OhioEPA

2/13/2014

Certified Mail

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

DWIGHT LOCKWOOD
LIMA ENERGY COMPANY
312 WALNUT ST, SUITE 1600
CINCINNATI, OH 45202

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

Facility ID: 0302020336
Permit Number: P0115577
Permit Type: Initial Installation
County: Allen

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install and Operate (PTIO)for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio Environmental Protection Agency (EPA) Weekly Review and the local newspaper, The Lima News. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page,www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
50 West Town Street Suite 700
PO Box 1049
Columbus, Ohio 43216-1049

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 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

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

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
Ohio EPA-NWDO; Indiana

PUBLIC NOTICEPUBLIC HEARING
OHIO ENVIRONMENTAL PROTECTION AGENCY
ISSUANCE OF A DRAFT PERMIT-TO-INSTALL AND OPERATE TO
LIMA ENERGY COMPANY
1046 South Main Street
Lima, Ohio 45804

Public notice is hereby given that the Ohio EPA - Division of Air Pollution Control (DAPC) has issued, on February 13, 2014 a draft Permit-to-Install and Operate (PTIO) to LIMA ENERGY COMPANY (Permit Number: P0115577). The draft PTIO involves the proposed installation and operation of a gasification plant that will convert petroleum coke and other solid hydrocarbon feedstock into Ultra Clean Synthetic Crude.

The proposed project is for the LIMA ENEGRY COMPANY facility located at 1046 South Main Street, Lima, Ohio 45804. LIMA ENERGY COMPANY is located in an area in attainment with National Ambient Air Quality Standards (NAAQS). The allowable air emissions from the proposed project comply with all applicable air pollution rules and conform to ambient air impact requirements of federal and state regulations.

Copies of the draft PTIO are available for review at Ohio EPA's Northwest District Office, 347 North Dunbridge Road, Bowling Green, Ohio, (419) 352-8461. The draft permit may also be accessed through Ohio EPA's website at the following link:

http://www.epa.ohio.gov/dapc/newpermits/issued.aspx

An Ohio EPA information session and public hearing concerning the draft PTIO will be held on Tuesday, March 18, 2014at the Lima City Council Chambers, 50 Town Square, Lima, Ohio 45801. The information session will begin at 6:30 pm. The public hearing will follow immediately and continue until all persons have had the opportunity to provide testimony related to the proposed permit.

All interested persons are entitled to attend or be represented and give written or oral comments on the draft permit at the hearing. Written comments must be received by Ohio EPA at the close of the business day on March 24, 2014. Comments received after this date will not be considered to be a part of the official record. Written comments may be submitted at the hearing or sent to: Mark Barber, Division of Air Pollution, Ohio EPA's Northwest District Office, 347 North Dunbridge Road, Bowling Green, Ohio 43402.

Permit Strategy Write-Up

1. Check all that apply:

   _X_ Synthetic Minor Determination

   Netting Determination

2. Source Description:

   Lima Energy Company (LRC) has proposed to install and operate a gasification plant that will convert petroleum coke and other solid hydrocarbon feedstock intoUltra Clean Synthetic Crude (UCSC). The proposed facility is to be located in Lima, Ohio (Allen County). The facility has requested synthetic minor restrictions because the potential emissions for sulfur dioxide (SO_2), hazardous air pollutants (methanol), and greenhouse gases (GHGs) would exceed "Major Source" thresholds. This proposed federally enforceable permit to install and operate (FEPTIO) is to establish the facility as a "Synthetic Minor" source when taking into account the federally-enforceable restrictions. Permitted emission units at the facility include a 50mmBtu/hr Auxiliary Boiler (B001), Raw Material Handling and Storage (F004), Paved Roadways and Parking Areas (F005), Synthetic Crude Loading (J001), Synthetic Fuel Processing Operations (P005), Cooling Tower (P009), Fugitive Equipment Leaks (P801), Roller Drying Mills 1-4 (P010-P013) and Storage Tanks(T001-T004).

3. Facility Emissions and Attainment Status:

   Without federally-enforceable restrictions in place, the facility would be considered a "Major Source" for for purposes of Prevention of Significant Deterioration (PSD), Title V, and Maximum Achievable Control Technology (MACT) applicability. Allen County is designated attainment for all criteria pollutants.

4. Source Emissions:

   LRC has requested natural gas usage restrictions on emission unit B001, P010 through P013, and restrictions on startups, shutdowns, and non-routine operation for emissions unit P005. The usage and operational restrictions will limit carbon dioxide equivalent (CO_2e) emissions to less than 95,000 tons per rolling 12-month period. The potential to emit (PTE) of less than 95,000 tons CO_2e along with the potential emissions from other sources at the facility will result in a PTE below 100,000 tons per year of CO_2e. The PTE of less than 100,000 tons CO_2e annually will result in GHGs from the facility not becoming "subject to regulation" as defined in 40 CFR 51.166(b)(48)(i) and as a result no determination regarding major source status of the facility for GHGs on a mass basis will be required.

   LRC has also requested a limitation of 8.8 tons for fugitive methanol emissions from processing equipment (emissions unit P801) by the implementation of a leak detection and repair (LDAR) program. The limitation on methanol emissions will limit the PTE for hazardous air pollutant (HAP) emissions below the MACT major thresholds of 10 tons for a single HAP and 25 tons per year for combined HAPs.

5. Conclusion:

   The federally enforceable restriction and limitations will limit PTE below “Major Source” thresholds and will establish the facility’s operating status as a Synthetic Minor facility.

6. Please provide additional notes or comments as necessary:

   None

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

Pollutant	Tons Per Year
NOx	22.1
CO	51.7
VOC	39.7
PM10	14.2
SO_2	24.1
CO_2e	94,123
Methanol	8.8

DRAFT

Division of Air Pollution Control
Permit-to-Install and Operate
for
LIMA ENERGY COMPANY

Facility ID:	0302020336
Permit Number:	P0115577
Permit Type:	Initial Installation
Issued:	2/13/2014
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance

Division of Air Pollution Control
Permit-to-Install and Operate
for
LIMA ENERGY COMPANY

Table of Contents

Authorization

Facility ID:	0302020336
Application Number(s):	A0048567, A0049627
Permit Number:	P0115577
Permit Description:	Installation and operation of a gasification plant that will convert petroleum coke and other solid hydrocarbon feedstock into Ultra Clean Synthetic Crude.
Permit Type:	Initial Installation
Permit Fee:	$6,650.00*DO NOT send payment at this time, subject to change before final issuance*
Issue Date:	2/13/2014
Effective Date:	To be entered upon final issuance
Expiration Date:	To be entered upon final issuance

Permit Evaluation Report (PER) Annual Date: To be entered upon final issuance

This document constitutes issuance to:

LIMA ENERGY COMPANY
1046 SOUTH MAIN ST
Lima, OH 45801

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

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

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

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler
Interim Director

Authorization (continued)

Permit Number: P0115577
Permit Description: Installation and operation of a gasification plant that will convert petroleum coke and other solid hydrocarbon feedstock into Ultra Clean Synthetic Crude.

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

Emissions Unit ID:	**B001**
Company Equipment ID:	B001
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F004**
Company Equipment ID:	F001
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F005**
Company Equipment ID:	F003
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**J001**
Company Equipment ID:	J001
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P005**
Company Equipment ID:	P005
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P009**
Company Equipment ID:	P009
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P801**
Company Equipment ID:	F002
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**T004**
Company Equipment ID:	T004
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

Group Name: Drying Mills

Emissions Unit ID:	**P010**
Company Equipment ID:	P001
Superseded Permit Number:	
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**P011**
Company Equipment ID:	P002
Superseded Permit Number:	

General Permit Category andType:	Not Applicable
Emissions Unit ID:	**P012**
Company Equipment ID:	P003
Superseded Permit Number:	
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**P013**
Company Equipment ID:	P004
Superseded Permit Number:	
General Permit Category andType:	Not Applicable

Group Name: Product Storage Tanks

Emissions Unit ID:	**T001**
Company Equipment ID:	T001
Superseded Permit Number:	
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**T002**
Company Equipment ID:	T002
Superseded Permit Number:	
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**T003**
Company Equipment ID:	T003
Superseded Permit Number:	
General Permit Category andType:	Not Applicable

A. Standard Terms and Conditions

1. What does this permit-to-install and operate ("PTIO") allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

- PTIO fee.This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

  You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

- Annual emissions fee.Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

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

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

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

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

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

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

7. What reports must I submit under this permit?

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

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

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

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

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

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

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

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Ohio EPA DAPC, Northwest District Office in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. “Shut down” means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

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

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

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

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

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

change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

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

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

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

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

B. Facility-Wide Terms and Conditions

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

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

      (1) None.

