissions unit(s) controlled by the cryogenic solvent recovery system was/were in operation, during which the average temperature(s) of the exhaust gases from the cryogenic solvent recovery system was/were more than the average temperature measured during the most recent design evaluation conducted in accordance with 40 CFR 63.1257(a)(1)(iii) that demonstrates the cryogenic solvent recovery system has a minimum overall control efficiency of 95%, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent.; and
- b. a log or record of operating time for the capture (collection) system, cryogenic solvent recovery system, monitoring equipment, and the associated emissions unit(s).

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

- (3) Whenever the monitored temperature(s) of the exhaust gases from the cryogenic solvent recovery system deviates from the range/limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

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

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- a. a description of the corrective action;
- b. the date corrective action was completed;
- c. the date and time the deviation ended;

- d. the total period of time (in minutes) during which there was deviation;
- e. the temperature readings of the exhaust gas from the cryogenic solvent recovery system immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

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

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

- (4) Record keeping of the process emissions is not required since the emissions unit is permitted at its potential to emit.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. each period of time (start time and date, and end time and date) when the average temperature of the exhaust gases from the cryogenic solvent recovery system was outside of the range specified by the manufacturer and/or outside of the acceptable range following any required compliance demonstration;
 - b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the cryogenic solvent recovery system;
 - c. each incident of deviation described in “a” or “b” (above) where a prompt investigation was not conducted;
 - d. each incident of deviation described in “a” or “b” where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature of the exhaust gases from the cryogenic solvent recovery system into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - e. each incident of deviation described in “a” or “b” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

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).

- (2) 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.
- (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 and include any deviations (excursions) or exceedances of the emission limitations, operational restrictions and/or control device operating parameter limitations in his permit.

f) Testing Requirements

- (1) Compliance with the emission limitations in section b)(1) of the terms and conditions for this emissions unit shall be determined in accordance with the following method(s):

- a. Emission Limitation:

The OC emissions from this emissions unit shall not exceed 0.56 lb/hr from each emissions unit.

Applicable Compliance Method:

The hourly OC emissions limitation is determined by multiplying the maximum gallons of liquid processed (913.242 gal/hour) by the average liquid density (7.42 lb/gallon) and dividing by 2000 lbs/ton, then multiplying by the solvent reclaiming emissions factor of 3.3 lbs/ton for a condenser vent from Table 4.7-1 from AP-42, Compilation of Air Pollutant Emissions Factors", 5th Edition, Section 4.8 (2/1980) and the control efficiency of (1-0.95) for the cryogenic solvent recovery system and dividing by 8760 hours/year.

If required, compliance with the hourly OC limitation shall be determined in accordance with the USEPA Reference Methods 1 – 4 and & 18, 25 or 25A of 40 CFR Part 60, Appendix A.

- b. Emission Limitation:

The OC emissions shall not exceed 2.45 tons per year from each emissions unit.

Applicable Compliance Method:

Compliance with the annual OC emission limitation shall be demonstrated by multiplying the hourly OC emission rate by 8760 hrs/yr and then dividing by 2000 lbs/ton.

- (2) The permittee shall conduct, or have conducted, a design evaluation of the cryogenic solvent recovery system to measure and establish the maximum temperature(s) for the outlet gas stream at which the system can maintain a minimum overall control efficiency of 95%, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent. The design evaluation shall be performed in accordance with 40 CFR 63.1257(a)(1)(iii). A comprehensive written report on the results of the testing shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency following completion of the test(s) and prior to start up and operation of the emissions unit(s).

g) Miscellaneous Requirements

- (1) None.

9. Emissions Unit Group -Tanks: T069, T070, T071, T072, T073, T074, T075, T076, T077, T078, T079, T080, T081, T082, T083, T084, T085, T086, T087, T088, T089, T090, T091, T092, T093, T094, T095, T096, T097, T098, T099, T100, T101, T102, T103, T104, T105, T106, T107.

