



State of Ohio Environmental Protection Agency

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2/22/2010

Certified Mail

Robert Counselman  
Campbell Soup Company  
Campbell Soup Supply Company LLC  
12-773 State Route 110  
Napoleon, OH 43545

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL  
Facility ID: 0335010105  
Permit Number: P0105688  
Permit Type: Initial Installation  
County: Henry

Yes	TOXIC REVIEW
No	PSD
Yes	SYNTHETIC MINOR
Yes	CEMS
Yes	MACT
Yes	NSPS
No	NESHAPS
Yes	NETTING
No	MAJOR NON-ATTAINMENT
Yes	MODELING SUBMITTED

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 EPA Weekly Review and the local newspaper, Northwest-Signal. A copy of the public notice and the draft permit are enclosed. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page <http://www.epa.ohio.gov> in Microsoft Word and Adobe Acrobat format. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

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

and Ohio EPA DAPC, Northwest District Office  
347 North Dunbridge Road  
Bowling Green, OH 43402

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 Ohio EPA DAPC, Northwest District Office at (419)352-8461.

Sincerely,

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

Cc: U.S. EPA  
Ohio EPA-NWDO; Michigan; Indiana; Canada





## Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description:

Campbell is proposing to replace existing natural gas fired boilers #5 (B007), #6 (B008) and #7 (B009) with a package natural gas boiler. The new boiler will be internally identified by Campbell as Gas-Oil-Unit 1. The Ohio EPA identification for the boiler will be B012. The new boiler will provide 150,000 pounds of steam per hour and has a rated input capacity of 180 MMBtu/hr. The boiler will be equipped with a condenser to recover energy that would normally be lost to the atmosphere. The primary fuel for the boiler will be natural gas. Additionally, the boiler will have the capability of firing #2 fuel oil, for backup, in the event of a natural gas curtailment. Boiler emissions will be emitted through some combination of the condenser stack or the boiler stack depending on condenser operation.

3. Facility Emissions and Attainment Status:

Campbell currently operates pursuant to a Title V operating permit number P0087212. The company also took voluntary restrictions and a netting analysis to avoid PSD significance levels. The facility is located in Henry County which is in attainment for all criteria pollutants.

4. Source Emissions:

Emission limits will be set for each fuel to be used (natural gas and #2 fuel oil). The company is requesting voluntary emission limits/restrictions in order to avoid PSD significance levels. Emission limits will be based off of manufacturer guarantees and AP-42 emission factors. Natural gas will be the predominant fuel to be used in this boiler but the company would like to have the flexibility to use #2 fuel oil in case of a natural gas curtailment (possibly in December through March). The company is requesting a voluntary restriction on the fuel sulfur content and annual fuel oil usage to avoid PSD significance levels.

### Natural Gas

$$\begin{aligned} \text{NOx} &= (0.04 \text{ lbs/mmBtu})(180 \text{ mmBtu/hr}) = 7.20 \text{ lbs/hr} && \text{(manufacturer guarantee)} \\ &= (7.20 \text{ lbs/hr})(8760 \text{ hr/yr})(1 \text{ ton}/2000 \text{ lbs}) = 31.54 \text{ tons/yr} \end{aligned}$$

$$\begin{aligned} \text{CO} &= (0.075 \text{ lbs/mmBtu})(180 \text{ mmBtu/hr}) = 13.50 \text{ lbs/hr} && \text{(manufacturer guarantee)} \\ &= (13.50 \text{ lbs/hr})(8760 \text{ hr/yr})(1 \text{ ton}/2000 \text{ lbs}) = 59.13 \text{ tons/yr} \end{aligned}$$

$$\begin{aligned} \text{PE} &= (0.015 \text{ lbs/mmBtu})(180 \text{ mmBtu/hr}) = 2.70 \text{ lbs/hr} && \text{(manufacturer guarantee)} \\ &= (2.70 \text{ lbs/hr})(8760 \text{ hr/yr})(1 \text{ ton}/2000 \text{ lbs}) = 11.83 \text{ tons/yr} \end{aligned}$$

All PE is assumed to be PM10

$$\begin{aligned} \text{SO}_2 &= (0.6 \text{ lbs}/10^6 \text{ scf})(1 \text{ scf}/1020 \text{ mmBtu})(180 \text{ mmBtu/hr}) = 0.11 \text{ lbs/hr} \\ &= (0.11 \text{ lbs/hr})(8760 \text{ hr/yr})(1 \text{ ton}/2000 \text{ lbs}) = 0.48 \text{ tons/yr} \end{aligned}$$

