

STAFF DETERMINATION FOR THE APPLICATION TO CONSTRUCT UNDER THE PREVENTION OF SIGNIFICANT DETERIORATION REGULATIONS

The federal Clean Air Act and regulations promulgated thereunder require that major air pollution stationary sources undergoing construction or modification comply with all applicable Prevention of Significant Deterioration (PSD) provisions and non-attainment area (NAA) requirements. Both of these provisions and requirements are referred to as the New Source Review (NSR) program. The federal PSD provisions govern emission increases in attainment areas for major stationary sources, which are all pollutant-emitting activities that belong to the same industrial grouping, are located on contiguous or adjacent properties, and are under common control with the potential to emit 250 tons per year or more of any pollutant regulated under the Clean Air Act, or 100 tons per year or more if the stationary source is identified as one of 28 stationary source categories. In non-attainment areas, the definition of major stationary source is one having at least 100 tons per year potential emissions. A major modification is one resulting in a contemporaneous increase in emissions which exceeds the significance level of one or more pollutants. Any changes in actual emissions within a five-year period are considered to be contemporaneous. In addition, Ohio now has incorporated the federal NSR program by rule in Ohio Administration Code (OAC) Chapter 3745-31.

Both PSD requirements and non-attainment area provisions require that certain analyses be performed before a facility can obtain a permit authorizing construction of a new stationary source or major modification to a major stationary source. The principal requirements of the PSD requirements are:

- 1) Best Available Control Technology (BACT) review - A detailed engineering review must be performed to ensure that BACT is being installed for the pollutants for which the new air contaminant source(s) is a major stationary source.
- 2) Ambient Air Quality Review - An analysis must be completed to ensure the continued maintenance of the National Ambient Air Quality Standards (NAAQS) and that any increases in ambient air pollutant concentrations do not exceed the incremental values set pursuant to the Clean Air Act.

For non-attainment areas, the requirements are:

- 1) Lowest Achievable Emissions Rate (LAER) - New major stationary sources must install controls that represent the lowest emission levels (highest control efficiency) that has been achieved in practice.
- 2) The emissions from the new major stationary source must be offset by a reduction of existing emissions of the same pollutant by at least the same amount, and a demonstration must be made that the resulting air quality shows a net air quality benefit. This is more completely described in the Emission Offset Interpretative Ruling as found in Appendix S of 40 CFR Part 51.
- 3) The facility must certify that all major stationary sources owned or operated in the state by the same entity are either in compliance with the existing State Implementation Plan (SIP) or are on an approved schedule resulting in full compliance with the SIP.

For rural ozone non-attainment areas, the requirements are:

- 1) LAER - New major stationary sources must install controls that represent the lowest emissions levels (highest control efficiency) that has been achieved in practice.

- 2) The facility must certify that all major stationary sources owned or operated in the state by the same entity are either in compliance with the existing SIP or are on an approved schedule resulting in full compliance with the SIP.

Finally, New Source Performance Standards (NSPS), SIP emission standards and public participation requirements must be followed in all cases.

Site Description

The facility is in Cincinnati, Ohio, which is located in Hamilton County.

Under Section 107 of the Clean Air Act as of June 24, 1992, this area (Hamilton County) was classified as attainment for all of the criteria pollutants, i.e., total suspended particulates (PM), particulate matter less than 10 microns (PM₁₀), sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), and lead (Pb), except for volatile organic compounds (the 8-hour ozone standard) and particulate matter less than 2.5 microns (PM_{2.5}).

Facility Description

Rumpke Sanitary Landfill, Inc. currently operates a municipal solid waste landfill located in Cincinnati, Ohio in the northwest portion of Hamilton County, Ohio and occupies an area of appropriately 507 acres that accepts unprocessed domestic and commercial solid wastes, construction refuse, industrial non-hazardous solid waste, asbestos-containing material (ACM) waste, and other similar wastes. The waste is processed at the landfill by using the following method of waste management: waste is brought into the facility by company-owned trucks, municipal vehicles, industrial and commercial haulers, and members of the public.

The waste is then placed on a prepared surface, spreading it in layers, and compacting with heavy equipment where a daily soil cover or Ohio Environmental Protection Agency (OEPA) approved equivalent material is spread over the compacted waste area to complete the process.

This Permitting Action

Rumpke Sanitary Landfill, Inc. is proposing to clarify the specific control system options (also the specific locations of where those control systems will be located.) and to allow for an increase in the amount of compost to be processed in Rumpke's composting operations.

This will result in a **modification of the previously issued PSD permit - - air PTI number 14-05292**. This modification will further clarify the proposed locations of the control systems and increase the throughput for several of the composting emissions units. There will be an increase in the ton per year emissions of PM and PM₁₀ due to the increase in the composting throughputs. There will be no increase in the tons per year for the permit allowables for the other pollutants. Rumpke was required to submit a new air dispersion analysis to validate that these changes would be in compliance with both air state and federal (PSD Review) air dispersion modeling requirements. As such the rest of this PSD staff determination will be to modify the air dispersion modeling analysis (**Ambient Air Quality Monitoring Requirements** listed below) to reflect the proposed changes to the previously issued PSD permit - - air PTI number 14-05292 and it's associated PSD analysis.

Ambient Air Quality Monitoring Requirements

The Rumpke Sanitary Landfill facility installation is located in Air Quality Control Region (AQCR)

079. The area is attainment or attainment/unclassifiable for total suspended particulates, particulate matter

less than 10 microns, sulfur dioxide, nitrogen oxides, carbon monoxide and lead. The area is non-attainment for ozone (8-hour standard) and PM_{2.5}.

U.S. EPA regulations require a year of ambient air quality data to be obtained as part of the PSD application. An applicant may conduct monitoring on-site, model to demonstrate a "de minimus" impact, or used existing air quality data to fill some of the requirements of a PSD ambient air quality analysis. If monitoring is required, U.S. EPA has set up specific conditions on the acceptability of existing air quality monitors is to ensure the monitor is representative of air quality in the area.

In this instance, Rumpke Sanitary Landfill facility has conducted ambient air quality modeling that predicts the ambient air quality impact of the source(s) to be less than the monitoring de minimus concentrations for CO. For NO_x and PM₁₀, air quality monitoring data exists in Hamilton County which Ohio EPA believes is representative of the area. Therefore, Rumpke Sanitary Landfill facility would not be required to conduct pre-application monitoring. A summary is below:

<u>Pollutant</u>	<u>Monitoring Averaging Period</u>	<u>Monitoring Predicted Concentration</u>	<u>De Minimis Concentration</u>
NO ₂	Annual	6.79 ug/m ³	14 ug/m ³
CO	8-hour high	26.07 ug/m ³	575 ug/m ³
PM ₁₀	24-hour high	24.99 ug/m ³	10 ug/m ³

Modeling

Air quality dispersion modeling was conducted to assess the effect of these sources on ambient air quality standards and PSD increments. The U.S. EPA Industrial Source Complex-Short Term (ISCST3, Version 02035) model was used for the refined modeling analysis.

The ISCST3, Version 02035 model was the appropriate model for this analysis, based on the need to model simple to intermediate terrain, the need to incorporate building wake effects, the need to predict both short-term and long-term (annual) average concentrations, and the need to incorporate impacts from multiple and separated emissions units.

The ISCST3, Version 02035 model was run with the regulatory default options (stack-tip downwash, buoyancy-induced dispersion, final plume rise), default wind speed profile categories, default potential temperature gradient, and no pollutant decay. Building downwash was assessed using either the Huber-Snyder or Schulman-Sire downwash methodology, depending on the stack and nearby building heights.

The ISCST3, Version 02035 model was run utilizing the National Weather Service meteorological data processed using the U.S. EPA PCRAMMET program. OEPA provided five years of the most recent PCRAMMET processed meteorological data on their bulletin board system. Following OEPA modeling guidance concerning representative meteorological data for various counties, the Cincinnati Surface, Dayton Upper Air (1987-1991) PCRAMMET data were used in the refined modeling analysis.

Building wake effects will influence emissions from stacks with heights less than Good Engineering

Practice (GEP). The ISCST3, Version 02035 model requires input of building heights and projected building widths for 36 wind directions. The U.S. EPA Building Profile Input Program (BPIP) was used to determine the direction-specific building dimensions.

Modeling Results/Increment Analysis

Modeling was performed to assess the peak impacts and to determine whether the project would have impacts above the PSD significant impact levels. Peak predicted impacts of CO were below the significant impact levels. Therefore, no additional dispersion modeling analyses for CO was necessary.

The maximum predicted annual NO₂ concentration of 6.79 ug/m³ was above the corresponding significant impact increment of 1.0 ug/m³. Therefore additional dispersion analyses were necessary for NO₂.

The maximum predicted annual and 24-hour PM10 concentration of 24.99 and 6.68 ug/m³ respectively were above the corresponding significant impact increments of 5 and 1 ug/m³. Therefore, additional dispersion modeling analysis was necessary for PM10.

PSD Increment Analyses

NO₂: The maximum predicted concentration of NO₂ from increment consuming sources was 6.79 ug/m³. The PSD Class II increment is 25 ug/m³.

PM₁₀: The PM₁₀ analysis was originally submitted with the maximum constraining 24-hour concentration consuming virtually the entire increment. Ohio EPA was concerned that potential future growth could be inhibited by this project and required that revisions to the project be made in order that no more than 25 ug/m³ increment was consumed (high 6th high over five years). The revised analysis indicates high 6th high 24-hour and annual impacts of 24.99 ug/m³ and 6.68 ug/m³, respectively. The PSD Class II increments are 30 ug/m³ and 17 ug/m³, respectively.

NAAQS Analyses

NO₂: The peak annual NO_x impact, with a background concentration of 41.5 ug/m³, was 11.14 ug/m³. The NAAQS is 100 ug/m³.

PM₁₀: The high 6th high 24-hour predicted impact of all of the major regional sources of PM₁₀, including a background of 49 ug/m³, was 84.24 ug/m³. The 24-hour NAAQS is 150 ug/m³. The Peak annual impact, including a background of 25 ug/m³, was 34.86 ug/m³. The annual NAAQS is 50 ug/m³.

Secondary Impact

The closest Class I area to the Rumpke Sanitary Landfill facility is the Mammoth Cave National Park near Elizabeth town, Kentucky, Shenandoah in the State of Virginia, and Otter Creek and Dolly Sods in the State of West Virginia. These parks are located over 200 km from the Rumpke Sanitary Landfill facility. Federal PSD regulation regulations require that the reviewing authority provide written notification of projects which may affect a Class 1 area. "May effect" is typically interpreted

by EPA as a major source or major modification within 100 kilometers. Since the Rumpke Sanitary Landfill facility is located greater than 100 kilometers from any Class I area, and all modeled impacts are below Significant Impact Levels, the Rumpke Sanitary Landfill facility is not subject to the visibility analysis modeling.

