



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

08/13/03

CERTIFIED MAIL

RE: Final Title V Chapter 3745-77 permit

01-25-04-0716
Barnebey and Sutcliffe Columbus Facility
Mark R. Stouffer
835 N. Cassady Ave
Columbus, OH 43219

Dear Mark R. Stouffer:

Enclosed is the Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully.

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

If you have any questions, please contact Central District Office.

Sincerely,

Michael W. Ahern
Permit Issuance and Data Management Section
Division of Air Pollution Control

cc: Central District Office
File, DAPC PMU



State of Ohio Environmental Protection Agency

FINAL TITLE V PERMIT

Issue Date: 08/13/03	Effective Date: 09/03/03	Expiration Date: 09/03/08
-----------------------------	---------------------------------	----------------------------------

This document constitutes issuance of a Title V permit for Facility ID: 01-25-04-0716 to:
 Barnebey and Sutcliffe Columbus Facility
 835 N. Cassady Ave.
 Columbus, OH 43219

Emissions Unit ID (Company ID)/Emissions Unit Activity Description

F002 (Spent Carbon Pile) Spent Carbon Storage Pile-covered	P035 (79 Reactivation Kiln) Regenerate carbon	P038 (B33 Mill/Gyratory Sifter) Carbon Screening
P028 (20A Reactivation Kiln) Regenerate carbon	P036 (20B Reactivation Kiln) Regenerate carbon	

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Central District Office
 3232 Alum Creek Drive
 PO Box 1049
 Columbus, OH 43216-1049
 (614) 728-3778

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. *State and Federally Enforceable Section*

1. **Monitoring and Related Record Keeping and Reporting Requirements**

a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

- i. The date, place (as defined in the permit), and time of sampling or measurements.
- ii. The date(s) analyses were performed.
- iii. The company or entity that performed the analyses.
- iv. The analytical techniques or methods used.
- v. The results of such analyses.
- vi. The operating conditions existing at the time of sampling or measurement.

(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))

b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))

c. The permittee shall submit required reports in the following manner:

- i. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

- ii. **All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) with respect to emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:**

- (a) Written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations ; (ii) the probable cause of such deviations; and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Part III of this Title V permit, the written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. These written reports shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii)

pertaining to the prompt reporting of all deviations. See B.6 below if no deviations occurred during the quarter.

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i), (ii) and (iii))

- (b) Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the deviation reporting requirements for this Title V permit, written reports that identify each malfunction that occurred during each calendar quarter shall be submitted, at a minimum, quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters.

In identifying each deviation caused by a malfunction, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Also, if a deviation caused by a malfunction is identified in a written report submitted pursuant to paragraph (a) above, a separate report is not required for that malfunction pursuant to this paragraph. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing, at a minimum, on a quarterly basis.

Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation, operational restriction, and control device operating parameter limitation shall be reported in the same manner as described above for malfunctions. These written reports for malfunctions (and scheduled maintenance projects, if appropriate) shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations.

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(iii))

iii. **For monitoring, record keeping, and reporting requirements:**

Written reports that identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year, for the previous six calendar months. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, record keeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no deviations occurred during that period.

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii))

- iv. Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."

(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions unit(s) or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iii))

3. Risk Management Plans

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. (“Act”); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

- a. a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or
- b. as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

(Authority for term: OAC rule 3745-77-07(A)(4))

4. Title IV Provisions

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

(Authority for term: OAC rule 3745-77-07(A)(5))

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

(Authority for term: OAC rule 3745-77-07(A)(6))

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.10 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

(Authority for term: OAC rule 3745-77-07(A)(7))

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

(Authority for term: OAC rule 3745-77-07(A)(8))

8. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

(Authority for term: OAC rule 3745-77-07(A)(9))

9. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.

(Authority for term: OAC rule 3745-77-07(A)(10))

10. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by

the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.

- c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))

11. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

(Authority for term: OAC rule 3745-77-07(B))

12. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

- i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
- i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
 - ii. Compliance certifications shall include the following:
 - (a) An identification of each term or condition of this permit that is the basis of the certification.
 - (b) The permittee's current compliance status.
 - (c) Whether compliance was continuous or intermittent.
 - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
 - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
 - iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))

13. Permit Shield

- a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

(Authority for term: OAC rule 3745-77-07(F))

14. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall

provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

15. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

(Authority for term: OAC rule 3745-77-07(G))

16. Off-Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b. The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.
- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit to install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(For purposes of clarification, the permittee can refer to Engineering Guide #63 that is available in the STARSHIP software package.)

(Authority for term: OAC rule 3745-77-07(I))

17. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.
(This term is provided for informational purposes only.)

18. Insignificant Activities

Each insignificant activity that has one or more applicable requirements shall comply with those applicable requirements.

(Authority for term: OAC rule 3745-77-07(A)(1))

19. Permit to Install Requirement

Prior to the “installation” or “modification” of any “air contaminant source,” as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

(Authority for term: OAC rule 3745-77-07(A)(1))

20. Air Pollution Nuisance

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

(Authority for term: OAC rule 3745-77-07(A)(1))

B. *State Only Enforceable Section*

1. Reporting Requirements Related to Monitoring and Record Keeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

2. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

3. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

4. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution

control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

5. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

6. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

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

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforceable Section

1. The permittee shall maintain and implement a Preventative Maintenance and Malfunction Abatement Plan (PM&MAP) for each emissions unit and its associated control equipment. This plan shall include the requirements for compliance with OAC rule 3745-15-06. Within thirty (30) days following revisions to the plan, it shall be submitted to the Ohio EPA, Central District Office for review and approval.