(AP-42,Chapter 1 Table 4-2, 7/98)

$$\begin{aligned} \text{VOC} &= (5.5 \text{ lbs}/10^6 \text{ scf})(1 \text{ scf}/1020 \text{ mmBtu})(180 \text{ mmBtu/hr}) = 0.97 \text{ lbs/hr} \\ &= (0.97 \text{ lbs/hr})(8760 \text{ hr/yr})(1 \text{ ton}/2000 \text{ lbs}) = 4.25 \text{ tons/yr} \end{aligned}$$

(AP-42,Chapter 1 Table 4-2, 7/98)

#2 Fuel Oil – Actual – based on a 2,142,833 gallon usage restriction

$$\begin{aligned} \text{NOx} &= (0.12 \text{ lbs/mmBtu})(180 \text{ mmBtu/hr}) = 21.60 \text{ lbs/hr} \quad (\text{manufacturer guarantee}) \\ &= (21.60 \text{ lbs/hr})(\text{hr}/1260.49 \text{ gal})(2,142,833 \text{ gal/yr})(1 \text{ ton}/2000 \text{ lbs}) = 18.36 \text{ tons/yr} \end{aligned}$$

$$\begin{aligned} \text{CO} &= (0.037 \text{ lbs/mmBtu})(180 \text{ mmBtu/hr}) = 6.66 \text{ lbs/hr} \quad (\text{manufacturer guarantee}) \\ &= (6.66 \text{ lbs/hr})(\text{hr}/1260.49 \text{ gal})(2,142,833 \text{ gal/yr})(1 \text{ ton}/2000 \text{ lbs}) = 5.66 \text{ tons/yr} \end{aligned}$$

$$\begin{aligned} \text{PE} &= (0.020 \text{ lbs/mmBtu})(180 \text{ mmBtu/hr}) = 3.60 \text{ lbs/hr} \quad (\text{manufacturer guarantee}) \\ &= (3.60 \text{ lbs/hr})(\text{hr}/1260.49 \text{ gal})(2,142,833 \text{ gal/yr})(1 \text{ ton}/2000 \text{ lbs}) = 3.06 \text{ tons/yr} \end{aligned}$$

$$\begin{aligned} \text{SO}_2 \text{ EF} &= (157S), \text{ where } S = 0.0015\%, = (157)(0.0015) = 0.236 \text{ lbs}/1000 \text{ gal} \\ &= (0.236 \text{ lbs}/1000 \text{ gal})(1260.49 \text{ gal/hr}) = 0.30 \text{ lbs/hr} \\ &= (0.30 \text{ lbs/hr})(\text{hr}/1260.49 \text{ gal})(2,142,833 \text{ gal/yr})(1 \text{ ton}/2000 \text{ lbs}) = 0.26 \text{ tons/yr} \\ &(\text{AP-42,Chapter 1 Table 3-1, 9/98}) \end{aligned}$$

$$\begin{aligned} \text{VOC} &= (0.252 \text{ lbs}/1000 \text{ gal})(1260.49 \text{ gal/hr}) = 0.32 \text{ lbs/hr} \\ &= (0.32 \text{ lbs/hr})(\text{hr}/1260.49 \text{ gal})(2,142,833 \text{ gal/yr})(1 \text{ ton}/2000 \text{ lbs}) = 0.27 \text{ tons/yr} \\ &(\text{AP-42,Chapter 1 Table 3-1, 9/98}) \end{aligned}$$

PSD Netting Analysis

The following is a table that summarizes the potential emissions (using #2 fuel oil, worst-case) from the new boiler compared to the actual emissions from the three (3) old boilers which will be de-commissioned.

Pollutant	Old Boilers	B012 – New Boiler	Net Change (TPY)	PSD Significance Level
NOx	4.74	94.61	89.87	40
CO	3.20	29.17	25.93	100
PE	0.34	15.77	15.43	25
SO <sub>2</sub>	0.06	1.31	1.25	40
VOC	0.25	4.25	4.00	40

The company would like to avoid PSD significance levels by requesting federally enforceable restrictions on the annual gallon usage of #2 fuel oil. The predominant fuel for this boiler is natural gas and the company is only choosing to use #2 fuel oil as a backup in the event sufficient natural gas is not available. With the annual gallon request of 2,142,833 gallons (equivalent to 1700 hours), the potential emissions of NOx, PE and SO<sub>2</sub> will be the greatest when the #2 fuel oil is used at the maximum allowable and natural gas makes up the remainder of the operating year (equivalent to 7060 hours). The potential for CO and VOC will be at the greatest when operating on natural gas for 8760 hrs/yr. Therefore for this analysis, the net change in emissions will be based off of the potential emissions of natural gas and #2 fuel oil combustion, at the worst case operating schedule, for NOx, PE and SO<sub>2</sub> or, a full operating schedule on natural gas for CO and VOC.

