



2/26/2014

Certified Mail

Mr. Joe Payne  
Cargill, Incorporated - Salt Division (Akron, OH)  
2065 Manchester Road  
Akron, OH 44314-1770

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL

Facility ID: 1677010027  
Permit Number: P0115784  
Permit Type: Initial Installation  
County: Summit

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
Yes	NSPS
No	NESHAPS
Yes	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
No	MAJOR GHG
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 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, Akron Beacon Journal. 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](http://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  
50 West Town Street, Suite 700  
P.O. Box 1049  
Columbus, Ohio 43216-1049

and Akron Regional Air Quality Management District  
146 South High Street, Room 904  
Akron, OH 44308

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Akron Regional Air Quality Management District at (330)375-2480.

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  
ARAQMD; Pennsylvania; West Virginia; Canada



PUBLIC NOTICE  
Issuance of Draft Air Pollution Permit-To-Install  
Cargill, Incorporated - Salt Division (Akron, OH)

Issue Date: 2/26/2014  
Permit Number: P0115784  
Permit Type: Initial Installation  
Permit Description: Title V PTI for the installation of a new 180.97 MMBtu/hr natural gas-fired boiler (B008) to replace four existing coal-fired boilers (B001-B004) and one existing natural gas-fired boiler (B006). Emissions offsets were used to avoid major NANSR/PSD.  
Facility ID: 1677010027  
Facility Location: Cargill, Incorporated - Salt Division (Akron, OH)  
2065 Manchester Road,  
Akron, OH 44314-1770  
Facility Description: All Other Miscellaneous Chemical Product and Preparation Manufacturing

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: Kelly Kanoza, Akron Regional Air Quality Management District, 146 South High Street, Room 904, Akron, OH 44308. Ph: (330)375-2480





## Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

X Netting Determination

2. **Source Description:** Cargill, Incorporated - Salt Division (Cargill) owns and operates a salt processing facility in Akron, Ohio. With this application Cargill is requesting a permit to install (PTI) for a new natural gas-fired boiler (B008) to replace four existing coal-fired boilers (B001-B004) and one existing natural gas-fired boiler (B006) in order to increase the plant's energy efficiency and avoid major source applicability under 40 CFR Part 63, Subpart DDDDD (Boiler MACT). The new boiler has a maximum heat input capacity of 180.97 million British thermal units per hour (MMBtu/hr), and is equipped with low-NO<sub>x</sub> burners and flue gas recirculation.
  
3. **Facility Emissions and Attainment Status:** Cargill's Akron Plant is located in Summit County, Ohio, which is currently in attainment for all criteria air pollutants, with the exception of the 8-hour ozone standards. The facility operates under a Title V permit, therefore, the proposed installation of the new natural gas-fired boiler is subject to the Title V program. Cargill's facility-wide potential to emit (PTE) is greater than 250 tons of nitrogen oxides (NO<sub>x</sub>) per year, and, as such, the facility is considered to be a major source with respect to nonattainment new source review (NANSR) for ozone. NANSR permitting is applicable if the proposed project results in NO<sub>x</sub> or VOC emissions increases exceeding the major NSR significant emission rates (SERs) of 40 tons per year (tpy). In addition, the facility-wide PTE for greenhouse gases (GHGs) represented as carbon dioxide equivalents (CO<sub>2</sub>e) is greater than 100,000 tpy. The facility would be subject to regulation under the Prevention of Significant Deterioration (PSD) program if the proposed project results in an increase of CO<sub>2</sub>e emissions greater than 75,000 tpy. Cargill is requesting that the shutdown of the five existing boilers (B001-B004, and B006) be made federally enforceable through this permitting action to avoid triggering NANSR permitting for ozone and PSD permitting for all other regulated NSR pollutants and GHGs.
  
4. **Source Emissions:** The new boiler (B008) will emit air pollutants associated with natural gas combustion, including (but not limited to) the following: nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), particulate matter (PM), sulfur dioxide (SO<sub>2</sub>), volatile organic compounds (VOC), hazardous air pollutants (HAP), lead (Pb), and greenhouse gases (GHGs) represented as carbon dioxide equivalents (CO<sub>2</sub>e).

