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

4/3/2013

Certified Mail

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

Thomas Steib
DETREX CORPORATION, ASHTABULA PLANT
1100 STATE RD
ASHTABULA, OH 44004

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

Facility ID: 0204010192
Permit Number: P0109305
Permit Type: Initial Installation
County: Ashtabula

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, The Star Beacon. 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
Permit Review/Development Section
Ohio EPA, DAPC
122 South Front Street
Columbus, Ohio 43215

and

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087

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 Ohio EPA DAPC, Northeast District Office at (330)425-9171.

Sincerely,

Michael W. Ahern

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

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
Ohio EPA-NEDO; Pennsylvania; Canada

PUBLIC NOTICE
4/3/2013 Issuance of Draft Air Pollution Permit-To-Install and Operate

DETREX CORPORATION, ASHTABULA PLANT
1100 STATE RD,
Ashtabula, OH 44004
Ashtabula County
FACILITY DESC.: All Other Basic Inorganic Chemical Manufacturing
PERMIT #: P0109305
PERMIT TYPE: Initial Installation
PERMIT DESC: Installation of (P103) hydrochloric acid (HCl) filling to drums & totes with a packed scrubber to control HCl emissions.

The Director of the Ohio Environmental Protection Agency issued the draft permit above. 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 permit # or: Christine McPhee, Ohio EPA DAPC, Northeast District Office, 2110 East Aurora Road, Twinsburg, OH 44087. Ph: (330)425-9171

Permit Strategy Write-Up

1. Check all that apply: Synthetic Minor Determination Netting Determination

2. Source Description: The facility is classified as a non-Title V facility and is considered an area HAP source. The SIC code is 2819 industrial inorganic chemicals and the NAICS is 325188 all other basic inorganic chemical manufacturing. The facility makes concentrated hydrochloric acid (HCl) at P101, sodium dialkydithiophosphate& zinc dialkydithiophosphate at P200, and light color/low odor sulfurized fats at P201. Concentrated HCl is made at P101, stored in tanks T107 –T109, T111, T113 – T115, T122, T151 and T153, and loaded out to trucks at J001. Additional HCl is transferred from the bulk storage tanks and packaged into smaller containers at P102 and P103.

3. Facility Emissions and Attainment Status: The current potential emissions are summarized in row 75 – 78 in the "Facility Totals" page of "Detrex Facility Wide Emissions 2-14-13-rev 1.xls, attached to appl. no. A0046398:

FACILITY- WIDE TOTAL POTENTIAL TO EMIT		
HAP or non-HAP	**Pollutant**	**Potential Emissions, Tons/Year**
HAP	HCl	0.878
HAP	Trichloroethylene (TCE)	0.21_
HAP	Tetrachloroethylene (perchloroethylene)	0.16_
HAP	1,1,2,2 Tetrachloroethane	0.55_
HAP	Combined HAPs	1.798
Non-HAP	Hydrogen sulfide, H_2S	0.15_
Non-HAP	Organic Compounds – non-HAP	73.357
Non-HAP	Particulate Emissions	1.742

The facility is located in Ashtabula Township in Ashtabula County, which is in non-attainment with the criteria pollutant standard for the 2008 8-hr standard of 0.075 ppm for O_3. Ashtabula township may be in non-attainment with the annual standard of 15 µg/m^3 for $PM_{2.5}$.

4. Source Emissions: Application nos. A0043501and A0046398 were received or amended to PTIO no. P0109305 to <u>install</u> P103.

5. Conclusion:
<u>Operating Parameters for Drum and Tote Acid Packed Scrubber</u>
Although the DAPC library permit terms recommend monitoring the differential pressure drop across the scrubber, it is not as critical for gaseous pollutants as it would be for control of PE. The facility profile in STARS2 notes that the drum & tote acid scrubber has a low differential pressure of >0 - 5 inches of water, which is preferred for control of HCl& chlorine (Cl_2) gases. The scrubber liquor temperature is typically 40^o -110^{o}F and may have a fair solubility up to 56.1 grams HCl/cm^3. The strong acid gas inflow will be absorbed into the scrubber liquor (water) until it reaches a concentration of 20% HCl, by weight, and will be acceptable since the saturation point is 37.5% HCl in water. Instead of monitoring the pH, the applicant proposed to perform an assay of the scrubber liquor for a determination of the HCl concentration, in percent by weight, at the start of the packaging process, which will be performed at least once per day. The "Assay procedure for HCl%" has been attached to application no. A0046398. The scrubber fluid flow will be monitored (continuously) and recorded once per shift.

Minor HAP Source
40 CFR 63.8985(a) states that a HCl production facility that produces a liquid HCl product of 30% or greater concentration and is located at a major HAP source is subject to the requirements of the NESHAP for Hydrochloric Acid Production in 40 CFR Part 63, Subpart NNNNN. However the facility-wide potential for HAP emissions is less than 10 tons/year for each single HAP and less than 25 tons/year for combined HAPs so that the Ashtabula plant of Detrex Corporation is an area (minor) HAP source. P103 is not subject to 40 CFR Part 63, Subpart NNNNN.

