



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

10/7/2013

Certified Mail

Peter Askew
USALCO Fairfield Plant, LLC
1120 Middle River Road
Baltimore, MD 21220

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

Facility ID: 1409030215
Permit Number: P0114920
Permit Type: Initial Installation
County: Butler

| | |
|-----|------------------------------------|
| No | TOXIC REVIEW |
| Yes | 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 |

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

and Southwest Ohio Air Quality Agency
250 William Howard Taft Rd.
Cincinnati, OH 45219

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

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



Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description:

USALCO Fairfield Plant, LLC is a manufacturing site for aluminum based coagulants, primarily used for municipal potable water treatment. The only air emissions unit currently operated by the facility is one natural-gas fired boiler (emissions unit B001).

This permitting action (P0114920) is an initial installation for a new 23,000 Gallon Basic Aluminum Chloride Digester (emissions unit P003). Emissions from emissions unit P003 will consist of hydrochloric acid (HCl) emissions, which is a hazardous air pollutant (HAP). The HCl emissions will be controlled by a venturi scrubber and packed tower scrubber. The requirements regarding HCl emissions will be represented by the particulate emission (PE) limitation in this permitting action. The uncontrolled potential to emit HCl emissions is greater than the Title V applicability thresholds of 10 tons per year (TPY) for an individual HAP and 100 TPY for PE. The uncontrolled potential to emit HCl emissions is also greater than the New Source Review (NSR) applicability threshold of 100 TPY for PE for a chemical process plant (one of the twenty-eight source categories) in an attainment area. The control equipment controls the emissions of HCl to emission levels less than the emission threshold levels that trigger Title V and NSR applicability.

3. Facility Emissions and Attainment Status:

USALCO Fairfield Plant, LLC is located in Butler County, Ohio, which is currently non-attainment for ozone (8-hour standard) and attainment for all other criteria pollutants. USALCO Fairfield Plant is currently a minor source of air emissions. The uncontrolled potential emissions for new emissions unit P003 would trigger both Title V and NSR applicability. USALCO Fairfield Plant has accepted facility-wide emission restrictions on HAP emissions and emissions unit specific emission restrictions on PE (in this case, HCL is a HAP which is deemed to be PE as mentioned above) in order to avoid Title V and NSR applicability. The emissions are restricted by the use of control equipment.

4. Source Emissions:

Ohio Administrative Code (OAC) rule 3745-31-05(A)(3), as effective November 30, 2001, applies to emissions unit P003 for PE until U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 for Ohio's State Implementation Plan (SIP). Best available technology (BAT) is considered the use of a venturi scrubber and packed tower scrubber. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 for Ohio's SIP, OAC rule 3745-31-05(A)(3)(b), as effective December 1, 2006, will apply for PE for emissions unit P003 based on the controlled potential to emit for this pollutant being less than 10 tons per year (TPY) based upon the premise that the control devices will obtain at least a 99.9% control efficiency and a uncontrolled outlet value of 206.74 pounds per hour at 8760 hours per year with both parametric monitoring of the control devices and PE mass emission recordkeeping and reporting requirements along with hourly operating and number of batches produced



aluminum based coagulants that result in HCL emissions being emitted recordkeeping and reporting requirements by emissions unit P003.

5. Conclusion:

The facility will have a Synthetic Minor designation. The facility has accepted federally enforceable emission limitations for HAP emissions and PE, and a federally enforceable requirement to employ a venturi scrubber and packed tower scrubber to control those emissions from emissions unit P003 at specified control efficiency.

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> |
|------------------|----------------------|
| PE | 0.91 |
| Single HAP | 9.9 |
| Combined HAPs | 24.9 |

PUBLIC NOTICE
10/7/2013 Issuance of Draft Air Pollution Permit-To-Install and Operate

USALCO Fairfield Plant, LLC
3700 DIXIE HIGHWAY,
Fairfield, OH 45014

Butler County

FACILITY DESC.: All Other Basic Inorganic Chemical Manufacturing

PERMIT #: P0114920

PERMIT TYPE: Initial Installation

PERMIT DESC: Initial installation of a 23,000-gallon basic aluminum chloride digester.

