



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

7/17/2015

Certified Mail

Allan Cowie
 UNIVAR USA, INC.
 Univar USA Inc.
 4600 Dues Drive
 CINCINNATI, OH 45246

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

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

Facility ID: 1409000588
 Permit Number: P0118725
 Permit Type: Initial Installation
 County: Butler

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 Environmental Protection Agency (EPA) Weekly Review and the local newspaper, Journal 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 "Search for Permits" link under the Permitting topic on the Programs tab. 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 and Southwest Ohio Air Quality Agency
 Permit Review/Development Section 250 William Howard Taft Rd.
 Ohio EPA, DAPC Cincinnati, OH 45219
 50 West Town Street Suite 700
 PO Box 1049
 Columbus, Ohio 43216-1049

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 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 Southwest Ohio Air Quality Agency at (513)946-7777.

Sincerely,

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

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

PUBLIC NOTICE

The following matters are the subject of this public notice by the Ohio Environmental Protection Agency. The complete public notice, including any additional instructions for submitting comments, requesting information, a public hearing, or filing an appeal may be obtained at: <http://epa.ohio.gov/actions.aspx> or Hearing Clerk, Ohio EPA, 50 W. Town St., Columbus, Ohio 43215. Ph: 614-644-2129 email: HClerk@epa.ohio.gov

Draft Air Pollution Permit-to-Install and Operate Initial Installation
UNIVAR USA, INC.

4600 DUES DRIVE,, Cincinnati, OH 45246

ID#:P0118725

Date of Action: 7/17/2015

Permit Desc:Initial FEPTIO for one (1) HCl bulk loading operation, one (1) HCl container filling operation, and two (2) HCl storage tanks all, with packed bed scrubber emissions controls, at an existing chemical distribution facility currently classified as a non-Title V facility..

The permit and complete instructions for requesting information or submitting comments may be obtained at: <http://epa.ohio.gov/dapc/permitsonline.aspx> by entering the ID # or: Paul Tedtman, Southwest Ohio Air Quality Agency, 250 William Howard Taft Rd., Cincinnati, OH 45219. Ph: (513)946-7777



Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description: HCl bulk loading operation, HCl container filling operation, and two HCl storage tanks with packed bed scrubber emissions controls at an existing chemical distribution facility currently classified as a non-Title V (NTV) facility.
3. Facility Emissions and Attainment Status: Facility emissions consist of VOC, VOHAP, and non-VOHAP (like HCl) emissions. Southwest Ohio is nonattainment for the 8hr ozone standard, nonattainment for the 1hr SO₂ standard in Pierce Twp. Clermont County only, and attainment for PM_{2.5}, PM₁₀, CO, NO_x, and SO₂ in all other areas. (current as of 1/2015)
4. Source Emissions: Source Emissions consist of HCl. Uncontrolled Project HCl is 17.84 TPY before application of scrubber controls. FEPTIO for Facility-Wide HAPs includes Federally Enforceable scrubber requirements which limit HAPs to < 10 TPY and 25 TPY.
5. Conclusion: Federally Enforceable Emissions Limitations and Control Measures for HAPs and scrubbers along with appropriate MRR allow the facility to avoid Part 70 Major Source (Title V) requirements.
6. Please provide additional notes or comments as necessary:
- None
7. Total Permit Allowable Emissions Summary (for informational purposes only):

<u>Pollutant</u>	<u>Tons Per Year</u>
HCl	9.9
Total HAPs	24.9



DRAFT

**Division of Air Pollution Control
Permit-to-Install and Operate
for
UNIVAR USA, INC.**

Facility ID:	1409000588
Permit Number:	P0118725
Permit Type:	Initial Installation
Issued:	7/17/2015
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
UNIVAR USA, INC.

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Draft Permit-to-Install and Operate
UNIVAR USA, INC.