B. State Only Enforceable Section

1. The following insignificant emissions units are located at this facility:

B005 - 2.0 mmBtu/hr natural gas-fired boiler;
B006 - carbon dryer number 72;
B007 - jeffrey fluid bed dryer;
B008 - dryer number 93;
F001 - truck unloading and storage hopper;
G001 - gasoline dispensing station;
P029 - bagging operation with dust collector;
P030 - truck loading with dust collector;
P039 - carbon acid wash;
P040 - B62 SWECO screener;
P041 - B80 SWECO screener;
P042 - B67 mill/gyratory sifter;
P043 - east wall screen;
P044 - doyle mixer;
P045 - B54 SWECO Screener;
P046 - nauta mixer/sifter;
P047 - B62 packaging system;
P048 - B80 packaging system;
P049 - B24 mill/gyratory sifter;
P050 - blue m oven 1;
P051 - blue m oven 2;
P052 - blue m oven 3;
P053 - wyssmont dryer; and
P054 - double cone washer.

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within a Permit to Install for the emissions unit.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Spent Carbon Pile (F002)
Activity Description: Spent Carbon Storage Pile-covered

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
spent carbon pile	OAC rule 3745-31-05(A)(3) (PTI # 01-8619)	Particulate emissions (PE) shall not exceed 5.15 tons per year (TPY). Compliance with this rule also includes compliance with OAC rules 3745-17-07(B)(6) and 3745-17-08(B)(6).
	OAC rule 3745-17-07(B)(6)	no visible PE from any material storage pile except for a period of time not to exceed 13 minutes during any 60-minute observation period
	OAC rule 3745-17-08(B), (B)(6)	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.I.2.b through A.I.2)

2. Additional Terms and Conditions

- 2.a The storage piles that are covered by this permit and subject to the above-mentioned requirements are listed below:

carbon storage pile

- 2.b The permittee shall employ best available control measures on all load-in and load-out operations associated with the storage piles 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 tarp the carbon pile after completion of the loading activities. Use of the tarp will constitute best available control measures and will ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2. Additional Terms and Conditions (continued)

- 2.c** The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.
- 2.d** The permittee shall employ best available control measures for wind erosion from the surfaces of all storage piles 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 use of a tarp. The tarp will constitute best available control measures and will ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.e** The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.
- 2.f** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05(A)(3).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

- 1.** Except as otherwise provided in this section, the permittee shall perform inspections of each load-in operation at each storage pile in accordance with the following frequencies:

storage pile identification	minimum load-in inspection frequency
carbon pile	daily
- 2.** Except as otherwise provided in this section, the permittee shall perform inspections of each load-out operation at each storage pile in accordance with the following frequencies:

storage pile identification	minimum load-out inspection frequency
carbon pile	daily
- 3.** Except as otherwise provided in this section, the permittee shall perform inspections of the wind erosion from pile surfaces associated with each storage pile in accordance with the following frequencies:

storage pile identification	minimum wind erosion inspection frequency
carbon pile	daily
- 4.** No inspection shall be necessary for wind erosion from the surface of a storage pile when the tarp is in place or when the pile is covered with snow and/or ice and for any storage pile activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

III. Monitoring and/or Record Keeping Requirements (continued)

5. The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.
6. The permittee may, upon receipt of written approval from the Ohio EPA, Central District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
7. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in 7.d shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion), and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

IV. Reporting Requirements

1. The permittee shall quarterly submit deviation (excursion) reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for use of a best available control measure or for snow and/or ice cover or precipitation; and
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
2. The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the emission limitations specified in section A.I.1 shall be determined by the following methods:
 - 1.a Emission Limitation: no visible PE from any material storage pile except for a period of time not to exceed 13 minutes during any 60-minute observation period.

Applicable Compliance Method: Compliance with the visible emission limitation for the storage pile identified 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, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

V. Testing Requirements (continued)

1.b Emission Limitation: PE shall not exceed 5.15 TPY.

Applicable Compliance Method: The annual emission limitation was developed based upon the facility's mass balance calculations [submitted as part of the PTI application, on June 4, 2002] that established a maximum hourly emission rate of 1.18 lbs of PE/hour. The annual emission limitation was then calculated by multiplying the hourly emission rate by 8,760 hour/year and divided by 2,000 lbs/ton.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
---	---	--

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 20A Reactivation Kiln (P028)

Activity Description: Regenerate carbon

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
carbon regeneration kiln 20A controlled by a thermal incinerator, wet scrubber and venturi scrubber	OAC rule 3745-31-05(A)(3) (PTI # 01-8619)	Particulate emissions (PE) shall not exceed 0.12 pound per hour and 0.54 ton per year (TPY).
		Nitrogen oxides (NOx) emissions shall not exceed 1.52 pounds per hour and 6.66 TPY.
		Carbon monoxide (CO) emissions shall not exceed 0.58 pound per hour and 2.53 TPY.
		Sulfur dioxide (SO2) emissions shall not exceed 0.54 pound per hour and 2.37 TPY.
		Volatile organic compound (VOC) emissions shall not exceed 7.53 pounds per hour and 33.0 TPY.
		Barium emissions shall not exceed 0.001 pound per hour and 0.004 TPY.
		Zinc emissions shall not exceed 0.0009 pound per hour and 0.004 TPY.
		Copper emissions shall not exceed 0.0008 pound per hour and 0.004 TPY.
		Cadmium emissions shall not exceed 0.002 pound per hour and 0.009 TPY.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
		Lead emissions shall not exceed 0.0002 pound per hour and 0.0007 TPY.
		Arsenic emissions shall not exceed 0.0005 pound per hour and 0.002 TPY.
		Hydrochloric acid (HCl) emissions shall not exceed 0.94 pound per hour and 4.12 TPY.
		Compliance with this rule also includes compliance with the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-07(A)(1)	See A.I.2.a and A.I.2.b below. Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a** The thermal incinerator controlling VOC emissions from this emissions unit shall operate with a minimum control efficiency of 95%, by weight, for VOC emissions.
- 2.b** The wet scrubber and venturi scrubber controlling the PE, SO₂ and HCl emissions from this emissions unit shall collectively operate with a minimum control efficiency of 95%, by weight.

