



Environmental Protection Agency

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

2/29/2012

Mr. Frank Simcic
Hukill Chemical Corporation
7013 Krick Rd
Bedford, OH 44146-4493

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 1318030172
Permit Number: P0095084
Permit Type: Renewal
County: Cuyahoga

Certified Mail

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

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

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

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

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

Sincerely,

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

Cc: CDAQ



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
Hukill Chemical Corporation**

Facility ID:	1318030172
Permit Number:	P0095084
Permit Type:	Renewal
Issued:	2/29/2012
Effective:	2/29/2012
Expiration:	2/28/2017



Division of Air Pollution Control
Permit-to-Install and Operate
for
Hukill Chemical Corporation

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Authorization

Facility ID: 1318030172

Application Number(s): A0026606

Permit Number: P0095084

Permit Description: FEPTIO renewal of existing Hukill Chemical Corporation, a chemical recycling and processing facility consisting of a waste water stripping operation, spent solvent holding tanks, drum processing, hydrofluoric acid cutting and a tank farm. Restrictions were taken on volume processed to keep facility-wide HAP emissions below Title V levels to avoid MACT requirements.

Permit Type: Renewal

Permit Fee: \$0.00

Issue Date: 2/29/2012

Effective Date: 2/29/2012

Expiration Date: 2/28/2017

Permit Evaluation Report (PER) Annual Date: Apr 1 - Mar 31, Due May 15

This document constitutes issuance to:

Hukill Chemical Corporation
7013 Krick Rd
Bedford, OH 44146

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

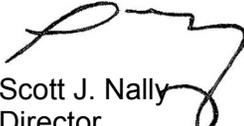
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

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

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency


Scott J. Nally
Director



Authorization (continued)

Permit Number: P0095084

Permit Description: FEPTIO renewal of existing Hukill Chemical Corporation, a chemical recycling and processing facility consisting of a waste water stripping operation, spent solvent holding tanks, drum processing, hydrofluoric acid cutting and a tank farm. Restrictions were taken on volume processed to keep facility-wide HAP emissions below Title V levels to avoid MACT requirements.

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

Emissions Unit ID:	P012
Company Equipment ID:	Air Stripper
Superseded Permit Number:	13-04102
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P013
Company Equipment ID:	Storage tanks 8-11
Superseded Permit Number:	13-2366
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P015
Company Equipment ID:	Drum Processing
Superseded Permit Number:	13-04067
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P016
Company Equipment ID:	HF Process
Superseded Permit Number:	13-04099
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

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

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

2. Who is responsible for complying with this permit?

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

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

3. What records must I keep under this permit?

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

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

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

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

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

Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

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

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

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

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

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

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

7. What reports must I submit under this permit?

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

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

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

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

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

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

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

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

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

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

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

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

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

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting¹ a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

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

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

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

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

C. Emissions Unit Terms and Conditions



1. P012, Air Stripper

Operations, Property and/or Equipment Description:

Air Stripper to remove organic compounds from contaminated storm water

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

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

a. None.

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

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

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.

Table with 2 columns: Applicable Rules/Requirements and Applicable Emissions Limitations/Control Measures. Rows include OAC rule 3745-31-05 (A)(3), OAC rule 3745-21-07 (M), and OAC rule 3745-31-05(D)(1)(b).