Permit Number: P0118725

Facility ID: 1409000588

Effective Date: To be entered upon final issuance

Authorization

Facility ID: 1409000588
Application Number(s): A0053164
Permit Number: P0118725
Permit Description: Initial FEPTIO for one (1) HCl bulk loading operation, one (1) HCl container filling operation, and two (2) HCl storage tanks all, with packed bed scrubber emissions controls, at an existing chemical distribution facility currently classified as a non-Title V facility.
Permit Type: Initial Installation
Permit Fee: \$2,300.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 7/17/2015
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:

UNIVAR USA, INC.
4600 DUES DRIVE
Cincinnati, OH 45246

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

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

Southwest Ohio Air Quality Agency
250 William Howard Taft Rd.
Cincinnati, OH 45219
(513)946-7777

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler
Director



Authorization (continued)

Permit Number: P0118725
 Permit Description: Initial FEPTIO for one (1) HCl bulk loading operation, one (1) HCl container filling operation, and two (2) HCl storage tanks all, with packed bed scrubber emissions controls, at an existing chemical distribution facility currently classified as an non-Title V facility.

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

Emissions Unit ID: J001
 Company Equipment ID: Tank Truck Loading
 Superseded Permit Number:
 General Permit Category and Type: Not Applicable

Emissions Unit ID: P012
 Company Equipment ID: Container Filling
 Superseded Permit Number:
 General Permit Category and Type: Not Applicable

Group Name: HCl Storage Tanks

Emissions Unit ID:	T009
Company Equipment ID:	AT-07
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	T010
Company Equipment ID:	AT-05
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



Draft Permit-to-Install and Operate
UNIVAR USA, INC.
Permit Number: P0118725
Facility ID: 1409000588
Effective Date: To be entered upon final issuance

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. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

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

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

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

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

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

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

7. What reports must I submit under this permit?

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

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

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

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

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

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

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

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Southwest Ohio Air Quality 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 submitting a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emission unit once the certification has been submitted to Ohio EPA by the authorized official.

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

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

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.



Draft Permit-to-Install and Operate

UNIVAR USA, INC.

Permit Number: P0118725

Facility ID: 1409000588

Effective Date: To be entered upon final issuance

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) 2., 3., 4., and 5.
2. The actual emissions of hazardous air pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from emissions units B001 (5.25 MMBtu/hr gas/oil boiler), J001 [Hydrochloric acid (HCl) loading rack with wet scrubber], P001 (Chlorine cylinder filling), P002 (Ammonia batch & filling), P004 (Drum filling areas), P007 (Dry blending industrial cleaners), P009 (Mix tanks industrial cleaners), P010 (Soda ash, borax, boric acid material handling), P012 (HCl container filling with wet scrubber), T007 (Inorganic chemical storage), T009 (35% HCl storage tank), T010 (31% HCl storage tank), and any de minimis emissions units as defined in OAC rule 3745-15-05, any registration status and/or permit exempt emissions units pursuant to OAC rule 3745-31-03, or future constructed emissions units, combined, shall not exceed 9.9 tons per year (TPY) for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation.
3. The permittee shall collect and record the following information each month for the emissions units identified in 2. above:
 - a) The individual HAP emissions, in tons, for all the HAP-containing materials stored, handled, processed, and transferred;
 - b) The combined HAPs emissions, in tons, for all the HAP-containing materials stored, handled, processed, and transferred;
 - c) The updated rolling, 12-month individual HAP emissions, in tons, for all the HAP-containing materials stored, handled, processed, and transferred; this shall include the information for the current month and the preceding eleven calendar months; and
 - d) The updated rolling, 12-month combined HAPs emissions, in tons, for all the HAP-containing materials stored, handled, processed, and transferred; this shall include the information for the current month and the preceding eleven calendar months

[Monthly emissions from the facility may be calculated using any method deemed suitable by the permittee as long as prior approval from Southwest Ohio Air Quality Agency is obtained that has not already been approved, including Emission Factors or emissions estimate methods included in prior Ohio EPA Permit Applications, Permits, etc. In Application A0053164, the permittee prepared calculations using Emission Factors from USEPA AP-42, Fifth Ed., Chapter 5.2, Transportation and Marketing of Petroleum Liquids, July 2008 and USEPA TANKS emissions estimating software.



*A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA District Office or local air agency contact. This information does not have to be kept on a line-by-line basis.

4. The permittee shall submit quarterly deviation (excursion) reports for the following emissions unit(s) 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:

Emissions unit ID Terms& Conditions

B001, J001, P001, P002 B.2., B.3.

P004, P007, P009, P010

P012, T007, T009, T010

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 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).