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/permitonline.aspx> by entering the permit # or: Paul Tedtman, Southwest Ohio Air Quality Agency, 250 William Howard Taft Rd., Cincinnati, OH 45219. Ph: (513)946-7777



DRAFT

**Division of Air Pollution Control
Permit-to-Install and Operate
for
USALCO Fairfield Plant, LLC**

| | |
|----------------|-----------------------------------|
| Facility ID: | 1409030215 |
| Permit Number: | P0114920 |
| Permit Type: | Initial Installation |
| Issued: | 10/7/2013 |
| 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
USALCO Fairfield Plant, LLC

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Draft Permit-to-Install and Operate

USALCO Fairfield Plant, LLC

Permit Number: P0114920

Facility ID: 1409030215

Effective Date: To be entered upon final issuance

Authorization

Facility ID: 1409030215
Application Number(s): A0048052
Permit Number: P0114920
Permit Description: Initial installation of a 23,000-gallon basic aluminum chloride digester.
Permit Type: Initial Installation
Permit Fee: \$1,000.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 10/7/2013
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:

USALCO Fairfield Plant, LLC
3700 DIXIE HIGHWAY
Fairfield, OH 45014

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

Scott J. Nally
Director



Draft Permit-to-Install and Operate

USALCO Fairfield Plant, LLC

Permit Number: P0114920

Facility ID: 1409030215

Effective Date: To be entered upon final issuance

Authorization (continued)

Permit Number: P0114920

Permit Description: Initial installation of a 23,000-gallon basic aluminum chloride digester.

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

| | |
|-----------------------------------|----------------|
| Emissions Unit ID: | P003 |
| Company Equipment ID: | BACS-1, PT-1 |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |



Draft Permit-to-Install and Operate

USALCO Fairfield Plant, LLC

Permit Number: P0114920

Facility ID: 1409030215

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

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

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

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



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

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

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

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

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

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



Draft Permit-to-Install and Operate

USALCO Fairfield Plant, LLC

Permit Number: P0114920

Facility ID: 1409030215

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 (12.55 mmBtu/hr Natural Gas-Fired Boiler), P003 (23,000 Gallon Basic Aluminum Chloride Digester), any de minimis emissions units as defined in OAC rule 3745-15-05, any registration status and/or permit exempt emissions units, or future constructed emissions units, shall not exceed 9.9 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.:
 - a) the name and identification number of each HAP containing material employed;
 - c) the identification of each individual HAP contained in each material employed;
 - d) the HAP emission factor for each individual HAP and each type of operation;
 - e) the number of batches employing HAP containing material;
 - f) the total operating time for production employing HAP containing material, in hours;
 - g) the total individual HAP emissions for each HAP from all sources, in pounds or tons per month;
 - h) the total combined HAP emissions from all sources, in pounds or tons per month [the summation of the individual HAP emissions from f) above];
 - i) the updated rolling, 12-month summation of the individual HAP emissions for each HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months; and
 - j) the updated rolling, 12-month summation of the combined HAP emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting Southwest Ohio Air Quality Agency. This information does not have to be kept on an individual emissions unit basis.



Draft Permit-to-Install and Operate

USALCO Fairfield Plant, LLC

Permit Number: P0114920

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4. The permittee shall submit quarterly deviation reports which identify any exceedance of the HAP emission limitations outlined in 2. If no exceedances occurred, the permittee shall state so in the report. The reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters (October through December, January through March, April through June, and July through September, respectively).

5. Emission Limitation:

HAP emissions shall not exceed 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 listed in 2.

Applicable Compliance Method:

Compliance with the HAP emission limitations in 2. shall be demonstrated by the record keeping requirements specified in 3.



Draft Permit-to-Install and Operate

USALCO Fairfield Plant, LLC

Permit Number: P0114920

Facility ID: 1409030215

Effective Date: To be entered upon final issuance

C. Emissions Unit Terms and Conditions



1. P003, BACS-1, PT-1

Operations, Property and/or Equipment Description:

23,000 Gallon Basic Aluminum Chloride Digester

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

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

a. d)(6).

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

a. b)(1)c., b)(2)c., b)(2)d., d)(1), d)(3), d)(5), e)(1), and f)(1)a.

b) Applicable Emissions Limitations and/or Control Requirements

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

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|---|--|
| a. | OAC rule 3745-31-05(A)(3), as effective 11/30/2001 | The permittee shall install a venturi scrubber and packed tower scrubber with an overall design control efficiency of at least 99.9% control of particulate emissions (PE). See b)(2)a. |
| b. | OAC rule 3745-31-05(A)(3)(b), as effective 12/1/2006 | See b)(2)b. |
| c. | OAC rule 3745-31-05(D) <i>Synthetic Minor to Avoid Title V and New Source Review Applicability</i> | See b)(2)c., b)(2)d., d)(1), d)(3), d)(5), e)(1), f)(1)a, Sections B.2., B.3., B.4, and B.5. |



| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|-------------------------------|--|
| d. | 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. |
| e. | OAC rule 3745-17-11(B)(1) | Particulate emissions (PE) shall not exceed 23.8 pounds per hour. |

(2) Additional Terms and Conditions

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

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

Federally Enforceable Permit to Install and Operate (FEPTIO) P0114920 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment), as proposed by the permittee, for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

i. for particulate emissions (PE): the emissions from this emissions unit shall be vented to the venturi scrubber and packed tower scrubber at all times the emissions unit is in operation.

c. Particulate emissions (PE) shall not exceed 0.91 ton per year (TPY), based upon a rolling, 12-month summation of the monthly emissions.