6. Please provide additional notes or comments as necessary: Please issue as draft PTIO P0109305 to make the annual emissions limit, with the use of control equipment, federally enforceable. The potential HAP emissions for P103 would then be the maximum, controlled emissions rate of 0.266 ton HCl/year.

   Simultaneous review of recommendation for a direct final PTIO P0084094 to renew J001 & P101 is requested.

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

Pollutant	Tons Per Year
HCl	0.266

DRAFT

Division of Air Pollution Control
Permit-to-Install and Operate
for
DETREX CORPORATION, ASHTABULA PLANT

Facility ID:	0204010192
Permit Number:	P0109305
Permit Type:	Initial Installation
Issued:	4/3/2013
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
DETREX CORPORATION, ASHTABULA PLANT

Table of Contents

Authorization

Facility ID:	0204010192
Application Number(s):	A0043501, A0043526, A0046398
Permit Number:	P0109305
Permit Description:	Installation of (P103) hydrochloric acid (HCl) filling to drums & totes with a packed scrubber to control HCl emissions.
Permit Type:	Initial Installation
Permit Fee:	$1,000.00*DO NOT send payment at this time, subject to change before final issuance*
Issue Date:	4/3/2013
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:

DETREX CORPORATION, ASHTABULA PLANT
1100 STATE RD
Ashtabula, OH 44004

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:

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(330)425-9171

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: P0109305
Permit Description: Installation of (P103) hydrochloric acid (HCl) filling to drums & totes with a packed scrubber to control HCl emissions.

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

Emissions Unit ID:	**P103**
Company Equipment ID:	Drum and Tote Filling
Superseded Permit Number:	
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 Ohio EPA DAPC, Northeast District Office 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[1] a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

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

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

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

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

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

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

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

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

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

B. Facility-Wide Terms and Conditions

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. P103, Drum and Tote Filling

Operations, Property and/or Equipment Description:

Hydrochloric acid (HCl) filling to drums and totes with a packed scrubber to control HCl emissions

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D)(1)(b) to limit the potential hazardous air pollutant (HAP) emissions and retain area source status for HAPs with the use of a federally enforceable control device.	The emissions of hydrochloric acid (HCl) from this emissions unit shall not exceed 0.266 ton per year from the stack egress and fugitive egress points, combined. See b)(2)a.

(2) Additional Terms and Conditions

a. The emissions from the stack egress associated with this emissions unit shall be vented to a packed scrubber at all times the emissions unit is in operation.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable scrubber liquid flow rate, that shall be maintained in order to demonstrate compliance, shall not be less than 4.5 gallons per minute.

(2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable hydrochloric acid concentration of the scrubber liquid, that shall be maintained in order to demonstrate compliance, shall not be more than twenty percent hydrochloric acid, 20% HCl, by weight.

(3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the scrubber liquid flow rate (in gallons per minute)during operation of this emissions unit, including periods of startup and shutdown.The permittee shall record the scrubber liquid flow rate on a once per shift 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.

(4) The permittee shall collect a representative sample of the scrubber liquid inflow at the beginning of the packaging operations on a daily basis. The permittee shall perform or have performed an assay on the scrubber liquid inflow and maintain records on the composition of the scrubber liquid outflow which shall contain the following information:

a. the date and time the sample was taken; and

b. the hydrochloric acid content of the sample, in percent by weight of hydrochloric acid.

The assay of the scrubber liquid inflow shall be determined as specified in f)(2).

(5) 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 scrubber liquid flow rate and assay 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 liquid flow rate and hydrochloric acid concentrationare effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA Northeast District Office. The permittee may request revisions to the permitted range or limit for the liquid flow rate or hydrochloric acid concentrationbased upon information obtained during future performance tests that demonstrate compliance with the allowable HCl emission rate for this emissions unit. 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 an administrative modification.

(6) 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 permit-to-install and operate (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) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPANortheast District Office 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. It is recommended that the PER is submitted electronically through the Ohio EPA’s “e-Business Center: Air Services” although PERs can be submitted via U.S. postal service or can be hand delivered.

(2) The permittee shall identify in the annual permit evaluation report the following information during the 12-month reporting period for this emissions unit:

a. each period of time (start time and date, and end time and date)when the scrubber liquid flow rate or the scrubber liquid hydrochloric acid concentrationwas outside of the appropriate range or limit specified by the manufacturer and outside of the acceptable range for each parameter following any required compliance demonstration;

b. any period of time (start time and date, and end time and date)when the emissions unit(s) was in operation and the process stack emissions were not vented to the scrubber;

c. each incident of deviation described in “a” or “b” (above) where a prompt investigation was not conducted;

d. each incident of deviation described in “a” or “b”where prompt corrective action, that would bring the scrubber liquid flow rateor assay into compliance with the appropriate range or limit contained in this permit, was determined to be necessary and was not taken; and

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

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. Emissions Limitation

The HCl emissions shall not exceed 0.266 ton/year from the stack egress and fugitive egress points, combined.

