



State of Ohio Environmental Protection Agency

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

9/10/2008

Certified Mail

Vince Waggle  
Heritage - WTI, Inc.  
1250 St. George Street  
East Liverpool, OH 43920-3400

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

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL  
Facility ID: 0215020233  
Permit Number: 02-22975  
Permit Type: Initial Installation  
County: Columbiana

Dear Permit Holder:

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

The issuance of this PTI 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

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 Compliance Assistance and Pollution Prevention at (614) 644-3469. If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Northeast District Office. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page <http://www.epa.state.oh.us/dapc>.

Sincerely,

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

Cc: U.S. EPA Region 5 Via E-Mail Notification  
Ohio EPA DAPC, Northeast District Office

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  
for  
Heritage - WTI, Inc.**

Facility ID: 0215020233  
Permit Number: 02-22975  
Permit Type: Initial Installation  
Issued: 9/10/2008  
Effective: 9/10/2008





State of Ohio Environmental Protection Agency  
 Division of Air Pollution Control

**Air Pollution Permit-to-Install**  
 for  
 Heritage - WTI, Inc.

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State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install**  
**Permit Number:** 02-22975  
**Facility ID:** 0215020233  
**Effective Date:** 9/10/2008

## Authorization

Facility ID: 0215020233  
Facility Description: Hazardous Waste Incinerator  
Application Number(s): A0002093  
Permit Number: 02-22975  
Permit Description: Slag canopy.  
Permit Type: Initial Installation  
Permit Fee: \$200.00  
Issue Date: 9/10/2008  
Effective Date: 9/10/2008

This document constitutes issuance to:

Heritage - WTI, Inc.  
1250 St. George Street  
East Liverpool, OH 43920-3400

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

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

Ohio EPA DAPC, Northeast District Office  
2110 East Aurora Road  
Twinsburg, OH 43087  
(330)425-9171

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski  
Director



State of Ohio Environmental Protection Agency  
 Division of Air Pollution Control

**Final Permit-to-Install**  
**Permit Number:** 02-22975  
**Facility ID:** 0215020233  
**Effective Date:** 9/10/2008

## Authorization (continued)

Permit Number: 02-22975  
 Permit Description: Slag canopy.

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

<b>Emissions Unit ID:</b>	<b>P006</b>
Company Equipment ID:	Slag Canopy
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install**  
**Permit Number:** 02-22975  
**Facility ID:** 0215020233  
**Effective Date:** 9/10/2008

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



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

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

## **2. Severability Clause**

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

## **3. General Requirements**

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



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

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

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



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

## **5. Scheduled Maintenance/Malfunction Reporting**

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

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

## **6. Compliance Requirements**

- a) The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.
- b) Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on



information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

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

## **7. Best Available Technology**

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

## **8. Air Pollution Nuisance**

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

## **9. Reporting Requirements**

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Ohio EPA DAPC, Northeast District Office.



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

**10. Applicability**

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

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

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.
- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or



confirmed through completion of the annual PER covering the last period of operation of the affected emissions unit(s).

- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the PER covering the last period the emissions unit operated.

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

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

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

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

## **13. Construction Compliance Certification**

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

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

## **14. Public Disclosure**

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



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

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

**16. Fees**

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

**17. Permit Transfers**

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

**18. Risk Management Plans**

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

**19. Title IV Provisions**

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



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install**  
**Permit Number:** 02-22975  
**Facility ID:** 0215020233  
**Effective Date:** 9/10/2008

## **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 permittee shall comply with the requirements contained within the most recent version of the following regulations that are applicable to the facility:
      - a. 40 CFR 61, Subpart J = National Emission Standard for Equipment Leaks (Fugitive Emission Sources) of Benzene;
      - b. 40 CFR 61, Subpart V = National Emission Standard for Equipment Leaks (Fugitive Emission Sources);
      - c. 40 CFR 61, Subpart FF = National Emission Standard for Benzene Waste Operations;
      - d. 40 CFR 63, Subpart DD = National Emission Standard for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations; and
      - e. 40 CFR 68 = Chemical Accident Provisions.
      - f. OAC rule 3745-21-09, paragraph DD (Leaks from process units that produce organic chemicals) when operations warrant applicability.