| EU ID | Operations, Property and/or Equipment Description |
|--------------|--|
| T069 | Solvent Tank TK-2001: 8,000 gallon controlled with vapor balance system and cryogenic solvent recovery system |
| T070 | Solvent Tank TK-2002: 8,000 gallon controlled with vapor balance system and cryogenic solvent recovery system |
| T071 | Solvent Tank TK-2003: 8,000 gallon controlled with vapor balance system and cryogenic solvent recovery system |
| T072 | Solvent Tank TK-2004: 8,000 gallon controlled with vapor balance system and cryogenic solvent recovery system |
| T073 | Solvent Tank TK-1001: 8,000 gallon controlled with vapor balance system and cryogenic solvent recovery system |
| T074 | Solvent Tank TK-1002: 8,000 gallon controlled with vapor balance system and cryogenic solvent recovery system |
| T075 | Solvent Tank TK-2012: 7,500 gallon controlled with vapor balance system and cryogenic solvent recovery system |
| T076 | Solvent Tank TK-2013: 7,500 gallon controlled with vapor balance system and cryogenic solvent recovery system |
| T077 | Solvent Tank TK-2014: 7,500 gallon controlled with vapor balance system and cryogenic solvent recovery system |
| T078 | Solvent Tank TK-2015: 7,500 gallon controlled with vapor balance system and cryogenic solvent recovery system |
| T079 | Solvent Tank TK-2016: 7,500 gallon controlled with vapor balance system and cryogenic solvent recovery system |
| T080 | Solvent Tank TK-2009: 19,750 gallon controlled with vapor balance system and cryogenic solvent recovery system |
| T081 | Solvent Tank TK-2010: 19,750 gallon controlled with vapor balance system and cryogenic solvent recovery system |
| T082 | Solvent Tank TK-2011: 14,000 gallon controlled with vapor balance system and cryogenic solvent recovery system |

- T083 Solvent Tank TK-2005: 13,000 gallon controlled with vapor balance system and cryogenic solvent recovery system
- T084 Solvent Tank TK-2006: 13,000 gallon controlled with vapor balance system and cryogenic solvent recovery system
- T085 Solvent Tank TK-2007: 13,000 gallon controlled with vapor balance system and cryogenic solvent recovery system
- T086 Solvent Tank TK-2008: 13,000 gallon controlled with vapor balance system and cryogenic solvent recovery system
- T087 Solvent Tank TK-1020: 19,750 gallon controlled with vapor balance system and cryogenic solvent recovery system
- T088 Solvent Tank TK-1021: 19,750 gallon controlled with vapor balance system and cryogenic solvent recovery system
- T089 Solvent Tank TK-1022: 19,750 gallon controlled with vapor balance system and cryogenic solvent recovery system
- T090 Solvent Tank TK-1023: 19,750 gallon controlled with vapor balance system and cryogenic solvent recovery system
- T091 Solvent Tank TK-1017: 12,000 gallon controlled with vapor balance system and cryogenic solvent recovery system
- T092 Solvent Tank TK-1004: 12,000 gallon controlled with vapor balance system and cryogenic solvent recovery system
- T093 Solvent Tank TK-1005: 12,000 gallon controlled with vapor balance system and cryogenic solvent recovery system
- T094 Solvent Tank TK-1006: 12,000 gallon controlled with vapor balance system and cryogenic solvent recovery system
- T095 Solvent Tank TK-1007: 12,000 gallon controlled with vapor balance system and cryogenic solvent recovery system
- T096 Solvent Tank TK-1008: 12,000 gallon controlled with vapor balance system and cryogenic solvent recovery system
- T097 Solvent Tank TK-1009: 12,000 gallon controlled with vapor balance system and cryogenic solvent recovery system
- T098 Solvent Tank TK-1010: 12,000 gallon controlled with vapor balance system and cryogenic solvent recovery system

- T099 Solvent Tank TK-1011: 12,000 gallon controlled with vapor balance system and cryogenic solvent recovery system
- T100 Solvent Tank TK-1012: 12,000 gallon controlled with vapor balance system and cryogenic solvent recovery system
- T101 Solvent Tank TK-1013: 12,000 gallon controlled with vapor balance system and cryogenic solvent recovery system
- T102 Solvent Tank TK-1014: 12,000 gallon controlled with vapor balance system and cryogenic solvent recovery system
- T103 Solvent Tank TK-1015: 12,000 gallon controlled with vapor balance system and cryogenic solvent recovery system
- T104 Solvent Tank TK-1016: 12,000 gallon controlled with vapor balance system and cryogenic solvent recovery system
- T105 Solvent Tank TK-1003: 12,000 gallon controlled with vapor balance system and cryogenic solvent recovery system
- T106 Solvent Tank TK-1018: 12,000 gallon controlled with vapor balance system and cryogenic solvent recovery system
- T107 Solvent Tank TK-1019: 12,000 gallon controlled with vapor balance system and cryogenic solvent 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. through b)(1)f., b)(2)c., b)(2)d., c)(1), c)(2), d)(1) through d)(3), and e)(1).

