



State of Ohio Environmental Protection Agency

STREET ADDRESS:

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Columbus, Ohio 43215

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www.epa.state.oh.us

MAILING ADDRESS:

P.O. Box 1049
Columbus, OH 43216-1049

7/15/2009

Todd Watson
Butler Dehy Inc.
P.O. Box 277
Ross, OH 45061

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 1409040713
Permit Number: P0097113
Permit Type: Renewal
County: Butler

Certified Mail

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

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate ("PTIO") which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully.

Ohio EPA maintains a document entitled "Frequently Asked Questions about the PTIO". The document can be downloaded from the DAPC Web page, www.epa.state.oh.us/dapc, from the "Permits" link. This document contains additional information related to your permit, such as what activities are covered under the PTIO, who has enforcement authority over the permit and Ohio EPA's authorization to inspect your facility and records. Please contact the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469 if you need assistance.

The issuance of this PTIO is a final action of the Director and may be appealed to the Environmental Review Appeals Commission ("ERAC") under Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and describe the action complained of and the grounds for the appeal. The appeal must be filed with the ERAC within thirty (30) days after notice of the Director's action. A filing fee of \$70.00 must be submitted to the ERAC with the appeal, although the ERAC, has discretion to reduce the amount of the filing fee if you can demonstrate (by affidavit) that payment of the full amount of the fee would cause extreme hardship. If you file an appeal of this action, you must notify Ohio EPA of the filing of the appeal (by providing a copy to the Director) within three (3) days of filing your appeal with the ERAC. Ohio EPA requests that a copy of the appeal also be provided to the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the ERAC at the following address:

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

If you have any questions regarding this permit, please contact the Hamilton County Dept. of Environmental Services. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page www.epa.state.oh.us/dapc.

Sincerely,

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

Cc: HCDOES

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director



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

FINAL

**Air Pollution Permit-to-Install and Operate
for
Butler Dehy Inc.**

Facility ID: 1409040713
Permit Number: P0097113
Permit Type: Renewal
Issued: 7/15/2009
Effective: 7/15/2009
Expiration: 7/15/2019



Air Pollution Permit-to-Install and Operate
for
Butler Dehy Inc.

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State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate
Permit Number: P0097113
Facility ID: 1409040713
Effective Date: 7/15/2009

Authorization

Facility ID: 1409040713
Application Number(s): A0028748
Permit Number: P0097113
Permit Description: PTIO Renewal following PTI Modification 14-02748, issued 1/29/2004
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 7/15/2009
Effective Date: 7/15/2009
Expiration Date: 7/15/2019
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Butler Dehy Inc.
1830 Hamilton-Cleves Road
Hamilton, OH 45013

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

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

Hamilton County Dept. of Environmental Services
250 William Howard Taft Pkwy.
Cincinnati, OH 45219-2660
(513)946-7777

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate

Permit Number: P0097113

Facility ID: 1409040713

Effective Date: 7/15/2009

Authorization (continued)

Permit Number: P0097113

Permit Description: PTIO Renewal following PTI Modification 14-02748, issued 1/29/2004

Permits for the following emissions unit(s) or groups of emissions units are in this document as indicated below:

Emissions Unit ID:	P001
Company Equipment ID:	Sludge dryer
Superseded Permit Number:	14-02748
General Permit Category and Type:	Not Applicable



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Division of Air Pollution Control

Final Permit-to-Install and Operate

Permit Number: P0097113

Facility ID: 1409040713

Effective Date: 7/15/2009

A. Standard Terms and Conditions



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

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

2. Who is responsible for complying with this permit?

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

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

3. What records must I keep under this permit?

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

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

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

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

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

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

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

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.