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

      (1) B.3

2. The Ohio EPA has determined that this facility is subject to the requirements of 40 CFR Part 63 Subpart JJJJJJ, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial/Commercial/Institutional Boilers and Process Heaters at Area Sources. Although Ohio EPA has determined that this Generally Available Control Technology (GACT) NESHAP applies, at this time Ohio EPA does not have the authority to enforce this standard. Instead, U.S. EPA has the authority to enforce this standard. Please be advised, that all requirements associated with this rule are in effect and shall be enforced by U.S. EPA. For more information on the area source rules, please refer to the following U.S. EPA website: http//www.epa.gov/ttn/atw/area/arearules.html.

3. Under the authority of OAC rule 3745-31-05(D), this permit establishes the following terms and conditions for purposes of establishing federally enforceable requirements to limit the potential to emit (PTE) for greenhouse gases (GHGs) from emission units P005, P010, P011, P012, and P013 at the facility. The federally enforceable requirements are being established for purposes of limiting the PTE of carbon dioxide equivalent (CO_2e) emissions from emission units P005, P005, P010, P011, P012, and P013, combined, to 93,000 tons per rolling, 12-month period. The PTE of 93,000 tons CO_2e annually from the above indicated emissions units along with the potential CO_2e emissions from other sources at the facility will result in a PTE below 100,000 tons per year of CO_2e. The PTE of less than 100,000 tons CO_2e annually will result in GHGs from the facility not becoming “subject to regulation” as defined in 40 CFR 51.166(b)(48)(i) and as a result no determination regarding major source status of the facility for GHGs on a mass basis will be required.

   a) This permit establishes an operational restriction which limits the quantity of natural gas combusted in emission units P010, P011, P012, and P013 and also limits the operations (i.e. startups, shutdowns, etc.) of emissions unit P005 which generates CO_2e emissions. The maximum quantity of natural gas combusted in emission units P010, P011, P012, and P013 and the CO2e generating operations of emissions unit P005 are limited by the following equation:

$$\sum_{M=1}^{12} \left[\sum_{i=1}^{n} (NG_i) + GHG \right] \leq 93{,}000$$

   where

   M = the increment of the rolling, 12-month period

n = individual emissions units (P010, P011, P012, P013)

NGi = tons of CO_2e emissions from emission units P010, P011, P012, and P013 combined

GHG = tons of carbon dioxide equivalent emissions, in tons, from emissions unit P005

To ensure federal enforceability during the first 12 calendar months of operation, the permittee shall not exceed the CO_2e emission rates for P005, P010, P011, P012, and P013 combined, as specified in the following table:

Maximum Allowable Cumulative CO2e Emission Rates (tons)	
Month(s)	**CO2e Emissions**
1-1	18,600
1-2	37,200
1-3	55,800
1-4	74,400
1-12	93,000

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual CO2e limitation shall be based upon a rolling, 12-month summation of the monthly emission rates.

b) The permittee shall collect and record the following information each month:

(1) The CO2e emissions, in tons, from emissions units P010, P011, P012, and P013, combined [value as calculated in Section C - Emissions Unit Terms and Conditions, 9.d)(2)b.];

(2) The CO2e emissions, in tons, from emissions unit P005 [value as calculated in Section C – Emissions Unit Terms and Conditions, 5.d)(1)n.;

(3) The total CO2e emissions, in tons, from emissions units P005, P010, P011, P012, and P013 [summation of B.3.b)(1) + B.3.b)(2);

(4) during the first 12 calendar months of operation, the permittee shall calculate the cumulative CO2e emissions, in tons, from emission units P005, P010, P011, P012, and P013, combined;

(5) beginning after the first 12 calendar months of operation, the rolling, 12-month summation of CO2e emissions, in tons, from emission units P005, P010, P011, P012, and P013, combined.

The calculated emissions of CO_2e shall be in short tons, quantified in accordance with the calculation methodologies outlined in 40 CFR Part 98.33. (It should be noted that 40 CFR Part 98.33 quantifies GHG emissions in metric tons and emissions must be converted to short tons for purposes of this monitoring and recordkeeping requirement due to PSD and Title V applicability involving short ton thresholds).

c) The permittee shall submit quarterly deviation reports that identify:

(1) all deviations of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit of any regulated air pollutant and have been detected by the monitoring, recordkeeping, and/or testing requirements in this permit:

a. all exceedances of the rolling, 12-month facility-wide CO_2e emission limitation of 93,000 tons;

b. for the first 12 calendar months of operation, all exceedances of the maximum allowable cumulative CO2e emission levels.

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).

d) Compliance with the emission limitation of 93,000,000 tons of CO_2e per rolling, 12-month period from emissions units P005, P010, P011, P012, and P013, combined, shall be demonstrated by the monitoring and record keeping in section B.3.b).

4. The following sourcesare subject to the applicable provision of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR part 60:

Emissions Unit	Source Description	NSPS Regulation (Subpart)
B001	Boiler	Dc
F004	Material Handling Operations	Y
P009-P013	Drying Mills 1-4	Y
T004	Storage Tank	Kb

The application and enforcement of these standards are delegated to the Ohio EPA.The requirements of 40 CFR Part 60 are also federally enforceable.

Pursuant to NSPS, the source owner/operator is hereby advised of the requirement toreport 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 the Ohio EPA District Office or local air agency responsible for the permitting of the facility.

C. Emissions Unit Terms and Conditions

1. B001

Operations, Property and/or Equipment Description:

50mmBtu/hr Auxiliary Boiler

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

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

a. None.

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

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

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) OAC rule 3745-31-05(A)(3), as effective 11/30/01	for nitrogen oxides (NOx), use of low NOx burners, see b)(2)a. for carbon monoxide (CO), particulate matter 10 microns or less in size (PM10), volatile organic compounds (VOC), and sulfur dioxide (SO_2), throughput restriction on natural gas usage, see c)(1) See b)(2)b.
b.	OAC rule 3745-31-05(A)(3), as effective 12/1/06	See b)(2)c.
c.	OAC rule 3745-31-05(D)	Carbon Dioxide Equivalent Emissions (CO2e) shall not exceed 59.7 tons/mmscf, 1123 tons CO_2e, /rolling, 12-month period, see b)(2)d.
d.	OAC rule 3745-17-10(B)(1)	0.020 lb particulate emission (PE) per mmBtu

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20% opacity as a 6-minute average, except as specified by rule
f.	OAC rule 3745-18-06	See b)(2)f.
g.	40 CFR, Part 60, Subpart Dc	Record keeping requirements See d)(1)a.

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) requirements established under OAC rule 3745-31-05(A)(3), as effective November 30, 2001, have been determined to be the use of low NOx burners designed to meet a emissions standard of 0.049 lbNOx/mmBtu, and for CO, PM_{10}, OC, and SO_2, a throughput restriction on natural gas usage as specified in c)(1).

b. The permittee has satisfied the BAT requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective 11/30/01, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 Changes), such that BAT is no longer required by State regulations for NAAQS pollutants 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 requirements of OAC rule 3745-31-05(A)(3), effective November 30, 2001 will no longer apply.