II. Operational Restrictions

1. The average water flow rate through the venturi scrubber and the wet scrubber, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 50 gallons per minute.
2. The average pressure drop across the venturi scrubber and the wet scrubber, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 15 inches of water.
3. The average pH of the venturi scrubber's and the wet scrubber's liquor, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 6.5.
4. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the water flow rate through the venturi scrubber and the wet scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. the average water flow rate through the wet scrubber, in gallons per minute, for all 3-hour blocks of time that the emissions unit was operated; and
- b. the downtime for the control device and monitoring equipment when the associated emissions unit was in operation.

2. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the venturi scrubber and the wet scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. the average pressure drop across the venturi scrubber and the wet scrubber, in inches of water, for all 3-hour blocks of time that the emissions unit was operated; and
- b. the downtime for the control device, monitoring equipment when the associated emissions unit was in operation.

3. The permittee shall properly operate and maintain equipment to monitor the pH of the venturi scrubber's and the wet scrubber's liquor while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. the average pH of the venturi scrubber's and the wet scrubber's liquor, for all 3-hour blocks of time that the emissions unit was operated; and
- b. the downtime for the control device and monitoring equipment when the associated emissions unit was in operation.

4. The permittee shall operate and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. all 3-hour periods of time during which the average water flow rate through the venturi scrubber and the wet scrubber was not maintained at or above the required level;
 - b. all 3-hour periods of time during which the average pressure drop across the venturi scrubber and the wet scrubber was not maintained at or above the required level;
 - c. all 3-hour periods of time during which the average pH of the venturi scrubber's and the wet scrubber's liquor was not maintained at or above the required level; and
 - d. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission tests that demonstrated that the emissions unit was in compliance.
2. The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the emission limitations specified in sections A.I.1 and A.I.2 shall be determined in accordance with the following methods:

- 1.a Emission Limitations: PE shall not exceed 0.12 pound per hour; NO_x emissions shall not exceed 1.52 pounds per hour; CO emissions shall not exceed 0.58 pound per hour; SO₂ emissions shall not exceed 0.54 pound per hour.

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. The emission testing shall be conducted approximately 2.5 years after permit issuance.
 - ii. The emission testing shall be conducted to demonstrate compliance with the hourly emission limitations for PE, SO₂, NO_x and CO.
 - iii. The following test method(s) shall be employed to demonstrate compliance with the hourly PE, SO₂, NO_x and CO emission limitations:

40 CFR Part 60, Appendix A, Methods 1 through 5, 6C, 7E and 10.

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

- iv. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity unless otherwise specified or approved by the Ohio EPA, Central District Office.

V. Testing Requirements (continued)

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, Central District Office. 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, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central Office and Ohio EPA, Central District Office 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 on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office 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, Central District Office.

- 1.b** Emission Limitations: VOC emissions shall not exceed 7.53 pounds per hour; HCl emissions shall not exceed 0.94 pound per hour; barium emissions shall not exceed 0.001 pound per hour; zinc emissions shall not exceed 0.0009 pound per hour; copper emissions shall not exceed 0.0008 pound per hour; cadmium emissions shall not exceed 0.002 pound per hour; arsenic emissions shall not exceed 0.0005 pound per hour; lead emissions shall not exceed 0.0002 pound per hour.

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. The emission testing shall be conducted approximately 2.5 years after permit issuance and within 6 months prior to permit expiration.
- ii. The emission testing shall be conducted to demonstrate compliance with the hourly emission limitations for VOC, HCl, barium, zinc, copper, cadmium, arsenic and lead.
- iii. The following test method(s) shall be employed to demonstrate compliance with the hourly VOC, HCl, barium, zinc, copper, cadmium, arsenic and lead emission limitations:

40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25 or 25A, as appropriate, 26A and 29.

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

- iv. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity unless otherwise specified or approved by the Ohio EPA, Central District Office.

V. Testing Requirements (continued)

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, Central District Office. 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, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central Office and the Ohio EPA, Central District Office 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 on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office 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, Central District Office.

- 1.c** Emission Limitation: The thermal incinerator controlling VOC emissions from this emissions unit shall operate with a minimum control efficiency of 95%, by weight, for VOC emissions.

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. The emission testing shall be conducted approximately 2.5 years after permit issuance and within 6 months prior to permit expiration.
- ii. The emission testing shall be conducted to demonstrate compliance with the minimum control efficiency of not less than 95%, by weight, for VOC emissions
- iii. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25 or 25A, as appropriate. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
- iv. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity unless otherwise specified or approved by the Ohio EPA, Central District Office.

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, Central District Office. 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, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central Office and Ohio EPA, Central District Office 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 on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office 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, Central District Office.

V. Testing Requirements (continued)

- 1.d** Emission Limitation: The wet scrubber and venturi scrubber controlling the PE, SO₂ and HCl emissions from this emissions unit shall collectively operate with a minimum control efficiency of 95%, by weight.