The following table represents the potential emissions of natural gas and #2 fuel oil combustion, as described above, compared to the actual emissions from the three (3) old boilers which will be decommissioned. (**Worst case = natural gas at 7060 hrs, #2 fuel oil at 2,142,833 gallons for NOx, PE and SO<sub>2</sub> or natural gas at 8760 hrs for CO and VOC**)

Pollutant	Old Boilers	B012 – New Boiler	Net Change (TPY)	PSD Significance Level
NOx	4.74	43.75	39.00	40

<b>CO</b>	3.20	59.13	55.93	100
<b>PE</b>	0.34	12.59	12.25	25
<b>SO<sub>2</sub></b>	0.06	0.65	0.58	40
<b>VOC</b>	0.25	4.25	4.00	40

The following table represents the historical data, provided by the company, used to establish largest, two-year averages in order to determine the actual emissions per year of the old boilers. The total is the summation of the two year averages from each of the boilers, divided by two, with the purpose of getting an annual average.

<b>Boiler ID</b>	<b>NOx</b>	<b>CO</b>	<b>PE</b>	<b>SO<sub>2</sub></b>	<b>VOC</b>	<b>OC</b>
	<b>2001-2002</b>	<b>2002-2003</b>	<b>2000-2001</b>	<b>2007-2008</b>	<b>2000-2001</b>	<b>2007-2008</b>
<b>Boiler 5 (B007)</b>	6.32	3.09	0.42	0.02	0.31	0.29
<b>Boiler 6 (B008)</b>	1.63	1.12	0.02	0.01	0.02	0.12
<b>Boiler 7 (B009)</b>	1.53	0.73	0.23	0.09	0.17	0.21
<b>Total</b>	4.74 TPY	3.20 TPY	0.34 TPY	0.06 TPY	0.25 TPY	0.34 TPY

5. Conclusion:

With the voluntary restrictions proposed by the company and the netting analysis, the installation of this boiler will not trigger PSD significance levels. Therefore, a PSD review is not required.

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>
NOx	43.75
CO	59.13
PE	12.59
VOC	4.25
SO <sub>2</sub>	0.65

PUBLIC NOTICE  
Issuance Of Draft Air Pollution Permit-To-Install  
Campbell Soup Company

Issue Date: 2/22/2010

Permit Number: P0105688

Permit Type: Initial Installation

Permit Description: The purpose of this permit is for the initial installation of a 180 mmBtu/hr, natural gas fired steam boiler. The boiler will have #2 fuel oil capabilities along with a continuous emissions monitor.

Facility ID: 0335010105

Facility Location: Campbell Soup Company

Campbell Soup Company LLC, 12-773 State Route 110  
Napoleon, OH 43545

Facility Description: Specialty Canning

Chris Korleski, Director of the Ohio Environmental Protection Agency, 50 West Town Street, Columbus Ohio, has issued a draft action of an air pollution control permit-to-install (PTI) for an air contaminant source at the location identified above on the date indicated. Installation of the air contaminant source may proceed upon final issuance of the PTI. Comments concerning this draft action, or a request for a public meeting, must be sent in writing no later than thirty (30) days from the date this notice is published. All comments, questions, requests for permit applications or other pertinent documentation, and correspondence concerning this action must be directed to Donald Waltermeyer at Ohio EPA DAPC, Northwest District Office, 347 North Dunbridge Road or (419)352-8461. The permit can be downloaded from the Web page: [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc)





**State of Ohio Environmental Protection Agency  
Division of Air Pollution Control**

**DRAFT**

**Air Pollution Permit-to-Install  
for  
Campbell Soup Company**

Facility ID: 0335010105  
Permit Number: P0105688  
Permit Type: Initial Installation  
Issued: 2/22/2010  
Effective: To be entered upon final issuance





State of Ohio Environmental Protection Agency  
 Division of Air Pollution Control

**Air Pollution Permit-to-Install**  
 for  
 Campbell Soup Company

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State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Draft Permit-to-Install**

**Permit Number:** P0105688

**Facility ID:** 0335010105

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

## Authorization

Facility ID: 0335010105

Facility Description:

Application Number(s): A0037948

Permit Number: P0105688

Permit Description: The purpose of this permit is for the initial installation of a 180 mmBtu/hr, natural gas fired steam boiler. The boiler will have #2 fuel oil capabilities along with a continuous emissions monitor.