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

The BAT requirements under OAC rule 3745-31-05(A)(3)(a), as effective December 1, 2006, do not apply to the emissions of NOx, CO, PM_{10}, VOC, and SO_2 from this air contaminant source since the potential to emit, taking into account the federally enforceable restrictions established under OAC rule 3745-31-05(D), is less than ten tons per year for each pollutant (0.47 tons/yr for NOx, 0.79 tons/yr for CO, 0.07 ton/yr for PM_{10}, 0.05 ton/yr for VOC, and 0.01 ton/yr for SO_2 respectively).

d. This permit establishes the following federally enforceable emission limitations for the purpose of limiting potential to emit (PTE) to avoid Prevention of Significant Deterioration (PSD) and Title V permitting requirements. The federally enforceable emission limitations are based on the operational restriction contained in c)(1):

i. 59.7 tons CO_2e/mmscf, and

ii. 1123 tons CO_2e/rolling 12-month period.

e. The emissions unit is exempt from the requirements of OAC rule 3745-18-06 in accordance with OAC rule 3745-18-06(A)(3).

c) Operational Restrictions

(1) The following operational restriction has been included in this permit for the purpose of establishing federally enforceable requirements which limit PTE [See b)(2)d]:

The maximum annual natural gas usage for emissions unit B001 shall not exceed 18.80 million cubic feet (mmcf) per year, based upon a rolling, 12-month summation of the monthly fuel usage rates.

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

Month	Maximum Allowable Cumulative Fuel Usage (mmcf)
1	4.0
1-2	6.0
1-3	8.0
1-4	10.0
1-5	12.0
1-6	14.0
1-7	16.0
1-12	18.80

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

(2) The permittee shall burn only pipeline quality natural gas in this emissions unit.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following information:

a. the natural gas usage for each month, in mmcf;

b. for the first 12 calendar months of operation following the issuance of this permit, the cumulative natural gas usage, in mmcf;

c. after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the natural gas usage, in mmcf;

d. the calculated emissions of CO_2e, in tons (short tons), quantified in accordance with the calculation methodologies outlined in 40 CFR Part 98.33. (It should be noted that 40 CFR Part 98.33 quantifies GHG emissions in metric tons and the emissions must be converted to short tons for purposes of this monitoring and recordkeeping requirement due to PSD and Title V applicability involving short ton thresholds); and

e. the rolling, 12-month CO_2e, emissions, in tons.

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

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

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. for the first 12 calendar months of operation following the issuance of this permit, the maximum allowable cumulative fuel usage levels; and

ii. after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month natural gas usage limitation of 18.8 mmcf; and

iii. the rolling, 12-month CO_2e emission limitation.

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.

These 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), October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

(2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this

permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.

(3) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.

f) Testing Requirements

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

a. Emission Limitation:

0.020 lb PE per mmBtu

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance by testing in accordance with the methods specified in OAC rule 3745-17-03(B)(7).

b. Emission Limitation:

59.7 tons CO_2e/mmcf

Applicable Compliance Method:

The CO_2e/mmcf emission rate was established in accordance with the emissions data supplied by the permittee. The permittee shall demonstrate compliance with the emission limitation above by applying the CO_2e emission factors as outlined in 40 CFR, Part 98.

c. Emission Limitations:

1123 tons CO_2e/rolling, 12-month period

Applicable Compliance Method:

Compliance with the rolling, 12-month emission limitation shall be demonstrated through the record keeping requirements specified in section d)(1) of this permit.

d. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible PE limitation pursuant to OAC rule 3745-17-03(B)(1).

g) Miscellaneous Requirements

(1) None.

2. F004

Operations, Property and/or Equipment Description:

Raw Material Handling and Storage

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05 (A)(3), as effective 11/30/01	opacity requirements, see b)(2)a. See b)(2)b.
b.	OAC rule 3745-31-05(A)(3), as effective 12/01/06	See b)(2)c.
c.	OAC rule 3745-17-08(B)	Reasonably Available Control Measures (RACM) for the prevention of fugitive dust See b)(2)d.
d.	OAC rule 3745-17-07(B)	opacity requirements, See b)(2)e.
e.	40 CFR Part 60, Subpart Y	opacity requirements when processing coal, See b)(2)e.
f.	40 CFR Part 60.1-19, Subpart A (40 CFR 60.1a)	The provisions of Subpart A apply to the owner or operator of any stationary source which contains an affected facility

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		that commenced construction or modification after the date of publication in 40 CFR Part 60 that is applicable to that facility.

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) requirements established under OAC rule 3745-31-05(A)(3), as effective November 30, 2001, have been determined to be compliance with the opacity requirements established underOAC rule 3745-17-07(B), and when processing coal, the opacity requirements established under 40 CFR Part 60, Subpart Y.

b. The permittee has satisfied the BAT requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective 11/30/01, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 Changes), such that BAT is no longer required by State regulations for NAAQS pollutants 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 requirements of OAC rule 3745-31-05(A)(3), effective November 30, 2001 will no longer apply.

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

The BAT requirements under OAC rule 3745-31-05(A)(3)(a), as effective December 1, 2006, do not apply to the emissions of particulate matter 10 microns or less in size (PM_{10}) from this air contaminant source since the uncontrolled potential to emit is less than ten tons per (7.8 tons/yr).

d. The permittee has indicated the application of the following control measures for fugitive material handling/storage operations for the purpose of ensuring compliance with the applicable visible emission limitations and the application of reasonable available control measures (RACM). In accordance with the permit application, the permittee has committed to perform the following control measure(s):

Material Handling/Storage	Control Measures
loading and unloading	partial and/or total enclosures, wet application, as necessary*

Material Handling/Storage	Control Measures
transfer and conveying	partial and/or total enclosures, wet application, as necessary*
storage pile management	partial and/or total enclosures, wet application, as necessary*

* If at any time the moisture content of the material processed or handled is not sufficient to meet the above applicable requirements, the permittee shall employ a wet suppression control system to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

e. The permittee shall not cause to be discharged into the atmosphere, fugitive dust emissions which exhibit greater than the following:

Material Handling/Storage	Opacity limit
loading and unloading (non-coal)	20% opacity, as a 3-minute average
transfer and conveying(non-coal)	20% opacity, as a 3-minute average
storage piles	no visible particulate emissions except for a period of time not to exceed thirteen minutes during any 60-minute observation period
loading and unloading (coal)	10% opacity, as a 6-minute average
transfer and conveying (coal)	10% opacity, as a 6-minute average

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the following operations:

Material Processing/Handling Operation
each loading or unloading operation
each plant conveyor and transfer point
each storage pile

The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

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

(2) The owner or operator of a coal preparation and processing plant that commenced construction, reconstruction, or modification after April 28, 2008, shall maintain in a logbook (written or electronic) on-site and make it available upon request. The logbook shall record the following:

a. The manufacturer's recommended maintenance procedures and the date and time of any maintenance and inspection activities and the results of those activities. Any variance from manufacturer recommendation, if any, shall be noted.

b. The date and time of periodic coal preparation and processing plant visual observations, noting those sources with visible emissions along with corrective actions taken to reduce visible emissions. Results from the actions shall be noted.

c. The amount and type of coal processed each calendar month.

d. The amount of chemical stabilizer or water purchased for use in the coal preparation and processing plant.

e. Monthly certification that the dust suppressant systems were operational when any coal was processed and that manufacturer's recommendations were followed for all control systems. Any variance from the manufacturer's recommendations, if any, shall be noted.

f. Monthly certification that the fugitive coal dust emissions control plan was implemented as described. Any variance from the plan, if any, shall be noted. A copy of the applicable fugitive coal dust emissions control plan and any letters from the Administrator providing approval of any alternative control measures shall be maintained with the logbook. Any actions, *e.g.* objections, to the plan and any actions relative to the alternative control measures, *e.g.* approvals, shall be noted in the logbook as well.

CFR Part 60, Subpart Y [40 CFR 60.258(a)]

e) Reporting Requirements

(1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.