No sensitive soil types are known to exist with the significant impact area of the Rumpke Sanitary Landfill facility. Moreover, the areas of maximum impacts are generally residential, forested, or urban, and demonstrate no obvious sensitivity to industrial air emissions. Most of the designated vegetation screening levels are equivalent to or exceed NAAQS and/or PSD increments, so that satisfaction of NAAQS and PSD increment assures compliance with sensitive vegetation screening levels. The results demonstrate maximum concentrations are well below sensitive levels.

It is not expected that there will be regional population, commercial, or industrial growth associated with this project.

Conclusions

Based upon analysis of the permit to install application and its supporting documentation provided by Rumpke Sanitary Landfill facility, the Ohio EPA staff has determined that the proposed installations and changes to its current facility will comply with all applicable State and Federal environmental regulations and that the requirements for BACT are still satisfied. Therefore, the Ohio EPA staff recommends that a permit to install be issued to Rumpke Sanitary Landfill facility.

PUBLIC NOTICE
OHIO ENVIRONMENTAL PROTECTION AGENCY
PUBLIC HEARING CONCERNING
ISSUANCE OF DRAFT SYNTHETIC MINOR
AND MODIFICATION OF THE PREVIOUSLY
ISSUED PREVENTION OF SIGNIFICANT DETERIORATION (PSD)
AIR PERMIT TO INSTALL
TO RUMPKE SANITARY LANDFILL, INC.
CINCINNATI, OHIO

Public notice is hereby given that the Ohio Environmental Protection Agency (EPA) has issued on August 29, 2006 draft action of air permit-to-install (PTI) application number 14-05824 to Rumpke Sanitary Landfill, Inc. This permit action proposes to allow Rumpke to clarify the proposed locations of the control systems already allowed in previous PSD permitting action and to increase the amount of compost produced at the facility located at 10795 Hughes Road in Cincinnati, Ohio. The draft modification of the previously issued PSD air PTI number 14-05292 will result in an increase in PM and PM10 emissions due to the increase in the throughput for the composting operation. There will be no increase in the permit allowables for the other pollutants. Rumpke will continue to be in compliance with both state and federal (PSD review) air dispersion modeling requirements.

The proposed allowable air pollutant emission rates for the air contaminant sources in draft air PTI number 14-05824 are the following amounts:

<u>Pollutant</u>	<u>Tons/year</u>	
Nitrogen Oxides (NO _x)	144.45	
Sulfur Dioxide (SO ₂)		39.7
Particulate Matter <10 microns (PM ₁₀)	54.11	
Particulate Matter (PM)	180.88	
Carbon Monoxide (CO)	500.6	
Fluorothrichloromethane (CFC-11)	0.92	
Dichlorodifluorormethane (CFC-12)		16.8
Non-methane organic compounds from Municipal waste landfills (NMOC)	797.14	
Volatile Organic Compounds	18.36	
Hydrogen Fluorides (HF)	10.56	
Hydrogen Chlorides (HCL)		70.8
Methane	75,779	

PSD increment analyses:

NO_x: The U.S. EPA allows sources to consume no more than the maximum available ambient PSD increment(s) for each PSD pollutant. The Ohio EPA allows PSD sources to consume less than one half the available increment. This facility has demonstrated that the impact from the new sources is 4.8 micrograms per cubic meter (µg/m³) which is less than one half the available increment of 12.5 µg/m³. Based on this analysis, the project complies with the increment requirements for NO_x.

PM₁₀: The U.S. EPA allows sources to consume no more than the maximum available ambient PSD increments of 30 µg/m³ and 17 µg/m³ for the 24-hour and annual averaging times, respectively. The Ohio EPA allows PSD sources to consume less than one half the available increment, with some exceptions. In this case, the impact above one half the PSD increment for this source is localized. This facility has demonstrated that the impacts from the new sources are 24.95 µg/m³ and 6.57 µg/m³, respectively, which are less than the available increment. Based on this analysis, the project complies with the increment requirements for PM₁₀.

CO: The CO impact for this project on a one-hour and eight-hour basis are 116.7 µg/m³ and 55.6 µg/m³, respectively. This facility has demonstrated that the impact from the new sources is less than the PSD significant impact increments of 2000 µg/m³ and 500 µg/m³ for the one-hour and eight-hour levels, respectively. Therefore, the impact is insignificant and additional modeling is not required. Based on this analysis, the applicant has demonstrated that the project will have insignificant impact for CO.

A public hearing for the draft air permit is scheduled for Tuesday, October 3, 2006, in the Colerain Township Senior and Community Center at 4300 Springdale Road in Colerain Township, Ohio and will commence at 7:00 p.m. The public hearing provides an opportunity for citizens to submit comments on the draft air permit. A presiding officer will be present and may limit oral testimony to ensure that all parties are heard.

All interested persons are entitled to attend or be represented and give written or oral comments on the draft permit at the hearing. Written comments must be received by the close of the business day on October 10, 2006. Comments received after this date will not be considered part of the official record.

Written comments may be submitted at the hearing or sent to: Peter Sturdevant of the Hamilton County Department of Environmental Services at 250 William Howard Taft Road, Cincinnati, Ohio 45219.

Copies of the draft air permit application and technical support information may be reviewed and/or copies made by first calling to make an appointment at the Hamilton County Department of Environmental Services, located at the above address, telephone number (513) 946-7777.

Synthetic Minor Determination and/or **Netting Determination**
Permit To Install **14-05824**

A. Source Description

Rumpke owns and operates an existing sanitary landfill operation which accepts solid waste. This permit action involves changes to the air permit-to-install (PTI)/Prevention of Significant Deterioration (PSD) number 14-05292 issued on June 10, 2004. That permit action included a number of operations at the Rumpke facility. These changes are to clarify the specific control system options (also the specific locations of where those control systems will be located.) and to allow for an increase in the amount of compost to be processed in Rumpke's composting operations. All these operations were permitted in the previous Prevention of Significant Deterioration (PSD)/synthetic minor permitting action for this facility as depicted in air permit-to-install (PTI) number 14-05292 and therefore the result of this has required Rumpke to re-do the air dispersion modeling analysis for on a state and federal (air dispersion modeling associated with a PSD permit) levels.

B. Facility Emissions and Attainment Status

As stated above, the Rumpke facility went thru PSD review for the following criteria pollutants: Carbon Monoxide, Nitrogen Oxides and PM-10 and has accepted fuel oil restrictions to limit sulfur dioxide emissions such that the Rumpke facility does not exceed the major modification level of 40 tons per year (TPY). Hamilton County is in attainment for all criteria pollutants, except for the 8-hour ozone standard and PM2.5.

C. Source Emissions

As in air PTI number 14-05292, the potential emissions of sulfur dioxide from emissions units P014, P015 and P902, combined, are 40.3 tons per year. The permittee has accepted gallons of fuel oil restriction based upon a per rolling, 12-month period for emissions units P014 and P015, the two diesel engines, to limit the total sulfur dioxide emissions. Based upon the limitations outlined in the permit, the allowable sulfur dioxide emissions will be 39.7 TPY.

D. Conclusion

This permit action will also be a synthetic minor for sulfur dioxide based upon the fuel oil usage limits established in this permit. Since the allowable sulfur dioxide emissions are below the major modification level of 40 tons per year, this permit will not be subject to PSD for sulfur dioxide. The permittee will maintain monthly records and submit quarterly fuel oil usage reports to demonstrate compliance with the permit limits.



State of Ohio Environmental Protection Agency

**RE: DRAFT PERMIT TO INSTALL
HAMILTON COUNTY**

CERTIFIED MAIL

Street Address:

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:
Lazarus Gov.
Center

Application No: 14-05824
Fac ID: 1431092049

DATE: 8/29/2006

Rumpke Sanitary Landfill, Inc
John Butler
10795 Hughes Rd
Cincinnati, OH 45251-4598

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$5200** will be due. Please do not submit any payment now.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Sincerely,

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

CC: USEPA

HCDES

OH-KY-IN Regional Council of Gov.

KY

IN



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**Permit To Install
Terms and Conditions**

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

DRAFT PERMIT TO INSTALL 14-05824

Application Number: 14-05824
Facility ID: 1431092049
Permit Fee: **To be entered upon final issuance**
Name of Facility: Rumpke Sanitary Landfill, Inc
Person to Contact: John Butler
Address: 10795 Hughes Rd
Cincinnati, OH 45251-4598

Location of proposed air contaminant source(s) [emissions unit(s)]:
**10795 Hughes Rd
Cincinnati, Ohio**

Description of proposed emissions unit(s):
**Landfill gas generation, portable tub grinder, portable screener, storage piles, roadways -
modification of PTI 14-05292, issued June 10, 2004.**

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) 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 above described 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

Director

Rumpke Sanitary Landfill, Inc
PTI Application: 14-05824
Issued: To be entered upon final issuance
Part I - GENERAL TERMS AND CONDITIONS

Facility ID: 1431092049

A. State and Federally Enforceable Permit-To-Install General Terms and Conditions

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- 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:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. 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 appropriate Ohio EPA District Office or local air agency. The written

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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 B.9 below if no deviations occurred during the quarter.

- iii. 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 appropriate Ohio EPA District Office or local air agency 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.
 - iv. If this permit is for an emissions unit located at a Title V facility, then 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.

2. Scheduled Maintenance/Malfunction Reporting

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

3. 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

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permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

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

5. Severability Clause

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

6. General Requirements

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

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7. Fees

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

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8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that 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. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

- a. 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.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of

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the Ohio EPA. Progress reports shall contain the following:

- i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
- ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit-To-Operate Application

- a. If 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).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this permit is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

12. 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.

13. Permit-To-Install

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in

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Rumpke Sanitary Landfill, Inc

PTI Application: 14-05824

**Issued: To be entered upon final issuance
this permit.**

Facility ID: 1431092049

Rumpke Sanitary Landfill, Inc

PTI Application: 14-05824

Issued: To be entered upon final issuance

Facility ID: 1431092049

B. State Only Enforceable Permit-To-Install General Terms and Conditions

1. Compliance Requirements

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.

2. 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 appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (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 appropriate Ohio EPA District Office or local air agency. 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.)