Permit Type: Initial Installation

Permit Fee: \$1,000.00 *DO NOT send payment at this time, subject to change before final issuance*

Issue Date: 2/22/2010

Effective Date: To be entered upon final issuance

This document constitutes issuance to:

Campbell Soup Company  
Campbell Soup Company LLC  
12-773 State Route 110  
Napoleon, OH 43545

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

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

Ohio EPA DAPC, Northwest District Office  
347 North Dunbridge Road  
Bowling Green, OH 43402  
(419)352-8461

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

Chris Korleski  
Director



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Draft Permit-to-Install**

**Permit Number:** P0105688

**Facility ID:** 0335010105

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

## Authorization (continued)

Permit Number: P0105688

Permit Description: The purpose of this permit is for the initial installation of a 180 mmBtu/hr, natural gas fired steam boiler. The boiler will have #2 fuel oil capabilities along with a continuous emissions monitor.

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>B012</b>
Company Equipment ID:	Gas-Oil - Unit 1
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Draft Permit-to-Install**

**Permit Number:** P0105688

**Facility ID:** 0335010105

**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 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) The permittee must comply with all terms and conditions of this permit. 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 Ohio EPA DAPC, Northwest District Office.



(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 Ohio EPA DAPC, Northwest District Office. The written reports shall be submitted (i.e., postmarked) 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 (i.e., postmarked) to the Ohio EPA DAPC, Northwest District Office 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 Ohio EPA DAPC, Northwest District Office 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) The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

b) 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.

c) 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.
- d) The permittee shall submit progress reports to the Ohio EPA DAPC, Northwest District Office 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 Ohio EPA DAPC, Northwest District Office.
- 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 Ohio EPA DAPC, Northwest District Office. 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



(i.e., postmarked) 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).

**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 party 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 through completion of the annual PER covering the last period of operation 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 PER covering the last period the emissions unit operated.



No emissions unit certified by the authorized official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

- e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a PER, 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 the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

**13. Construction Compliance Certification**

The applicant shall identify the following dates in the online 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 (i.e., postmarked), 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.



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Draft Permit-to-Install**

**Permit Number:** P0105688

**Facility ID:** 0335010105

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

**17. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Ohio EPA DAPC, Northwest District Office must be notified in writing of any transfer of this permit.

**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.



State of Ohio Environmental Protection Agency  
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## **B. Facility-Wide Terms and Conditions**



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Draft Permit-to-Install**

**Permit Number:** P0105688

**Facility ID:** 0335010105

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

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.



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Draft Permit-to-Install**

**Permit Number:** P0105688

**Facility ID:** 0335010105

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

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



**1. B012, Gas-Oil – Unit 1**

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

180 mmBtu/hr, Natural Gas fired steam boiler, equipped with #2 fuel oil backup and continuous emissions monitor (CEM)

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) b)(1)i., b)(2)e., b)(2)f., d)(7), d)(8), d)(9) and e)(5)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(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. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D)	<u>Emissions from Natural Gas Use:</u>  7.20 pounds nitrogen oxides (NOx) per hour;  13.50 pounds of carbon monoxide (CO) per hour;  2.70 pounds of particulate matter 10 microns or less in size (PM10) per hour  See b)(2)a.  <u>Emissions from #2 Fuel Oil Use:</u>  21.60 pounds NOx per hour;  6.66 pounds CO per hour;  3.60 pounds PM10 per hour;  18.36 tons NOx/rolling, 12-month period  5.66 tons CO/rolling, 12-month period  3.06 tons PE/rolling, 12-month period  See (b)(2)a. and (b)(2)b.
b.	OAC rule 3745-31-05(A)(3)(a)(ii)	See b)(2)e.
c.	ORC 3704.03(T)	See b)(2)f.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-07(A)	See b)(2)c.
e.	OAC rule 3745-17-10(B)(1)	See b)(2)g.
f.	OAC rule 3745-18-06(D)	See b)(2)g.
g.	OAC rule 3745-110-03(C)	See b)(2)g.
h.	OAC rule 3745-114-01 ORC 3704.03(F)	See d)(7) through d)(9)
i.	40 CFR Part 60, Subpart Db (40 CFR 60.40b – 60.49b)	See b)(2)d., b)(2)h., and b)(2)i.
j.	40 CFR 63, Subpart DDDDD (40 CFR 63.7480 – 7575)	See b)(2)k.

(2) Additional Terms and Conditions

a. This permit establishes the following federally enforceable emission limitations for purposes of limiting potential to emit (PTE) to avoid Prevention of Significant Deterioration (PSD). The federally enforceable emission limitations are based on the operational restrictions contained in c)(1) and c)(3) which limit fuel usage type and require burner design performance specifications for each fuel:

i. emission limitation for natural gas fuel use:

- (a) 7.20 pounds NOx per hour;
- (b) 13.50 pounds CO per hour;
- (c) 2.70 pounds PM10 per hour.