Applicable Compliance Method:

Compliance may be based on the following estimation methods:

i. Determination of the maximum, controlled daily emissions from the stack egress:

Compliance may be based on the following equation:

$HCl_{LOAD}(DAY) = Q \times L_L \times (1 - CE)$.

Where:

HCl_{LOAD}(DAY) = the estimated HCl emissions from loading operations exhausted to the stack egress, in lbs/day, which is estimated to be 1.4451 lbs/day.

Q = the maximum loading rate, which is 6600 gal HCl/dayas specified in the application for this PTIO.

L_L = the factor for uncontrolled loading loss emissions, which is calculated to be 2.1896 lbsHCl per 1000 gal HCl loaded as determined from Equation 1 found in of AP42, Chap. 5.2 (06/2008):

L_L = 12.46 x SPM/T.

where:

S = a saturation factor, which is 1.45for splash loading as found in Table 5.2-1, AP42 Chap. 5.2 (06/2008).

P = true vapor pressure of liquid loaded, pounds per square inch absolute (psia), which is 1.7 psia.

M = molecular weight of vapors, pounds per pound-mole (lb/lb-mole), which is 36.5 lbs/lb-mole.

T = temperature of bulk liquid loaded, °R (°F + 460), which is (52°F + 460) or 512°R.

CE = the efficiency of the control device as a decimal fraction, which is conservatively estimated to be at least 0.90 (90%) as specified in the application for this PTIO.

ii. Determination of the maximum, controlled, annual emissions from the stack egress:

HCl_{LOAD}(YR) = HCl_{LOAD}(DAY) x Days/year x ton HCl/2,000 lbsHCl.

Where:

HCl_{LOAD}(YR) = maximum emissions from the loading operation, in tons/year, which is estimated to be 0.2637ton HCl/year.

HCl_{LOAD}(DAY) = maximum, daily controlled pollutant emissions, in lbs/day, as specified in f)(1)a.i.; and

Days/year = the maximum annual operating days, which is 365days/year.

iii. Determination of the maximum, controlled, annual emissions from the fugitive egresses:

$HCl_{FUGITIVE}(YR) = \{\sum(F_{Ai} X WF_{HCl} x N_i)$kg HCl/hour}
xlbHCl/kg HCl x ton HCl/2000 lbsHClx 8760 hours/year.

Where:

$HCl_{FUGITIVE}(YR)$ = total fugitive HCl emissions from equipment leaks, which is estimated to be 0.002504 ton HCl/year (5.008311 lbsHCl/year), as determined from the average emission factor approach found in "Protocol for Equipment Leak Estimates" U.S. EPA, Office of Air Quality Planning and Standards, (EPA 453/R-95-017), November 1995, p. 2-11.

F_{Ai} = applicable average emission factor for the equipment type, in kg/hour/source, as found in Table 2-4 of "Protocol for Equipment Leak Estimates".

WF_{HCl}= average weight fraction of HCl in the exhaust streams;

N_i = number of pieces of equipment of the applicable equipment type in the stream.

iv. Determination of the maximum, controlled, annual emissions from the stack and fugitive egresses, combined:

Compliance may be based on the following equation:

$HCl_{TOTAL}(YR) = HCl_{LOAD}(YR) + HCl_{FUGITIVE}(YR)$.

Where:

$HCl_{TOTAL}(YR)$ = maximum emissions from stack and fugitive egresses, combined, in tons/year, which is estimated to be 0.266 ton HCl/year.

(2) The hydrochloric acid content in the scrubber liquid inflow shall be analyzed using the assay procedure, HCl Titration – DC_QC018, (10/21/04) or an alternative test protocol approved by the Ohio EPA. For an alternative test protocol request, the permittee shall submit a written request and receive approval from Ohio EPA before an alternative test method, not listed above, can be used for the hydrochloric acid content assay.

g) Miscellaneous Requirements

(1) HCl product transfer from a storage tank (e.g. T107-T109, T111, T113-T115, T119, T122, T151 or T153) to the loading ("filling") station associated with P103 will cease if the scrubber conditions (a scrubber liquid inflow of at least 36 gal/min and at least a pH of 6) for the packed bed scrubber, associated with J001, P101 and the aforementioned storage tanks, are not met within 10 minutes after the start of city water flow.

(2) The "drum and tote acid" packed scrubber associated with this emissions unit, P103, controls the HCl emissions from the loading operation.

(3) The Detrex Corporation, Ashtabula Plant is an area (minor) source of hazardous air pollutant (HAP) emissions. This source 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).