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install**  
**Permit Number:** 02-22975  
**Facility ID:** 0215020233  
**Effective Date:** 9/10/2008

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



**1. P006, Slag Canopy**

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

Slag Canopy

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific 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(C)	Organic compounds (OC) shall not exceed 0.6 lb/hr and 2.63 tons per year See b)(2)a through b)(2)o.
b.	OAC rule 3745-17-07(A)	Visible particulate emissions from the two side wall exhaust vents shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
c.	OAC rule 3745-17-11(B)	Particulate emissions shall not exceed 0.551 lb/hr.
d.	40 CFR Part 61, Subpart FF	The requirements specified by this applicable subpart are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3). See b)(2)n.
e.	40 CFR Part 63, Subpart DD	The requirements specified by this applicable subpart are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3). See b)(2)n.
f.	40 CFR Part 63, Subpart PP	See section b)(2)m.



(2) Additional Terms and Conditions

- a. Activities within the Slag Canopy will include: container receiving and sampling, container splitting and consolidation, container transfer, lab pack storage and repackaging, container storage, and absorbent add station. Emissions at each activity are to be captured and transferred through the vapor recovery system to the carbon adsorption system. Activities within this emissions unit are reported to be similar to and approximately one fifth of the activities within emissions unit P001. (The Ohio Hazardous Waste Facility Installation and Operation Permit limits the maximum storage within the Slag Canopy to be 100,000 gallons and the maximum storage within P001 to be 510,000 gallons.  $100,000/510,000 = 0.20$ ) Emission limitations for P001 were based on stack testing results. Emission limitations for this emissions unit were therefore calculated to be a percentage of the emissions limitations for P001 as follows:  $(0.20)(3.0 \text{ lb OC/hr}) = 0.6 \text{ lb OC/hr}$  and  $(0.20)(13.14 \text{ tons OC/year}) = 2.63 \text{ tons OC/year}$ .
- b. The cover and/or opening (e.g., bungs, hatches, and sampling ports) of each container (e.g., drum, tote) located within this emissions unit shall be maintained in a closed, sealed position at all times that waste is in the container except when it is necessary to use the opening for waste loading, removal, inspection, or sampling.
- c. The cover and/or opening (e.g., bungs, hatches, and sampling ports) of each container (e.g., drum, tote) located within this emissions unit shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h).
- d. When a waste is transferred into a container by pumping, the transfer shall be performed by using a submerged fill pipe. The submerged fill pipe outlet shall extend to within two fill pipe diameters of the bottom of the container while the container is being loaded. During loading of the waste, the cover shall remain in place and all openings shall be maintained in a closed, sealed position except for those openings required for the submerged fill pipe, those openings required for venting of the container to prevent physical damage or permanent deformation of the container or cover.
- e. The vapor recovery system, or closed-vent system, shall be in operation with operational snorkels in place to capture emissions when waste is being processed. The snorkel(s) is(are) to be adequately placed over the activity in such a manner that maximum capture is achieved.
- f. The vapor recovery system shall route organic vapors to the carbon adsorption system and/or incinerator. The carbon adsorption system shall be in operation when waste is being processed within this emissions unit.
- g. The vapor recovery system upstream from the ventilation header blower shall be operated at a pressure below atmospheric pressure so that there is adequate suction, or inward flow, at each snorkel.
- h. The carbon adsorption system shall recover or control the organic emissions vented to it with an efficiency of 95 weight percent or greater.