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

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

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

7. What reports must I submit under this permit?

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

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

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

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

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

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



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

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

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

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

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

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

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

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

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

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

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

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



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

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

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

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

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

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



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B. Facility-Wide Terms and Conditions



1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
 - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (1) The following emissions units contained in this permit are subject to 40 CFR Part 61, Subpart E, National Emission Standards for Mercury: P001. The complete NESHAP requirements, including the NESHAP General Provisions, may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District office of local air agency.

The permittee shall comply with all applicable requirements of 40 CFR Part 61, Subpart E. The permittee shall also comply with all applicable requirements of 40 CFR Part 61, Subpart A (General Provisions). Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR Part 61, Subpart E and Subpart A.



State of Ohio Environmental Protection Agency
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Final Permit-to-Install and Operate

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Effective Date: 7/15/2009

C. Emissions Unit Terms and Conditions



1. P001, Sludge dryer

Operations, Property and/or Equipment Description:

30 mmBtu/hr Natural Gas/Oil-Fired Sludge Drying Operation with Settling Chamber Cyclone and Wet Scrubber

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

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

a. None.

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

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

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Particulate emissions (PE) and particulate matter emissions 10 microns and less in diameter (PM10) shall not exceed 2.7 pounds per hour* and 11.8 tons per year (TPY)*.</p> <p>Nitrogen oxides (NOx) emissions shall not exceed 0.14 pound per mmBtu* and 18.4 TPY*.</p> <p>Carbon monoxide (CO) emissions shall not exceed 0.08 pound per mmBtu* and 10.8 TPY*.</p> <p>Organic compound (OC) emissions shall not exceed 0.66 pound per hour* and 2.9 TPY*.</p> <p>Sulfur dioxide (SO₂) emissions shall not exceed 0.51 pound per mmBtu and 38.4</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>TPY.</p> <p>*The emission limitations outlined above are based upon the emissions unit's potential to emit (PTE). Therefore, no records are required to demonstrate compliance with these limits.</p> <p>Visible particulate emissions from any stack shall not exceed 10 percent opacity, as a six-minute average (see b)(2)a.).</p> <p>See c)(1) and c)(2).</p> <p>The requirements of this rule include compliance with the requirements of 40 CFR Part 61.</p>
b.	<p>40 CFR Part 61, Subpart E [40 CFR 61.50-56]</p> <p>National Emission Standard for Mercury</p> <p>[In accordance with 40 CFR 61.50, this emissions unit is a stationary source which dries wastewater treatment plant sludge.]</p>	<p>Mercury emissions shall not exceed 3.2 kilograms (7.1 pounds) of mercury per 24-hour period. [40 CFR 61.52(b)]</p> <p>See c)(3).</p>
c.	<p>40 CFR Part 61, Subpart A [40 CFR 61.01-19]</p>	<p>The General Provisions as specified in 40 CFR 61.01-61.19 apply to this emissions unit.</p>
d.	<p>OAC rule 3745-17-07(A)</p>	<p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
e.	<p>OAC rule 3745-17-11</p>	<p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
f.	<p>OAC rule 3745-18-06(D)</p>	<p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>

(2) Additional Terms and Conditions

- a. The presence of water vapor in the scrubber plume does not constitute visible emissions.



- b. The emissions from this emissions unit shall be vented to the settling chamber cyclone and wet scrubber at all times the emissions unit is in operation.
 - c. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of a settling chamber cyclone and scrubber, emissions limitations, and fuel oil usage limitations.
 - d. The application and enforcement of the provisions of the National Emission Standards for Hazardous Air Pollutants (NESHAP), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 61, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 61 are also federally enforceable.
- c) Operational Restrictions
- (1) The maximum annual No. 2 fuel oil usage for this emissions unit shall not exceed 1,075,000 gallons per year.
 - (2) The quality of No. 2 fuel oil received for burning in this emissions unit shall have a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.51 lb/mmBtu of actual heat input.
 - (3) No changes in the operation of the emissions unit shall be made after a stack test or sludge test has been conducted as specified in f)(2) which would potentially increase mercury emissions above the level determined by the most recent stack test or sludge test, until the new mercury emission level has been estimated by calculation and the results reported to the Hamilton County Department of Environmental Services. [40 CFR Part 61.54]
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall maintain monthly records of the total number of gallons of No. 2 fuel oil used in this emissions unit.
 - (2) The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below:
 - a. Alternative 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.



b. Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).