(2) The permittee shall also identify in the PER any of the following occurrences:

a. all days during which any visible fugitive particulate emissions were observed from material processing/handling operations specified in d(1); and

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

(3) The owner or operator of an affected facility shall submit the results of initial performance tests to the Administrator or delegated authority, consistent with the provisions of section 60.8. The owner or operator who elects to comply with the reduced performance testing provisions of sections 60.255(c) or (d) shall include in the performance test report identification of each affected facility that will be subject to the reduced testing. The owner or operator electing to comply with section 60.255(d) shall also include information which demonstrates that the control devices are identical.

40 CFR Part 60, Subpart Y [40 CFR 60.258(c)]

(4) After July 1, 2011, within 60 days after the date of completing each performance evaluation conducted to demonstrate compliance with this subpart, the owner or operator of the affected facility must submit the test data to EPA by successfully entering the data electronically into EPA's WebFIRE data base available at*http://cfpub.epa.gov/oarweb/index.cfm?action=fire.main.* For performance tests that cannot be entered into WebFIRE (*i.e.,* Method 9 of appendix A-4 of this part opacity performance tests) the owner or operator of the affected facility must mail a summary copy to United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; mail code: D243-01; RTP, NC 27711.

40 CFR Part 60, Subpart Y [40 CFR 60.258(d)]

(5) For the purpose of reports required under section 60.7(c), any owner operator subject to the provisions of this subpart also shall report semiannually periods of excess emissions as follow:

a. All 6-minute average opacities that exceed the applicable standard.

40 CFR Part 60, Subpart Y (40 CFR 60.255(b)(3)]

(6) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.

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 no later than 180 days after this emissions unit first processes coal.

b. The emission testing shall be conducted to demonstrate compliance with the following emission rates:

Visible PE shall not exceed 10 percent opacity, as a six minute average.

c. The following test methods shall be employed to demonstrate compliance with the above emission limitations:

for opacity, Method 9 of appendix A-4 of this part and the procedures in §60.11 must be used to determine opacity, in conjunction with the following requirements:

i. The duration of the Method 9 of appendix A-4 of this part performance test shall be 1 hour (ten 6-minute averages).

ii. If, during the initial 30 minutes of the observation of a Method 9 of appendix A-4 of this part performance test, all of the 6-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes.

iii. To determine opacity for fugitive coal dust emissions sources, the additional requirements specified below must be used:

The minimum distance between the observer and the emission source shall be 5.0 meters (16 feet), and the sun shall be oriented in the 140-degree sector of the back.

The observer shall select a position that minimizes interference from other fugitive coal dust emissions sources and make observations such that the line of vision is approximately perpendicular to the plume and wind direction.

The observer shall make opacity observations at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. Water vapor is not considered a visible emission.

iv. A visible emissions observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions are met:

No more than three emissions points may be read concurrently.

All three emissions points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.

If an opacity reading for any one of the three emissions points is within 5 percent opacity from the applicable standard (excluding readings of zero opacity), then the observer must stop taking readings for the other two points and continue reading just that single point.

d. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA, NWDO. The test method(s) which must be employed to demonstrate compliance with the control efficiencies are specified below.

e. The test(s) shall be conducted at a Maximum Source Operating Rate (MSOR), unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. MSOR is defined as the condition that is most likely to challenge the emission control measures with regards to meeting the applicable emission standard(s). Although it 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 at the MSOR is justification for not accepting the test results as a demonstration of compliance.

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.

g. The frequency of future testing shall be done in accordance with the requirements specified in 40 CFR Part 62.225.

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

a. Emission Limitation:

Visible emissions of fugitive dust.when processing coal shall not exceed 10% opacity, as a 6-minute average.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the emission limitation in accordance with the testing requirements specified in section f)(1) of this permit.

b. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20% opacity, as a 3-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated using Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60, Appendix A (Standards of Performance for New Stationary Sources") and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

c. Emission Limitation:

no visible particulate emissions, except for a period of time not to exceed thirteen minutes during any 60-minute observation period.

Applicable Compliance Method:

If required, compliance shall be demonstrated using Method 22 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) Within 180 days after this emissions unit first processes coal, the permittee must prepare and operate in accordance with a submitted fugitive coal dust emissions control plan. This plan must be in accordance with the requirements specified in 40 CFR Part 60.254 (c)(1) through (c)(6) [60.254(c)(1) through(6)].

3. F005

Operations, Property and/or Equipment Description:

Paved roadways and parking areas

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A), as effective 11/30/01	opacity requirements, see b)(2)a. See b)(2)b.
b.	OAC rule 3745-31-05(A), as effective 12/01/06	See b)(2)c
e.	OAC rule 3745-17-08(B)	Reasonably Available Control Measures (RACM) for the prevention of fugitive dust See b)(2)d. through b)(2)h.
f.	OAC rule 3745-17-07(B)(4)	no visible particulate emissions except for a period of time not to exceed six minutes during any 60-minute observation period.

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) requirements established under OAC rule 3745-31-05(A)(3), as effective November 30, 2001, have been determined to be compliance with the opacity requirements established underOAC rule 3745-17-08(B).

b. The permittee has satisfied the BAT requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective 11/30/01, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 Changes), such that BAT is no longer required by State regulations for NAAQS pollutants 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 requirements of OAC rule 3745-31-05(A)(3), effective November 30, 2001 will no longer apply.

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

The BAT requirements under OAC rule 3745-31-05(A)(3)(a), as effective December 1, 2006, do not apply to the emissions of PM_{10} from this air contaminant source since the uncontrolled potential to emit is less than ten tons per (1.5 tons/yr).

d. The paved roadways and parking areas that are subject to the terms and conditions of this permit are listed below:

paved roadways: all paved road segments

paved parking areas: all paved parking areas

e. The permittee shall employ reasonably available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas with sweeping, watering, and other good housekeeping practices at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from any paved roadway or parking area.

The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

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

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

e) Reporting Requirements

(1) The permittee shall also identify in the PER any of the following information:

:all days during which any visible fugitive particulate emissions were observed from material processing/handling operations specified in d(1); and

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

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.

(2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.

(3) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.

f) Testing Requirements

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

a. Emission Limitation:

no visible particulate emissions except for a period of time not to exceed six minutes during any 60-minute observation period for paved roadways and parking areas

Applicable Compliance Method:

If required, compliance with the visible emission limitation specified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

g) Miscellaneous Requirements

(1) None.

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4. J001

Operations, Property and/or Equipment Description:

Ultra Clean Synthetic Crude (UCSC) Loading Rack

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T)	material throughput restriction, see b)(2)a.

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) requirements established under ORC rule 3704.03(T), have been determined to be a material throughput restriction as specified in condition c(1).

c) Operational Restrictions

(1) The maximum throughput of UCSC shall not exceed 37,150,000 gallons per month averaged over a 12-month rolling period. The operational restriction reflects the allowable maximum operational capacity for all loading arms.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following each month for this emissions unit:

a. the total amount of UCSC throughput, in gallons per month;

b. for the first 12 calendar months of operation following the issuance of this permit, the cumulative amount of UCSC throughput, in gallons; and

c. after the first 12 calendar months of operation following the issuance of this permit, the monthly UCSC throughput, averaged over a 12-month rolling period, in gallons.

e) Reporting Requirements

(1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.

(2) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.

f) Testing Requirements

(1) Compliance with the emission limitations specified in b)(1) of the terms and conditions of this permit shall be determined in accordance with the following method(s):

a. Emission Limitation:

The maximum throughput of UCSC shall not exceed 37,150,000 gallons per month averaged over a 12-month rolling period.

Applicable Compliance Method:

Compliance with the annual throughput restriction shall be demonstrated through the record keeping requirements specified in section d)(1).

g) Miscellaneous Requirements

(1) None.

5. P005

Operations, Property and/or Equipment Description:

Synthetic Fuel Processing Operations controlled by Thermal Oxidizer

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

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

a. None.