5. Compliance with the Emissions Limitations and/or Control Requirements specified in B.2. of these terms and conditions shall be determined in accordance with the following methods:

a) Emission Limitations:

9.9 TPY for any single HAP and 24.9 TPY for combined HAPs, based on a rolling 12-month summation for the emissions units identified in 2.

Applicable Compliance Method:

Compliance with the HAP emission limitations shall be demonstrated by the record keeping requirements specified in 3.

Estimates of the maximum controlled and uncontrolled fugitive emissions from the loading rack and container filling operations were based on the following equations with information supplied by the permittee in Application A0053164 for Federally Enforceable Permit to Install and



Operate (FEPTIO) P0118725. This information is specific to HCl emissions only. Also, this information was not used to establish the 9.9 TPY and 24.9 TPY HAPs Emissions Limitations:

Container Filling, 31% HCl (P012)

$L_L = 12.46$ (SPM/T), where: L_L = pound/1000 gallons loaded, $S = 1.45$ splash loading, $P = 0.2601$ psia for 31% HCl, $M = 36.5$ molecular weight of vapors, $T =$ Rankin temperature (F deg, avg + 460)

L_L , pound/1000 gallons loaded = $12.46 [(1.45)(0.2601)(36.5)/(513)]$

$L_L = 0.334$ pound/1000 gallons loaded

29.5 gallons loaded/minute x 0.33435 pound HCl/1000 gallons loaded, uncontrolled x 60 minutes/hour = 0.5918 pound HCl/hour, uncontrolled

0.5918 pound HCl/hour, uncontrolled x 8760 hours/year x 1 Ton/2000 pounds = 2.592 TPY HCl, uncontrolled, rounded to 2.59 TPY HCl, uncontrolled

Bulk Loading, 35% HCl, assume 35% product is loaded 100% of the time (J001)

$L_L = 12.46$ (SPM/T), where: $S = 1.45$ splash loading $P = 0.9036$ psia for 35% HCl $M = 36.5$ molecular weight of vapors $T =$ Rankin temperature (F deg, avg + 460)

L_L , pound/1000 gallons loaded = $12.46 [(1.45)(0.9036)(36.5)/(513)]$

$L_L = 1.16155$ pound/1000 gallons loaded

140 gallons loaded/minute x 1.16155 pound HCl/1000 gallons loaded, uncontrolled x 60 minutes/hour = 9.757 pounds HCl/hour, uncontrolled

There is a Physical Limitation (production bottleneck; see "HCl Process Limitations and Process Capacity") that limits HCl emissions from bulk loading such that the annual uncontrolled PTE would be calculated as:

13.6 cargo tank trucks/day x 4480 gallons loaded/cargo tank truck x 1.16155 pound HCl/1000 gallons loaded x 365 days/year x 1 Ton/2000 pounds = 12.915 TPY HCl, uncontrolled, rounded to 12.92 TPY HCl, uncontrolled

P012 2.59 TPY HCl x (0.987 CaE) x (1 - 0.95 CoE) = 0.128 TPY HCl, rounded to 0.13 TPY HCl, controlled

2.59 TPY HCl x (1 - 0.987 CaE) = 0.034 TPY HCl, rounded to 0.03 TPY HCl, uncontrolled

J001 12.92 TPY HCl x (0.987 CaE) x (1 - 0.95 CoE) = 0.638 TPY HCl, rounded to 0.64 TPY HCl, controlled

12.92 TPY HCl x (1 - 0.987 CaE) = 0.167 TPY HCl, rounded to 0.17 TPY HCl, uncontrolled



Where:

Emissions, uncontrolled x Operating Capture Efficiency (CaE) x 1 - Operating Control Efficiency (CoE) [98.7% CaE, AP-42 pg. 5.2-6, J001 and P012 loading] = HCl, controlled

Emissions, uncontrolled x 1 – Operating Capture Efficiency (CaE) = HCl, uncontrolled

Estimates of the maximum, controlled emissions from the storage tanks were based on the following equations with information supplied by the permittee in Application A0053164 for FEPTIO P0118725:

Storage Tank, 31% (T010)

Tanks 4.0.9d Emissions Report – Detail Format provided by the permittee indicate uncontrolled HCl of 834.71 pounds per year, or 0.417 Tons, rounded to 0.42 TPY HCl, from working losses and breathing losses

Storage Tank, 35% (T009)