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

(3) Pursuant to 40 CFR Part 61, Subpart E, the permittee shall retain records of emission test results, sludge sampling, test reports, and other data, as specified in f)(2) of this permit, needed to determine mercury emissions. These records shall be retained in accordance with the record keeping requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

(4) The permittee shall properly install, operate, and maintain equipment to continuously monitor the scrubber liquid flow rate (in gallons per minute) during operation of this emissions unit, including periods of startup and shutdown. The permittee shall record the scrubber liquid flow rate on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The acceptable range or limit for the scrubber liquid flow rate shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate range for each parameter is established to demonstrate compliance.

Whenever the monitored value for any parameter deviates from the range(s) or minimum limit(s) established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and



- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the control equipment parameters within the acceptable range(s), or at or above the minimum limit(s) specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date the corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the flow rate readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

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

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

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (2) The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the wet scrubber during the 12-month reporting period for this emissions unit:
 - a. each period of time (start time and date, and end time and date) when the liquid flow rate was outside of the appropriate range or limit specified by the



- manufacturer and outside of the acceptable range following any required compliance demonstration;
- b. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the scrubber;
 - c. each incident of deviation described in Aa@ or “b” (above) where a prompt investigation was not conducted;
 - d. each incident of deviation described in Aa@ or “b” where prompt corrective action, that would bring the liquid flow rate into compliance with the appropriate range or limit contained in this permit, was determined to be necessary and was not taken; and
 - e. each incident of deviation described in Aa@ or “b” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.
- (3) See f)(2) of this permit for mercury emissions reporting requirements upon completion of stack emissions testing or sludge sampling analyses, as specified in 40 CFR Part 61, Subpart E.
- f) Testing Requirements
- (1) Compliance with the emission limitations in b) of these terms and conditions shall be determined in accordance with the following method(s) identified below:
- a. Emission Limitations:

Particulate emissions (PE) and particulate matter emissions 10 microns and less in diameter (PM10) shall not exceed 2.7 pounds per hour and 11.8 tons per year (TPY).

Organic compound (OC) emissions shall not exceed 0.66 pound per hour and 2.9 TPY.

Applicable Compliance Method:

The PE, PM10, and OC emission limitations specified above are based upon the emission unit’s potential to emit. The emission limitations were based upon permittee-supplied stack test data, manufacturer-guaranteed control efficiencies, and the operational parameters contained in the permit to install (PTI) application 14-02748, as received on July 2, 1992. Compliance with the PE, PM10 and OC TPY emission limitations specified above shall be determined by multiplying the maximum potential hourly emissions limits by 8760 hours/year, then dividing by 2000 lbs/ton.

If required, the permittee shall demonstrate compliance with the pound per hour PE/PM10 emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-5 and 201.



If required, the permittee shall demonstrate compliance with the pound per hour OC emissions limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 25.

b. Emission Limitations:

Nitrogen oxides (NO_x) emissions shall not exceed 0.14 pound per mmBtu and 18.4 TPY.

Applicable Compliance Method:

The NO_x emission limitations specified above are based upon the emission unit's potential to emit. The emission limitations were based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.3, Table 1.3-1 (9/98). Compliance with the lb/mmBtu emission limitation may be determined by converting the 20 lbs NO_x/10³ gal emission factor into lb NO_x/mmBtu by dividing by 140 mmBtu/10³ gal. Compliance with the annual emission limitation may be demonstrated by multiplying the lb NO_x/mmBtu value by the maximum rated heat input capacity of the emissions unit (in mmBtu/hr), then multiplying by 8760 hrs/yr and dividing by 2000 lbs/ton.