To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the emission levels specified in the following table:



| <u>Month(s)</u> | <u>Maximum Allowable Cumulative Particulate Emissions (tons)</u> |
|-----------------|--|
| 1 | 0.09 |
| 1-2 | 0.18 |
| 1-3 | 0.27 |
| 1-4 | 0.36 |
| 1-5 | 0.46 |
| 1-6 | 0.55 |
| 1-7 | 0.64 |
| 1-8 | 0.73 |
| 1-9 | 0.82 |
| 1-10 | 0.91 |
| 1-11 | 0.91 |
| 1-12 | 0.91 |

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual emission limitation shall be based upon a rolling, 12-month summation of the monthly emissions.

- d. The emissions from this emissions unit shall be vented to the venturi scrubber and packed tower scrubber at all times the emissions unit is in operation.
- c) Operational Restrictions
- (1) None.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall maintain monthly records of the following information:
 - a. the amount of PE from this emissions unit, in pounds or tons; and
 - b. the updated rolling, 12-month summation of PE* from this emissions unit, in tons. (This shall include the information for the current month and the preceding eleven months). During the first 12 calendar months of operation, the permittee shall record the updated cumulative PE, in tons, for each calendar month.

*All PE are hydrochloric acid emissions.



- (2) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. The presence of water vapor in the scrubber plume does not constitute visible emissions. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (3) 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 each scrubber, the liquid flow rate for each scrubber, and the liquid pH for the packed tower scrubber shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate range for each parameter is established to demonstrate compliance.
- (4) The permittee shall maintain a record of the maintenance, along with manufacturer's operating recommendations, on each scrubber.
- (5) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop across each scrubber (in inches of water column), the scrubber liquid flow rate for each scrubber (in gallons per minute), and the scrubber liquid pH for the packed tower scrubber during operation of this emissions unit, including periods of startup and shutdown. The permittee shall record the pressure drop across each scrubber and the scrubber liquid's pH for the packed tower scrubber and flow rate for each scrubber 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. The acceptable liquid flow rate for each scrubber and the liquid pH for the packed tower scrubber shall be based upon the manufacturer's



specifications until such time as any required performance testing is conducted and the appropriate range for each parameter is established to demonstrate compliance.

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 particulate 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 of 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 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. all exceedances of the rolling, 12-month emission limitation (or monthly cumulative emission limitation for the first 12 months of operation) for PE outlined in b)(2)c.;
 - ii. all exceedances of the rolling, 12-month emission limitations for HAPs outlined in Section B.2.;
 - iii. 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; and
 - iv. 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 venturi scrubber and packed tower scrubber.
- b. the probable cause of each deviation (excursion);
- c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- d. the magnitude and duration of each deviation (excursion).

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



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

(2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA e-Business Center: Air Services 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.

a. The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in d)(2) above:

i. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and

ii. any corrective actions taken to minimize or eliminate the visible particulate emissions.

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

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:

Particulate emissions (PE) shall not exceed 0.91 ton per year (TPY), based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Method:

Compliance with the rolling, 12-month PE limitation in b)(2)c. shall be determined by the record keeping in d)(1).

Potential PE (hydrochloric acid) for this emissions unit were determined based on the following equation from the permittee-supplied information in FEPTIO application P0114920 as submitted on June 4, 2013:

$$PE = (206.74 \text{ lbs of PE/hr uncontrolled worst case emission rate derived from stack test data for similar unit}) \times (8760 \text{ hrs/year}) \times (1 - .999 \text{ control efficiency for venturi scrubber and packed tower scrubber control}) / (2000 \text{ lbs/ton}) = 0.91 \text{ TPY.}$$



Draft Permit-to-Install and Operate

USALCO Fairfield Plant, LLC

Permit Number: P0114920

Facility ID: 1409030215

Effective Date: To be entered upon final issuance

b. Emission Limitation:

Visible particulate emissions from the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule. The presence of water vapor in the scrubber plume does not constitute visible emissions.

Applicable Compliance Method:

Compliance with the stack visible particulate emission limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

c. Emission Limitation:

Particulate emissions (PE) shall not exceed 23.8 pounds per hour based upon a maximum hourly throughput of 13.79 tons and Table I listed in OAC rule 3745-17-11.

Applicable Compliance Method:

If required, compliance shall be determined through emission testing performed in accordance with U.S. EPA Methods 1-4 and 26. Particulate emissions for this emissions unit are in the form of hydrochloric acid emissions.

g) Miscellaneous Requirements

(1) None.