- (2) Additional Terms and Conditions
 - a. The requirements of OAC rule 3745-21-07(M) do not apply because there are no controls for this emissions unit.
- c) Operational Restrictions
 - (1) The maximum throughput of storm water processed through emissions unit P012 shall not exceed 1,920,000 gallons per year, based upon a rolling 12-month summation of the throughput of storm water processed.
 - (2) The maximum HAP content of all organic liquids processed shall not exceed 25 percent for any single HAP and 70 percent for total combined HAPs.
- d) Monitoring and/or Recordkeeping Requirements
 - (1) The permittee shall collect and maintain daily records of the following information for this emissions unit:
 - a. the total amount of contaminated storm water treated and pumped, in gallons per day;
 - b. the daily inlet and outlet concentrations in mg/L of treated water; and
 - c. the amount of VOCs emitted into the atmosphere, in pounds per day, determined using the equation in f)(1)a. below.
 - (2) The permittee shall collect and maintain monthly records of the following information for this emissions unit:
 - a. The total amount of contaminated storm water treated and pumped, in gallons per month, determined by summing daily amounts;
 - b. the rolling, 12-month summation of the gallons of storm water treated and pumped; and
 - c. the amount of VOCs emitted, in pounds/month determined by summing the daily emissions;
 - d. the rolling, 12-month summation of VOC emissions determined by summing the pounds per month and in accordance with f)(1)b. below; and
 - e. the rolling, 12-month summation of single and combined HAP emissions in tons, determined in accordance with f)(1)c. below.
 - (3) The permittee shall maintain records of all storm water analyses performed that are used to determine the inlet and outlet VOC concentrations.
 - (4) The permittee shall maintain records of percent single and combined HAP content of all organic liquids processed on a monthly basis.

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

e) Reporting Requirements

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

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

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

Emission limitations: 0.80 ton VOC, 0.20 ton single HAP and 0.56 ton combined HAP emissions per rolling, 12-month summation

Operational Limitations: 1,920,000 gallons storm water per rolling, 12-month summation

25% single HAP and 70% combined HAP content

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

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

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

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

due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

60 lbs of VOCs/day

Applicable Compliance Method:

Compliance with the above emission limitation shall be determined by the record keeping specified in d)(1) and d)(2) of these terms and conditions and the following equation:

$$E_{\text{daily}} = M \times (C_i - C_o) \times CF_{\text{lb}} \times CF_L$$

Where:

E_{daily} = VOC in lb/day

M = wastewater flow rate in gal/day

C_i = maximum inlet VOC Concentration in mg/L

C_o = daily average outlet VOC concentration in mg/L

CF_{lb} = milligram to pound conversion factor = lb/454,000 mg

CF_L = liter to gallon conversion factor 3.785 L/gal

b. Emission Limitation:

0.80 ton VOC, per rolling, 12-month summation

Applicable Compliance Method:

Compliance with the above emission limitation shall be determined by the record keeping specified in d)(2). Compliance with the annual emission limitation shall be assumed provided compliance is maintained with the 1,920,000 gallons per year operational limitation. Compliance with the rolling, 12-month summation shall be reevaluated every month of operation.

c. Emission Limitation:

0.20 ton single HAP and 0.56 ton combined HAPs, per rolling, 12-month summation



Applicable Compliance Method:

Compliance with the annual emission limitation shall be demonstrated the same as f)(1)b. based on 25% VOC for single HAP and 70% VOC for combined HAP.

g) Miscellaneous Requirements

- (1) None.

2. P013, Storage tanks 8-11

Operations, Property and/or Equipment Description:

Four storage tanks for waste feed to LUWA's (P009 and P010)

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. None.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. b)(1)c., c)(1), d)(1)f., e)(2), f)(1)b., and f)(1)c..
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05 (A)(3) (PTI 13-2366 issued 4/15/1992)	2.37 lb/hr of VOC for four tanks combined. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D)(1)(b).
b.	OAC rule 3745-21-07(M)	See b)(2)a below.
c.	OAC rule 3745-31-05(D)(1)(b) FEPTIO to avoid Title V	VOC emissions shall not exceed 6.24 tons per rolling, 12-month summation. HAP emissions shall not exceed 1.56 tons single HAP and 4.37 tons combined HAP for the four tanks as a rolling, 12-month summation. (based on a HAP content of 25% single and 70% combined of VOC). See c)(1) below.