- i. The carbon adsorption system shall consist of two or more trains of a primary and a secondary carbon box operated in series. The trains shall be operated in parallel. All boxes shall be the same size and have a maximum design flow rate of no less than 10,000 cfm. The carbon adsorption system shall be installed, operated and maintained in accordance with the "Von Roll's Routine Maintenance Procedure for Vapor Recovery Management" dated October 27, 2006, (also referred to as the "Routine Maintenance Procedure").
- j. The existing carbon within the carbon adsorption system shall be replaced with fresh carbon immediately when carbon breakthrough is indicated. Carbon breakthrough will be determined by a reading of 50 ppm as a 60-minute rolling average from the Total Hydrocarbon (THC) Continuous Emissions Monitor (CEM) located between the first and second carbon bed in each train. This CEM shall be referred to as an Inter-Box CEM. The permittee is permitted to replace the carbon more frequently, i.e., before breakthrough is indicated, if the permittee determines that the carbon within any box is not effectively adsorbing volatile organic compounds, including benzene.
- k. The vapor recovery system, or closed-vent system, shall comply with the following requirements:
  - i. Be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h).
  - ii. All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
  - iii. One or more devices which vent directly to the atmosphere may be used on the closed-vent system provided each device remains in a closed, sealed position during normal operations except when the device needs to open to prevent physical damage or permanent deformation of the closed-vent system resulting from malfunction of the unit in accordance with good engineering and safety practices for handling flammable, explosive, or other hazardous materials.
- l. The permittee shall control equipment leaks from each equipment component of this emissions unit in accordance with sections 61.242 through 61.247 in 40 CFR Part 61, Subpart V - National Emission Standards for Equipment Leaks.
- m. 40 CFR 63.688 (standards for containers) refers to 40 CFR Part 63, Subpart PP for the control of air emissions from a container. The following requirements are specified for the containers located within this emissions unit:



Container Description	Requirement
Having a design capacity greater than 0.1 m <sup>3</sup> and less than or equal to 0.46 m <sup>3</sup>	Permittee controls air emissions from the container in accordance with Container Level 1, 2 or 3 controls, as specified in 40 CFR Part 63, Subpart PP.
Having a design capacity greater than 0.46 m <sup>3</sup> and the container is not in light material service as defined in Section 63.681	
Having a design capacity greater than 0.46 m <sup>3</sup> and the container is in light material service as defined in Section 63.681	Permittee controls air emissions from the container in accordance with the standards for Container Level 2 or 3 controls, as specified in 40 CFR Part 63, Subpart PP.
Having a design capacity greater than 0.1 m <sup>3</sup> and is used for treatment of an off-site material by a waste stabilization process as defined in Section 63.681.	Permittee controls air emissions from the container at those times during the process when the off-site material in the container is exposed to the atmosphere in accordance with the standards for Container Level 3 controls, as specified in 40 CFR Part 63, Subpart PP.

- n. When this emissions unit is subject to the requirements of 40 CFR Part 61, Subpart FF (National Emissions Standards for Benzene Waste Operation), the permittee is exempt from Section 63.688 (standards for containers) of 40 CFR Part 63, Subpart DD. Because benzene may be present in the waste handled by this emissions unit at any given time, the requirements contained in both 40 CFR Part 61, Subpart FF and 40 CFR Part 63, Subpart DD are provided.
- o. The permittee shall maintain a written quality assurance/quality control plan for the continuous THC monitoring system, designed to ensure continuous valid and representative readings of THC emissions in units of parts per million. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous THC monitoring system must be kept on site and available for inspection during regular office hours.

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

c) Operational Restrictions

- (1) The permittee shall operate a sufficient number of trains in the carbon adsorption system to ensure that the flow rate through each primary carbon box does not exceed the manufacturer's recommended maximum design air flow rate.
- (2) When breakthrough within a train of the carbon adsorption system occurs, the permittee shall discontinue the use of that train as soon as possible but not longer than 12 hours



after detection of breakthrough. The change-out must be completed within 48 hours after the use of the train that has been discontinued. The change-out shall be performed such that the secondary carbon box becomes the primary box and a new carbon box is installed as the secondary box.

- (3) If an Inter-Box CEMS reading is equal to or greater than 50 ppm on a 60-minute rolling average within 15 days after a change-out, the permittee is not required to initiate and complete a new change-out of the primary box pursuant to the Routine Maintenance Procedure. Instead, as expeditiously as possible, the permittee shall initiate and complete an investigation of the cause of the elevated Inter-Box CEMS reading to determine if the carbon within the primary box actually is spent or otherwise not functional. If the permittee determines the carbon within the primary box is spent or otherwise not functional, the permittee shall immediately initiate and complete a change-out of the primary box pursuant to the Routine Maintenance Procedure. If the permittee determines that the elevated Inter-Box CEMS reading is not caused by spent or non-functional carbon, the permittee shall implement corrective actions, if any to eliminate the cause(s) of the elevated readings. If within 5 days after the elevated Inter-Box CEMS reading, the permittee cannot determine the cause of the elevated reading, the permittee immediately shall initiate and complete a change-out of the primary box pursuant to the Routine Maintenance Procedure.
- (4) The permittee shall maintain on-site a sufficient supply of fresh carbon or a spare carbon box containing fresh carbon to enable a change-out procedure to be performed in a timely manner.