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

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

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 thetable.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC rule 3704.03(T)	See b)(2)b.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	Startup and shutdown restrictions, see b)(2)c. See b)(2)d.
c.	OAC rule 3745-31-05(A)(3), as effective 12/01/06	See b)(2)e.
d.	OAC rule 3745-31-05(D)	Carbon Dioxide Equivalent Emissions (CO2e) shall not exceed: 415.5 tons per startup; 92.5 tons per shutdown; 686.6 tons per hour for AGR Unit venting to thermal oxidizer (TO); and 93,000 tons CO2e/rolling, 12-month period from emissions units P005, P010,

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		P011, P012, and P013 combined (See Section B. – Facility-Wide Terms and Conditions) Sulfur dioxide (SO2) emissions shall not exceed: 3.84 tons per startup; 5.82 tons per shutdown; and 23.1 tons SO2/rolling, 12-month period, from the startup and shutdowns combined See b)(2)f.

(2) Additional Terms and Conditions

a. Emissions unit P005 involves a gasification process which converts petroleum coke and other solid hydrocarbon feedstock into ultra clean synthetic crude (USCS). Emissions unit P005 consists of two separate gasification trains with one thermal oxidizer controlling both trains. Each gasification train consists of the following processes/equipment;

i. gasification unit;

ii. shift reaction unit;

iii. acid gas removal (AGR) unit;

iv. sulfur recovery unit (SRU);

v. Shell Claus Offgas Treatment (SCOT) “in process” unit;

vi. Fischer-Tropsch process unit;

b. The Best Available Technology (BAT) requirements established under ORC rule 3704.03(T) apply to sulfur dioxide (SO_2) emissions from this emissions unit and have been determined to be compliance with the 23.1 tons SO_2 per rolling, 12-month period limitation established under OAC rule 3745-31-05(D).

c. Best Available Technology (BAT) requirements established under OAC 3745-31-05(A)(3), as effective November 30, 2001 apply to emissions of nitrogen oxides (NOx), carbon monoxide (CO), particulate matter 10 microns or less in size (PM10), and volatile organic compounds (VOC) from this emissions unit. The BAT requirements for each pollutant above have been determined to be

compliance with the operational restrictions established under OAC rule 3745-31-05(D).

d. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to 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 ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants 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 3745-31-05, then these emission limits/control measures no longer apply.

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

The BAT requirements under OAC rule 3745-31-05(A)(3)(a), as effective December 1, 2006, do not apply to the emissions of NOx, CO, PM_{10}, and VOC from this air contaminant source since the potential to emit taking into account the federally enforceable operational restrictions established under OAC rule 3745-31-05(D), is less than ten tons per year for each pollutant (2.1 tons/yr for NOx, 3.3 tons/yr for CO, 0.3 ton/yr for PM_{10}, and 0.3 ton/yr for VOC).

f. This permit establishes the following federally enforceable emission limitations for the purpose of limiting potential to emit (PTE) to avoid Prevention of Significant Deterioration (PSD) and Title V permitting requirements. The federally enforceable emission limitations are based on the operational restriction contained in c)(1):

i. CO2e emissions from emissions units P005, P010, P011, P012, and P013 combined shall not exceed 93,000 tons per rolling 12-month period,

ii. SO2 emissions from emissions unit P005 shall not exceed 23.3 tons perrolling 12-month period.

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing federally enforceable requirements which limit PTE [See b)(2)e]:

a. All emissions from startup*, shutdown**, and non-routine process emissions (i.e. malfunctions) shall be directed to a thermal oxidizer (TO) achieving a 98% destruction efficiency for VOC and meeting a maximum CO emission rate of 8.93 lb/hr;

b. The maximum number of startup events for this emissions unit shall not exceed 4 per rolling, 12-month period;

c. The maximum number of shutdown events for this emissions unit shall not exceed 4 per rolling, 12-month period;

d. The maximum number of hours emissions from the acid gas recovery (AGR) unit vented to the TO shall not exceed 120 hours per rolling, 12-month period.

*Startup involves the following emission generation stages before the gasification process obtains normal routine operations:

(1) preheating of no more than one gasification unit using natural gas;

(2) venting of raw syngas from gasification unit;

(3) venting of clean syngas from AGR unit;

(4) venting of tail gas from SRU.

**Shutdown involves the following emission generation stages before the gasification process:

(1) venting of clean syngas from Fischer-Tropsch process unit;

(2) venting of gas from AGR unit;

(3) venting of raw syngas from gasification unit.

(2) To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the startup, shutdown, and AGR unit venting values specified in the following table:

Months	Maximum Cumulative Allowable Startups	Maximum Cumulative Allowable Shutdowns	Maximum Cumulative Allowable Hours of AGR Unit Venting to TO
1	1	1	24
1-2	2	2	48
1-3	3	3	72
1-4	4	4	96
1-12	4	4	120

After the first 12 calendar months of operation, compliance with the annual operational restrictions shall be based upon a rolling, 12-month summation of the startups, shutdowns, and hours of AGR Unit venting to TO.

(3) The permittee shall burn only pipeline quality natural gas in the startup pre heater for this emissions unit.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following information:

a. the number of startups per month;

b. during the first 12 calendar months of operation, the cumulative number of startups for each calendar month;

c. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of the number of startups:

d. the calculated emissions of SO2 and CO2e, in tons, for each startup event;.

e. the number of shutdowns per month;

f. during the first 12 calendar months of operation, the cumulative number of shutdowns for each calendar month;

g. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of the number of shutdowns:

h. the calculated emissions of SO2 and CO2e, in tons, for each shutdown event;

i. the number of hours the AGR unit is vented to the thermal oxidizer;

j. during the first 12 calendar months of operation, the cumulative number of hours the AGR unit is vented to the thermal oxidizer for each calendar month;

k. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of the number of hours the AGR unit is vented to the thermal oxidizer:

l. the calculated emissions of SO2 and CO2e, in tons, from AGR unit venting to thermal oxidizer;

m. the total SO2 emissions, in tons, from startup, shutdown, and AGR unit venting to TO;

n. the total CO2e emissions, in tons, from startup, shutdown, and AGR unit venting to TO;

o. during the first 12 calendar months of operation, the cumulative SO2 emissions, in tons, from startups, shutdowns, and AGR unit venting to the TO (summation of d)(1)d., d)(1)h., & d)(h)l.;

p. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of SO2 emissions, in tons, from startup, shutdown, and AGR unit venting to TO.

(2) The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the combustion temperature within the thermal oxidizer during operation of this emissions unit. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the combustion temperature within the thermal oxidizer on a continuous basis.

Whenever the monitored value for the combustion temperature deviates from the minimum value specified by the manufacturer, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date(s) the investigation was conducted;

d. the names of the personnel who conducted the investigation; and,

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable value specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

f. a description of the corrective action;

g. the date it was completed;

h. the date and time the deviation ended;

i. the total period of time (in minutes) during which there was a deviation;

j. the combustion temperature within the thermal oxidizer immediately after the corrective action; and,

k. the names of the personnel who performed the work.

Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The temperature limit is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted temperature limit based upon information obtained during future performance tests that demonstrate compliance with the allowable emission rate(s) for the controlled pollutant(s). In addition, approved revisions to the temperature limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

(3) For each time period during which TOwas not in operation during startups, shutdowns, and non-routine process emissions [see c)(1)], the permittee shall maintain a record of the type of event and the duration in hours of each event.

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

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

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. for the first 12 calendar months of operation following the issuance of this permit, the number of startups, shutdowns and hours of AGR unit venting to TO; and

ii. after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month number of startups, shutdowns and hours of AGR unit venting to TO.

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).

(2) The permittee shall submit quarterly reports that identify the following information concerning the operation of the thermal oxidizer during the operation of this emissions unit:

a. all periods of time during which the combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was below the temperature specified by the manufacturer.

b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the combustion temperature into compliance with the acceptable range, was determined to be necessary and was not taken;

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action; and

e. each time period during which TOwas not in operation during startups, shutdowns, and non-routine process emissions as specified in c)(1).

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.