3. Permit Transfers

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

4. Authorization To Install or Modify

If applicable, authorization to install or modify any new or existing 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

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installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. 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.

5. Construction of New Sources(s)

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.

6. 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.

7. 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).

8. Construction Compliance Certification

If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) that the facility has been constructed in accordance with the permit-to-install application and the terms and conditions of the permit-to-install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

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

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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.

C. Permit-To-Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
PM	180.88
PM-10	54.11
SO ₂	39.70
NOx	144.45
CO	500.60
VOC	18.36
NMOC	797.14
Hydrogen	10.56
Fluorides	
HCl	70.8
Methane	75,779
CFC-11	0.92
CFC-12	16.8

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Facility ID: 1431092049

Emissions Unit ID: F001

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

None

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

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PTI A**

Emissions Unit ID: F001

Issued: To be entered upon final issuance

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emission Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>paved and unpaved roadways and paved parking areas</u>	<u>Applicable Rules/Requirements</u>
F001 - landfill roadways and parking areas		OAC rule 3745-31-05(A)(3)
paved roadways and parking areas		OAC rules 3745-31-10 through 3745-31-20.
unpaved roadways and parking areas		

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OAC rules 3745-17-07(B) and
3745-17-08(B)

Applicable Emission
Limitations/Control Measures

The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-10 through 3745-31-20.

Visible emissions of fugitive dust shall not exceed 5% opacity, as a 3-minute average.

Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See Sections A.1.2.b, A.1.2.c, A.1.2.d through A.1.2..f).

Visible emissions of fugitive dust shall not exceed 5% opacity, as a 3-minute average.

Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See Sections A.1.2.b through A.1.2.c, A.1.2.e and A.1.2..f).

Particulate matter (PM) emissions from the paved and unpaved roadways and parking areas shall not exceed 148.21 tons/yr.

Emissions of particulate matter less than 10 microns in diameter (PM-10) from the paved and unpaved roadways and parking

areas shall not exceed 34.16 tons/yr.

See Section A.1.2.g.

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2. Additional Terms and Conditions

- 2.a** The paved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:

paved roadways:

paved roadway 1, concrete
paved roadway 2, asphalt
paved roadway 3, asphalt

paved parking areas:

all paved parking areas, asphalt

The unpaved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:

unpaved roadways:

unpaved roadway 1, gravel
unpaved roadway 2, gravel
unpaved roadway 3, gravel

unpaved parking areas:

parking area 1, gravel

- 2.b** The permittee shall employ best available control measures on all paved and unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas with water flushing and sweeping, and the unpaved roadways and parking areas with water or other dust suppressant chemicals at sufficient treatment frequencies to ensure compliance. When necessary to prevent the carry out of earth or other materials onto public roadways, all trucks exiting the unpaved landfill roadways shall travel through the wheel wash located before the scale area. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.c** The needed frequencies of implementation of the control measures shall be

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determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved or an unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.

- 2.d** The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- 2.e** Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- 2.f** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.
- 2.g** This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rules 3745-17-07(B) and 3745-17-08(B) do not apply to the fugitive emissions from this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of the paved and unpaved roadways and parking areas in accordance with the following frequencies:

paved roadways

minimum inspection frequency

paved roadway 1, concrete
 paved roadway 2, asphalt
 paved roadway 3, asphalt

once daily when in use
 once daily when in use
 once daily when in use

paved parking areas

minimum inspection frequency

all

once daily when in use

unpaved roadways

minimum inspection frequency

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unpaved roadway 1, gravel	once daily when in use
unpaved roadway 2, gravel	once daily when in use
unpaved roadway 3, gravel	once daily when in use

unpaved parking areasminimum inspection frequency

all	once daily when in use
-----	------------------------

2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
3. The permittee may, upon receipt of written approval from the Hamilton County Department of Environmental Services, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
4. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in 4.d. shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:

- a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
- b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

The quarterly deviation reports shall be submitted in accordance with General Term and Condition A.1.c.ii of this permit.

2. The permittee shall also submit annual reports that specify the total PM and PM-10 emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations:

PM emissions from the paved and unpaved roadways and parking areas shall not exceed 148.21 tons/yr.

Emissions of PM-10 from the paved and unpaved roadways and parking areas shall not exceed 34.16 tons/yr.

Applicable Compliance Method: Compliance shall be determined using the following equations:

$$\begin{aligned} \text{tons PM/yr} &= (A) \times (B) \times (1-C) \times 1 \text{ ton}/2000 \text{ lbs} \\ \text{tons PM-10/yr} &= (A) \times (B) \times (1-C) \times 1 \text{ ton}/2000 \text{ lbs} \end{aligned}$$

where,

- A = PM or PM-10 emission factor, lb/VMT, calculated from AP-42, Sections 13.2.1 and 13.2.2 (December, 2003)
- B = annual vehicle miles traveled (VMT)

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C = control efficiency of 94% and 95%, for paved and unpaved, respectively, from operational parameters outlined in PTI application 14-05292, received March 19, 2002.

b. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 5% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance with this emission limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

VI. Miscellaneous Requirements

1. The terms and conditions of this PTI shall supersede the terms and conditions of PTI 14-05292, as issued on June 10, 2004. Existing emissions units F001 and F003 were replaced by emissions unit F001, upon issuance of PTI 14-05292.

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Emissions Unit ID: F001

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B. State Only Enforceable Section

I. Applicable Emission Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emission Limitations/Control Measures</u>
F001 - landfill roadways and parking areas		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Applicable Emission
Limitations/Control
Measures

Particulate matter (PM) emissions shall not exceed 1.52 lbs/hr and 1.66 tons/yr.

Emissions of particulate matter less than 10 microns in diameter (PM-10) shall not exceed 0.83 lb/hr, 5.00 lbs/day and 0.91 ton/yr.

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

Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. (See Sections A.1.2.b and A.1.2.c.)

See Section A.1.2.d.

See Section A.1.2.e.

2. Additional Terms and Conditions

- 2.a** The material handling operations that are covered by this permit and subject to the above-mentioned requirements are listed below:

75 tons/hr portable tub grinder

- 2.b** The permittee shall employ best available control measures for the above-identified material handling operation for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee shall maintain the moisture content of material, which may include watering. Nothing in this paragraph shall

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prohibit the permittee from employing other equally effective control measures to ensure compliance.

- 2.c** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rules 3745-31-10 through 3745-31-20.
- 2.d** This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rules 3745-17-07(B) and 3745-17-08(B) do not apply to the fugitive emissions from this emissions unit.
- 2.e** Permit to install number 14-05824 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment and/or measures) as proposed by the permittee, for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) for both PM and PM-10.

II. Operational Restrictions

- 1. The maximum annual material throughput rate for this emissions unit shall not exceed 164,250 tons.
- 2. The maximum daily material throughput rate for this emissions unit shall not exceed 450 tons.

III. Monitoring and/or Record keeping Requirements

- 1. Except as otherwise provided in this section, the permittee shall perform inspections of the material handling operations in accordance with the following frequencies:

<u>material handling operation</u>	<u>minimum inspection frequency</u>
75 tons/hr portable tub grinder	once daily during operation

- 2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal operating conditions. No inspection shall be necessary for this material handling operation if the material used in this operation is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.

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3. The permittee may, upon receipt of written approval from the Hamilton County Department of Environmental Services, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
4. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented.
5. The permittee shall maintain daily records of the amount of material throughput in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation;
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented; and
 - c. any exceedance of the daily material throughput rate as identified in term A.II.2.

The quarterly deviation reports shall be submitted in accordance with General Term and Condition A.1.c.ii of this permit.

2. The permittee shall also submit annual reports that specify the total amount of material throughput for this emissions unit and the total PM and PM-10 emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April

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15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

V. Testing Requirements

1. Compliance with the emission limitations specified in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

Emission Limitations:

PM emissions shall not exceed 1.52 lbs/hr.

Emissions of PM-10 shall not exceed 0.83 lb/hr and 5.00 lbs/day.

Applicable Compliance Method: The hourly PE and PM-10 emission limitations are based upon the emissions unit's potentials to emit and were established by the following methodology:

$$\text{lbs of PM} = (A) \times (B)$$

$$\text{lbs of PM-10 emissions} = (A) \times (B)$$

where:

A = PM or PM-10 emission factor, lb/ton, as calculated from AP-42 Section 13.2.4, (January, 1995). See emission calculations detailed in PTI application 14-05824 for specific emission factors (load-in, grinding, transfer, etc).

B = maximum hourly throughput of 75 tons

The daily PM-10 limitation of 5.00 lbs/day is based upon the daily throughput limitation of 450 tons and the above emissions factor.

2. Emission Limitations:

PM emissions shall not exceed 1.66 tons/yr.

Emissions of PM-10 shall not exceed 0.91 ton/yr.

Applicable Compliance Method: Compliance shall be determined by calculating emissions using the following equations:

$$\text{TPY of PM} = (A) \times (B) \times 1 \text{ ton}/2,000 \text{ lbs}$$

$$\text{TPY of PM-0} = (A) \times (B) \times 1 \text{ ton}/2,000 \text{ lbs}$$

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where:

A = PM or PM-10 emission factor, lb/ton, as calculated from AP-42 Section 13.2.4, (January, 1995). See emission calculations detailed in PTI application 14-05824 for specific emission factors (load-in, grinding, transfer, etc)

B = total annual throughput, in tons, from Section A.III.5.

3. Emission Limitation:

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

Applicable Compliance Method:

If required, compliance with this emission limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

4. Compliance with the production limitation in term A.II.1 and A.II.2 shall be demonstrated by the record keeping in term A.III.5.**VI. Miscellaneous Requirements****1. Notice to Relocate a Portable Source**

Pursuant to OAC rule 3745-31-03(A)(1)(p), the permittee of a portable source may relocate within the State of Ohio without first obtaining a permit to install (PTI) providing certain criteria are met. The portable source shall meet one of the two following scenarios in order to qualify for this PTI exemption for the new location:

a. The following determinations have been documented, pursuant to OAC rule 3745-31-03(A)(1)(p)(i):

- i. the portable source is equipped with the best available technology for such portable source;
- ii. the portable source is operating pursuant to a currently effective permit to install, permit to operate (PTO), or registration status;
- iii. the applicant has provided proper notice of the intent to relocate the portable source to the (1.) Ohio EPA District Office or local air agency responsible for the permit(s) for the source and (2.) the appropriate Ohio

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EPA District Office or local air agency having jurisdiction over the new site within a minimum of 30 days prior to the scheduled relocation; and

- iv. in the judgement of the Ohio EPA District Office or local air agency having jurisdiction over the new site, the proposed site is acceptable under OAC rule 3745-15-07.
- b. In the alternative, pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), the permittee of a portable source may relocate within the State of Ohio without first obtaining a PTI, providing the following criteria of OAC rule 3745-31-05(E) are met:
- i. the portable source permittee possesses an Ohio EPA PTI, PTO or registration status;
 - ii. the portable source is equipped with best available technology;
 - iii. the portable source owner has identified the proposed site to Ohio EPA;
 - iv. Ohio EPA has determined that the portable source, at the proposed site, will have an acceptable environmental impact;
 - v. a public notice, consistent with OAC Chapter 3745-47, is published in the county where the proposed site is located;
 - vi. the owner of the proposed site has provided the portable source owner with approval or equivalent declaration that it is acceptable to the site owner to move the portable source to this proposed site; and
 - vii. the portable source owner has provided Ohio EPA with 15 days written notice of the relocation.