### Summary of Project Emission Increase

Pollutant	Annual Emissions (tons)								
	NO <sub>x</sub>	CO	PM	SO <sub>2</sub>	VOC	Pb	CO <sub>2</sub> e	Individual HAP	Combined HAP
New Boiler (B008)	79.3	65.3	5.9	0.5	4.3	3.9E-04	92,748	1.4	1.5
Major NSR SER	40	100	25	40	40	0.6	75,000	-	-



The installation of B008 results in emissions increases of NO<sub>x</sub> and CO<sub>2</sub>e greater than the major NSR SERs. As such, a full, 5-year contemporaneous netting analysis for NO<sub>x</sub> and CO<sub>2</sub>e was conducted in accordance with the provisions of OAC 3745-31-01(TTT) to demonstrate that NANSR/PSD permitting is not required when the change in emissions from the shutdown of the five existing boilers (B001-B004 and B006) is taken into account. The contemporaneous time period for the proposed project extends approximately from April 2009 to January 2015. The period begins five years prior to the start of the construction period, which is scheduled for April 2014. The end of the contemporaneous period is when the project will begin normal operation, which is planned for January 2015.

NO<sub>x</sub> and CO<sub>2</sub>e Emissions Offsets

Pollutant	NO <sub>x</sub>	CO <sub>2</sub> e
Period of Baseline Actual Emissions (calendar years)	2010-2011	2006-2007
Average Baseline Actual Emissions from Existing Boilers B001-B004 and B006 (tpy)	139.4	101,588
Potential Emissions from New Boiler B008 (tpy)	79.3	92,748
Net Emissions Change (tpy)	-60.2	-8,840
Major NSR SER (tpy)	40	75,000

5. Conclusion: The installation of new boiler B008 and federally-enforceable shutdown of existing boilers (B001-B004 and B006) will result in a net decrease in emissions of criteria pollutants relative to those that were previously emitted at the facility. Thus, Cargill will not trigger NANSR or PSD permitting provisions regulated under Ohio Administrative Code (OAC) chapters 3745-31 and 3745-34. Issuance of PTI P0115784 is recommended.
6. Please provide additional notes or comments as necessary: Following the implementation of the boiler replacement project, Cargill anticipates that emissions for all pollutants at the facility will fall below the applicable Title V thresholds. Cargill will address this transition with a Permit to Install and Operate (PTIO) application to replace the existing Title V permit after the completion of the project.
7. Total Permit Allowable Emissions Summary (for informational purposes only):

<u>Pollutant</u>	<u>Tons Per Year</u>
NO <sub>x</sub>	79.3
CO	65.3
PM	5.9
VOC	4.3
SO <sub>2</sub>	0.5



**DRAFT**

**Division of Air Pollution Control  
Permit-to-Install**

for

**Cargill, Incorporated - Salt Division (Akron, OH)**

Facility ID:	1677010027
Permit Number:	P0115784
Permit Type:	Initial Installation
Issued:	2/26/2014
Effective:	To be entered upon final issuance





**Division of Air Pollution Control**  
**Permit-to-Install**  
for  
Cargill, Incorporated - Salt Division (Akron, OH)

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**Draft Permit-to-Install**  
Cargill, Incorporated - Salt Division (Akron, OH)  
**Permit Number:** P0115784  
**Facility ID:** 1677010027  
**Effective Date:** To be entered upon final issuance

## Authorization

Facility ID: 1677010027  
Facility Description:  
Application Number(s): A0048490  
Permit Number: P0115784  
Permit Description: Title V PTI for the installation of a new 180.97 MMBtu/hr natural gas-fired boiler (B008) to replace four existing coal-fired boilers (B001-B004) and one existing natural gas-fired boiler (B006). Emissions offsets were used to avoid major NANSR/PSD.  
Permit Type: Initial Installation  
Permit Fee: \$500.00 *DO NOT send payment at this time, subject to change before final issuance*  
Issue Date: 2/26/2014  
Effective Date: To be entered upon final issuance

This document constitutes issuance to:

Cargill, Incorporated - Salt Division (Akron, OH)  
2065 Manchester Road  
Akron, OH 44314-1770

of a Permit-to-Install 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:

Akron Regional Air Quality Management District  
146 South High Street, Room 904  
Akron, OH 44308  
(330)375-2480