d) **Monitoring and/or Recordkeeping Requirements**

- (1) Each cover and/or opening of the containers located within this emissions unit shall be visually inspected initially and quarterly thereafter to ensure that they are closed and gasketed properly, if not being processed at the time. If a broken seal or gasket is identified, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification. Each cover and/or opening of the containers shall also be inspected initially and at least one per year by the methods specified in Section 61.355(h) to determine if the containers are operating with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background.
- (2) The permittee shall perform quarterly, visual inspections of the vapor recovery system and control device (carbon adsorption system). The visual inspection shall include inspection of ductwork and piping and connections to covers and control devices for evidence of visible defects such as holes in ductwork or piping and loose connection.

If visible defects are observed during an inspection, or if other problems are identified, or if detectable emissions are measured, a first effort to repair the vapor recovery system and control device shall be made as soon as practicable but no later than 5 calendar days after detection. Repair shall be completed no later than 15 calendar days after the emissions are detected or the visible defect is observed. Exception for delay of repair would be allowed per 40 CFR 61.350.

- (3) The permittee shall install, calibrate, operate and maintain equipment to continuously monitor and record total hydrocarbons (THC), in units of parts per million, between the first and second carbon bed of each train of the carbon adsorption system (Inter-Box



CEMS) for the purpose of determining breakthrough. A THC monitor and recorder shall also be on the exhaust vent stream.

- a. A statement of approval of the continuous THC monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the performance specifications tests and a statement by the Agency that the system is considered approved for use in accordance with the requirements of 40 CFR Part 60, Appendix B, performance Specification 8A - Specifications and Test Procedures for Total Hydrocarbon Continuous Monitoring Systems in Stationary Sources. Proof of approval shall be made available to the Director (Ohio EPA Northeast District Ohio) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in parts per million, and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

- b. The permittee shall operate and maintain equipment to continuously monitor and record THC emissions in units of parts per million. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.
- c. The permittee shall maintain records of data obtained by the continuous THC monitoring system including, but not limited to:
  - i. emissions of THCs in parts per million on an instantaneous (one-minute) basis;
  - ii. emissions of THCs in parts per million on a 60-minute rolling average;
  - iii. results of quarterly cylinder gas audits;
  - iv. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
  - v. results of required relative accuracy test audit (or PS 8A alternative);
  - vi. hours of operation of the emissions unit, continuous THC monitoring system, and carbon adsorption system;
  - vii. the date, time, and hours of operation of the emissions unit without the carbon adsorption system and/or the continuous THC monitoring system;
  - viii. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous THC monitoring system; and
  - ix. the reason (if known) and the corrective actions taken (if any) for each such event in (c.vii) and (c.viii). These records shall be kept at the facility no less than 3 years and be available for inspection upon request by the Ohio EPA.



- (4) With respect to each Inter-Box CEMS, the permittee shall comply with Performance Specification 8A, except that the permittee shall:
  - a. to the extent that the permittee utilizes two ducts between each primary and each secondary box for pressure control purposes, be permitted to utilize a sample location on only one of the two ducts;
  - b. keep the sample probe heated to approximately the same temperature as, or slightly higher than, the temperature inside the duct in which it is inserted;
  - c. establish a span value of 200 ppm propane; and
  - d. utilize the following three test points for conducting calibration error tests:
    - i. Zero Level: zero to 0.1 ppm;
    - ii. Mid-Level: 40 to 60 ppm; and
    - iii. High-Level: 140 to 160 ppm.
- (5) On a continuous basis, the permittee shall direct the Inter-Box CEMS data to the facility's control system and shall maintain an alarm that will sound whenever breakthrough between a primary and a secondary carbon box occurs.
- (6) During times when a train of the carbon adsorption system is not in use, the permittee shall record "no flow" instead of a THC concentration for the respective Inter-Box CEMS.
- (7) The permittee shall maintain, and retain for the life of each control device, the following records:
  - a. a statement signed and dated by the permittee certifying that the vapor recovery system and control device (carbon adsorption system) are designed to operate at the documented performance level when this emissions unit is operating at the highest load or capacity. The document will therefore include the following:
    - i. a statement certifying that the vapor recovery system is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, is designed so that all gauging and sampling devices be gas-tight except when gauging or sampling is taking place, and that any rupture discs remain closed during normal operation; and
    - ii. a statement certifying that the carbon adsorption system can achieve a 95% control efficiency for organic compounds when this emissions unit is operating at its highest load or capacity.
  - b. the design analysis showing control device performance. The design analysis shall include specifications, drawings, schematics, and piping and instrumentation diagrams prepared by the owner or operator, or the control device manufacturer or vendor that describe the control device design based on acceptable engineering texts.