Tanks 4.0.9d Emissions Report – Detail Format provided by the permittee indicate uncontrolled HCl of 3828.25 pounds per year, or 1.914 Tons, rounded to 1.91 TPY HCl, from working losses and breathing losses

T009 $1.91 \text{ TPY HCl} \times (1 - 0.95 \text{ TCaCoE}) = 0.0955 \text{ TPY HCl}$, rounded to 0.10 TPY HCl

T010 $0.42 \text{ TPY HCl} \times (1 - 0.95 \text{ TCaCoE}) = 0.021 \text{ TPY HCl}$, rounded to 0.02 TPY HCl

TCaCoE = Total Capture and Control Efficiency (Capture is assumed to be 100%)



Draft Permit-to-Install and Operate
UNIVAR USA, INC.
Permit Number: P0118725
Facility ID: 1409000588
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C. Emissions Unit Terms and Conditions



1. J001, Tank Truck Loading

Operations, Property and/or Equipment Description:

140 gpm, 1 loading arm, 31%/35% HCl top load, splash fill, tank truck loading operation with wet scrubber at an existing chemical distribution facility

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. b)(1)b. and d)(3).

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

a. b)(1)a., b)(1)c., b)(1)d., 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) June 30, 2008	Install a wet scrubber with a design removal efficiency of at least 95% for particulate emissions (PE), particulate matter 10 microns and less in diameter (PM10), and particulate matter 2.5 microns and less in diameter (PM2.5). See b)(2)a. below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii) June 30, 2008	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE/PM10/PM2.5 from this air contaminant source since the calculated annual emission rate is less than 10 tons/yr. taking into account the voluntary restriction from OAC rule 3745-31-05(E). See b)(2)b. below.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-31-05(E) June 30, 2008	Emissions shall not exceed 0.81 ton of PE/PM10/PM2.5 per year. Install a wet scrubber with a design removal efficiency of at least 95% for PE/PM10/PM2.5.
d.	OAC rule 3745-31-05(D) June 30, 2008 Synthetic Minor restricting facility-wide HAPs emissions to avoid Title V Operating Permit requirements.	See Section B.1.b)(1), C.1.b)(2)c., c)(1), and c)(2).
e.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule. The presence of water vapor in the scrubber plume does not constitute visible emissions.
f.	OAC rule 3745-17-11(B), Table I	Emissions of PE shall not exceed 42.7 pounds per hour.

(2) Additional Terms and Conditions

- a. This Best Available Technology (BAT) emission limit applies until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) [the less than 10 tons per year BAT exemption] into the Ohio State Implementation Plan (SIP).
- b. These requirements apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) [the less than 10 tons per year BAT exemption] as part of the Ohio SIP.
- c. The emissions from J001 [Hydrochloric acid (HCl) loading rack with wet scrubber] shall be vented to a wet scrubber with a design efficiency of at least 95% control of HCl at all times the emissions unit is in operation.

c) Operational Restrictions

- (1) The permittee shall maintain the shipping vessels and transfer lines associated with this emissions unit using the following operational practices:
 - a. The shipping vessel may vent only to the wet scrubber during loading;
 - b. There shall be no leaks in the shipping vessel pressure/vacuum relief valves and hatch covers. The shipping vessel may be loaded via an open hatch only when the loading line is equipped with a shroud or other similar means at the loading point to prevent emissions;

- c. There shall be no leaks in the vapor and liquid lines during the transfer of HCl; and
 - d. The permittee shall not permit HCl to be spilled, discarded into sewers, stored in open containers, or handled in any other manner that would result in evaporation.
- (2) For any transfer of HCl from J001 to a shipping vessel (e.g. tank truck, tank trailer), the vapors displaced from the shipping vessel shall be processed with a vapor tight vapor line from the shipping vessel to wet scrubber. No HCl transfer shall occur until the vapor line is connected.
- d) **Monitoring and/or Recordkeeping Requirements**
- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range or limit for the pressure drop across the scrubber, the liquid flow rate, and the liquid pH shall be based upon the following manufacturer's specifications until the required performance testing is conducted and the appropriate range or limit for each parameter is established to demonstrate compliance.
 - (2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop across the scrubber (in pounds per square inch, water gauge), the scrubber liquid flow rate (in gallons per minute), and the scrubber liquid pH during operation of this emissions unit, including periods of startup and shutdown. The permittee shall record the pressure drop across the scrubber and the scrubber liquid's pH and flow rate on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for any parameter deviates from the range(s) or minimum limit(s) 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
- e. 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 control equipment parameters within the acceptable range(s), or at or above the minimum limit(s) 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:

- f. a description of the corrective action;
- g. the date the corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop, flow rate, and pH readings immediately after the corrective action was implemented; and
- k. 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.