The above named entity is hereby granted a Permit-to-Install for the 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 emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler  
Director



**Draft Permit-to-Install**  
Cargill, Incorporated - Salt Division (Akron, OH)  
**Permit Number:** P0115784  
**Facility ID:** 1677010027  
**Effective Date:** To be entered upon final issuance

## Authorization (continued)

**Permit Number:** P0115784  
**Permit Description:** Title V PTI for the installation of a new 180.97 MMBtu/hr natural gas-fired boiler (B008) to replace four existing coal-fired boilers (B001-B004) and one existing natural gas-fired boiler (B006). Emissions offsets were used to avoid major NANSR/PSD.

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

<b>Emissions Unit ID:</b>	<b>B008</b>
Company Equipment ID:	Natural Gas Boiler
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



**Draft Permit-to-Install**  
Cargill, Incorporated - Salt Division (Akron, OH)  
**Permit Number:** P0115784  
**Facility ID:** 1677010027  
**Effective Date:** To be entered upon final issuance

## **A. Standard Terms and Conditions**



## **1. Federally Enforceable Standard Terms and Conditions**

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
  - (1) Standard Term and Condition A.2.a), Severability Clause
  - (2) Standard Term and Condition A.3.c) through A. 3.e) General Requirements
  - (3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements
  - (4) Standard Term and Condition A.9., Reporting Requirements
  - (5) Standard Term and Condition A.10., Applicability
  - (6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install
  - (7) Standard Term and Condition A.14., Public Disclosure
  - (8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
  - (9) Standard Term and Condition A.16., Fees
  - (10) Standard Term and Condition A.17., Permit Transfers

## **2. Severability Clause**

- a) A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.
- b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

## **3. General Requirements**

- a) Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.



- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

#### **4. Monitoring and Related Record Keeping and Reporting Requirements**

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
  - (1) The date, place (as defined in the permit), and time of sampling or measurements.
  - (2) The date(s) analyses were performed.
  - (3) The company or entity that performed the analyses.
  - (4) The analytical techniques or methods used.
  - (5) The results of such analyses.
  - (6) The operating conditions existing at the time of sampling or measurement.
- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
  - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Akron Regional Air Quality Management District.



- (2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Akron Regional Air Quality Management District. The written reports shall be submitted quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.
  - (3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the Akron Regional Air Quality Management District every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
  - (4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

## 5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Akron Regional Air Quality Management District in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

## 6. Compliance Requirements

- a) 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 appropriate Ohio EPA District Office or contracted



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 electronic signature date shall constitute the date that the required application, notification or report is considered to be "submitted". Any document requiring signature may be represented by entry of the personal identification number (PIN) by responsible official as part of the electronic submission process or by the scanned attestation document signed by the Authorized Representative that is attached to the electronically submitted written report.

Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a Responsible Official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete

- b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
  - (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
  - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
  - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c) The permittee shall submit progress reports to the Akron Regional Air Quality Management District concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
  - (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

## **7. Best Available Technology**

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.



**8. Air Pollution Nuisance**

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

**9. Reporting Requirements**

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Akron Regional Air Quality Management District.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Akron Regional Air Quality Management District. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

**10. Applicability**

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s) not exempt from the requirement to obtain a Permit-to-Install.

**11. Construction of New Sources(s) and Authorization to Install**

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the



Director within a reasonable time before the termination date and the permittee shows good cause for any such extension.

- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., 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) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as "permanently shut down" in "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update electronically will constitute notifying the Director of the permanent shutdown of the affected emissions unit(s).
- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., 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). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

Unless otherwise exempted, no emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31 and OAC Chapter 3745-77 if the restarted operation is subject to one or more applicable requirements.

- e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

## **12. Permit-To-Operate Application**

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if operation of the proposed new or modified source(s) as authorized by this permit would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d) must be obtained before operating the source in a manner that would violate the existing Title V permit requirements.



**13. Construction Compliance Certification**

The applicant shall identify the following dates in the "Air Services" facility profile for each new emissions unit identified in this permit.

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.
- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

**14. Public Disclosure**

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

**15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations**

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

**16. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

**17. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the "Owner/Contact Change" functionality in "Air Services" once the transfer is legally completed. The change must be submitted through "Air Services" within thirty days of the ownership transfer date.