Any site approvals issued by the Ohio EPA, pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), shall be valid for no longer than 3 years and are subject to renewal.

In order for the permitting Ohio EPA District Office or local air agency and the appropriate field office having jurisdiction over the new site to determine compliance with all of the above criteria, the permittee of the portable source must file a " Notice of Intent to Relocate" within the specified time frame (30 or 15 days), prior to the relocation of the portable source with the Ohio EPA District Office or local air agency responsible for the permits for the source and the appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site. Upon receipt of the notice, the

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Ohio EPA District Office or local air agency responsible for the permits for the portable source, and/or appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site, will evaluate the request in accordance with the above criteria.

Failure to submit said notification and to receive Ohio EPA approval prior to relocation of the portable source may result in fines and civil penalties.

Pursuant to OAC rule 3745-31-05(F), the Director may modify the site approval to add or delete certain portable sources or add or delete certain terms and conditions as appropriate.

2. The terms and conditions listed in this Permit to Install shall supersede all the air pollution control requirements contained in Permit to Install 14-05292 as issued on June 10, 2004.

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B. State Only Enforceable Section

I. Applicable Emission Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emission Limitations/Control Measures</u>
F012 - 75 tons/hr portable tub grinder		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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Emissions Unit ID: F013

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Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F013 - 50 tons/hr portable screener	OAC rules 3745-31-10 through 3745-31-20.	Particulate matter (PM) emissions shall not exceed 1.01 lb/hr and 1.66 tons/yr.
		Emissions of particulate matter less than 10 microns in diameter (PM-10) shall not exceed 0.56 lb/hr, 5.00 lbs/day and 0.91 ton/yr.
		Visible emissions of fugitive dust shall not exceed 20% opacity, as a 3-minute average.
		Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. (See Sections A.I.2.b and A.I.2.c)
	OAC rules 3745-17-07(B) and 3745-17-08(B)	See Section A.I.2.d.
	ORC 3704.03(T)(4)	See Section A.I.2.e.

2. Additional Terms and Conditions

Emissions Unit ID: F013

- 2.a** The material handling operations that are covered by this permit and subject to the above-mentioned requirements are listed below:

50 tons/hr portable screener

- 2.b** The permittee shall employ best available control measures for the above-identified material handling operation for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee shall maintain the moisture content of material, which may include watering. Nothing in this paragraph shall prohibit the permittee from employing other equally effective control measures to ensure compliance.

- 2.c** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rules 3745-31-10 through 3745-31-20.

- 2.d** This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rules 3745-17-07(B) and 3745-17-08(B) do not apply to the fugitive emissions from this emissions unit.

- 2.e** Permit to install number 14-05824 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment and/or measures) as proposed by the permittee, for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) for both PM and PM-10.

II. Operational Restrictions

1. The maximum annual final product throughput for this emissions unit shall not exceed 164,250 tons.
2. The maximum daily final product throughput for this emissions unit shall not exceed 450 tons.

III. Monitoring and/or Record keeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of the material handling operations in accordance with the following frequencies:

material handling operation

minimum inspection frequency

50 tons/hr portable screener

once daily during operation

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2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal operating conditions. No inspection shall be necessary for this material handling operation if the material used in this operation is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.
3. The permittee may, upon receipt of written approval from the Hamilton County Department of Environmental Services, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
4. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented.
5. The permittee shall maintain daily records of the amount of material throughput in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation;
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented; and
 - c. any exceedance of the daily final product throughput rate as identified in term A.II.2.

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The quarterly deviation reports shall be submitted in accordance with General Term and Condition A.1.c.ii of this permit.

2. The permittee shall also submit annual reports that specify the total amount of material throughput for this emissions unit and the total PM and PM-10 emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

V. Testing Requirements

1. Compliance with the emission limitations specified in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

**Rump
PTI A**

Emissions Unit ID: F013

Issued: To be entered upon final issuance

Emission Limitations:

PM emissions shall not exceed 1.01 lb/hr.

Emissions of PM-10 shall not exceed 0.56 lb/hr and 5.00 lbs/day.

Applicable Compliance Method: The hourly PE and PM-10 emission limitations are based upon the emissions unit's potentials to emit and were established by the following methodology:

$$\text{lbs of PM} = (A) \times (B)$$

$$\text{lbs of PM-10 emissions} = (A) \times (B)$$

where:

A = PM or PM-10 emission factor, lb/ton, as calculated from AP-42 Section 13.2.4, (January, 1995). See emission calculations detailed in PTI application 14-05824 for specific emission factors (load-in, screening, transfer, etc).

B = maximum hourly throughput of 50 tons

The daily PM-10 limitation of 5.00 lbs/day is based upon the daily throughput limitation of 450 tons and the above emissions factor.

2. Emission Limitations:

PM emissions shall not exceed 1.66 tons/yr.

Emissions of PM-10 shall not exceed 0.91 ton/yr.

Applicable Compliance Method:

Compliance shall be determined by calculating emissions using the following equations:

$$\text{TPY of PM} = (A) \times (B) \times 1 \text{ ton}/2,000 \text{ lbs}$$

$$\text{TPY of PM-10} = (A) \times (B) \times 1 \text{ ton}/2,000 \text{ lbs}$$

where:

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- A = PM or PM-10 emission factor, lb/ton, as calculated from AP-42 Section 13.2.4, (January, 1995). See emission calculations detailed in PTI application 14-05824 for specific emission factors (load-in, screening, transfer, etc)
- B = total annual throughput, in tons, from Section A.III.5.

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3. Emission Limitation:

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

Applicable Compliance Method:

If required, compliance with this emission limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

4. Compliance with the production limitation in terms A.II.1 and A.II.2 shall be demonstrated by the record keeping in term A.III.5.

VI. Miscellaneous Requirements

1. Notice to Relocate a Portable Source

Pursuant to OAC rule 3745-31-03(A)(1)(p), the permittee of a portable source may relocate within the State of Ohio without first obtaining a permit to install (PTI) providing certain criteria are met. The portable source shall meet one of the two following scenarios in order to qualify for this PTI exemption for the new location:

- a. The following determinations have been documented, pursuant to OAC rule 3745-31-03(A)(1)(p)(i):
 - i. the portable source is equipped with the best available technology for such portable source;
 - ii. the portable source is operating pursuant to a currently effective permit to install, permit to operate (PTO), or registration status;
 - iii. the applicant has provided proper notice of the intent to relocate the portable source to the (1.) Ohio EPA District Office or local air agency responsible for the permit(s) for the source and (2.) the appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site within a minimum of 30 days prior to the scheduled relocation; and
 - iv. in the judgement of the Ohio EPA District Office or local air agency having jurisdiction over the new site, the proposed site is acceptable under OAC rule 3745-15-07.

Emissions Unit ID: F013

- b. In the alternative, pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), the permittee of a portable source may relocate within the State of Ohio without first obtaining a PTI, providing the following criteria of OAC rule 3745-31-05(E) are met:
- i. the portable source permittee possesses an Ohio EPA PTI, PTO or registration status;
 - ii. the portable source is equipped with best available technology;
 - iii. the portable source owner has identified the proposed site to Ohio EPA;
 - iv. Ohio EPA has determined that the portable source, at the proposed site, will have an acceptable environmental impact;
 - v. a public notice, consistent with OAC Chapter 3745-47, is published in the county where the proposed site is located;
 - vi. the owner of the proposed site has provided the portable source owner with approval or equivalent declaration that it is acceptable to the site owner to move the portable source to this proposed site; and
 - vii. the portable source owner has provided Ohio EPA with 15 days written notice of the relocation.

Any site approvals issued by the Ohio EPA, pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), shall be valid for no longer than 3 years and are subject to renewal.

In order for the permitting Ohio EPA District Office or local air agency and the appropriate field office having jurisdiction over the new site to determine compliance with all of the above criteria, the permittee of the portable source must file a " Notice of Intent to Relocate" within the specified time frame (30 or 15 days), prior to the relocation of the portable source with the Ohio EPA District Office or local air agency responsible for the permits for the source and the appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site. Upon receipt of the notice, the Ohio EPA District Office or local air agency responsible for the permits for the portable source, and/or appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site, will evaluate the request in accordance with the above criteria.

Failure to submit said notification and to receive Ohio EPA approval prior to relocation of the portable source may result in fines and civil penalties.

Pursuant to OAC rule 3745-31-05(F), the Director may modify the site approval to add or delete certain portable sources or add or delete certain terms and conditions as appropriate.

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PTI A

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- 2.. The terms and conditions listed in this Permit to Install shall supersede all the air pollution control requirements contained in Permit to Install 14-05292 as issued on June 10, 2004.

**Rump
PTI A**

Emissions Unit ID: F013

Issued: To be entered upon final issuance

B. State Only Enforceable Section

I. Applicable Emission Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emission Limitations/Control Measures</u>
F013 - 50 tons/hr portable screener		

2. Additional Terms and Conditions

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Rump
PTI A

Emissions Unit ID: F014

Issued: To be entered upon final issuance

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emission Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emission Limitations/Control Measures</u>
F014 - load-in, load-out, turning, and wind erosion for the composting operation storage piles	OAC rules 3745-31-10 through 3745-31-20.	Particulate matter (PM) emissions shall not exceed 1.09 tons/yr. Emissions of particulate matter less than 10 microns in diameter (PM-10) shall not exceed 2.98 lbs/day and 0.54 ton/yr. Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. (See Sections A.I.2.b through A.I.2.h) No visible emissions of fugitive dust from any storage pile associated with this emissions unit, except for 1 minute during any 60-minute observation period.
	OAC rules 3745-17-07(B) and 3745-17-08(B)	See Section A.I.2.i.
	ORC 3704.03(T)(4)	See Section A.I.2.j.