These range(s) and/or limit(s) for the pressure drop, liquid flow rate, and pH are 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 range or limit for the pressure drop, liquid flow rate, or pH based upon information obtained during future performance tests that demonstrate compliance with the allowable design efficiency of the control device(s) for this/these emissions unit(s). In addition, approved revisions to the range or 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.

- (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 a permittee to apply for and obtain a new or modified FEPTIO 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 FEPTIO.

e) Reporting Requirements

- (1) 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:
 - i. each period of time (start time and date, and end time and date) when the pressure drop across the scrubber, the liquid flow rate, or the liquid pH

was outside of the appropriate range or limit specified by the manufacturer and/or outside of the acceptable range for each parameter following any required compliance demonstration;

- ii. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the scrubber; and
 - iii. any period of time when the emissions unit was in operation and any of the operational practices as described in c)(1) were not followed.
- 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 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) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (3) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.

f) Testing Requirements

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

a. Emission Limitation/Control Measure:

The emissions from J001 [Hydrochloric acid (HCl) loading rack with wet scrubber] shall be vented to a wet scrubber with a design efficiency of at least 95% control of HCl at all times the emissions unit is in operation.

Applicable Compliance Method:

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission 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;

The emission testing shall be conducted to demonstrate compliance with the design efficiency requirement for HCl;

The following test method(s) shall be employed to demonstrate compliance:

For HCl, Methods 1 through 4 and Method 26 or Method 26A of 40 CFR Part 60, Appendix A.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval



prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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. Emissions Limitation/Voluntary Restriction:

Emissions shall not exceed 0.81 ton of PE/PM10/PM2.5 per year.

Install a wet scrubber with a design removal efficiency of at least 95% for PE/PM10/PM2.5.

Applicable Compliance Methods:

PE/PM10/PM2.5 is acid particulate matter comprised of HCl. Compliance with the PE/PM10/PM2.5 emissions limitation may therefore be demonstrated through the recordkeeping requirements of the HCl emissions as calculated in Section B. of this permit.

If required, emission testing shall be conducted to demonstrate compliance with the design efficiency requirement for PE/PM10/PM2.5 using Test Methods 1 through 4 and Method 26A of 40 CFR Part 60, Appendix A. Sources, such as those controlled by wet scrubbers, that emit acid particulate matter must be sampled using Method 26A.

c. Emissions Limitation:

Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.



d. Emissions Limitation:

Emissions of PE shall not exceed 42.7 pounds per hour.

Applicable Compliance Method:

If required, emission testing shall be conducted to demonstrate compliance with the mass emissions limitation for PE using Test Methods 1 through 4 and Method 26A of 40 CFR Part 60, Appendix A. Sources, such as those controlled by wet scrubbers, that emit acid particulate matter must be sampled using Method 26A.

g) Miscellaneous Requirements

- (1) This emissions unit is not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Hydrochloric Acid Production in 40 CFR Part 63, Subpart NNNNN (40 CFR 63.8980 – 63.9075) since the facility does not consist of or constitute an “HCl production facility” as defined in §63.8985(a)(1). The Univar USA Inc. facility in Cincinnati, Ohio is an area (minor) source of hazardous air pollutant (HAP) emissions.

2. P012, Container Filling

Operations, Property and/or Equipment Description:

29.5 gpm 31%/32% HCl drum and IBC container filling operation with wet scrubber at an existing chemical distribution facility

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. b)(1)b. and d)(3).