**18. Risk Management Plans**

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

**19. Title IV Provisions**

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.



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**Effective Date:** To be entered upon final issuance

## **B. Facility-Wide Terms and Conditions**



1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
  - a) None.
2. Permit to install (PTI) P0115784 shall cover the installation of one natural gas-fired boiler rated at a maximum heat input capacity of 180.97 MMBtu/hr. The new boiler (B008) will replace the steam generating requirements of four existing coal-fired boilers (B001-B004) and one existing natural gas-fired boiler (B006) that currently provide steam to the plant. The permittee shall permanently shut down all five existing boilers (B001-B004, and B006) once the new boiler (B008) is available for operation and determined to be reliable, within a 180-day shake-down period.

These shutdowns are required for the purpose of netting out of Non-Attainment New Source Review (NANSR), Prevention of Significant Deterioration (PSD), and corresponding Ohio Administrative Code (OAC) provisions for nitrogen oxides NO<sub>x</sub> and greenhouse gases (GHGs) represented as carbon dioxide equivalents (CO<sub>2e</sub>). This section will address only NO<sub>x</sub> and CO<sub>2e</sub> emissions, as the project emission increases for all remaining regulated NSR pollutants are below the major NSR significant emission rates (SERs). In order to ensure that the emissions of NO<sub>x</sub> and CO<sub>2e</sub> do not exceed the allowable emission rates described in the netting table below, the permittee must comply with the limitations specified in the emissions unit's terms and conditions under Section C of this permit.

The following table demonstrates the net decrease in NO<sub>x</sub> and CO<sub>2e</sub> emissions from the proposed project. Note that during the contemporaneous period, Cargill's Akron Plant will not have undergone any changes resulting in an increase or decrease in potential emissions (other than the proposed shutdown of the existing boilers). Thus, the only facility changes considered in the netting analysis were the shutdowns of the four existing coal-fired boilers (B001-B004) and the one existing natural gas-fired boiler (B006), as outlined above. The contemporaneous time period for the proposed project extends approximately from April 2009 to January 2015. The period begins five years prior to the start of the construction period, which is scheduled for April 2014. The end of the contemporaneous period is when the project will begin normal operation, which is planned for January 2015.

Table of Cargill's NO<sub>x</sub> and CO<sub>2e</sub> Emissions Offsets

	NO <sub>x</sub>	CO <sub>2e</sub>
Period of Baseline Actual Emissions (calendar years)	2010-2011	2006-2007
Average Baseline Actual Emissions (tpy)	139.4	101,588
Potential Emissions from New Boiler Installation (tpy)	79.3	92,748
Net Emissions Change (tpy)	-60.2	-8,840
Major NSR SER (tpy)	40	75,000

[OAC rule 3745-77-07(A)(11)] and [OAC rule 3745-77-07(B)]

3. The following emissions units contained in this permit are subject to the New Source Performance Standards (NSPS) for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR Part 60, SubpartDb: B008. The complete NSPS requirements, including the General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website



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<http://ecfr.gpoaccess.gov> or by contacting the Akron Regional Air Quality Management District (ARAQMD).

[40 CFR Part 60, Subpart Db]



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## **C. Emissions Unit Terms and Conditions**