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

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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), as effective 11/30/01 | The organic compounds (OC) emissions from for each emissions unit shall not exceed the following: T069: 0.13 tons per year T070: 0.13 tons per year T071: 0.13 tons per year T072: 0.13 tons per year T073: 0.37 tons per year T074: 0.13 tons per year T075: 0.12 tons per year T076: 0.12 tons per year T077: 0.12 tons per year T078: 0.35 tons per year T079: 0.35 tons per year T080: 0.20 tons per year T081: 0.20 tons per year T082: 0.17 tons per year T083: 0.17 tons per year T084: 0.17 tons per year T085: 0.17 tons per year T086: 0.17 tons per year T087: 0.27 tons per year T088: 0.27 tons per year T089: 0.21 tons per year T090: 0.21 tons per year T091: 0.16 tons per year T092: 0.16 tons per year T093: 0.16 tons per year T094: 0.12 tons per year T095: 0.12 tons per year T096: 0.12 tons per year T097: 0.12 tons per year T098: 0.12 tons per year T099: 0.12 tons per year T100: 0.12 tons per year T101: 0.12 tons per year T102: 0.12 tons per year T103: 0.12 tons per year T104: 0.12 tons per year T105: 0.36 tons per year T106: 0.12 tons per year T107: 0.12 tons per year See b)(2)a and b)(2)c. |

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| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|---|--|
| b. | OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06 | See b)(2)b. |
| c. | 40 CFR Part 60, Subparts A and VVa | See Section B. Facility-Wide Terms and Conditions. |
| d. | 40 CFR Part 61, Subparts A, J, N and FF | See Section B. Facility-Wide Terms and Conditions. |
| e. | 40 CFR Part 63 Subparts A, GGG, FFFF, and VVVVVV | See Section B. Facility-Wide Terms and Conditions. |
| f. | OAC rule 3745-31-05(D) Synthetic Minor to avoid Title V permitting requirements | See B.17 of Facility-Wide Terms and Conditions. |
| g. | OAC rule 3745-21-09(DD) | The limitations and requirements specified by this rule are less stringent than the limitations and requirements established pursuant to OAC rule 3745-31-05(A)(3), 40 CFR Part 60, 40 CFR Part 61, and 40 CFR Part 63. |
| h. | OAC rule 3745-21-07(M)(3)(c)(i) | The requirements of this rule shall not apply to any source, including any new source as defined in rule 3745-15-01 of the Administrative Code, for which installation commenced after the effective date of this rule. |
| i. | OAC rule 3745-15-05(C)(4) | The exemption contained in paragraph (B) of 3745-15-05 shall not apply to a source if the source alone or in combination with similar sources at the same facility, would result in potential emissions of any air pollutant in excess of twenty-five tons per year. In determining the total emissions from a group of similar sources, an enforceable permit emission limit shall be used in lieu of the potential to emit for such source or sources. |

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S.

EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, these emission limitations/control measures no longer apply.

- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE, NO_x, SO₂, and CO emissions from this air contaminant source since the uncontrolled potential to emit for each is less than 10 tons/year.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the OC emissions from this air contaminant source since the calculated annual emission rate for OC is less than 10 tons/year, taking into account the following federally enforceable limitations:

- i. The emissions from this emissions unit shall be vented to the vapor balance system and controlled by a cryogenic solvent recovery system that achieves a total organic compound (less methane and ethane) or total HAP destruction efficiency of 95% or more, on a total weight-basis, or an outlet total OC concentration less than or equal to 20 ppmv, whichever is less stringent.
- c. Based on the information and data submitted by the permittee in the application for permit P0106686, the annual OC emissions limit for each emission unit was established to reflect the after control potential to emit for these emissions units. Record keeping of the process emissions is not required since the emissions unit is permitted at its potential to emit.
- d. The emissions from this emissions unit shall be vented to and controlled by a cryogenic solvent recovery system that achieves a total organic compound (less methane and ethane) or total HAP destruction efficiency of 95% or more, on a total weight-basis, or an outlet total OC concentration less than or equal to 20 ppmv, whichever is less stringent.
- e. All equipment and components associated with this emissions unit and the cryogenic solvent recovery system must comply with the applicable requirements included in Section B. Facility-Wide Terms and Conditions.

c) **Operational Restrictions**

- (1) All of the emissions from this emissions unit shall be vented to the vapor balance system and controlled by a cryogenic solvent recovery system that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation.
- (2) The average temperature of the exhaust gases from the cryogenic solvent recovery system, for any 3-hour block of time shall not exceed the average temperature(s) measured during the most recent design evaluation conducted in accordance with 40

CFR 63.1257(a)(1)(iii) that demonstrates the cryogenic solvent recovery system has a minimum overall control efficiency of 95%, on a total weight-basis, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent.