All emissions of particulate matter from the use of natural gas are PM10.

The federally enforceable emission limitations established above for the use of natural gas result in an annual PTE of 31.54 tons for NOx, 59.13 tons for CO, and 11.83 tons for PM10. Annual PTE levels were determined by multiplying the federally enforceable pound per hour emission limitations by a maximum operating schedule of 8,760 hours per year and dividing by 2,000 pounds per ton.

ii. emission limitation for #2 fuel oil use:

- (a) 21.60 pounds NOx per hour;
- (b) 6.66 pounds CO per hour;
- (c) 3.60 pounds PM10 per hour.

All emissions of particulate matter from the use #2 fuel oil are PM10.



The annual PTE for emissions from the use of #2 fuel oil are limited further by additional federally enforceable requirements on #2 fuel usage [see c)(4)]

- b. This permit establishes the following additional federally enforceable emission limitations for purposes of limiting the annual PTE for emissions associated with the use of #2 fuel oil. The federally enforceable emission limitations are based on the operational restrictions contained in c)(2)4. which restrict #2 fuel oil usage:
  - i. 18.36 tons NO<sub>x</sub> per rolling, 12-month period;
  - ii. 5.66 tons CO per rolling, 12-month period;
  - iii. 3.06 tons PM<sub>10</sub> per rolling, 12-month period.
- c. Visible particulate emissions while burning natural gas shall not exceed 20 percent opacity as a six-minute average, except as provided by rule. The visible particulate emission limitation by 40 CFR Subpart Db is more stringent than OAC rule 3745-17-07(A) during #2 fuel oil use [see b)(2)d.]
- d. Visible particulate emissions while burning #2 fuel oil shall not exceed 20 percent opacity as a six-minute average, except for one 6-minute per hour of not more than 27%.
- e. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a) do not apply to the volatile organic compound (VOC) and sulfur dioxide (SO<sub>2</sub>) emissions from this air contaminant source taking into account the following restriction established in this permit which results in emissions for each pollutant of less than 10 tons per year:
  - i. fuel type and usage restrictions;
  - ii. sulfur content restrictions

[Note: The worst case operating scenario for VOC emissions has been determined to be when the boiler is operated on natural gas at a rate of 8760 hrs/yr. The worst case operating scenario for SO<sub>2</sub> emissions has been determined to be when the boiler is operated at the maximum #2 fuel oil annual usage allowable in c)(4) and natural gas operated during the remainder of the year]

The potential to emit for VOC emissions from natural gas combustion is calculated based upon an emission factor of 5.5 lbs/10<sup>6</sup> scf [AP-42 Chapter 1.4 – Table 1.4-2, 07/98] multiplied by a conversion factor of 10<sup>6</sup> scf/1020 mmBtu by a maximum heat input of 180 mmBtu/hr by an operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton (4.25 TPY).

The potential to emit for SO<sub>2</sub> emissions from #2 fuel oil combustion is calculated based upon an emission factor of (157S) lbs/1000 gal [AP-42 Chapter 1.4 – Table 1.4-2, 07/98], where S = the fuel sulfur content in percent by weight (0.0015) multiplied by a maximum annual fuel usage of 2,142,833 gal/yr and divided by 2000 lbs/ton (0.26 TPY)



[Note: The gallon usage restriction in c)(3) is equivalent to 1700 hours based upon a maximum hourly fuel input of 1260.49 gal/hr]

plus, the emissions from natural gas combustion is calculated based upon an emission factor of 0.6 lbs/10<sup>6</sup> scf [AP-42 Chapter 1.4 – Table 1.4-2, 07/98] multiplied by a conversion factor of 10<sup>6</sup> scf/1020 mmBtu by a maximum heat input of 180 mmBtu/hr by an operating schedule of 7060 hrs/yr and dividing by 2000 lbs/ton (0.39 TPY).

- f. The BAT requirements under ORC 3704.03(T) have been determined to be compliance with the pound per mmBtu limitations established under OAC rule 3745-31-05(D).
- g. The emission limitation established by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(D).
- h. Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous NOx monitoring system, designed to ensure continuous valid and representative readings of NOx emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous NOx monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

- i. This emissions unit is subject to a case-by-case MACT determination pursuant to section 112(j) of the Clean Air Act (CAA) due to the June 8, 2007 D.C. Circuit Court of Appeals decision to vacate the Boiler MACT (40 CFR Part 63, Subpart DDDDD).