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. The emission testing shall be conducted approximately 2.5 years after permit issuance.
- ii. The emission testing shall be conducted to demonstrate compliance with the minimum collective control efficiency requirement for the wet scrubber and venturi scrubber controlling the PE, SO₂ and HCl emissions from this emissions unit as specified in section A.I.
- iii. The control efficiency (i.e., the percent reduction in particulate, SO₂ and HCL mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5, 6C and 26A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- iv. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity unless otherwise specified or approved by the Ohio EPA, Central District Office.

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, Central District Office. 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, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central Office and Ohio EPA, Central District Office 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 on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office 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, Central District Office.

- 1.e** Emission Limitations: PE shall not exceed 0.54 TPY; NO_x emissions shall not exceed 6.66 TPY; CO emissions shall not exceed 2.53 TPY; SO₂ emissions shall not exceed 2.37 TPY; VOC emissions shall not exceed 33.0 TPY; barium emissions shall not exceed, 0.004 TPY; zinc emissions shall not exceed 0.004 TPY; copper emissions shall not exceed 0.004 TPY; cadmium emissions shall not exceed 0.009 TPY; lead emissions shall not exceed 0.0007 TPY; arsenic emissions shall not exceed 0.002 TPY; HCl emissions shall not exceed 4.12 TPY.

Applicable Compliance Method: The annual emission limitations were established by multiplying the hourly emission limitations of each pollutant by 8,760 hrs/year and dividing by 2,000 lbs/ton. Therefore, compliance with the annual emission limitations are ensured if compliance is maintained with the hourly emission limitations.

- 1.f** Emission Limitation: Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method: If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

Facility Name: **Barnebey Sutcliffe Corporation**
Facility ID: **01-25-04-0716**
Emissions Unit: **20A Reactivation Kiln (P028)**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
carbon regeneration kiln 20A controlled by a thermal incinerator, wet scrubber and venturi scrubber		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this emissions unit (P028) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Benzene

TLV (ug/m3): 1,600
Maximum Hourly Emission Rate (lbs/hr): 0.82
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 10.46
MAGLC (ug/m3): 38

Pollutant: Ethylbenzene

TLV (ug/m3): 434
Maximum Hourly Emission Rate (lbs/hr): 0.72
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 9.52
MAGLC (ug/m3): 10,333

Pollutant: Toluene

TLV (ug/m3): 188
Maximum Hourly Emission Rate (lbs/hr): 1.03
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 13.59
MAGLC (ug/m3): 4476

Pollutant: Xylene

TLV (ug/m3): 434
Maximum Hourly Emission Rate (lbs/hr): 1.24
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 16.31
MAGLC (ug/m3): 10,333

III. Monitoring and/or Record Keeping Requirements (continued)

Pollutant: Chloroform

TLV (ug/m3): 49
Maximum Hourly Emission Rate (lbs/hr): 1.7
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 21.96
MAGLC (ug/m3): 1,167

Pollutant: HCl

TLV (ug/m3): 7.5 (STEL)
Maximum Hourly Emission Rate (lbs/hr): 0.94
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 12.55
MAGLC (ug/m3): 131.61

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include 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 compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value 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 pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. when the computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

Facility Name: **Barnebey Sutcliffe Corporation**
Facility ID: **01-25-04-0716**
Emissions Unit: **20A Reactivation Kiln (P028)**

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 79 Reactivation Kiln (P035)

Activity Description: Regenerate carbon

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
79 carbon regeneration kiln controlled by a thermal incinerator, wet scrubber and venturi scrubber	OAC rule 3745-31-05(A)(3) (PTI # 01-7367)	<p>Particulate emissions (PE) shall not exceed 0.15 pound per hour and 0.66 ton per year (TPY).</p> <p>Nitrogen oxides (NOx) emissions shall not exceed 0.78 pound per hour and 3.2 TPY.</p> <p>Carbon monoxide (CO) emissions shall not exceed 0.17 pound per hour and 0.70 TPY.</p> <p>Sulfur dioxide (SO₂) emissions shall not exceed 0.57 pound per hour and 2.34 TPY.</p> <p>Volatile organic compound (VOC) emissions shall not exceed 19.48 pounds per hour and 85.3 TPY.</p> <p>Cadmium emissions shall not exceed 0.010 pound per hour and 0.044 TPY.</p> <p>Mercury emissions shall not exceed 0.011 pound per hour and 0.048 TPY.</p> <p>Nickel emissions shall not exceed 0.0076 pound per hour and 0.033 TPY.</p> <p>Phosphorous emissions shall not exceed 0.014 pound per hour and 0.061 TPY.</p>

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
		Lead emissions shall not exceed 0.068 pound per hour and 0.30 TPY.
		Hydrochloric acid (HCl) emissions shall not exceed 1.125 pound per hour and 4.63 TPY.
		Compliance with this rule also includes compliance with the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-07(A)(1)	See A.I.2.a, A.I.2.b, and A.II.5 below. Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a** The thermal incinerator controlling VOC emissions from this emissions unit shall operate with a minimum control efficiency of 90%, by weight, for VOC emissions.
- 2.b** The wet scrubber and venturi scrubber controlling the PE, SO₂ and HCl emissions from this emissions unit shall collectively operate with a minimum control efficiency of 95%, by weight.