If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 7.

c. Emission Limitations:

Carbon monoxide (CO) emissions shall not exceed 0.08 pound per mmBtu and 10.8 TPY.

Applicable Compliance Method:

The CO emission rates specified above are based upon the emission unit's potential to emit. The emission limitations were based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-1 (7/98). Compliance with the lb/mmBtu emission limitation may be determined by converting the 84 lbs CO/10⁶ scf emission factor into lb CO/mmBtu by dividing by 1,020 Btu/scf. Compliance with the annual emission limitation may be demonstrated by multiplying the lb CO/mmBtu value by the maximum rated heat input capacity of the emissions unit (in mmBtu/hr), then multiplying by 8760 hrs/yr and dividing by 2000 lbs/ton.

If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 10.

d. Emission Limitations:

Sulfur dioxide (SO₂) emissions shall not exceed 0.51 pound per mmBtu and 38.4 TPY.

Applicable Compliance Method:



The SO₂ emission limitations were based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.3, Table 1.3-1 (9/98). Compliance with the lb/mmBtu emission limitation shall be based upon the record keeping in d)(2). Compliance with the annual emission limitation shall be determined by multiplying the annual average lb SO₂/mmBtu value by the annual average heat content and the total gallons on No. 2 fuel oil burned, and then dividing by 2000 lbs/ton.

If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 6.

e. Emissions Limitation:

Mercury emissions shall not exceed 3.2 kilograms (7.1 pounds) of mercury per 24-hour period.

Applicable Compliance Method:

Pursuant to 40 CFR Part 61, Subpart E, compliance with the mercury emissions limitation shall be demonstrated through the emissions testing required in f)(2) below.

- (2) The permittee shall conduct, or have conducted, mercury emission testing for this emissions unit in accordance with the following requirements as specified in 40 CFR 61.55(a):
- a. The emission testing shall be conducted on an annual basis, by December 31 of each year.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emissions rate of 3.2 kg (7.1 pounds) of mercury per 24-hour period.
 - c. Either of the following test method(s), as specified in 40 CFR Part 61, Subpart E, shall be employed to demonstrate compliance with the allowable mass emission rate(s):
 - i. Stack sampling by Method 101A of Appendix B and the requirements of 40 CFR 61.53(d); or
 - ii. Sludge sampling by Method 105 of Appendix B and the requirements of 40 CFR 61.54.
 - d. Samples shall be taken over such a period as necessary to determine accurately the maximum emissions which will occur in a 24-hour period.
 - e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be



conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

- f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- g. All samples shall be analyzed and mercury emissions shall be determined within 30 days after the emissions test. If the sludge sampling method is performed, mercury emissions shall be determined using the equation specified in 40 CFR 61.54(d). Results shall be reported to the Hamilton County Department of Environmental Services within 15 calendar days following the date such determination is completed. Reports shall contain the following information if the sludge sampling method is performed:
 - i. the mercury concentration of the sludge on a dry solids basis, $\mu\text{g/g}$;
 - ii. sludge charging rate, kg/day ;
 - iii. weight fraction of solids in the collected sludge; and
 - iv. mercury emissions in kilograms per day.
- h. If annual emission test results, demonstrated by either stack sampling or sludge sampling according to the above methods, do not exceed 1.6 kg (3.5 lbs) of mercury per 24-hour period, the permittee may apply for a reduced emission testing schedule through a written request to Hamilton County Department of Environmental Services. If the result of any subsequent emission test indicates the emissions unit exceeds 1.6 kg (3.5 lbs) of mercury per 24-hour period, annual mercury emission testing shall be resumed.

g) Miscellaneous Requirements

- (1) The terms and conditions of this permit to install and operate (PTIO) shall supersede the terms and conditions of permit to install (PTI) No. 14-02748, as issued on January 29, 2004.