- (2) Additional Terms and Conditions
 - a. The requirements of OAC rule 3745-21-07(M) do not apply because there are no controls for this emissions unit.
- c) Operational Restrictions
 - (1) The maximum throughput of all organic materials for this emissions unit shall not exceed 5.8 million gallons per rolling, 12 month summation.
 - (2) The maximum HAP content of all organic liquids processed shall not exceed 25 percent for any single HAP and 70 percent for total combined HAPs.
 - (3) The tanks in this emissions unit shall be fitted with bottom filling and pressure relief vent valves.
 - (4) The tanks in this emissions unit shall feed spent solvents to the thin film evaporation units (P009-P010) only.
- d) Monitoring and/or Recordkeeping Requirements
 - (1) The permittee shall collect and maintain monthly records of the following information for this emissions unit:
 - a. the total amount of spent solvent pumped, in gallons per month to the evaporation units;
 - b. the amount of volatile organic compounds (VOCs) emitted into the atmosphere, in pounds per month, determined using the equation in f)(1)a;
 - c. the hours of operation per month;
 - d. the average hourly VOC emission rate, in lbs/hr (b/c);
 - e. the rolling, 12-month summation of the gallons of solvent pumped;
 - f. the rolling, 12-month summation of VOC emissions in tons, determined by summing the pounds per month and in accordance with f)(1)b. below; and
 - g. the rolling, 12-month summation of single and combined HAP emissions in tons, determined in accordance with f)(1)c. below.
 - (2) The permittee shall maintain records of percent single and combined HAP content of all organic liquids processed on a monthly basis.
- e) Reporting Requirements
 - (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

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

Emission limitations: 6.24 tons VOC, 1.56 tons single HAP and 4.37 tons combined HAP emissions per rolling, 12-month summation

Operational Limitations: 5.81 million gallons per rolling, 12-month summation
25% single HAP, 70% total combined HAPs
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).

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

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

- (3) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:
- a. Emission Limitation:
2.37 lbs/hr of VOC

Applicable Compliance Method:

Compliance with the above emission limitation shall be determined by the record keeping specified in d)(1) of these terms and conditions and the following equation:

$$M * EF = \text{lbs VOC/month}$$

M = amount of spent solvent pumped, in gallons per month

EF = emission factor of 2.15 lb/1000 gal. (AP 42 Chapter 7)

Divide the lbs VOC/month by the hours of operation per month to determine the average hourly emission rate.

b. Emission Limitation:

6.24 tons of VOC, per rolling, 12-month summation

Applicable Compliance Method:

Compliance with the above emission limitation shall be determined by the record keeping specified in d)(1). Compliance with the annual emission limitation shall be assumed provided compliance is maintained with the 6,130,000 gallons per year operational limitation. Compliance with the rolling, 12-month summation shall be reevaluated every month.

c. Emission Limitation:

1.56 tons single HAP and 4.37 tons combined HAP, per rolling, 12-month summation

Applicable Compliance Method:

Compliance with the annual emission limitation shall be demonstrated the same as f)(1)b. based on 25% VOC for single HAP and 70% VOC for combined HAP.

g) **Miscellaneous Requirements**

(1) None.



3. P015, Drum Processing

Operations, Property and/or Equipment Description:

Drum processing operation using pumping wand

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

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

a. None.

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

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

b) Applicable Emissions Limitations and/or Control Requirements

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

Table with 2 columns: Applicable Rules/Requirements and Applicable Emissions Limitations/Control Measures. Row a: OAC rule 3745-31-05(A)(3) (PTI 13-04067 issued final 8/12/2003) - The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D)(1)(b). Row b: OAC rule 3745-21-07(M) - See b)(2)a. below. Row c: OAC rule 3745-31-05(D)(1)(b) FEPTIO to avoid Title V - VOC emissions shall not exceed 6.0 tons per rolling, 12-month summation. HAP emissions shall not exceed 1.5 tons single HAP and 4.20 tons combined HAP per rolling, 12-month summation. See c)(1) below.