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average temperature(s) of the exhaust gases from the cryogenic solvent recovery system, for any 3-hour block of time, shall not be more than the average temperature measured during the most recent design evaluation conducted in accordance with 40 CFR 63.1257(a)(1)(iii) that demonstrates the cryogenic solvent recovery system has a minimum overall control efficiency of 95%, on a total weight-basis, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent. Until testing has been conducted, the cryogenic solvent recovery system shall be operated and maintained in accordance with the manufacturer's recommendations.
- (2) The permittee shall install, operate, and maintain a continuous temperature monitor and recorder which measures and records the temperature(s) of the exhaust gases from the cryogenic solvent recovery system when the emissions unit(s) is/are in operation, including periods of startup and shutdown. 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 installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee.

Following compliance testing, the permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:

- a. all 3-hour blocks of time, when the emissions unit(s) controlled by the cryogenic solvent recovery system was/were in operation, during which the average temperature(s) of the exhaust gases from the cryogenic solvent recovery system was/were more than the average temperature measured during the most recent design evaluation conducted in accordance with 40 CFR 63.1257(a)(1)(iii) that demonstrates the cryogenic solvent recovery system has a minimum overall control efficiency of 95%, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent.; and
- b. a log or record of operating time for the capture (collection) system, cryogenic solvent recovery system, monitoring equipment, and the associated emissions unit(s).

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

- (3) Whenever the monitored temperature(s) of the exhaust gases from the cryogenic solvent recovery system deviates from the range/limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

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

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- a. a description of the corrective action;
- b. the date corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was deviation;
- e. the temperature readings of the exhaust gas from the cryogenic solvent recovery system immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

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

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

- (4) Record keeping of the process emissions is not required since the emissions unit is permitted at its potential to emit.

e) Reporting Requirements

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

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- a. each period of time (start time and date, and end time and date) when the average temperature of the exhaust gases from the cryogenic solvent recovery system was outside of the range specified by the manufacturer and/or outside of the acceptable range following any required compliance demonstration;
- b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the cryogenic solvent recovery system;
- c. each incident of deviation described in "a" or "b" (above) where a prompt investigation was not conducted;
- d. each incident of deviation described in "a" or "b" where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature of the exhaust gases from the cryogenic solvent recovery system into compliance with the acceptable range, was determined to be necessary and was not taken; and
- e. each incident of deviation described in "a" or "b" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

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).

- (2) 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.
 - (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 and include any deviations (excursions) or exceedances of the emission limitations, operational restrictions and/or control device operating parameter limitations in his permit.
- f) Testing Requirements
- (1) Compliance with the emission limitations in section b)(1) of the terms and conditions for this emissions unit shall be determined in accordance with the following method(s):
 - a. Emission Limitation:

The OC emissions from these emissions units shall not exceed the tons per year limitation specified in b)(1)(a) for each unit.

Applicable Compliance Method:

The working loss emissions and breathing loss emissions for each of these emissions units were calculated using material throughput for each source and U.S. EPA's TANKS 4.09d program. Except for emissions units T073, T078, T079 and T105, the annual OC emissions limitation for each unit was determined by summing the working loss OC emissions and breathing loss OC emissions.

Operation of emissions units T073, T078, T079 and T105 includes recirculation and uses smear tube filling. Emissions from recirculation was determined by multiplying the maximum material throughput for each source by an estimated filling emissions factor of 3.025 lb/gallon for smear tube filling, multiplying by the control efficiency of (1-0.95) for the cryogenic solvent recovery system, and then dividing by 2000 lbs/ton. The emissions factor for smear tube filling was determined by taking an average of the submerged filling emissions factor (0.3 lb/gallon) and one-half the modified splash filling emissions factor (11.5 lb/gallon) from Table 5.2-7 from AP-42, "Compilation of Air Pollutant Emissions Factors", 5th Edition, Section 5.2 (6/2008). The annual OC emissions limitation for T073, T078, T079 and T105 was determined by summing the corresponding working loss OC emissions, breathing loss OC emissions, and recirculation emissions for each unit.

- (2) The permittee shall conduct, or have conducted, a design evaluation of the cryogenic solvent recovery system to measure and establish the maximum temperature(s) for the outlet gas stream at which the system can maintain a minimum overall control efficiency of 95%, or an outlet total OC concentration of less than 20 ppmv, whichever is less stringent. The design evaluation shall be performed in accordance with 40 CFR 63.1257(a)(1)(iii). A comprehensive written report on the results of the testing shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency following completion of the test(s) and prior to start up and operation of the emissions unit(s).

g) Miscellaneous Requirements

- (1) None.