II. Operational Restrictions

1. The average water flow rate through the venturi scrubber and the wet scrubber, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 60 gallons per minute.
2. The average pressure drop across the venturi scrubber and the wet scrubber, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 16.2 inches of water.
3. The average pH of the venturi scrubber's and the wet scrubber's liquor, for any 3-hour block of time when the emissions unit is in operation, shall be within the range of 6.0 to 10.0.
4. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
5. The maximum hourly process rate for this emissions unit shall not exceed 770 pounds of carbon per hour.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the water flow rate through the venturi scrubber and the wet scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. the average water flow rate through the venturi scrubber and the wet scrubber, in gallons per minute, for all 3-hour blocks of time that the emissions unit was operated; and
- b. the downtime for the control device and monitoring equipment when the associated emissions unit was in operation.

2. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the venturi scrubber and the wet scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. the average pressure drop across the venturi scrubber and the wet scrubber, in inches of water, for all 3-hour blocks of time that the emissions unit was operated; and
- b. the downtime for the control device and monitoring equipment when the associated emissions unit was in operation.

3. The permittee shall properly operate and maintain equipment to monitor the pH of the venturi scrubber's and the wet scrubber's liquor while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. the average pH of the venturi scrubber's and the wet scrubber's liquor, for all 3-hour blocks of time that the emissions unit was operated; and
- b. the downtime for the control device and monitoring equipment when the associated emissions unit was in operation.

4. The permittee shall operate and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

5. The permittee shall maintain the following daily records:

- a. the amount of carbon produced in this emissions unit, in pounds;
- b. the number of hours of operation; and
- c. the average hourly process rate, in pounds (a/b).

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. all 3-hour periods of time during which the average water flow rate through the venturi scrubber and the wet scrubber was not maintained at or above the required level;
 - b. all 3-hour periods of time during which the average pressure drop across the venturi scrubber and the wet scrubber was not maintained at or above the required level;
 - c. all 3-hour periods of time during which the average pH of the venturi scrubber's and the wet scrubber's liquor was not maintained at or above the required level;
 - d. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance; and
 - e. all exceedances of the hourly carbon process rate restriction.
2. The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the emission limitations and process rate restriction specified in sections A.I.1, A.I.2, and A.II.5 shall be determined in accordance with the following methods:

- 1.a Emission Limitations: PE shall not exceed 0.15 pound per hour; NO_x emissions shall not exceed 0.78 pound per hour; CO emissions shall not exceed 0.17 pound per hour; SO₂ emissions shall not exceed 0.57 pound per hour.

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. The emission testing shall be conducted approximately 2.5 years after permit issuance.
- ii. The emission testing shall be conducted to demonstrate compliance with the hourly emission limitations for PE, SO₂, NO_x and CO.
- iii. The following test method(s) shall be employed to demonstrate compliance with the hourly PE, SO₂, NO_x and CO emission limitations:

40 CFR Part 60, Appendix A, Methods 1 through 5, 6C, 7E and 10.

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

- iv. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity unless otherwise specified or approved by the Ohio EPA, Central District Office.

V. Testing Requirements (continued)

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, Central District Office. 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, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central Office and Ohio EPA, Central District Office 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 on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office 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, Central District Office.

- 1.b** Emission Limitations: VOC emissions shall not exceed 19.48 pounds per hour; HCl emissions shall not exceed 1.125 pound per hour; nickel emissions shall not exceed 0.0076 pound per hour; phosphorous emissions shall not exceed 0.014 pound per hour; cadmium emissions shall not exceed 0.01 pound per hour; mercury emissions shall not exceed 0.011 pound per hour; lead emissions shall not exceed 0.068 pound per hour.

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. The emission testing shall be conducted approximately 2.5 years after permit issuance and within 6 months prior to permit expiration.
- ii. The emission testing shall be conducted to demonstrate compliance with the hourly mass emission limitations for VOC, HCl, nickel, phosphorous, cadmium, mercury and lead.
- iii. The following test method(s) shall be employed to demonstrate compliance with the hourly VOC, HCl, nickel, phosphorous, cadmium, mercury and lead emission rates:

40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25 or 25A, as appropriate, 26A and 29.

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

- iv. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity unless otherwise specified or approved by the Ohio EPA, Central District Office.

V. Testing Requirements (continued)

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, Central District Office. 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, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central Office and Ohio EPA, Central District Office 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 on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office 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, Central District Office.

- 1.c** Emission Limitation: The thermal incinerator controlling VOC emissions from this emissions unit shall operate with a minimum control efficiency of 90%, by weight, for VOC emissions.

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. The emission testing shall be conducted approximately 2.5 years after permit issuance and within 6 months prior to permit expiration.
- ii. The emission testing shall be conducted to demonstrate compliance with the minimum control efficiency of 90%, by weight, for VOC emissions.
- iii. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25 or 25A, as appropriate. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
- iv. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity unless otherwise specified or approved by the Ohio EPA, Central District Office.

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, Central District Office. 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, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central Office and the Ohio EPA, Central District Office 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 on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office 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, Central District Office.

V. Testing Requirements (continued)

- 1.d** Emission Limitation: The wet scrubber and venturi scrubber controlling PE, SO₂ and HCl emissions from this emissions unit shall collectively operate with a minimum control efficiency of 95%, by weight.

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. The emission testing shall be conducted approximately 2.5 years after permit issuance.
- ii. The emission testing shall be conducted to demonstrate compliance with the minimum collection control efficiency requirement of 95%, by weight, for the wet scrubber and venturi scrubber controlling the PE, SO₂ and HCl emissions from this emissions unit.
- iii. The control efficiency (i.e., the percent reduction in PE, SO₂ and HCl emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5, 6C and 26A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- iv. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity unless otherwise specified or approved by the Ohio EPA, Central District Office.

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, Central District Office. 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, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Central Office and Ohio EPA, Central District Office 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 on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office 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, Central District Office.