If notified by the Ohio EPA or U.S. EPA, the permittee shall submit an application for a revision to this Title V permit that meets the requirements of 40 CFR 63.52(a)(2) pertaining to case-by-case MACT determinations. The 30-day clock for submittal of a 112(j) application does not begin until such notification is made by Ohio EPA or U.S. EPA.

- j. Prevention of Significant Deterioration (PSD) requirements for particulate matter equal to or less than 2.5 microns in size (PM2.5) are being implemented through the PM10 Surrogate Policy issued by EPA in 1997. For purposes of demonstrating that PM10 is a reasonable surrogate for PM2.5, all emissions of PM10 will be considered PM2.5.

c) Operational Restrictions

- (1) The permittee shall only burn natural gas or #2 fuel oil in this emissions unit.



- (2) The #2 fuel oil combusted in this emissions unit shall only be #2 fuel oil, as defined by the American Society for Testing and Materials in ASTM D396-78, 89, 90, 92, 96, or 98, "Standard Specification for Fuel Oils". The sulfur content of the #2 fuel oil shall contain no more than 0.0015 percent, by weight.
  
- (3) The following operational restrictions are being established for purposes of establishing federally enforceable requirements which limit PTE [see b)(2)a.]. Emissions from the boiler shall meet the following burner design performance specifications as guaranteed by the burner manufacturer:
  - a. for natural gas fuel use:
    - i. 0.04 pound NOx per mmBtu;
    - ii. 0.075 pound CO per mmBtu;
    - iii. 0.015 pound PM10 per mmBtu.
  - b. for #2 fuel oil use:
    - i. 0.12 pound NOx per mmBtu;
    - ii. 0.037 pound CO per mmBtu;
    - iii. 0.020 pound PM10 per mmBtu.
  
- (4) The following operational restrictions are being established for purposes of establishing federally enforceable requirements which limit PTE [see b)(2)b.].
  - a. The maximum #2 fuel oil usage for this emissions unit shall not exceed 2,142,833 gallons per year, based upon a rolling, 12-month summation of the monthly fuel usage.
  - b. To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the fuel usage levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Usage of #2 fuel oil (gallons)
1	907,200
1-2	1,360,800
1-3	1,814,400
1-4	1,869,000
1-5	1,923,600
1-6	2,032,800
1-7	2,087,400
1-12	2,142,833

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual fuel usage limitation for #2 fuel oil shall be based upon a rolling, 12-month summation of the monthly emissions.



d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas or #2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
- (2) For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the fuel oil type (number 2, 4, or 6), the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods, such as D240 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter and D4294, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, or equivalent methods as approved by the Director.

- (3) In lieu of the requirements of d)(2) for the sulfur content of #2 fuel oil, the permittee may keep records of fuel oil supplier certification, which shall include the following information:
  - a. The name of the oil supplier.
  - b. A statement from the oil supplier that the oil complies with the specifications under the definition of 'distillate oil' in 40 CFR 60.41c.
  - c. The sulfur content of the oil.
- (4) The permittee shall maintain monthly records of the following information:
  - a. the monthly amount of #2 fuel oil burned, in gallons;
  - b. the rolling, 12-month summation of the fuel usage rates burned, in gallons;
  - c. the monthly NO<sub>x</sub>, CO and PM<sub>10</sub> emissions, in tons; and
  - d. the rolling, 12-month summation of NO<sub>x</sub>, CO and PM<sub>10</sub> emissions while burning #2 fuel oil.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative fuel usage for each calendar month.

- (5) Prior to the installation of the continuous NO<sub>x</sub> monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specifications 2 for approval by the Ohio EPA, Central Office. The Ohio EPA, Central Office shall



approve the proposed sampling site and certify that the continuous NO<sub>x</sub> monitoring system meets the requirements of Performance Specification 2. Once received, the letter/document of certification shall be maintained on-site and shall be made available to the director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

- (6) The permittee shall install, operate, and maintain equipment to continuously monitor and record NO<sub>x</sub> emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Parts 60.

The permittee shall maintain records of data obtained by the continuous NO<sub>x</sub> monitoring system including, but not limited to:

- a. emissions of NO<sub>x</sub> in parts per million on an instantaneous (one-minute) basis;
- b. emissions of NO<sub>x</sub> in all units of the applicable standard(s) in the appropriate averaging period;
- c. results of quarterly cylinder gas audits;
- d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);
- f. hours of operation of the emissions unit, continuous NO<sub>x</sub> monitoring system, and control equipment;
- g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NO<sub>x</sub> monitoring system;
- h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NO<sub>x</sub> monitoring system; as well as,
- i. the reason (if known) and the corrective actions taken (if any) for each such event in d)(6)g. and d)(6)h.