2. Additional Terms and Conditions

- 2.a** The storage piles that are covered by this permit and subject to the requirements of OAC rule 3745-31-10 through 3745-31-20 are listed below:

composting storage piles (windrows) containing composting materials with similar characteristics.

- 2.b** The permittee shall employ best available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to reduced drop height for load-in and load-out operations to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.c** The above-mentioned control measure(s) shall be employed for each operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.

- 2.d** The permittee shall employ best available control measures on all windrow turning operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to watering for windrow turning to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.e** The above-mentioned control measure(s) shall be employed for each operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary. Implementation of the control measures shall not be necessary for windrow turning operations when the windrows are covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.

- 2.f** The permittee shall employ best available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with

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the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to watering to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.g** The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.
- 2.h** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rules 3745-31-10 through 3745-31-20.
- 2.i** This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rules 3745-17-07(B) and 3745-17-08(B) do not apply to the fugitive emissions from this emissions unit.
- 2.j** Permit to install number 14-05824 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment and/or measures) as proposed by the permittee, for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) for both PM and PM-10.

II. Operational Restrictions

1. The maximum annual final product throughput for this emissions unit shall not exceed 279,225 tons.
2. The maximum daily material throughput for this emissions unit shall not exceed 450 tons.
3. The maximum daily final product throughput for this emissions unit shall not exceed 765 tons.
4. The maximum exposed compost storage pile and windrow surface area shall not exceed 4.26 acres.

III. Monitoring and/or Record keeping Requirements

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

<u>storage pile identification</u>	<u>minimum load-in inspection frequency</u>
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composting operation storage piles	once daily during operation
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2. Except as otherwise provided in this section, the permittee shall perform inspections of the load-out operations at the storage piles in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-out inspection frequency</u>
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composting operation storage piles	once daily during operation
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3. Except as otherwise provided in this section, the permittee shall perform inspections of the windrow turning operations at the storage piles in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum windrow turning inspection frequency</u>
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composting operation storage piles	once daily during operation
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4. Except as otherwise provided in this section, the permittee shall perform inspections of the wind erosion from pile surfaces associated with the storage piles in accordance with the following frequencies:

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

6. The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in, load-out, and turning of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be

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performed during representative, normal storage pile operating conditions.

7. The permittee may, upon receipt of written approval from the Hamilton County Department of Environmental Services, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
8. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and, for windrow turning operations and the wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in 8.d. shall be kept separately for (i) the load-in operations, (ii) the load-out operations, (iii) the windrow turning operations, and (iv) the pile surfaces (wind erosion), and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

9. The permittee shall maintain daily records of the total amount of material throughput, final product throughput and the calculated compost storage pile and windrow exposed surface area in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation;

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- b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented;
- c. any exceedance of the daily material throughput rate as identified in term A.II.2;
- d. any exceedance of the daily final product throughput rate as identified in term A.II.3; and
- e. any exceedance of the exposed compost storage pile and windrow surface area limit in term A.II.4.

The quarterly deviation reports shall be submitted in accordance with General Term and Condition A.1.c.ii of this permit.

- 2. The permittee shall also submit annual reports that specify the total amount of material throughput, final product throughput and exposed compost storage pile and windrow surface area for this emissions unit and the total PM and PM-10 emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

V. Testing Requirements

- 1. Compliance with the emission limitations in Section A.I of these terms and conditions shall be determined in accordance with the following methods:

Emission Limitation:

No visible emissions of fugitive dust from any storage pile associated with this emissions unit, except for 1 minute during any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with this emission limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 22.

- 2. Emission Limitations:

PM emissions shall not exceed 1.09 tons/yr.

Emissions of PM-10 shall not exceed 2.98 lbs/day and 0.54 ton/yr.

Applicable Compliance Method:

**Rump
PTI A**

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Compliance shall be determined by calculating emissions using the following equations:

$$\text{TPY of PM} = (A) \times (B) \times 1 \text{ ton}/2,000 \text{ lbs}$$

$$\text{TPY of PM-10} = (A) \times (B) \times 1 \text{ ton}/2,000 \text{ lbs}$$

$$\text{lbs/day of PM-10} = (A) \times (C)$$

where:

A = PM or PM-10 emission factor, (lb/ton) for material handling, as calculated from AP-42 Section 13.2.4, (January, 1995); and PM or PM-10 emission factor (lb/day/acre), as calculated from the USEPA BACM document Equation 2-12. See emission calculations detailed in PTI application 14-05824 for specific emission factors (load-in, load-out, turning, wind erosion, etc)

B = total annual throughput, in tons, from Section A.III.9.

C = total daily throughput, in tons, from Section A.III.9.

3. Compliance with the production limitations specified in Sections A.II.1, A.II.2, A.II.3 and A.II.4 shall be determined by the record keeping requirements in Section A.III.9.

VI. Miscellaneous Requirements

1. The terms and conditions listed in this Permit to Install shall supersede all the air pollution control requirements contained in Permit to Install 14-05292 as issued on June 10, 2004.

Emissions Unit ID: F014

B. State Only Enforceable Section

I. Applicable Emission Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emission Limitations/Control Measures</u>
F014 - load-in, load-out and wind erosion from composting operation storage piles		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
F015 - composting operation roadways	OAC rule 3745-31-05(A)(3)
paved roadways	OAC rules 3745-31-10 through 3745-31-20
unpaved roadways	OAC rules 3745-17-07(B) and 3745-17-08(B) ORC 3704.03(T)(4)
paved and unpaved roadways	

**Rump
PTI A**

Emissions Unit ID: F015

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Applicable Emissions
Limitations/Control Measures

The requirements of this rule for PM emissions also include compliance with the requirements of OAC rules 3745-31-10 through 3745-31-20 for the emissions limitations listed below for PM.

Visible emissions of fugitive dust shall not exceed 5% opacity, as a 3-minute average.

Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. (See Sections A.1.2.b, A.1.2.c, A.1.2.d through A.1.2.f)

Visible emissions of fugitive dust shall not exceed 5% opacity, as a 3-minute average.

Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. (See Sections A.1.2.b through A.1.2.c, A.1.2.e and A.1.2.f)

Particulate matter (PM) emissions from the paved and unpaved roadways and

parking areas shall not exceed 14.03 tons/yr.

Emissions of particulate matter less than 10 microns in diameter (PM-10) from the paved and unpaved roadways and parking areas shall not exceed 3.68 tons/yr. See Section A.1.2. h.

See Section A.1.2. g.

See Section A.1.2. h.

Issued: To be entered upon final issuance**2. Additional Terms and Conditions**

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

paved roadways:

paved roadway 1, concrete

paved roadway 2, asphalt

The unpaved roadways that are covered by this permit and subject to the above-mentioned requirements are listed below:

unpaved roadways:

unpaved roadway 1, gravel

unpaved roadway 2, gravel

- 2.b** The permittee shall employ best available control measures on all paved and unpaved roadways for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways with water flushing and sweeping, and the unpaved roadways with water or other dust suppressant chemicals at sufficient treatment frequencies to ensure compliance. When necessary to prevent the carry out of earth or other materials onto public roadways, all trucks exiting the unpaved landfill roadways shall travel through the wheel wash located before the scale area. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.c** The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved or an unpaved roadway that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- 2.d** The permittee shall promptly remove, in such a manner as to minimize or

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prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.

- 2.e** Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- 2.f** Implementation of the above-mentioned control measures for PM emissions in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.
- 2.g** This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rules 3745-17-07(B) and 3745-17-08(B) do not apply to the fugitive emissions from this emissions unit.
- 2.h** Permit to install number 14-05824 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment and/or measures) as proposed by the permittee, for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) for PM-10.

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of the paved and unpaved roadways in accordance with the following frequencies:

**Rump
PTI A**

Emissions Unit ID: F015

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paved roadway 1, concrete
paved roadway 2, asphalt

once daily when in use
once daily when in use

unpaved roadwaysminimum inspection frequency

unpaved roadway 1, gravel
unpaved roadway 2, gravel

once daily when in use
once daily when in use

2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
3. The permittee may, upon receipt of written approval from the Hamilton County Department of Environmental Services, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
4. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in 4.d. shall be kept separately for (i) the paved roadways and (ii) the unpaved roadways, and shall be updated on a calendar quarter basis within 30

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days after the end of each calendar quarter.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:

- a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
- b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

The quarterly deviation reports shall be submitted in accordance with General Term and Condition A.1.c.ii of this permit.

2. The permittee shall also submit annual reports that specify the total PM and PM-10 emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations:

PM emissions from the paved and unpaved roadways and parking areas shall not exceed 14.03 tons/yr.

Emissions of PM-10 from the paved and unpaved roadways and parking areas shall not exceed 3.68 tons/yr.

Applicable Compliance Method:

Compliance shall be determined using the following equations:

$$\text{tons PM/yr} = (A) \times (B) \times (1-C) \times 1 \text{ ton}/2000 \text{ lbs}$$

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tons PM-10/yr = (A) x (B) x (1-C) x 1 ton/2000 lbs

where,

- A = PM or PM-10 emission factor, lb/VMT, calculated from AP-42, Sections 13.2.1 and 13.2.2 (December, 2003)
- B = annual vehicle miles traveled (VMT)
- C = control efficiency of 94% and 95%, for paved and unpaved, respectively, from operational parameters outlined in PTI application 14-05824, submitted March 14, 2006.

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b. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 5% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance with this emission limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

VI. Miscellaneous Requirements

1. The terms and conditions listed in this Permit to Install shall supersede all the air pollution control requirements contained in Permit to Install 14-05292 as issued on June 10, 2004.

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B. State Only Enforceable Section

I. Applicable Emission Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emission Limitations/Control Measures</u>
F015 - composting operation roadways		

2. Additional Terms and Conditions

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emission Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
P014 - 0.58 mmBtu/hr portable number two fuel oil-fired engine	OAC rules 3745-31-10 through 3745-31-20	OAC rule 3745-31-05(C) - - Synthetic minor to avoid PSD new source review
		OAC rule 3745-17-07(A)

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OAC rule 3745-17-11(B)(5)(a)

Applicable Emission Limitations/Control Measures

Particulate emissions (PE) shall not exceed 0.18 lb/hr and 0.42 ton per rolling, 12-month period.

The visible particulate emission limitations specified by this rule are less stringent than the visible particulate emission limitation established pursuant to OAC rules 3745-31-10 through 3745-31-20.