(2) Additional Terms and Conditions

a. There are no applicable requirements from OAC rule 3745-21-07(M) for this emissions unit.

- c) Operational Restrictions
- (1) The maximum throughput of all drummed organic material for this emissions unit shall not exceed 184,500 drums per year per rolling 12-month period.
 - (2) The maximum HAP content of all organic liquids processed shall not exceed 25 percent for any single HAP and 70 percent for total combined HAPs.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the number of drums processed for the removal of waste organic liquids;
 - b. the monthly VOC emission rate, in lbs/month, calculated in accordance with f)(1)a. below.
 - c. the rolling, 12-month summation of VOC emissions, in tons determined using the formula from f)(1)a.;
 - d. the rolling, 12-month summation of single and combined HAP emissions in tons, determined using the formula from f)(1)b.; and
 - e. the rolling, 12-month summation of drums processed.
 - (2) The permittee shall maintain records of percent single and combined HAP content of all organic liquids processed on a monthly basis.
 - (3) The permit to install application for this emission unit, P015, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit 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 contaminants 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 emitted from the emissions unit, (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for

Chemical Substances and Physical Agents Biological Exposure Indices”;
or

- ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) “Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices”; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., “X” hours per day and “Y” days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

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

- 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: methylene chloride

TLV (mg/m³): 173,681

Maximum Hourly Emission Rate (lbs/hr): 8.0 lb/hr

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 905.1

MAGLC (ug/m³): 4,135

Toxic Contaminant: toluene

TLV (mg/m³): 75,360

Maximum Hourly Emission Rate (lbs/hr): 8.0 lb/hr

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 905.1

MAGLC (ug/m³): 1,794

Toxic Contaminant: xylene

TLV (mg/m³): 434,192

Maximum Hourly Emission Rate (lbs/hr): 8.0 lb/hr

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 905.1

MAGLC (ug/m3): 10,338

Toxic Contaminant: styrene

TLV (mg/m3): 85,203

Maximum Hourly Emission Rate (lbs/hr): 8.0 lb/hr

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 905.1

MAGLC (ug/m3): 2,029

The permittee, has demonstrated that emissions of the above compound from emission unit P015, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

- (4) Prior to making any physical changes to or changes in the method of operation of the emission unit, 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.

- (5) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):
- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
 - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
 - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit 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 or the materials applied.
- e) Reporting Requirements
- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
 - (2) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

Emission limitations:	6.0 tons VOC emissions per rolling, 12-month summation
	1.5 tons single HAP and 4.20 tons combined HAP emissions per rolling, 12-month summation
Operational Limitations:	184,500 drums/yr per rolling, 12-month summation
	25% single HAP, 70% combined HAP
 - b. the probable cause of each deviation (excursion);

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

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

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

- (3) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit..

f) Testing Requirements

- (1) Compliance with the emission limitation(s) in b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation:

6.0 tons VOC per rolling, 12-month summation

Applicable Compliance Method:

Compliance with the annual emission limitation shall be determined by summing the actual pounds per month emission rates and divide by 2000 lb/ton as determined based on the daily recordkeeping from d) and the following equation:

$$\text{lbs VOC /month} = D \times EF$$

where:

D = number of drums processed per month

EF = 0.065 lbs VOC/drum = working loss emission factor calculated from AP-42 Section 7.1, equation 1-29

- b. Emission Limitation:

1.5 tons single HAP and 4.2 tons combined HAP per rolling, 12-month summation



Applicable Compliance Method:

Compliance with the annual emission limitation shall be determined by summing the monthly VOC emission rate determined in d)(1), multiplying by the percent HAP (25% for single and 70% for combined) and dividing by 2,000 pounds per ton.

g) Miscellaneous Requirements

- (1) None.