For the carbon adsorption system, the design analysis shall consider the vent stream composition, constituent concentration, flow rate, relative humidity and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.

- (8) The permittee shall install, calibrate, maintain and operate according to the manufacturer's specifications a device equipped with a continuous recorder to monitor the pressure in the vapor recovery system upstream from the ventilation header blower. This record shall be reviewed at least once per day.
- (9) The permittee shall maintain records that contain the following information:
  - a. a record of any time when the vapor recovery system was not in operation when waste was processed within this emissions unit. The record should include the date and duration, in minutes, explanation, and corrective action taken, if any;
  - b. any time when emissions in the vapor recovery system were not vented to the carbon adsorption system and/or the incinerator when waste was processed within this emissions unit. The record should include the date and duration, in minutes, explanation, and corrective action taken, if any;
  - c. any record indicating that the pressure within the vapor recovery system upstream from the ventilation header blower was at or above atmospheric pressure when waste was processed within this emissions unit. The record should include the date and duration, in minutes, explanation, and corrective action, if any;
  - d. any time when pumping occurred without submerged fill. The record should include the date and an explanation; and
  - e. any record indicating detectable emissions from the vapor recovery system, cover and/or opening of any container, and/or any equipment component of this emissions unit. This record may be included in the monthly Leak Detection and Repair Program report.
- (10) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the two side wall exhaust vents serving this emissions unit for one calendar quarter. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the location and color of the emissions;
  - b. 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 check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period. 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 emissions.

(11) Notwithstanding the frequency of reporting requirements specified under the Reporting Requirements, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

- a. for 1 full quarter this emissions unit's visual observations indicate the emissions are representative of normal operations; and
- b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to daily readings for this emissions unit if the emissions are not representative of normal operations. The permittee may again reduce the frequency of visual observations from daily to weekly after obtaining 1 full quarter of observations with visible emissions that are representative of normal operations for this emissions unit.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. any time when the vapor recovery system was not in operation when waste was processed within this emissions unit;
  - b. any time when emissions in the vapor recovery system were not vented to the carbon adsorption system when waste was processed within this emissions unit;
  - c. any record indicating the pressure within the vapor recovery system upstream from the ventilation header blower was at or above atmospheric pressure when waste was processed within this emissions unit;
  - d. any record indicating detectable emissions from the vapor recovery system, cover and/or opening of any container, and/or any equipment component of this emissions unit; and
  - e. each day or week during which any visible emissions were observed and the corrective actions taken.



The quarterly deviation reports shall be submitted in accordance with the General Terms and Conditions. The written reports shall be submitted quarterly to the Ohio EPA Northeast District Office, i.e., by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarters.

If no deviation occurred during a calendar quarter, the permittee shall submit a quarterly report which states that no deviations occurred during the quarter.

f) Testing Requirements

(1) Emission Limitation:

Organic compounds shall not exceed 0.6 lb/hr and 2.63 tons per year

Applicable Compliance Method:

If required by Ohio EPA, compliance shall be determined by emission testing for this emissions unit in accordance with Methods 18, 25 or 25A of 40 CFR Part 60, Appendix A.

(2) Emission Limitation:

Visible particulate emissions from the two side wall exhaust vents shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission 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).

(3) Emission Limitation:

Particulate emissions shall not exceed 0.551 lb/hr.

Applicable Compliance Method:

If required by Ohio EPA, compliance shall be determined by emission testing for this emissions unit in accordance with Method 5 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.