OAC rule 3745-17-11(B)(5)(a)

Emissions of particulate matter with a diameter of 10 microns or less in size (PM-10) shall not exceed 0.18 lb/hr and 0.42 ton per rolling, 12-month period.

The particulate emission limitation specified by this rule is equivalent to the particulate emission limitation established pursuant to OAC rules 3745-31-10 through 3745-31-20.

OAC rule 3745-18-06(G)

Nitrogen oxides (NOx) emissions shall not exceed 2.55 lbs/hr and 5.91 tons per rolling, 12-month period..

PE shall not exceed 0.25 lb/mmBtu of actual heat input.

OAC rules 3745-21-08(B) and 3745-23-06(B)

Carbon monoxide (CO) emissions shall not exceed 0.55 lb/hr and 1.27 tons/yr per rolling, 12-month period.

See Section A.I.2.b below.

ORC 3704.03(T)(4)

The hourly emission limitations specified above are based upon the emissions unit's potentials to emit. Therefore, no additional monitoring, record keeping or reporting is required to demonstrate compliance with these emission limitations.

Exempt, pursuant to OAC rule 3745-18-06(B).

See Section A.I.2.c below.

Visible PE from any stack shall not exceed 10% opacity, as a 6-minute average.

Volatile organic compound (VOC) emissions shall not exceed 0.48 ton per rolling, 12-month period.

See Section A.I.2.d and e below.

Sulfur dioxide (SO₂) emissions shall not exceed 0.39 ton per rolling, 12-month period.

See Sections A.II.1 and A.II.2 below.

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2. Additional Terms and Conditions

- 2.a Compliance with OAC rules 3745-31-10 through 3745-31-20 shall be demonstrated by the use of number two fuel oil and compliance with the number two fuel oil usage limitation and the specified emission limitations.
- 2.b The requirement to comply with the 0.25 lb/mmBtu shall terminate on the date USEPA approves the 0.310 lb/mmBtu of actual heat input emission limitation as a revision to the Ohio SIP for particulate matter.
- 2.c The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC paragraph 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC paragraph 3745-31-05(A)(3) in this permit-to-install.

On February 14, 2005, OAC rule 3745-23-06 was rescinded and is no longer part of State regulations. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the U.S. EPA approves Ohio's requested revision to the SIP, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC paragraph 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC paragraph 3745-31-05(A)(3) in this permit-to-install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. On June 24, 2003, that rule revision was submitted to the USEPA as a revision to Ohio's State Implementation Plan(SIP), however, that rule revision has not yet been approved by the U.S. EPA. Therefore, until the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.d The uncontrolled potential to emit for PM, PM-10, and CO from this air contaminant source is less than 10 tons per year and therefore pursuant to SB265 this air contaminant source is not subject to OAC rule 3745-31-05(A)(3)

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for PM, PM-10, NO_x, and CO.

- 2.e** Permit to install number 14-05824 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee, for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) for both SO₂, VOC, and NO_x.

II. Operational Restrictions

1. The permittee shall only burn number two fuel oil in this emissions unit.
2. The maximum annual number two fuel oil usage for this emissions unit shall not exceed 19,000 gallons per year, based on a rolling, 12-month summation of the number two fuel oil usage.

III. Monitoring and/or Record keeping Requirements

1. For each day during which the permittee burns a fuel other than number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. the number two fuel oil usage for each month, in gallons;
 - b. the rolling, 12-month summation of the fuel usage, in gallons;
 - c. the total PE, PM-10, NO_x, SO₂, VOC, and CO emissions, in tons (i.e., the value from Section A.III.2.a above multiplied by the PE, PM-10, NO_x, SO₂, VOC, and CO emission factors specified in Section A.V); and
 - d. the rolling, 12-month PE, PM-10, NO_x, SO₂, VOC, and CO emission rates, in tons (i.e., the values from Section A.III.2.c above added to the total PE, PM-10, NO_x, SO₂, VOC, and CO emissions for the previous 11 calendar months).

IV. Reporting Requirements

1. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any record that shows this emissions unit employed a fuel other than

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number two fuel oil. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the occurrence.

2. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. all exceedances of the rolling, 12-month PE, PM-10, NO_x, SO₂, VOC, and CO emission limitations; and
 - b. all exceedances of the rolling, 12-month fuel oil usage limitation.

The quarterly reports shall be submitted in accordance with Part I - General Term and Condition A.1.c.ii of this permit.

3. The permittee shall also submit annual reports that specify the total particulate, PM₁₀, CO, NO_x, SO₂, and VOC emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

V. Testing Requirements

1. Compliance with the emission limitations specified in Section A.I.1 shall be determined by the following methods:
 - a. Emission Limitation:
Visible PE from any stack shall not exceed 10% opacity, as a 6-minute average.

Applicable Compliance Method:
If required compliance with this emission limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.
 - b. Emission Limitations:
PE shall not exceed 0.18 lb/hr and 0.42 ton per rolling, 12-month period.

Emissions of PM-10 shall not exceed 0.18 lb/hr and 0.42 ton per rolling, 12-month period.

Applicable Compliance Method:
The hourly emission limitations are based upon the emissions unit's potentials to emit and were established by multiplying the emissions unit's total heat input of 0.58 mmBtu/hr by the emission factor of 0.31 lb of PE/mmBtu. This emission factor is from AP-42, Fifth Edition, Section 3.3.1, Table 3.3-1 (10/96).

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Compliance with the annual emission limitations may be assumed as long as compliance with the annual number two fuel oil usage restriction is maintained.

If required, the permittee shall demonstrate compliance with the hourly PE limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

If required, the permittee shall demonstrate compliance with the hourly PM10 emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 40 CFR Part 51, Appendix M, Method 201.

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- c. Emission Limitations:
SO₂ emissions shall not exceed 0.17 lb/hr and 0.39 ton per rolling, 12-month period.
- Applicable Compliance Method:
The hourly emission limitation is based upon the emissions unit's potential to emit and was established by multiplying the emissions unit's total heat input of 0.58 mmBtu/hr by the emission factor of 0.29 lb of SO₂/mmBtu. This emission factor is from AP-42, Fifth Edition, Section 3.3.1, Table 3.3-1 (10/96).
- Compliance with the annual emission limitation may be assumed as long as compliance with the annual number two fuel oil usage restriction is maintained.
- If required, the permittee shall demonstrate compliance with the hourly limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.
- d. Emission Limitations:
NO_x emissions shall not exceed 2.55 lbs/hr and 5.91 tons per rolling, 12-month period.
- Applicable Compliance Method:
The hourly emission limitation is based upon the emissions unit's potential to emit and was established by multiplying the emissions unit's total heat input of 0.58 mmBtu/hr by the emission factor of 4.41 lbs of NO_x/mmBtu. This emission factor is from AP-42, Fifth Edition, Section 3.3.1, Table 3.3-1 (10/96).
- Compliance with the annual emission limitation may be assumed as long as compliance with the annual number two fuel oil usage restriction specified is maintained.
- If required, the permittee shall demonstrate compliance with the hourly limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.
- e. Emission Limitations:
CO emissions shall not exceed 0.55 lb/hr and 1.27 tons per rolling, 12-month period.
- Applicable Compliance Method:
The hourly emission limitation is based upon the emissions unit's potential to emit and was established by multiplying the emissions unit's total heat input of 0.58 MMBtu/hr by the emission factor of 0.95 lb of CO/mmBtu. This emission factor is from AP-42, Fifth Edition, Section 3.3.1, Table 3.3-1 (10/96).
- Compliance with the annual emission limitation may be assumed as long as

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compliance with the annual number two fuel oil usage restriction is maintained.

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

- f. Emission Limitations:
VOC emissions shall not exceed 0.20 lb/hr and 0.48 ton per rolling, 12-month period..

Applicable Compliance Methods:

The hourly emission limitation is based upon the emissions unit's potential to emit and was established by multiplying the emissions unit's total heat input of 0.58 MMBtu/hr by the emission factor of 0.36 lb of VOC/mmBtu. This emission factor is from AP-42, Fifth Edition, Section 3.3.1, Table 3.3-1 (10/96).

Compliance with the annual emission limitation shall be assumed as long as compliance with the annual number two fuel oil usage restriction is maintained.

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

- g. Emission Limitation:
PE shall not exceed 0.25 lb/mmBtu of actual heat input.

Applicable Compliance Method:

The permittee cannot demonstrate compliance with this emission limitation based upon the current emission factor contained in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.3, Table 3.3-1 (10/96). The Ohio EPA revised the emission limitation specified in this rule citation based upon the currently applicable emission factor. The revised rule was adopted by the Director of Ohio EPA in December of 1997, and it has been submitted to the U.S. EPA as a proposed revision to the Ohio SIP for particulate matter. When the SIP revision is approved by the U.S. EPA, the 0.25 lb/mmBtu actual heat input emission limitation will no longer be applicable, and the permittee will be able to demonstrate compliance with the OAC rule 3745-17-11(B)(5)(a) emission limitation (0.310 lb/mmBtu actual heat input) using the current emission factor.

If required, the permittee shall demonstrate compliance with this emission

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limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

VI. Miscellaneous Requirements

1. Notice to Relocate a Portable or Mobile Source

Pursuant to OAC rule 3745-31-03(A)(1)(p), the permittee of a portable source may relocate within the State of Ohio without first obtaining a permit to install (PTI) providing certain criteria are met. The portable source shall meet one of the two following scenarios in order to qualify for this PTI exemption for the new location:

- a. The following determinations have been documented, pursuant to OAC rule 3745-31-03(A)(1)(p)(i):
 - i. the portable source is equipped with the best available technology for such portable source;
 - ii. the portable source is operating pursuant to a currently effective permit to install, permit to operate (PTO), or registration status;
 - iii. the applicant has provided proper notice of the intent to relocate the portable source to the (1.) Ohio EPA District Office or local air agency responsible for the permit(s) for the source and (2.) the appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site within a minimum of 30 days prior to the scheduled relocation; and
 - iv. in the judgement of the Ohio EPA District Office or local air agency having jurisdiction over the new site, the proposed site is acceptable under OAC rule 3745-15-07.
- b. In the alternative, pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), the permittee of a portable source may relocate within the State of Ohio without first obtaining a PTI, providing the following criteria of OAC rule 3745-31-05(E) are met:
 - i. the portable source permittee possesses an Ohio EPA PTI, PTO or registration status;
 - ii. the portable source is equipped with best available technology;
 - iii. the portable source owner has identified the proposed site to Ohio EPA;
 - iv. Ohio EPA has determined that the portable source, at the proposed site, will have an acceptable environmental impact;

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- v. a public notice, consistent with OAC Chapter 3745-47, is published in the county where the proposed site is located;
- vi. the owner of the proposed site has provided the portable source owner with approval or equivalent declaration that it is acceptable to the site owner to move the portable source to this proposed site; and
- vii. the portable source owner has provided Ohio EPA with 15 days written notice of the relocation.