These 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), 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) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.

f) Testing Requirements

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

a. Emission Limitation:

CO2e emissions shall not exceed:415.5 tons per startup;92.5 tons per shutdown; and 686.6 tons per hour for AGR Unit venting to TO

SO2 emissions shall not exceed3.84 tons per startup and 5.82 tons per shutdown

Applicable Compliance Method:

The emission limitations were developed by applying conservative methodologies/calculations for estimating the worst case emissions from these processes, as seen contained in thepermittee’s application, number A0048567.If

required, the permittee shall demonstrate compliance in accordance with USEPA approved test methods.

b. Emission Limitations:

23.3 tons SO2/rolling, 12-month period

Applicable Compliance Method:

Compliance with the rolling, 12-month emission limitation shall be demonstrated through the record keeping requirements specified in section d)(1) of this permit.

c. Emission Limitations:

93000 tons CO2e/rolling, 12-month period

Applicable Compliance Method:

See Section B. – Facility-Wide Terms and Conditions.

g) Miscellaneous Requirements

(1) None.

6. P009

Operations, Property and/or Equipment Description:

Cooling Tower

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a	OAC rule 3745-31-05(F)	0.92 lb particulate matter 10 microns or less in size (PM_{10}), 4.03 tons PM_{10} /yr See b)(2)a.
a.	OAC rule 3745-31-05 (A)(3), as effective 11/30/01	See b)(2)b. and b)(2)c.
b.	OAC rule 3745-31-05(A)(3), as effective 12/01/06	See b)(2)d.
c.	OAC rule 3745-17-11(B)	See b)(2)e.
d.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

(2) Additional Terms and Conditions

a. This permit establishes the following legally and practically enforceable emission limitations for the purpose of limiting potential to emit (PTE) from cooling tower operations. The legally and practically enforceable emission limitations are

voluntary restrictions established under OAC rule 3745-31-05(F) and are based on the operational restrictions contained in c)(1) which requires the use of high efficiency mist eliminators

i. the use of high efficiency mist eliminators with a designed drift rate not to exceed 0.0005%;

ii. a maximum average total dissolved solids content of 2,500 parts per million (ppm); and

iii. mass emission rates of 0.92 lb PM_{10} /hr and 4.03 tons PM_{10} /yr.

For PTE purposes all emissions of particulate matter are considered to be 2.5 microns or less in size (PM2.5).

b. Best Available Technology (BAT) requirements for this emissions unit have been determined to be the use of high efficiency mist eliminators as established under OAC rule 3745-31-05(F).

c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to 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 ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants 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 3745-31-05, then these emission limits/control measures no longer apply.

It should be noted that the requirements established pursuant to OAC rule 3745-31-05(F) will remain applicable after the above SIP revisions are approved by U.S. EPA.

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

The BAT requirements under OAC rule 3745-31-05(A)(3)(a), as effective December 1, 2006, do not apply to the emissions of PM_{10} from this air contaminant source since the uncontrolled potential to emit, taking into account the practically enforceable restrictions established under OAC rule 3745-31-05(F), is less than ten tons per year.

e. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

(1) The following operational restriction have been included in this permit for the purpose of establishing the following legally and practically enforceable requirements which limit PTE: [See b)(2)a.]

a. Emissions unit P009 shall employ high efficiency mist eliminatorsdesigned with a drift rate not to exceed 0.0005%.

b. The permittee shall not exceed an average total dissolved solids content of 2,500 parts per million (ppm) in this emissions unit.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform the following monitoring requirements for emissions unit P009 at least once per week:

a. test and record the total dissolved solids (TDS) content, in ppm*; and,

b. if monitored on a greater frequency, the average TDS shall be determined based on the results of all TDS tests performed, (in ppm).

* The permittee may measure conductivity in lieu of a direct measurement for dissolved solids content.

e) Reporting Requirements

(1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.

f) Testing Requirements

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

a. Emission Limitations:

0.92 lb PM_{10} /hr, 4.03 tons PM_{10} /yr.

Applicable Compliance Method:

Thelbs/hr emission limitation shall was established by applying the maximum drift loss factor 0.0005 percent to the maximum average total dissolved solids content of 2500 ppm and a maximum flow rate of 1,000,000 gallons per hour for the cooling water. Therefore, provided the permittee demonstrates compliance with the average dissolved solids content, compliance with the hourly emission limitation will be demonstrated. If required, the permittee shall submit a testing proposal which will demonstrate that the maximum drift loss does not exceed

0.0005 percent. Compliance with the annual emission limitation shall be demonstrated by the multiplying the hourly emission rate by the maximum operating schedule of 8760 hrs/yr, and by the conversion factor of 2000 lbs/ton.

b. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible PE limitation pursuant to OAC rule 3745-17-03(B)(1).

g) Miscellaneous Requirements

(1) None.

7. P801

Operations, Property and/or Equipment Description:

Fugitive Equipment Leaks

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

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

a. None.

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

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

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC rule 3704.03(T)	See b)(2)a .
b.	OAC rule 3745-31-05(D)	<u>facility-wide fugitive equipment leaks:</u> 12.9 tons volatile organic compounds (VOC)/rolling, 12-month period 8.8 tons Methanol/rolling 12-month period See b)(2)d.
c.	ORC 3704.03(F) OAC rule 3745-114-01	See d)(2) – d)(5) and e)(2).

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) requirements established under ORC rule 3704.03(T), have been determined to be the rolling VOC emission limitation established under OAC rule 3745-31-05(D).

b. This permit establishes the following federally enforceable emission limitations for the purpose of limiting potential to emit (PTE) to avoid Prevention of Significant Deterioration (PSD), Title V, and Maximum Achievable Control Technology (MACT) permitting requirements:

i. 12.9 tons volatile organic compounds (VOC)/rolling, 12-month period

ii. 8.8 tons methanol/rolling, 12-month period.

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

Month	Maximum Allowable Cumulative VOC/methanol emissions (tons)
1	2.0/1.0
1-2	3.5/2.0
1-3	5.0/3.0
1-4	6.5/4.0
1-5	8.0/5.0
1-6	9.5/6,0
1-7	11.0/7.0
1-8	12.5/8.0
1-12	12.9/8.8

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

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following information:

a. the calculated emissions of VOC*, in tons;

b. the calculated emissions of methanol*, in tons;

c. for the first 12 calendar months of operation following the issuance of this permit, the cumulative emissions of VOC and methanol, in tons; and

d. after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the emissions of VOC and methanol, in tons.

*Emissions of VOC and methanol shall be calculated using the methods developed in the facilities leak detection and repair (LDAR) program as specified in condition g(1).

(2) The federally enforceable permit-to-install (FEPTI) application for emissions unit P002 was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The Toxic Air Contaminant Statute, ORC 3704.03(F), was applied to this emissions unit 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., "**X**" hours per day and "**Y**" 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 x 8/X x 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: Methanol
TLV (mg/m3): 262,000
Maximum Hourly Emission Rate (lbs/hr): 1.63
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 453.6
MAGLC (ug/m3): 6240

The permittee, has demonstrated that emissions of methanol, from emissions unit P801, 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).

(3) 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 FEPTI 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.

(4) 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.

(5) 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 quarterly deviation (excursion) reports that identify the following:

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. for the first 12 calendar months of operation following the issuance of this permit, the maximum allowable cumulative emission limits; and

ii. after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month VOC and methanol emission limitations.

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.

These 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), October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

(2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.

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

a. Emission Limitations:

Fugitive VOC emissions shall not exceed 12.9 tons per rolling, 12-month period.

Fugitive methanol emissions shall not exceed 8.8 tons per rolling, 12-month period.

Applicable Compliance Method:

The rolling, 12-month emission limitations were developed by using conservative leak estimates to the proposed component counts and applying U.S. EPA emission factors for leaking and non-leaking components. Emission factors used are from the U.S. EPA Protocol document for Equipment Leaks (EPA-453/R-95-017, November 1995). Compliance with the rolling 12-month emission limitation shall be demonstrated through the record keeping requirements specified in section d)(1) of this permit.

g) Miscellaneous Requirements

(1) Upon startup of this facility, the permittee shall have developed and begin immediately implementing a comprehensive leak detection and repair (LDAR) monitoring, recordkeeping and reporting program for the purposes of minimizing fugitive emissions. The permittee's LDAR plan shall be developed in a manner such that it is consistent with the LDAR regulations specified in 40 CFR Part 60, Subparts VV and GGG; 40 CFR Part 61, Subpart V; and 40 CFR Part 63, Subpart CC. The LDAR program shall include a mechanism for calculating methanol emissions in addition to VOC emissions.