- (7) The permit to install application for this emissions unit(s), B012, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA



approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled “Review of New Sources of Air Toxic Emissions, Option A”, as follows:

- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
  - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists’ (ACGIH) “Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices”; or
  - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists’ (ACGIH) “Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices”; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., “24” hours per day and “7” days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

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

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or “worst case” toxic contaminant(s):

Toxic Contaminant: Hexane

TLV (mg/m<sup>3</sup>): 176.237 mg/m<sup>3</sup>

Maximum Hourly Emission Rate (lbs/hr): 0.32 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 2.1 ug/m<sup>3</sup>

MAGLC (ug/m<sup>3</sup>): 4,196 ug/m<sup>3</sup>

The permittee, has demonstrated that emissions of Hexane, from emissions unit(s) B012, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be



applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

- (8) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
  - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

- (9) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):
- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
  - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
  - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and



- d. the documentation of the initial evaluation of compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or #2 fuel oil was burned in the emissions unit. These reports shall be submitted to Ohio EPA, Northwest District Office (NWDO) within 30 days after the deviation occurs.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify:
  - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
    - i. all exceedances of the rolling, 12-month fuel oil usage limitation for this emissions unit; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative fuel usage;
    - ii. all exceedances of the rolling, 12-month NO<sub>x</sub>, CO and PM<sub>10</sub> emission limitations; and
    - iii. all exceedances of the #2 fuel oil sulfur restriction.
  - 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).

- (3) Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:



- a. construction date (no later than 30 days after such date);
- b. actual start-up date (within 15 days after such date); and
- c. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio EPA, Northwest District Office  
Division of Air Pollution Control  
347 N. Dunbridge Rd.  
Bowling Green, Ohio 43402

- (4) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NOx monitoring system:
  - a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of NOx emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-23, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.
  - b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
    - i. the facility name and address;
    - ii. the manufacturer and model number of the continuous NOx and other associated monitors;
    - iii. the location of the continuous NOx monitor;
    - iv. the exceedance report as detailed in (a) above;
    - v. the total NOx emissions for the calendar quarter (tons);
    - vi. the total operating time (hours) of the emissions unit;
    - vii. the total operating time of the continuous NOx monitoring system while the emissions unit was in operation;
    - viii. results and date of quarterly cylinder gas audits;
    - ix. results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));



- x. the results of any relative accuracy test audit showing the continuous NOx monitor out-of-control and the compliant results following any corrective actions;
- xi. the date, time, and duration of any/each malfunction of the continuous NOx monitoring system, emissions unit, and/or control equipment;
- xii. the date, time, and duration of any downtime of the continuous NOx monitoring system and/or control equipment while the emissions unit was in operation; and
- xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (b)(xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit.

- (5) The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration, in the quarterly deviation (excursion) reports. If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.

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 such emissions unit.
  - b. The emission testing shall be conducted to demonstrate compliance with the following limitations involving the use of natural gas:
    - i. 7.20 pounds NOx per hour;
    - ii. 0.04 pound NOx per mmBtu;
    - iii. 13.50 pounds CO per hour;
    - iv. 0.075 pound CO per mmBtu;
  - c. At anytime the emission unit is fired with #2 fuel oil for purposes other than routine "maintenance" procedures (i.e. monthly checks to verify the operating condition of the boiler). The permittee shall conduct testing within 60 days after the initial firing with #2 fuel oil to demonstrate compliance with the following when firing #2 fuel oil:
    - i. 21.60 pounds NOx per hour;



- ii. 0.12 pound NOx per mmBtu;
- iii. 6.66 pounds CO per hour;
- iv. 0.037 pound CO per mmBtu;
- d. The following test methods shall be employed to demonstrate compliance with the above emission limitations:
  - i. for NOx, Methods 1-4 and 7 of 40 CFR Part 60, Appendix A; and
  - ii. for CO, Methods 1-4 and 10 of 40 CFR Part 60, Appendix A.

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

- e. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA, NWDO.
- f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, NWDO. 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, NWDO's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, NWDO shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report of the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, NWDO 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 Ohio EPA, NWDO.

- (2) Within 60 days after achieving maximum production rate but no later than 180 days after startup of the specified emissions unit, the permittee shall conduct certification tests of the continuous NOx monitoring system, in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Ohio EPA Central District Office shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Ohio EPA Central District Office and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.