Any site approvals issued by the Ohio EPA, pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), shall be valid for no longer than 3 years and are subject to renewal.

In order for the permitting Ohio EPA District Office or local air agency and the appropriate field office having jurisdiction over the new site to determine compliance with all of the above criteria, the permittee of the portable source must file a " Notice of Intent to Relocate" within the specified time frame (30 or 15 days), prior to the relocation of the portable source with the Ohio EPA District Office or local air agency responsible for the permits for the source and the appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site. Upon receipt of the notice, the Ohio EPA District Office or local air agency responsible for the permits for the portable source, and/or appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site, will evaluate the request in accordance with the above criteria.

Failure to submit said notification and to receive Ohio EPA approval prior to relocation of the portable source may result in fines and civil penalties.

Pursuant to OAC rule 3745-31-05(F), the Director may modify the site approval to add or delete certain portable sources or add or delete certain terms and conditions as appropriate.

2. The terms and conditions listed in this Permit to Install shall supersede all the air pollution control requirements contained in Permit to Install 14-05292 as issued on June 10, 2004.

B. State Only Enforceable Section

I. Applicable Emission Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emission Limitations/Control Measures</u>
P014 - 0.58 MMBtu/hr portable number two fuel oil-fired engine		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

1. Air Toxic Policy Clarifying Language

Pursuant to Engineering Guide #69, modeling to demonstrate compliance with the Ohio EPA's Air Toxic Policy was not necessary since the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to

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apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

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Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emission Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
P015 - 4.68 mmBtu/hr portable number two fuel oil-fired engine	OAC rule 3745-31-05(A)(3)
	OAC rules 3745-31-10 through 3745-31-20.
	OAC rule 3745-31-05(C) - - Synthetic minor to avoid PSD new source review
	OAC rule 3745-17-07(A)
	OAC rule 3745-17-11(B)(5)(b)

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	Applicable Emission <u>Limitations/Control Measures</u>	
OAC rule 3745-17-11(B)(5)(b)	The requirements of this rule for NOx emissions also include compliance with the requirements of OAC rules 3745-31-10 through 3745-31-20 for the NOx emissions limitations below.	not exceed 10% opacity, as a 6-minute average. Sulfur dioxide (SO2) emissions shall not exceed 2.36 lbs/hr and 2.85 tons/yr.
OAC rule 3745-18-06(G)	Filterable particulate emissions (PE) shall not exceed 0.29 lb/hr and 0.35 ton per rolling, 12-month period.	See Sections A.II.1 and A.II.2 below.
OAC rules 3745-21-08(B) and 3745-23-06(B)	Emissions of particulate matter with a diameter of 10 microns or less in size (PM-10) shall not exceed 0.27 lb/hr and 0.32 ton per rolling, 12-month period.	The visible particulate emission limitations specified by this rule are less stringent than the visible particulate emission limitation established pursuant to OAC rules 3745-31-10 through 3745-31-20.
40 CFR Part 63, Subpart ZZZZ	Nitrogen oxides (NOx) emissions shall not exceed 14.99 lbs/hr and 18.05 tons per rolling, 12-month period.	The particulate emission limitation specified by this rule is equivalent to the particulate emission limitation established pursuant to OAC rules 3745-31-10 through 3745-31-20.
ORC 3704.03(T)(4)	Carbon monoxide (CO) emissions shall not exceed 3.98 lbs/hr and 4.79 tons per rolling, 12-month period.	PE shall not exceed 0.35 lb/mmBtu of actual heat input. See Section A.I.2.b below.
	The hourly emission limitations specified above are based upon the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping or reporting is required to demonstrate compliance with these emission limitations.	Exempt, pursuant to OAC rule 3745-18-06(B). See Section A.I.2.c below.
	Visible PE from any stack shall	Since this emissions unit is an existing compression ignition reciprocating internal combustion engine per 40 CFR Part 63.6600, the emission limitations in this rule do not apply to this emissions unit.

Volatile organic compound (VOC) emissions shall not exceed 0.51 ton per rolling, 12-month period.

See Section A.I.2.d and e below.

2. Additional Terms and Conditions

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of number two fuel oil and compliance with the number two fuel oil usage limitation and the specified emission limitations.
- 2.b** The requirement to comply with the 0.35 lb/mmBtu shall terminate on the date USEPA approves the 0.062 lb/mmBtu of actual heat input emission limitation as a revision to the Ohio SIP for particulate matter.
- 2.c** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC paragraph 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC paragraph 3745-31-05(A)(3) in this permit-to-install.

On February 14, 2005, OAC rule 3745-23-06 was rescinded and is no longer part of State regulations. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the U.S. EPA approves Ohio's requested revision to the SIP, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC paragraph 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC paragraph 3745-31-05(A)(3) in this permit-to-install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. On June 24, 2003, that rule revision was submitted to the USEPA as a revision to Ohio's State Implementation Plan(SIP), however, that rule revision has not yet been approved by the U.S. EPA. Therefore, until the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

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- 2.d** The uncontrolled potential to emit for PM and PM-10 from this air contaminant source is less than 10 tons per year and therefore pursuant to SB265 this air contaminant source is not subject to OAC rule 3745-31-05(A)(3) for PM and PM-10.

- 2.e** Permit to install number 14-05824 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee, for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) for both SO₂, VOC, and CO.

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1. The permittee shall only burn number two fuel oil with a sulfur content of 0.5%, by weight, or less in this emissions unit.
2. The maximum annual number two fuel oil usage for this emissions unit shall not exceed 80,000 gallons per year, based on a rolling, 12-month summation of the number two fuel oil usage.

III. Monitoring and/or Record keeping Requirements

1. For each day during which the permittee burns a fuel other than number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. the number two fuel oil usage for each month, in gallons;
 - b. the rolling, 12-month summation of the fuel usage, in gallons;
 - c. the total PE, PM-10, NO_x, SO₂, VOC, and CO emissions, in tons (i.e., the value from Section A.III.2.a above multiplied by the PE, PM-10, NO_x, SO₂, VOC, and CO emission factors specified in Section A.V); and
 - d. the rolling, 12-month PE, PM-10, NO_x, SO₂, VOC, and CO emission rates, in tons (i.e., the values from Section A.III.2.c above added to the total PE, PM-10, NO_x, SO₂, VOC, and CO emissions for the previous 11 calendar months).
3. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the permittee's or oil supplier's analyses for sulfur content. A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

The permittee shall perform or require the supplier to perform the analyses for sulfur content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM method (such as, ASTM method D4294), or an equivalent method as approved by the Director.

IV. Reporting Requirements

1. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any record that shows this emissions unit employed a fuel other than number two fuel oil. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the occurrence.
2. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. all exceedances of the rolling, 12-month PE, PM-10, NO_x, SO₂, VOC, and CO emission limitations;
 - b. all exceedances of the number two fuel oil sulfur content restriction; and
 - c. all exceedances of the rolling, 12-month fuel oil usage limitation.

The quarterly reports shall be submitted in accordance with Part I - General Term and Condition A.1.c.ii of this permit.

3. The permittee shall also submit annual reports that specify the total particulate, PM-10, CO, NO_x, SO₂, and VOC emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

V. Testing Requirements

1. Compliance with the emission limitations specified in Section A.I.1 shall be determined by the following methods:
 - a. Emission Limitation:
Visible PE from any stack shall not exceed 10% opacity, as a 6-minute average.

Applicable Compliance Method:
If required, compliance with this emission limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.
 - b. Emission Limitations:
PE shall not exceed 0.29 lb/hr and 0.35 ton per rolling, 12-month period.

Emissions of PM-10 shall not exceed 0.27 lb/hr and 0.32 ton per rolling, 12-month period.

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The hourly emission limitations are based upon the emissions unit's potentials to emit and were established by multiplying the emissions unit's total heat input of 4.68 mmBtu/hr by the emission factors of 0.062 lb of filterable PE/mmBtu and 0.0573 lb of PM-10/mmBtu. These emission factors are from AP-42, Fifth Edition, Section 3.4, Table 3.4-2 (10/96).

Compliance with the annual emission limitations may be assumed as long as compliance with the annual number two fuel oil usage restriction is maintained.

If required, the permittee shall demonstrate compliance with the hourly filterable PE limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

If required, the permittee shall demonstrate compliance with the hourly PM10 emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 40 CFR Part 51, Appendix M, Method 201.

c. Emission Limitations:

SO₂ emissions shall not exceed 2.36 lbs/hr and 2.85 tons per rolling, 12-month period.

Applicable Compliance Method:

The hourly emission limitation is based upon the emissions unit's potential to emit and was established by multiplying the emissions unit's total heat input of 4.68 mmBtu/hr by the emission factor of 0.505 lb of SO₂/mmBtu. This emission factor is from AP-42, Fifth Edition, Section 3.4, Table 3.4-1 (10/96).

Compliance with the annual emission limitation may be assumed as long as compliance with the annual number two fuel oil usage restriction is maintained.

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

d. Emission Limitations:

NO_x emissions shall not exceed 14.99 lbs/hr and 18.05 tons per rolling, 12-month period.

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Applicable Compliance Method:

The hourly emission limitation is based upon the emissions unit's potential to emit and was established by multiplying the emissions unit's total heat input of 4.68 mmBtu/hr by the emission factor of 3.2 lbs of NOx/mmBtu. This emission factor is from AP-42, Fifth Edition, Section 3.4, Table 3.4-1 (10/96).

Compliance with the annual emission limitation may be assumed as long as compliance with the annual number two fuel oil usage restriction specified is maintained.

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

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- e. Emission Limitations:
CO emissions shall not exceed 3.98 lbs/hr and 4.79 tons per rolling, 12-month period.

Applicable Compliance Method:

The hourly emission limitation is based upon the emissions unit's potential to emit and was established by multiplying the emissions unit's total heat input of 4.68 mmBtu/hr by the emission factor of 0.85 lb of CO/mmBtu. This emission factor is from AP-42, Fifth Edition, Section 3.4, Table 3.4-1 (10/96).

Compliance with the annual emission limitation may be assumed as long as compliance with the annual number two fuel oil usage restriction is maintained.

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

- f. Emission Limitations:
VOC emissions shall not exceed 0.42 lb/hr and 0.51 ton per rolling, 12-month period.