8. T004

Operations, Property and/or Equipment Description:

AGR Solvent De-inventory Internal Floating Roof Tank

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05 (A)(3), as effective 11/30/01	use of an internal floating roof See b)(2)a.
b.	OAC rule 3745-31-05(A)(3), as effective 12/01/06	See b)(2)b. and b)(2)c.
c.	OAC rule 3745-21-09(L)	None - see b)(2)m.
d.	40 CFR, Part 60, Subpart Kb	See b)(2)d. through b)(2)l.

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) requirements for this emissions unit has been determined to be the use of an internal floating roof complying with 40 CFR, Part 60, Subpart Kb.

b. The permittee has satisfied the BAT requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective 11/30/01, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to Ohio

Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 Changes), such that BAT is no longer required by State regulations for NAAQS pollutants 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 requirements of OAC rule 3745-31-05(A)(3), effective November 30, 2001 will no longer apply.

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

The BAT requirements under OAC rule 3745-31-05(A)(3)(a), as effective December 1, 2006, do not apply to the emissions of VOC from this air contaminant source since the uncontrolled potential to emit is less than ten tons per year (0.2 tons/yr) taking into consideration federally enforceable requirements under 40 CFR Part 60 Subpart Kb.

d. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

e. Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

ii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.

iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

f. Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

g. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

h. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

i. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

j. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

k. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

l. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

m. OAC rule 3745-21-09(L) is not applicable because this tank does not store petroleum liquids as defined in OAC rule 3745-21-01.

c) Operational Restrictions

(1) The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 11.11 psia.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain records of the following information:

a. The types of petroleum liquids stored in the tank.

b. The maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute. Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For refined petroleum products the vapor pressure may be obtained by the following:

(a) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Ohio EPA, Northwest District Office (NWDO) specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(b) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(a) May be obtained from standard reference texts, or

(b) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(c) Measured by an appropriate method approved by the OEPA, NWDO; or

(d) Calculated by an appropriate method approved by the OEPA, NWDO.

(2) Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.

(3) For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is

detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the OEPA, NWDO in the inspection report required in e)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

(4) For vessels equipped with a double-seal system as specified in b)(2)f.ii:

a. visually inspect the vessel as specified in d)(5) at least every 5 years; or

b. visually inspect the vessel as specified in d)(3).

(5) Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in d)(3) and d)(4)b. and at intervals no greater than 5 years in the case of vessels specified in d)(4)a.

(6) The owner or operator shall keep copies of all reports and records required in e)(2), e)(3), and e)(4), for at least 2 years.

(7) Keep a record of each inspect inspection performed as required by d)(2), d)(3), d)(4), and (d)(5). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

(8) The owner or operator shall keep copies of all records required by d)(2) through d)(8), for at least 2 years.

(9) The owner or operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).

e) Reporting Requirements

(1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.

(2) Notify the OEPA, NWDO in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by d)(2) and d)(5) to afford the OEPA, NWDO the opportunity to have an observer present. If the inspection required by d)(5) is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the OEPA, NWDO at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the OEPA, NWDO at least 7 days prior to the refilling.

(3) Furnish the OEPA, NWDO with a report that describes the control equipment and certifies that the control equipment meets the specifications of b)(2)e. through b)(2)m. and d)(2). This report shall be an attachment to the notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

(4) If any of the conditions described in d)(3) are detected during the annual visual inspection required by d)(3), a report shall be furnished to the OEPA, NWDO within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

(5) After each inspection required by d)(4) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in d)(4)b., a report shall be furnished to the OEPA, NWDO within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of b)(2)e. through b)(2)m. or d)(4) and list each repair made.

(6) If the permittee placed, stored, or held in this emissions unit any petroleum liquid with a true vapor pressure which was greater than 11.1 pounds per square inch absolute, the permittee shall notify the Ohio EPA Northwest District Office within 30 days of becoming aware of the occurrence.

f) Testing Requirements

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

a. <u>Emission Limitation:</u>

None

g) Miscellaneous Requirements

(1) None.

9. Emissions Unit Group -Drying Mills: P010,P011,P012,P013,

EU ID	Operations, Property and/or Equipment Description
P010	Roller Drying Mill 1
P011	Roller Drying Mill 2
P012	Roller Drying Mill 3
P013	Roller Drying Mill 4

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

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

a. None.

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

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

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(F)	<u>Material handling operations for each individual emissions unit:</u> 0.001 grain particulate matter 10 microns or less in size (PM_{10}) per dry standard cubic foot (dscf), 0.98 tons PM_{10}/yr Visible particulate emissions (PE) shall not exceed 5 percent opacity, as a six minute average. See b)(2)a and c)(1).
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	See b)(2)b and b)(2)c.
c.	OAC rule 3745-31-05(A)(3), as effective 12/01/06	See b)(2)d.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-31-05(D)	Carbon Dioxide Equivalent Emissions (CO2e) shall not exceed 59.7 tons/mmscf, from each individual emissions unit and 93,000 tons CO2e/rolling, 12-month period from emissions unitsP005, P010, P011, P012, and P013, combined (See Section B. – Facility-Wide Terms and Conditions) See b)(2)e.
e.	OAC rule 3745-17-11(B)	See b)(2)f.
f.	OAC rule 3745-17-07(A)	See b)(2)f.
g.	40 CFR Par 60 Subpart Y	See b)(2)g.
h.	OAC rule 3745-18-06	See b)(2)h.

(2) Additional Terms and Conditions

a. This permit establishes the following legally and practically enforceable emission limitations for the purpose of limiting potential to emit (PTE) from the material handling operations. The legally and practically enforceable emission limitations are voluntary restrictions established under OAC rule 3745-31-05(F) and are based on the operational restrictions contained in c)(1) which requires the use of a baghouse:

i. 0.001 gr PM_{10} /dscf;

ii. 0.98 ton PM_{10} /year; and

iii. Visible PE shall not exceed 5% opacity, as a six-minute average.

For PTE purposes all emissions of particulate matter are considered to be 2.5 microns or less in size (PM2.5).

b. Best Available Technology (BAT) requirements for this emissions unit have been determined to be compliance with the requirement for installation of a baghouse designed to achieve a maximum outlet concentration of 0.001 gr/dscf of PM_{10}, established in accordance with OAC rule 3745-31-05(F) for the drying/material handling operations.

c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to 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 ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants 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 3745-31-05, then these emission limits/control measures no longer apply.

It should be noted that the requirements established pursuant to OAC rule 3745-31-05(F) will remain applicable after the above SIP revisions are approved by U.S. EPA.

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

The BAT requirements under OAC rule 3745-31-05(A)(3)(a), as effective December 1, 2006, do not apply to the emissions of nitrogen oxide (NOx), carbon monoxide (CO), particulate matter 10 microns or less in size (PM10), and volatile organic compounds (VOC), and sulfur dioxide (SO2) from this air contaminant source since the potential to emit on a per emissions unit basis, taking into account the voluntary restriction on the use of a baghouse, is less than ten tons per year for each pollutant (4.3 tons/yr for NOx, 7.3 tons/yr for CO, 1.5 tons/yr for PM_{10}, 0.5 ton/yr for VOC, and 0.05 ton/yr for SO2 respectively).

e. This permit establishes the following federally enforceable emission limitations for the purpose of limiting potential to emit (PTE) to avoid Prevention of Significant Deterioration (PSD) and Title V requirements.

i. CO2e emissions from emissions units P005, P010, P011, P012, and P013 combined shall not exceed 93,000 tons /rolling 12-month period.

f. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(F).

g. This emissions unit is subject to the requirements of 40 CFR Part 60, Subpart Ywhen processing coal. The emission limitation specified by 40 CFR Part 60, Subpart Y is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(F).[Pursuant to 40 CFR 60.252(1)(i), the PM limit from each thermal dryer shall nto exceed 0.01 gr/dscf and 10% opacity. No SO2 and NOx limits are established per 40 CFR Part 60, Subpart Y, pursuant to 60.252(b)(2)(iii) and 60.252(b)3)(iii), respectively.]

h. The emissions units are exempt from the requirements of OAC rule 3745-18-06 in accordance with OAC rule 3745-18-06(A)(3).