- 1.e** Emission Limitations: PE shall not exceed 0.66 TPY; NO_x emissions shall not exceed 3.2 TPY; CO emissions shall not exceed 0.7 TPY; SO₂ emissions shall not exceed 2.34 TPY; VOC emissions shall not exceed 85.3 TPY; phosphorous emissions shall not exceed 0.061 TPY; cadmium emissions shall not exceed 0.044 TPY; lead emissions shall not exceed 0.3 TPY; mercury emissions shall not exceed 0.048 TPY; HCl emissions shall not exceed 4.63 TPY.

Applicable Compliance Method: The annual emission limitations were established by multiplying the hourly emission limitations of each pollutant by 8,760 hrs/year and dividing by 2,000 lbs/ton. Therefore, compliance with the annual emission limitations are ensured if compliance is maintained with the hourly emission limitations.

- 1.f** Emission Limitation: Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method: If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

Facility Name: **Barnebey Sutcliffe Corporation**
Facility ID: **01-25-04-0716**
Emissions Unit: **79 Reactivation Kiln (P035)**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
79 carbon regeneration kiln controlled by a thermal incinerator, wet scrubber and venturi scrubber		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this emissions unit (P035) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Acetone

TLV (ug/m3): 1,188,000
Maximum Hourly Emission Rate (lbs/hr): 3.53
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 34.07
MAGLC (ug/m3): 28,285

Pollutant: Benzene

TLV (ug/m3): 1,600
Maximum Hourly Emission Rate (lbs/hr): 1.49
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 14.4
MAGLC (ug/m3): 38

Pollutant: Chloroform

TLV (ug/m3): 49,000
Maximum Hourly Emission Rate (lbs/hr): 0.81
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 7.81
MAGLC (ug/m3): 1,167

Pollutant: Cumene

TLV (ug/m3): 246,000
Maximum Hourly Emission Rate (lbs/hr): 0.28
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 2.7
MAGLC (ug/m3): 5,957

Pollutant: 1,2-Dichloroethylene

TLV (ug/m3): 793,000
Maximum Hourly Emission Rate (lbs/hr): 0.366
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 3.53
MAGLC (ug/m3): 18,881

III. Monitoring and/or Record Keeping Requirements (continued)

Pollutant: Ethyl Acetate

TLV (ug/m3): 1,440
Maximum Hourly Emission Rate (lbs/hr): 0.367
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 3.54
MAGLC (ug/m3): 34,285

Pollutant: Ethylbenzene

TLV (ug/m3): 434
Maximum Hourly Emission Rate (lbs/hr): 0.925
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 8.92
MAGLC (ug/m3): 10,333

Pollutant: Methanol

TLV (ug/m3): 262
Maximum Hourly Emission Rate (lbs/hr): 1.36
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 13.14
MAGLC (ug/m3): 6,238

Pollutant: Methylene Chloride

TLV (ug/m3): 174,000
Maximum Hourly Emission Rate (lbs/hr): 0.576
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 5.55
MAGLC (ug/m3): 4,143

Pollutant: n-Propyl Acetate

TLV (ug/m3): 835,000
Maximum Hourly Emission Rate (lbs/hr): 0.34
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 3.28
MAGLC (ug/m3): 19,952

Pollutant: Toluene

TLV (ug/m3): 188
Maximum Hourly Emission Rate (lbs/hr): 2.768
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 26.69
MAGLC (ug/m3): 4,476

III. Monitoring and/or Record Keeping Requirements (continued)

Pollutant: Trichloroethylene

TLV (ug/m3): 269,000
Maximum Hourly Emission Rate (lbs/hr): 3.24
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 31.25
MAGLC (ug/m3): 6,405

Pollutant: Xylene

TLV (ug/m3): 434,000
Maximum Hourly Emission Rate (lbs/hr): 1.04
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 10
MAGLC (ug/m3): 10,333

Pollutant: HCl

TLV (ug/m3): 7.5 (STEL)
Maximum Hourly Emission Rate (lbs/hr): 1.13
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 10.85
MAGLC (ug/m3): 131.61

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include 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 compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value 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 pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

III. Monitoring and/or Record Keeping Requirements (continued)

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. when the computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 20B Reactivation Kiln (P036)

Activity Description: Regenerate carbon

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
carbon regeneration kiln 20B controlled by a thermal incinerator, wet scrubber and venturi scrubber	OAC rule 3745-31-05(A)(3) (PTI # 01-8619)	<p>Particulate emissions (PE) shall not exceed 0.12 pound per hour and 0.54 ton per year (TPY).</p> <p>Nitrogen oxides (NOx) emissions shall not exceed 1.52 pounds per hour and 6.66 TPY.</p> <p>Carbon monoxide (CO) emissions shall not exceed 0.58 pound per hour and 2.53 TPY.</p> <p>Sulfur dioxide (SO₂) emissions shall not exceed 0.54 pound per hour and 2.37 TPY.</p> <p>Volatile organic compound (VOC) emissions shall not exceed 7.53 pounds per hour and 33.0 TPY.</p> <p>Barium emissions shall not exceed 0.001 pound per hour and 0.004 TPY.</p> <p>Zinc emissions shall not exceed 0.0009 pound per hour and 0.004 TPY.</p> <p>Copper emissions shall not exceed 0.0008 pound per hour and 0.004 TPY.</p> <p>Cadmium emissions shall not exceed 0.002 pound per hour and 0.009 TPY.</p>

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
		Lead emissions shall not exceed 0.0002 pound per hour and 0.0007 TPY.
		Arsenic emissions shall not exceed 0.0005 pound per hour and 0.002 TPY.
		Hydrochloric acid (HCl) emissions shall not exceed 0.94 pound per hour and 4.12 TPY.
		Compliance with this rule also includes compliance with the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-07(A)(1)	See A.I.2.a and A.I.2.b below. Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a** The thermal incinerator controlling VOC emissions from this emissions unit shall operate with a minimum control efficiency of 95%, by weight, for VOC emissions.
- 2.b** The wet scrubber and venturi scrubber controlling the PE, SO₂ and HCl emissions from this emissions unit shall collectively operate with a minimum control efficiency of 95%, by weight.