Certification of the continuous NOx monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I). The letter/document of certification of the continuous NOx monitoring system, issued by the Ohio EPA, shall be maintained on file upon receipt and made available to the Ohio EPA, Central District Office upon request.

Ongoing compliance with the NOx emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the requirements of 40 CFR Part 60.

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

a. Emission Limitation

0.04 pound NOx per mmBtu, 7.20 pounds NOx per hour (when burning natural gas)

Applicable Compliance Method

Compliance with the allowable emission limitations shall be demonstrated based on the results of emission testing conducted in accordance with Methods 1 - 4 and 7 of 40 CFR Part 60, Appendix A.

The pound per mmBtu emission limitation is based on a burner manufacturer's guarantee. The pound per hour was determined by multiplying the pound per mmBtu limitation by a maximum heat input of 180 mmBtu per hour.

b. Emission Limitation

0.075 pound CO per mmBtu, 13.50 pounds CO per hour (while burning natural gas)

Applicable Compliance Method

Compliance with the allowable emission limitations shall be demonstrated based on the results of emission testing conducted in accordance with Methods 1 - 4 and 10 of 40 CFR Part 60, Appendix A.

The pound per mmBtu emission limitation is based on a burner manufacturer's guarantee. The pound per hour was determined by multiplying the pound per mmBtu limitation by a maximum heat input of 180 mmBtu per hour.

c. Emission Limitation

0.015 pound PM10 per mmBtu, 2.70 pounds PM10 per hour (while burning natural gas)



Applicable Compliance Method

If required, compliance with the allowable emission limitations shall be determined in accordance with Methods 201/201A and 202 of 40 CFR Part 51, Appendix M Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office (NWDO).

The pound per mmBtu emission limitation is based on a burner manufacturer's guarantee. The pound per hour was determined by multiplying the pound per mmBtu limitation by a maximum heat input of 180 mmBtu per hour.

d. Emission Limitation

0.12 pound NOx per mmBtu, 21.60 pounds NOx per hour (when burning #2 fuel oil)

Applicable Compliance Method

If required, compliance with the allowable emission limitations shall be demonstrated based on the results of emission testing conducted in accordance with Methods 1 - 4 and 7 of 40 CFR Part 60, Appendix A.

The pound per mmBtu emission limitation is based on a burner manufacturer's guarantee. The pound per hour was determined by multiplying the pound per mmBtu limitation by a maximum heat input of 180 mmBtu per hour.

e. Emission Limitation

0.037 pound CO per mmBtu, 6.66 pounds CO per hour (while burning #2 fuel oil)

Applicable Compliance Method

If required, compliance with the allowable lb CO/mmBtu emission limitation shall be demonstrated based on the results of emission testing conducted in accordance with Methods 1 - 4 and 10 of 40 CFR Part 60, Appendix A.

The pound per mmBtu emission limitation is based on a burner manufacturer's guarantee. The pound per hour was determined by multiplying the pound per mmBtu limitation by a maximum heat input of 180 mmBtu per hour.

f. Emission Limitation

0.020 pound PM10 per mmBtu, 3.60 pounds PM10 per hour (while burning #2 fuel oil)

Applicable Compliance Method

If required, compliance with the allowable emission limitations shall be determined in accordance with Methods 201/201A and 202 of 40 CFR Part 51, Appendix M Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office (NWDO).



The pound per mmBtu emission limitation is based on a burner manufacturer's guarantee. The pound per hour was determined by multiplying the pound per mmBtu limitation by a maximum heat input of 180 mmBtu per hour.

g. Emission Limitation

18.36 tons NOx per rolling, 12-month period while burning #2 fuel oil

Applicable Compliance Method

Compliance with the above emission limitation shall be demonstrated through recordkeeping requirements in d)(4).

h. Emission Limitation

5.66 tons CO per rolling, 12-month period while burning #2 fuel oil

Applicable Compliance Method

Compliance with the above emission limitation shall be demonstrated through recordkeeping requirements in d)(4).

i. Emission Limitation

3.06 tons PM10 per rolling, 12-month period while burning #2 fuel oil

Applicable Compliance Method

Compliance with the above emission limitation shall be demonstrated through recordkeeping requirements in d)(4).

j. Emission Limitation

Visible particulate emissions while burning any natural gas shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

k. Emission Limitation

l. Visible particulate emissions while burning #2 fuel oil shall not exceed 20 percent opacity as a six-minute average, except for one 6-minute per hour of not more than 27%.

Applicable Compliance Method

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Draft Permit-to-Install**

**Permit Number:** P0105688

**Facility ID:** 0335010105

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

g) Miscellaneous Requirements

(1) None.