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing the following legally and practically enforceable requirements which limit PTE: [See b)(2)a.]

a. Emissions unitsP010, P011, P012, and P013 shall each be controlled by a baghouse with a maximum outlet concentration of 0.001 gr/dscf for PM_{10}.

(2) The permittee shall burn only pipeline quality natural gas in the dryers in these emissions units.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghousestacks serving these emissions units. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. the total duration of any visible emission incident; and

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

(2) The permittee shall maintain monthly records of the following information for emission units P010, P011, P012, and P013, combined:

a. The amount of natural gas usage, in MMCF;

b. the calculated emissions of CO_2e, in tons (short tons), quantified in accordance with the calculation methodologies outlined in 40 CFR Part 98.33. (It should be noted that 40 CFR Part 98.33 quantifies GHG emissions in metric tons and emissions must be converted to short tons for purposes of this monitoring and recordkeeping requirement due to PSD and Title V applicability involving short ton thresholds)

(3) The permittee shall install, calibrate, maintain, and continuously operate a monitoring device for the measurement of the temperature of the gas stream at the exit of the thermal dryers. The monitoring device is to be certified by the manufacturer to be accurate within ±1.7 °C (±3 °F).

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

e) Reporting Requirements

(1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.

(2) The permittee shall additionally identify the following information in the annual PER in accordance with the monitoring requirements in section d)(1):

a. all days during which any visible particulate emissions were observed from the stack(s) serving this emissions unit; and

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

The above information shall be provided as an attachment to the PER. If there were no day(s) and/or corrective action(s) to identify as required above, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that no visible emissions were observed and no corrective actions were taken.

f) Testing Requirements

(1) The permittee shall conduct, or have conducted, emission testing for emissions units P010, P011, P012, and P013 in accordance with the following requirements:

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate that the emissions unit will be operated, but no later than 180 days after the initial startup of each emission unit.

b. The permittee may request that a single performance test for one of the above emissions unit be used to demonstrate that the group of emissions units are in compliance with the applicable emissions standards provided that the permittee meets all of the conditions specified in 40 CFR Part 62.225 paragraphs (e)(1) through (3).

c. The emission testing shall be conducted to demonstrate compliance with the following emission rates:

i. 0.0018 grains PM_{10}/dscf

ii. Visible PE shall not exceed 5 percent opacity, as a six minute average.

iii. Emission testing shall also be conducted to demonstrate compliance with the 40 CFR Part 60 Subpart Y particulate emission limitation.

d. The following test methods shall be employed to demonstrate compliance with the above emission limitations:

i. forPM_{10}, Methods 201/201A and 202 of 40 CFR, Part 51, Appendix M:

ii. for opacity, Method 9 of appendix A-4 of this part and the procedures in §60.11 must be used to determine opacity, in conjunction with the following requirements:

The duration of the Method 9 of appendix A-4 of this part performance test shall be 1 hour (ten 6-minute averages).

If, during the initial 30 minutes of the observation of a Method 9 of appendix A-4 of this part performance test, all of the 6-minute average

opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes.

iii. for 40 CFR Part 60 Subpart Y testing for particulate matter as indicated in Section 1.6 of Method 201A of 40 CFR, Part 51, Appendix M.

e. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA, NWDO. The test method(s) which must be employed to demonstrate compliance with the control efficiencies are specified below.

f. The test(s) shall be conducted at a Maximum Source Operating Rate (MSOR), unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. MSOR is defined as the condition that is most likely to challenge the emission control measures with regards to meeting the applicable emission standard(s). Although it 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 at the MSOR is justification for not accepting the test results as a demonstration of compliance.

g. 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.

h. The frequency of any future testing shall be done in accordance with the requirements specified in 40 CFR Part 62.225.

(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:

0.001 gr PM_{10} /dscf

Applicable Compliance Method:
The permittee shall demonstrate compliance with the emission limitation in accordance with the testing requirements specified in section f)(1) of this permit.

b. Emission Limitation:

0.98 tons PM_{10} /yr

Applicable Compliance Method:
The tons per year emission limitation was developed by multiplying the emission limitation of 0.001 gr PM_{10} /dscf by the maximum volumetric flow rate (26086scfm), the maximum operating schedule of 8760 hours/year and applying the conversion factors of 60 minutes/hour, 2000 lbs/ton and 7000 grains/pound. Therefore, provided compliance is shown with the emission limitation of 0.001 gr PM_{10} /dscf, compliance with the annual limitation shall also be demonstrated.

c. Emission Limitation:

Visible particulate matter shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:
The permittee shall demonstrate compliance with the emission limitation in accordance with the testing requirements specified in section f)(1) of this permit.

d. Emission Limitation:

0.049 lbNOx/mmBtu heat input

Applicable Compliance Method:

The above heat input limitation was established based on the burner vendor guarantees for the use of low NOx burners. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 – 4 and 7 of 40 CFR, Part 60, Appendix A.

e. Emission Limitation:

59.7 tonsCO2e//mmscf

Applicable Compliance Method:

The CO_2e/mmcf emission rate was established in accordance with the emissions data supplied by the permittee. The permittee shall demonstrate compliance with the emission limitation above by applying the CO_2e emission factors found in 40 CFR, Part 98.

f. Emission Limitations:

93,000 tons CO2e/rolling, 12-month period for emissions units, P005, P010, P011, P012, and P013, combined

Applicable Compliance Method:

See Section B. – Facility-Wide Terms and Conditions.

g) Miscellaneous Requirements

(1) None.

10. Emissions Unit Group -Product Storage Tanks: T001,T002,T003,

EU ID	Operations, Property and/or Equipment Description
T001	Ultra Clean Synthetic Crude (UCSC) Fixed Roof Storage Tank 1
T002	UCSC Fixed Roof Storage Tank 2
T003	UCSC Fixed Roof Storage Tank 3

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05 (A)(3), as effective 11/30/01	Use of submerge fill, See b)(2)a. See b)(2)b.
b.	OAC rule 3745-31-05(A)(3), as effective 12/01/06	See b)(2)c.
c.	40 CFR Par 60 Subpart Kb	None, see b)(2)d.
d.	OAC rule 3745-21-09(L)	None, see b)(2)e.

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) requirements established under OAC rule 3745-31-05(A)(3), as effective November 30, 2001, have been determined to be that the fixed roof storage tanks use submerged fill.

b. The permittee has satisfied the BAT requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective 11/30/01, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 Changes), such that BAT is no longer required by State regulations for NAAQS pollutants 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 requirements of OAC rule 3745-31-05(A)(3), effective November 30, 2001 will no longer apply.

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

The BAT requirements under OAC rule 3745-31-05(A)(3)(a), as effective December 1, 2006, do not apply to the emissions of volatile organic compounds (VOC) from these air contaminant sources since the uncontrolled potential to emit is less than ten tons per (2.6 tons/yr) per tank).

d. Pursuant to 40 CFR Part 60.110b(b), the requirements of 40 CFR Part 60, Subpart Kb do not apply to these tanks because the maximum true vapor pressure of the UCSC stored is less than 0.5 psia.

e. OAC rule 3745-21-09(L) is not applicable because this tank does not store petroleum liquids as defined in OAC rule 3745-21-01 (E).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.

f) Testing Requirements

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

a. Emission Limitation: None

g) Miscellaneous Requirements

(1) None.