**1. B008, Natural Gas Boiler**

**Operations, Property and/or Equipment Description:**

180.97 MMBtu/hr natural gas-fired boiler with a heat release rate of 93.3 MMBtu/hr-ft<sup>3</sup>

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) 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.	ORC 3704.03(T)	<p>The permittee shall install a boiler that is designed to achieve 0.10 pound (lb) of nitrogen oxide (NO<sub>x</sub>) per million British thermal units (MMBtu) of heat input using low NO<sub>x</sub> burners and flue gas recirculation.</p> <p>The permittee shall install a boiler that is designed to achieve 84 pounds (lbs) of carbon monoxide (CO) per million standard cubic feet (MMscf) of natural gas fired.</p> <p>See b)(2)a., c)(1) and c)(2)</p>
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/2001	<p>The permittee shall install a boiler that is designed to achieve the following:</p> <p>7.6 lbs of particulate emissions (PE) per MMscf of natural gas fired;</p> <p>5.5 lbs of volatile organic compounds (VOC) per MMscf of natural gas fired; and</p> <p>0.6 lb of sulfur dioxide (SO<sub>2</sub>) per MMscf of natural gas fired.</p> <p>See b)(2)a., b)(2)b., c)(1) and c)(2)</p>
c.	OAC rule 3745-31-05(A)(3), as effective 12/01/2006	See b)(2)c. and c)(1)
d.	OAC rule 3745-17-07(A)(1)	Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	OAC rule 3745-17-10(B)(1)	0.020 lb PE/MMBtu of actual heat input See b)(2)c.
f.	OAC rule 3745-18-06(A)	Exempt. See b)(2)d.
g.	OAC rule 3754-110-03(C)	0.10 lb NO <sub>x</sub> /MMBtu
h.	40 CFR Part 60, Subpart Db (40 CFR 60.40b – 60.49b)	0.20 lb NO <sub>x</sub> /MMBtu [40 CFR 60.44b(a)(1)(ii)] The emission limitation specified by this standard is less stringent than the limitation established pursuant to OAC rule 3745-110-03(C). See b)(2)e.
i.	40 CFR Part 60, Subpart A (40 CFR 60.1 – 60.19)	General Provisions

(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) requirements under ORC 3704.03(T) and OAC rule 3745-31-05(A)(3) are based on the source’s design characteristics. .

[OAC rule 3745-77-07(A)(1)]

- b. The permittee has satisfied the 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 the emission limitations/control measures for PE, VOC, and SO<sub>2</sub> no longer apply.

[OAC rule 3745-31-05(A)(3)] and [OAC rule 3745-77-07(A)(1)]

- c. The following 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:



- i. the Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE, VOC, and SO<sub>2</sub> emissions from this air contaminant source since the potential to emit for PE, VOC, and SO<sub>2</sub>, individually, is less than 10 tons per year; and
- ii. the requirements of OAC rule 3745-17-10(B)(1) become effective.

[OAC rule 3745-31-05(A)(3)] and [OAC rule 3745-77-07(A)(1)]

- d. Fuel burning equipment is exempt from paragraphs (D), (F) and (G) of this rule and from rules 3745-18-07 to 3745-18-94 of the Administrative Code during any calendar day in which natural gas is the only fuel burned.

[OAC rule 3745-18-06(A)] and [OAC rule 3745-77-07(A)(1)]

- e. In accordance with 40 CFR 60.40b(a), emissions unit B008 is a steam generating unit constructed after June 19, 1984, with a heat input capacity greater than 100 MMBtu/hr, and is subject to the emissions limitations/control measures specified in this section.

- i. Pursuant to 40 CFR 60.42b(k)(2), units firing only gaseous fuel are exempt from the sulfur dioxide (SO<sub>2</sub>) emissions limit in §60.42b(k)(1).
- ii. Emissions unit B008 is not subject to the particulate matter (PM) emission limits or opacity limits established under 40 CFR 60.43b since coal, oil, wood, or mixtures of these fuels with any other fuels are not combusted in this unit.
- iii. The permittee shall comply with the applicable standards for nitrogen oxides (NO<sub>x</sub>) required under 40 CFR Part 60, Subpart Db, including the following sections:

60.44b(a)	Standards for NO <sub>x</sub>
60.44b(h) and 60.46b(a)	NO <sub>x</sub> standards apply at all times, including periods of startup, shutdown, or malfunction
60.44b(i)	Compliance with NO <sub>x</sub> emission limits is determined on a 30-day rolling average basis

c) Operational Restrictions

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

[OAC rule 3745-77-07(A)(1)]

- (2) The permittee shall operate and maintain this emissions unit following the manufacturer's recommendations in order to ensure the source continues to operate as designed.



[OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

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

[OAC rule 3745-77-07(A)(3)(b)]

- (2) The permittee shall keep records of any maintenance activities performed on this emissions unit along with the manufacturer's recommendations.