II. Operational Restrictions

1. The average water flow rate through the venturi scrubber and the wet scrubber, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 50 gallons per minute.
2. The average pressure drop across the venturi scrubber and the wet scrubber, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 15 inches of water.
3. The average pH of the venturi scrubber's and the wet scrubber's liquor, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 6.5.
4. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission tests that demonstrated the emissions unit was in compliance.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the water flow rate through the venturi scrubber and the wet scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. the average water flow rate through the wet scrubber, in gallons per minute, for all 3-hour blocks of time that the emissions unit was operated; and
- b. the downtime for the control device and monitoring equipment when the associated emissions unit was in operation.

2. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the venturi scrubber and the wet scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. the average pressure drop across the venturi scrubber and the wet scrubber, in inches of water, for all 3-blocks of time that the emissions unit was operated; and
- b. the downtime for the control device and monitoring equipment when the associated emissions unit was in operation.

3. The permittee shall properly operate and maintain equipment to monitor the pH of the venturi scrubber's and the wet scrubber's liquor while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. the average pH of the venturi scrubber's and the wet scrubber's liquor, for all 3-hour blocks of time that the emissions unit was operated; and
- b. the downtime for the control device and monitoring equipment when the associated emissions unit was in operation.

4. The permittee shall operate and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. all 3-hour periods of time during which the average water flow rate through the venturi scrubber and the wet scrubber was not maintained at or above the required level;
 - b. all 3-hour periods of time during which the average pressure drop across the venturi scrubber and the wet scrubber was not maintained at or above the required level;
 - c. all 3-hour periods of time during which the average pH of the venturi scrubber's and the wet scrubber's liquor was not maintained at or above the required level; and
 - d. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission tests that demonstrated that the emissions unit was in compliance.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the emission limitations specified in section A.I.1 shall be determined in accordance with the following methods:
 - 1.a Emission Limitations: PE shall not exceed 0.12 pound per hour; NO_x emissions shall not exceed 1.52 pounds per hour; CO emissions shall not exceed 0.58 pound per hour; SO₂ emissions shall not exceed 0.54 pound per hour.

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. The emission testing shall be conducted approximately 2.5 years after permit issuance.
- ii. The emission testing shall be conducted to demonstrate compliance with the hourly emission limitations for PE, SO₂, NO_x and CO.
- iii. The following test method(s) shall be employed to demonstrate compliance with the hourly PE, SO₂, NO_x and CO emission limitations:

40 CFR Part 60, Appendix A, Methods 1 through 5, 6C, 7E and 10.

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

- iv. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity unless otherwise specified or approved by the Ohio EPA, Central District Office.

V. Testing Requirements (continued)

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, Central District Office. 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, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Central Office and the Ohio EPA, Central District Office 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 on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office 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, Central District Office.

- 1.b** Emission Limitation: VOC emissions shall not exceed 7.53 pounds per hour; HCl emissions shall not exceed 0.94 pound per hour; barium emissions shall not exceed 0.001 pound per hour; zinc emissions shall not exceed 0.0009 pound per hour; copper emissions shall not exceed 0.0008 pound per hour; cadmium emissions shall not exceed 0.002 pound per hour; arsenic emissions shall not exceed 0.0005 pound per hour; lead emissions shall not exceed 0.0002 pound per hour.

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. The emission testing shall be conducted approximately 2.5 years after permit issuance and within 6 months prior to permit expiration.
- ii. The emission testing shall be conducted to demonstrate compliance with the hourly emission limitations for VOC, HCl, barium, zinc, copper, cadmium, arsenic and lead.
- iii. The following test method(s) shall be employed to demonstrate compliance with the hourly VOC, HCl, barium, zinc, copper, cadmium, arsenic and lead emission limitations:

40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25 or 25A, as appropriate, 26A and 29.

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

- iv. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity unless otherwise specified or approved by the Ohio EPA, Central District Office.

V. Testing Requirements (continued)

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, Central District Office. 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, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central Office and Ohio EPA, Central District Office 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 on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office 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, Central District Office.

- 1.c** Emission Limitation: The thermal incinerator controlling VOC emissions from this emissions unit shall operate with a minimum control efficiency of 95%, by weight, for VOC emissions.

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. The emission testing shall be conducted approximately 2.5 years after permit issuance and within 6 months prior to permit expiration.
- ii. The emission testing shall be conducted to demonstrate compliance with the minimum control efficiency requirement of 95%, by weight, for VOC emissions.
- iii. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25 or 25A, as appropriate. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
- iv. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity unless otherwise specified or approved by the Ohio EPA, Central District Office.

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, Central District Office. 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, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Central Office and the Ohio EPA, Central District Office 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 on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office 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, Central District Office.

V. Testing Requirements (continued)

- 1.d** Emission Limitation: The wet scrubber and venturi scrubber controlling the PE, SO₂ and HCl emissions from this emissions unit shall collectively operate with a minimum control efficiency of 95%, by weight.