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

a. b)(1)a., b)(1)c., b)(1)d., 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) June 30, 2008	Install a wet scrubber with a design removal efficiency of at least 95% for particulate emissions (PE), particulate matter 10 microns and less in diameter (PM10), and particulate matter 2.5 microns and less in diameter (PM2.5). See b)(2)a. below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii) June 30, 2008	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE/PM10/PM2.5 from this air contaminant source since the calculated annual emission rate is less than 10 tons/yr. taking into account the voluntary restriction from OAC rule 3745-31-05(E). See b)(2)b. below.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-31-05(E) June 30, 2008	Emissions shall not exceed 0.16 ton of PE/PM10/PM2.5 per year. Install a wet scrubber with a design removal efficiency of at least 95% for PE/PM10/PM2.5.
d.	OAC rule 3745-31-05(D) June 30, 2008 Synthetic Minor restricting facility-wide HAPs emissions to avoid Title V Operating Permit requirements.	See Section B.1.b)(1), C.2.b)(2)c., and c)(1).
e.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule. The presence of water vapor in the scrubber plume does not constitute visible emissions.
f.	OAC rule 3745-17-11(B), Table I	Emissions of PE shall not exceed 17.3 pounds per hour.

(2) Additional Terms and Conditions

- a. This Best Available Technology (BAT) emission limit applies until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) [the less than 10 tons per year BAT exemption] into the Ohio State Implementation Plan (SIP).
- b. These requirements apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) [the less than 10 tons per year BAT exemption] as part of the Ohio SIP.
- c. The emissions from P012 (HCl container filling with wet scrubber) shall be vented to a wet scrubber with a design efficiency of at least 95% control of HCl at all times the emissions unit is in operation.

c) Operational Restrictions

- (1) The permittee shall maintain the containers and transfer lines associated with this emissions unit using the following operational practices:
 - a. The containers may vent only to the wet scrubber during loading;
 - b. There shall be no leaks in the containers. The containers may be loaded via an open hatch only when the loading line is equipped with a shroud or other similar means at the loading point to prevent emissions;

- c. There shall be no leaks in the vapor and liquid lines during the transfer of HCl; and
- d. The permittee shall not permit HCl to be spilled, discarded into sewers, stored in open containers, or handled in any other manner that would result in evaporation.

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

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range or limit for the pressure drop across the scrubber, the liquid flow rate, and the liquid pH shall be based upon the following manufacturer's specifications until the required performance testing is conducted and the appropriate range or limit for each parameter is established to demonstrate compliance.
- (2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop across the scrubber (in pounds per square inch, water gauge), the scrubber liquid flow rate (in gallons per minute), and the scrubber liquid pH during operation of this emissions unit, including periods of startup and shutdown. The permittee shall record the pressure drop across the scrubber and the scrubber liquid's pH and flow rate on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for any parameter deviates from the range(s) or minimum limit(s) 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
- e. 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 control equipment parameters within the acceptable range(s), or at or above the minimum limit(s) 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:

- f. a description of the corrective action;
- g. the date the corrective action was completed;

- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop, flow rate, and pH readings immediately after the corrective action was implemented; and
- k. 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.

These range(s) and/or limit(s) for the pressure drop, liquid flow rate, and pH are 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 range or limit for the pressure drop, liquid flow rate, or pH based upon information obtained during future performance tests that demonstrate compliance with the allowable design efficiency of the control device(s) for this/these emissions unit(s). In addition, approved revisions to the range or 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.

- (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 a permittee to apply for and obtain a new or modified FEPTIO 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 FEPTIO.

e) Reporting Requirements

- (1) 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:
 - i. each period of time (start time and date, and end time and date) when the pressure drop across the scrubber, the liquid flow rate, or the liquid pH was outside of the appropriate range or limit specified by the manufacturer and/or outside of the acceptable range for each parameter following any required compliance demonstration;

- ii. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the scrubber; and
- iii. any period of time when the emissions unit was in operation and any of the operational practices as described in c)(1) were not followed.
- 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 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) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (3) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.

f) Testing Requirements

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



a. Emission Limitation/Control Measure:

The emissions from P012 (HCl container filling with wet scrubber) shall be vented to a wet scrubber with a design efficiency of at least 95% control of HCl at all times the emissions unit is in operation.

Applicable Compliance Method:

If required, emission testing shall be conducted to demonstrate compliance with the design efficiency requirement for HCl using Test Methods 1 through 4 and Method 26 or Method 26A of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

b. Emissions Limitation/Voluntary Restriction:

Emissions shall not exceed 0.16 ton of PE/PM10/PM2.5 per year.

Install a wet scrubber with a design removal efficiency of at least 95% for PE/PM10/PM2.5.