[OAC rule 3745-77-07(A)(3)(b)]

- (3) The permittee shall comply with the applicable monitoring and recordkeeping requirements under 40 CFR Part 60, Subpart Db, including the following sections:

60.48b(b)(1) and (c) through (f)	Continuous emissions monitoring system (CEMS)
60.48b(g)(2)	Monitoring alternative to CEMS
60.49b(d)(1)	Records of amount of fuel combusted each day and the annual capacity factor calculation
60.49b(g)	Records for units subject to NO <sub>x</sub> standards
60.49b(o)	Record retention period

e) Reporting Requirements

- (1) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - Standard Terms and Conditions, Section A of this permit.

[OAC rule 3745-77-07(A)(3)(c)]

- (2) The permittee shall submit semiannual written reports that identify any days during which a fuel other than natural gas was burned in this emissions unit, including the type and quantity of fuel. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or Local Air Agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

[OAC rule 3745-77-07(A)(3)(c)]

- (3) The permittee shall comply with the applicable reporting requirements under 40 CFR Part 60, Subpart Db, including the following sections:

60.49b(a)	Initial startup notification
60.49b(b)	Performance test data



60.49b(c)	Plan for monitoring provisions of §60.48b(g)(2)
60.49b(h)	Excess emission reports
60.49b(i)	Reports of information recorded under §60.49b(g)

f) Testing Requirements

- (1) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. 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.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable NSPS Subpart Db mass emission rate of 0.20 lb NO<sub>x</sub>/MMBtu, in the appropriate averaging period.
  - c. A 30-day performance test using the continuous system for monitoring NO<sub>x</sub> shall be employed to demonstrate compliance with the allowable mass emission rate in accordance with 40 CFR 60.46b(e).
  - d. 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.
  - e. 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).
  - f. 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.



- g. 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.

[40 CFR 60.8], [40 CFR 60.46b(c) and (e)], and [OAC rule 3745-77-07(C)(1)]

- (2) 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:

Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule. [OAC rule 3745-17-07(A)(1)]

Applicable Compliance Method:

If required, compliance with the opacity limitation identified above shall be determined by visible emissions observations performed in accordance with U.S. EPA Method 9 of 40 CFR Part 60, Appendix A.

[OAC rule 3745-17-03(B)(1)] and [OAC rule 3745-77-07(C)(1)]

- b. Emission Limitation:

0.020 lb PE/MMBtu of actual heat input [OAC rule 3745-17-10(B)(1)]

Applicable Compliance Methods:

Compliance with the allowable particulate emission limitation identified above shall be demonstrated by dividing the emission factor for natural gas combustion of 7.6 lb PE/10<sup>6</sup>scf(AP-42, Table 1.4-2, dated 7/98) by 1,020 to convert to lb/MMBtu.

If required, compliance with the lb PE/MMBtu emission limitation above shall be determined through stack testing performed in accordance with U.S. EPA Methods 1 through 5 of 40 CFR Part 60, Appendix A, and the procedures specified in OAC rule 3745-17-03(B)(9).

[OAC rule 3745-17-03(B)(9)] and [OAC rule 3745-77-07(C)(1)]



c. Emission Limitation:

0.10 lb NO<sub>x</sub>/MMBtu [OAC rule 3745-110-03(C)]

Applicable Compliance Method:

Compliance with the allowable NO<sub>x</sub> emission limitation identified above shall be determined by a 24-hour daily heat input-weighted average calculated from the data measured and recorded by the continuous emissions monitor required in section d)(4). A 30-day rolling heat input-weighted average emission rate may be used to demonstrate compliance with the emission limit from October 1<sup>st</sup> to April 30<sup>th</sup>.

The permittee shall determine the 24-hour daily heat input-weighted average NO<sub>x</sub> emission rate based on the heat input-weighted average of the block hourly arithmetic average emission rates during each 24-hour daily period from 12 a.m. to 12 a.m. the following day using continuous emissions monitor data. The block hourly heat input-weighted average emission rate must be calculated for each one-hour period starting with the period 12 a.m. to 1 a.m. and continuing through until the last period 11 p.m. to 12 a.m.; or, starting with the period 12 p.m. to 1 p.m. and continuing through the last period 11 a.m. to 12 p.m. The 30-day rolling heat input-weighted average must be the average of the 24-hour daily heat input-weighted NO<sub>x</sub> emission rate.

[OAC rule 3745-110-03(H)(2)] and [OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.