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. The emission testing shall be conducted approximately 2.5 years after permit issuance.
- ii. The emission testing shall be conducted to demonstrate compliance with the minimum collective control efficiency requirement for the wet scrubber and venturi scrubber of 95%, by weight, for controlling the PE, SO₂ and HCl emissions from this emissions unit.
- iii. The control efficiency (i.e., the percent reduction in PE, SO₂ and HCl mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5, 6C and 26A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- iv. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity unless otherwise specified or approved by the Ohio EPA, Central District Office.

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, Central District Office. 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, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Central Office and Ohio EPA, Central District Office 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 on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office 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, Central District Office.

- 1.e** Emission Limitations: PE shall not exceed 0.54 TPY; NO_x emissions shall not exceed 6.66 TPY; CO emissions shall not exceed 2.53 TPY; SO₂ emissions shall not exceed 2.37 TPY; VOC emissions shall not exceed 33.0 TPY; barium emissions shall not exceed, 0.004 TPY; zinc emissions shall not exceed 0.004 TPY; copper emissions shall not exceed 0.004 TPY; cadmium emissions shall not exceed 0.009 TPY; lead emissions shall not exceed 0.0007 TPY; arsenic emissions shall not exceed 0.002 TPY; HCl emissions shall not exceed 4.12 TPY.

Applicable Compliance Method: The annual emission limitations were established by multiplying the hourly emission limitations of each pollutant by 8,760 hrs/year and dividing by 2,000 lbs/ton. Therefore, compliance with the annual emission limitations are ensured if compliance is maintained with the hourly emission limitations.

- 1.f** Emission Limitation: Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method: If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

Facility Name: **Barnebey Sutcliffe Corporation**
Facility ID: **01-25-04-0716**
Emissions Unit: **20B Reactivation Kiln (P036)**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
carbon regeneration kiln 20B controlled by a thermal incinerator, wet scrubber and venturi scrubber		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this emissions unit (P036) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Benzene

TLV (ug/m3): 1,600
Maximum Hourly Emission Rate (lbs/hr): 0.82
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 10.46
MAGLC (ug/m3): 38

Pollutant: Ethylbenzene

TLV (ug/m3): 434
Maximum Hourly Emission Rate (lbs/hr): 0.72
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 9.52
MAGLC (ug/m3): 10,333

Pollutant: Toluene

TLV (ug/m3): 188
Maximum Hourly Emission Rate (lbs/hr): 1.03
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 13.59
MAGLC (ug/m3): 4,476

Pollutant: Xylene

TLV (ug/m3): 434
Maximum Hourly Emission Rate (lbs/hr): 1.24
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 16.31
MAGLC (ug/m3): 10,333

III. Monitoring and/or Record Keeping Requirements (continued)

Pollutant: Chloroform

TLV (ug/m3): 49
Maximum Hourly Emission Rate (lbs/hr): 1.7
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 21.96
MAGLC (ug/m3): 1,167

Pollutant: HCl

TLV (ug/m3): 7.5 (STEL)
Maximum Hourly Emission Rate (lbs/hr): 0.94
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 12.55
MAGLC (ug/m3): 131.61

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include 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 compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value 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 pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. when the computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

Facility Name: **Barnebey Sutcliffe Corporation**
Facility ID: **01-25-04-0716**
Emissions Unit: **20B Reactivation Kiln (P036)**

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: B33 Mill/Gyratory Sifter (P038)

Activity Description: Carbon Screening

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B33- Mill/Gyratory Sifter, equipped with a baghouse	OAC rule 3745-31-05(A)(3) (PTI # 01-8619)	Particulate emissions (PE) shall not exceed 1.25 pounds per hour and 5.48 tons per year (TPY). Compliance with this rule also includes compliance with the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-07(A)(1)	See A.I.2.a below. Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- PE from the baghouse controlling PE from this emissions unit shall not exceed 0.02 grain per dry standard cubic foot (dscf).

II. Operational Restrictions

- The pressure drop across the baghouse controlling emissions from this emissions unit shall be maintained within the range of 0.6 to 1.4 inches of water while this emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

- The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. 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 pressure drop across the baghouse on a daily basis.

III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the stack serving this emissions unit. 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 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.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. The deviation reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions of this permit.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible PE were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible PE. These reports shall be submitted to the Ohio EPA, Central District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations specified in Section A.I shall be determined in accordance with the following methods:

- 1.a Emission Limitations: PE shall not exceed 1.25 pounds per hour and 0.02 grain/dscf:

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. The emission testing shall be conducted approximately 2.5 years after permit issuance.
- ii. The emission testing shall be conducted to demonstrate compliance with the hourly emission limitation and the grain/dscf emission limitation for PE.
- iii. The following test method(s) shall be employed to demonstrate compliance with the hourly emission and the grain/dscf limitations for PE:

40 CFR Part 60, Appendix A, Methods 1 through 5.

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

- iv. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity unless otherwise specified or approved by the Ohio EPA, Central District Office.

V. Testing Requirements (continued)

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, Central District Office. 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, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central Office and Ohio EPA, Central District Office 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 on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office 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, Central District Office.

- 1.b** Emission Limitation: PE shall not exceed 5.48 TPY.

Applicable Compliance Method: The annual emission limitation was established by multiplying the hourly emission limitation by 8,760 hrs/year and dividing by 2,000 lbs/ton. Therefore, compliance with the annual emission limitation is ensured if compliance is maintained with the hourly emission limitation.

- 1.c** Emission Limitation: Visible PE shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method: Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
---	---	--

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

THIS IS THE LAST PAGE OF THE PERMIT