4. P016, HF Process

Operations, Property and/or Equipment Description:

Dedicated hydrofluoric acid filling line with a packed bed tower scrubber

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. None.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. b)(1)d. c)(1), c)(2), d)(1), d)(2), e)(2) and f)(1)b.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 13-04099 issued 5/13/2003)	Particulate emissions (hydrofluoric acid) shall not exceed 0.313 lb/hr. Visible particulate emissions from any stack shall not exceed 5% opacity, as a six minute average.
b.	OAC rule 3745-17-07(A)	The visible particulate emission limitation specified by this rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-11	The particulate emission limitation specified by this rule is less stringent than the particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

d.	OAC rule 3745-31-05(D)(1)(b) FEPTIO to avoid Title V	Particulate emissions (PE/HAP) shall not exceed 0.16 ton as a rolling, 12-month summation. See b)(2)a. and c)(2) below.
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(2) Additional Terms and Conditions

a. The scrubber shall be operated at all times when the acid is being mixed/cut.

c) Operational Restrictions

(1) The permittee shall operate the scrubber at all times in accordance with the following parameters:

- a. the pressure drop across the scrubber shall be continuously maintained at a range of 1 to 3 inches of water at all times while the emissions unit is in operation;
- b. the scrubber water flow rate shall be continuously maintained at a range of 15 to 25 gallons per minute at all times while the emissions unit is in operation; and
- c. the scrubbing solution shall be maintained at an alkalinity (pH) of no less than 9.

(2) The maximum operating hours of the acid blending process shall not exceed 1000 hours per rolling, 12-month period.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

(2) The permittee shall collect and record the following information each day:

- a. the pressure drop across the scrubber, in inches of water;
- b. the scrubber water flow rate, in gallons per minute;
- c. the pH of the scrubber water; and
- d. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

(3) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and

obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTIO.

e) Reporting Requirements

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

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

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

Emission limitations: 0.16 ton HAP emissions per rolling, 12-month summation

Operational Limitations: Static pressure drop of 1 to 3 inches across the scrubber

Scrubber water flow rate of 15 to 25 gallons per minute

pH range between 9 and 12

process limited to 1,000 hours of operation per rolling, 12-month summation

b. the probable cause of each deviation (excursion);

c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and

d. the magnitude and duration of each deviation (excursion).

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

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

(3) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The

permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

(1) Compliance with the emission limitation(s) in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

Particulate emissions (hydrofluoric acid as a HAP) shall not exceed 0.313 lb/hr.

Applicable Compliance Method(s):

Stack testing performed in 2004 showed an emission rate of 0.15 lb HF/hr. Information provided by the permittee identifies a maximum scrubber loading rate of 6.25 lb HF/hr with an overall control efficiency of 95% resulting in an emission rate of 0.313 lb HF/hr.

If required, compliance with the mass emission limitation shall be determined by performing a stack test using US EPA test Methods 1-4 and 26 of 40 CFR Part 60, Appendix A.

b. Emissions Limitation:

Particulate emissions (hydrofluoric acid) shall not exceed 0.16 ton per rolling, 12-month summation.

Applicable Compliance Method(s):

The annual emission limitation was established by multiplying the hourly emission limit by 1000 hours of operation per year and dividing by 2,000 pounds per ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the hourly limitation and the annual hours of operation limitation.

c. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 5% opacity, as a six minute average.

Applicable Compliance Method(s):

If required, compliance shall be determined by visible emission observations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in U.S. EPA Reference Method 9.

g) Miscellaneous Requirements

- (1) Five hydrofluoric acid blend/cut tanks (Company identification numbers TK - 101, TK - 102, TK - 103, TK - 104, TK - 105) associated with emissions unit P016 were not required to obtain a permit to install. Tanks TK-101, TK-102, TK-104, and TK-105 are exempt from permitting requirements via OAC rule 3745-31-03(l). Tank TK-103 is exempt from permitting requirements via OAC rule 3745-15-05.
- (2) The five hydrofluoric acid blend/cut tanks (Company identification numbers TK - 101, TK - 102, TK - 103, TK - 104, TK - 105) are used exclusively for emissions unit P016.