Applicable Compliance Methods:

PE/PM10/PM2.5 is acid particulate matter comprised of HCl. Compliance with the PE/PM10/PM2.5 emissions limitation may therefore be demonstrated through the recordkeeping requirements of the HCl emissions as calculated in Section B. of this permit.

If required, emission testing shall be conducted to demonstrate compliance with the design efficiency requirement for PE/PM10/PM2.5 using Test Methods 1 through 4 and Method 26A of 40 CFR Part 60, Appendix A. Sources, such as those controlled by wet scrubbers, that emit acid particulate matter must be sampled using Method 26A.

c. Emissions Limitation:

Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.



d. Emissions Limitation:

Emissions of PE shall not exceed 17.3 pounds per hour.

Applicable Compliance Method:

If required, emission testing shall be conducted to demonstrate compliance with the mass emissions limitation for PE using Test Methods 1 through 4 and Method 26A of 40 CFR Part 60, Appendix A. Sources, such as those controlled by wet scrubbers, that emit acid particulate matter must be sampled using Method 26A.

g) Miscellaneous Requirements

- (1) This emissions unit is not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Hydrochloric Acid Production in 40 CFR Part 63, Subpart NNNNN (40 CFR 63.8980 – 63.9075) since the facility does not consist of or constitute an “HCl production facility” as defined in §63.8985(a)(1). The Univar USA Inc. facility in Cincinnati, Ohio is an area (minor) source of hazardous air pollutant (HAP) emissions.

3. Emissions Unit Group -HCl Storage Tanks: T009,T010,

EU ID	Operations, Property and/or Equipment Description
T009	30,344 gallon vertical fixed roof fiberglass storage tank for 35% aqueous hydrochloric acid (HCl) at an existing chemical distribution facility
T010	30,454 gallon vertical fixed roof fiberglass storage tank for 31% aqueous hydrochloric acid (HCl) at an existing chemical distribution facility

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. b)(1)b.

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

a. b)(1)a., b)(1)c., b)(1)d., 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) June 30, 2008	Install a wet scrubber with a design removal efficiency of at least 95% for particulate emissions (PE), particulate matter 10 microns and less in diameter (PM10), and particulate matter 2.5 microns and less in diameter (PM2.5). See b)(2)a. below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii) June 30, 2008	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE/PM10/PM2.5 from these air contaminant sources since the calculated annual emission rate is less than 10 tons/yr. each taking into account the voluntary restriction from OAC rule 3745-



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		31-05(E). See b)(2)b. below.
c.	OAC rule 3745-31-05(E) June 30, 2008	Emissions shall not exceed 0.12 ton of PE/PM10/PM2.5 per year, T009 & T010, combined. Install a wet scrubber with a design removal efficiency of at least 95% for PE/PM10/PM2.5.
d.	OAC rule 3745-31-05(D) June 30, 2008 Synthetic Minor restricting facility-wide HAPs emissions to avoid Title V Operating Permit requirements.	See Section B.1.b)(1), C.3.b)(2)c., and c)(1).
e.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the stack serving these emissions units shall not exceed 20 percent opacity as a six-minute average, except as provided by rule. The presence of water vapor in the scrubber plume does not constitute visible emissions.
f.	OAC rule 3745-17-11(B), Table I	Emissions of PE from each tank shall not exceed 0.551 pound per hour.

(2) Additional Terms and Conditions

- a. This Best Available Technology (BAT) emission limit applies until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) [the less than 10 tons per year BAT exemption] into the Ohio State Implementation Plan (SIP).
- b. These requirements apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) [the less than 10 tons per year BAT exemption] as part of the Ohio SIP.
- c. The working (HCl input and output) operation emissions and breathing operation emissions associated with this emissions unit group (T009 and T010; 35% HCl storage tank and 31% HCl storage tank) shall be vented to a wet scrubber with a design efficiency of at least 95% control of HCl during filling operations, whereas breathing losses will be controlled by the pressure release valves (PRVs).

c) Operational Restrictions

- (1) The permittee shall maintain the tanks and transfer lines associated with this emissions unit group using the following operational practices:

- a. Any hatches shall be closed at all times during the loading of any storage tank within this emissions unit group;
- b. There shall be no leaks in the hatch covers;
- c. There shall be no leaks in the vapor and liquid lines during the transfer of HCl; and
- d. The permittee shall not permit HCl to be spilled, discarded into sewers, stored in open containers, or handled in any other manner that would result in evaporation.

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

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range or limit for the pressure drop across the scrubber, the liquid flow rate, and the liquid pH shall be based upon the following manufacturer's specifications until the required performance testing is conducted and the appropriate range or limit for each parameter is established to demonstrate compliance.
- (2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop across the scrubber (in pounds per square inch, water gauge), the scrubber liquid flow rate (in gallons per minute), and the scrubber liquid pH during operation of this emissions unit, including periods of startup and shutdown. The permittee shall record the pressure drop across the scrubber and the scrubber liquid's pH and flow rate on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for any parameter deviates from the range(s) or minimum limit(s) 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
- e. 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 control equipment parameters within the acceptable range(s), or at or above the minimum limit(s) 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:

- f. a description of the corrective action;
- g. the date the corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop, flow rate, and pH readings immediately after the corrective action was implemented; and
- k. 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.

These range(s) and/or limit(s) for the pressure drop, liquid flow rate, and pH are 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 range or limit for the pressure drop, liquid flow rate, or pH based upon information obtained during future performance tests that demonstrate compliance with the allowable design efficiency of the control device(s) for this/these emissions unit(s). In addition, approved revisions to the range or 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.

e) Reporting Requirements

(1) 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:
 - i. each period of time (start time and date, and end time and date) when the pressure drop across the scrubber, the liquid flow rate, or the liquid pH was outside of the appropriate range or limit specified by the manufacturer and/or outside of the acceptable range for each parameter following any required compliance demonstration;
 - ii. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the scrubber; and
 - iii. any period of time when the emissions unit was in operation and any of the operational practices as described in c)(1) were not followed.



- 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 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) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (3) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.

f) Testing Requirements

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

The emissions from this emissions unit group (T009 and T010) shall be vented to a wet scrubber with a design efficiency of at least 95% control of HCl during filling operations.



Applicable Compliance Method:

If required, emission testing shall be conducted to demonstrate compliance for this emissions unit group during tank filling operations. This emissions unit group (T009 and T010) is served by the same wet scrubber as the loading rack (J001). Thus, any emissions testing requirement for the storage tanks will be concurrent with the testing requirement for the loading rack, and vice versa.

b. Emissions Limitation/Voluntary Restriction:

Emissions shall not exceed 0.12 ton of PE/PM10/PM2.5 per year, T009 & T010, combined.

Install a wet scrubber with a design removal efficiency of at least 95% for PE/PM10/PM2.5.

Applicable Compliance Methods:

PE/PM10/PM2.5 is acid particulate matter comprised of HCl. Compliance with the PE/PM10/PM2.5 emissions limitation may therefore be demonstrated through the recordkeeping requirements of the HCl emissions as calculated in Section B. of this permit.

If required, emission testing shall be conducted to demonstrate compliance with the design efficiency requirement for PE/PM10/PM2.5 using Test Methods 1 through 4 and Method 26A of 40 CFR Part 60, Appendix A. Sources, such as those controlled by wet scrubbers, that emit acid particulate matter must be sampled using Method 26A.

c. Emissions Limitation:

Visible particulate emissions from the stack serving these emissions units shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

d. Emissions Limitation:

Emissions of PE from each tank shall not exceed 0.551 pound per hour.

Applicable Compliance Method:

If required, emission testing shall be conducted to demonstrate compliance with the mass emissions limitation for PE using Test Methods 1 through 4 and Method 26A of 40 CFR Part 60, Appendix A. Sources, such as those controlled by wet scrubbers, that emit acid particulate matter must be sampled using Method 26A.



Draft Permit-to-Install and Operate

UNIVAR USA, INC.

Permit Number: P0118725

Facility ID: 1409000588

Effective Date: To be entered upon final issuance

g) Miscellaneous Requirements

- (1) This emissions unit is not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Hydrochloric Acid Production in 40 CFR Part 63, Subpart NNNNN (40 CFR 63.8980 – 63.9075) since the facility does not consist of or constitute an “HCl production facility” as defined in §63.8985(a)(1). The Univar USA Inc. facility in Cincinnati, Ohio is an area (minor) source of hazardous air pollutant (HAP) emissions.