Applicable Compliance Methods:

The hourly emission limitation is based upon the emissions unit's potential to emit and was established by multiplying the emissions unit's total heat input of 4.68 mmBtu/hr by the emission factor of 0.09 lb of VOC/mmBtu. This emission factor is from AP-42, Fifth Edition, Section 3.4, Table 3.4-1 (10/96).

Compliance with the annual emission limitation shall be assumed as long as compliance with the annual number two fuel oil usage restriction is maintained.

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

- g. Emission Limitation:
PE shall not exceed 0.35 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance with this emission limitation may be based upon an emission factor of 0.062 lb of filterable PE/mmBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution

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Emission Factors, Section 3.4, Table 3.4-2 (10/96).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

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Issued: To be entered upon final issuance**VI. Miscellaneous Requirements**

1. Notice to Relocate a Portable or Mobile Source

Pursuant to OAC rule 3745-31-03(A)(1)(p), the permittee of a portable source may relocate within the State of Ohio without first obtaining a permit to install (PTI) providing certain criteria are met. The portable source shall meet one of the two following scenarios in order to qualify for this PTI exemption for the new location:

- a. The following determinations have been documented, pursuant to OAC rule 3745-31-03(A)(1)(p)(i):
 - i. the portable source is equipped with the best available technology for such portable source;
 - ii. the portable source is operating pursuant to a currently effective permit to install, permit to operate (PTO), or registration status;
 - iii. the applicant has provided proper notice of the intent to relocate the portable source to the (1.) Ohio EPA District Office or local air agency responsible for the permit(s) for the source and (2.) the appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site within a minimum of 30 days prior to the scheduled relocation; and
 - iv. in the judgement of the Ohio EPA District Office or local air agency having jurisdiction over the new site, the proposed site is acceptable under OAC rule 3745-15-07.
- b. In the alternative, pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), the permittee of a portable source may relocate within the State of Ohio without first obtaining a PTI, providing the following criteria of OAC rule 3745-31-05(E) are met:
 - i. the portable source permittee possesses an Ohio EPA PTI, PTO or registration status;
 - ii. the portable source is equipped with best available technology;
 - iii. the portable source owner has identified the proposed site to Ohio EPA;
 - iv. Ohio EPA has determined that the portable source, at the proposed site, will have an acceptable environmental impact;

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- v. a public notice, consistent with OAC Chapter 3745-47, is published in the county where the proposed site is located;
- vi. the owner of the proposed site has provided the portable source owner with approval or equivalent declaration that it is acceptable to the site owner to move the portable source to this proposed site; and
- vii. the portable source owner has provided Ohio EPA with 15 days written notice of the relocation.

Any site approvals issued by the Ohio EPA, pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), shall be valid for no longer than 3 years and are subject to renewal.

In order for the permitting Ohio EPA District Office or local air agency and the appropriate field office having jurisdiction over the new site to determine compliance with all of the above criteria, the permittee of the portable source must file a " Notice of Intent to Relocate" within the specified time frame (30 or 15 days), prior to the relocation of the portable source with the Ohio EPA District Office or local air agency responsible for the permits for the source and the appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site. Upon receipt of the notice, the Ohio EPA District Office or local air agency responsible for the permits for the portable source, and/or appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site, will evaluate the request in accordance with the above criteria.

Failure to submit said notification and to receive Ohio EPA approval prior to relocation of the portable source may result in fines and civil penalties.

Pursuant to OAC rule 3745-31-05(F), the Director may modify the site approval to add or delete certain portable sources or add or delete certain terms and conditions as appropriate.

2. The terms and conditions listed in this Permit to Install shall supersede all the air pollution control requirements contained in Permit to Install 14-05292 as issued on June 10, 2004.

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B. State Only Enforceable Section

I. Applicable Emission Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emission Limitations/Control Measures</u>
P015 - 4.68 mmBtu/hr portable number two fuel oil-fired engine		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

1. Air Toxic Policy Clarifying Language

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Pursuant to Engineering Guide #69, modeling to demonstrate compliance with the Ohio EPA's Air Toxic Policy was not necessary since the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

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Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emission Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
P902 - Solid waste disposal and landfill gas generation - Landfill Southern Expansion modification	OAC rule 3745-31-05(A)(3)
MSW landfill equipped with active gas collection and control system (flare/landfill gas recovery for sale or use)	

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OAC rules 3745-31-11 through
3745-31-20

40 CFR Part 60, Subpart WWW

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	Applicable Emission Limitations/Control Measures	417.91 TPY.
40 CFR Part 61, Subparts A and M and OAC Chapter 3745-20	Emissions from the new gas recovery plant option shall not exceed the following: NMOC emissions shall not exceed 3.83 lbs/hr; and CO emissions shall not exceed 48.18 lbs/hr and 211.03 tons/yr.	If the gas recovery plant option is used by itself or in conjunction with the enclosed flare option then the emissions from the gas recovery plant shall not exceed the following: CO emissions shall not exceed 211.03 TPY.
OAC rule 3745-21-07(J)(2)	Emissions from the new enclosed combustor option shall not exceed the following: NMOC emissions shall not exceed 3.83 lbs/hr; CO emissions shall not exceed 95.4 lbs/hr and 417.91 tons/yr.	Emissions from the existing gas recovery plant (stack emissions) shall not exceed the following: Non-methane organic compound (NMOC) emissions shall not exceed 7.91 lbs/hr and 34.65 tons/yr.
40 CFR Part 63, Subpart AAAA	Emissions from the utility flares serving the new gas recovery plant shall not exceed the following: NMOC emissions shall not exceed 3.83 lbs/hr; and CO emissions shall not exceed 123.44 lbs/hr.	Carbon monoxide (CO) emissions shall not exceed 9.68 lbs/hour and 42.44 tons/yr.
OAC rules 3745-21-08(B) and 3745-23-06(B)	Emissions from the utility flares serving the new gas recovery plant shall not exceed the following: NMOC emissions shall not exceed 3.83 lbs/hr; and CO emissions shall not exceed 123.44 lbs/hr.	Particulate emissions (PE) shall not exceed 0.2 lb/hr and 0.86 ton/yr.
	Emissions from the utility flares serving the new gas recovery plant shall not exceed the following: NMOC emissions shall not exceed 3.83 lbs/hr; and CO emissions shall not exceed 123.44 lbs/hr.	Emissions of particulate matter less than 10 microns in diameter (PM-10) shall not exceed 0.2 lb/hr and 0.86 ton/yr.
	The combined TPY emissions limitation from the new gas recovery plant, utility flares, and enclosed combustors shall not exceed the following: NMOC emissions shall not exceed 16.79 TPY; and CO emissions shall not exceed	Nitrogen oxides (NOx) emissions shall not exceed 1.5 lbs/hr and 6.66 tons/yr. Sulfur dioxide (SO2) emissions shall not exceed 1.62 lbs/hr and 7.11 tons/yr.
	NMOC emissions shall not exceed 16.79 TPY; and CO emissions shall not exceed	Methane emissions shall not exceed 599 tons/yr.

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<p>Hydrogen chloride (HCl) emissions shall not exceed 25.62 tons/yr.</p>	<p>NOx emissions shall not exceed 26.0 lbs/hr and 113.83 tons/yr.*</p>	<p>10.47 tons/yr**.</p>
<p>Hydrogen fluoride (HF) emissions shall not exceed 3.28 tons/yr.</p>	<p>SO2 emissions shall not exceed 6.7 lbs/hr and 29.3 tons/yr.</p>	<p>**The H2S emissions are fugitive.</p>
<p>Fugitive (non stack) emissions from the existing emissions unit before the vertical and southern expansion shall not exceed the following:</p>	<p>HCl emissions shall not exceed 10.3 lbs/hr and 45.18 tons/yr.</p>	<p>CFC-11 emissions shall not exceed 0.90 ton/yr.</p>
<p>Methane emissions shall not exceed 28,588 tons/yr.</p>	<p>HF emissions shall not exceed 1.7 lbs/hr and 7.28 tons/yr.</p>	<p>CFC-12 emissions shall not exceed 16.43 tons/yr.</p>
<p>Emissions from the new gas recovery plants and/or control devices (stack emissions) shall not exceed the following:</p>	<p>Fluorotrichloromethane (CFC-11) emissions shall not exceed 0.02 ton/yr.*</p>	<p>See Sections A.I.2.f, A.I.2.g, A.I.2.h, A.II.9, and A.II.19.</p>
<p>PE shall not exceed 2.75 lbs/hr and 12.04 tons/yr from the new gas recovery plant.</p>	<p>Dichlorodifluoromethane (CFC-12) emissions shall not exceed 0.37 ton/yr.*</p>	<p>The requirements of this rule also include compliance with the requirements of OAC Chapter 3745-20, OAC rules 3745-31-11 through 3745-31-20, and 3745-21-07(J)(2), 40 CFR Part 60, Subpart WWW, 40 CFR Part 61, Subpart M, and 40 CFR Part 63, Subpart AAAA.</p>
<p>PM-10 emissions shall not exceed 2.75 lbs/hr and 12.04 tons/yr from the gas recovery plant.*</p>	<p>Methane emissions shall not exceed 1563 tons/yr.</p>	<p>The pollutant emission limitations asterisked above are subject to the requirements of these rules.</p>
<p>PE shall not exceed 7.3 lbs/hr and 31.87 tons/yr from the enclosed combustor.</p>	<p>Fugitive (non-stack) emissions from this emissions unit shall not exceed the following:</p>	<p>See Sections A.I.2.b through A.I.2.e, A.I.2.m, A.II.1 through A.II.6 and A.II.10 through A.II.15.</p>
<p>PM-10 emissions shall not exceed 7.3 lbs/hr and 31.87 tons/yr from the enclosed combustor.*</p>	<p>NMOC emissions shall not exceed 745.70 tons/yr.</p>	<p>See Sections A.I.2.I, A.II.7, and A.II.8.</p>
	<p>CO emissions shall not exceed 34.18 tons/yr.</p>	<p>All waste organic materials vented to an open flare shall be burned by a smokeless flare.</p>
	<p>Particulate matter (PM) emissions shall not exceed 0.56 ton/yr.</p>	<p>See Sections A.II.17 and A.II.18.</p>
	<p>PM-10 emissions shall not exceed 0.27 ton/yr.</p>	<p>See Section A.I.2.a.</p>
	<p>Methane emissions from both the vertical and southern expansion shall not exceed 45,029 tons/yr**.</p>	
	<p>Hydrogen sulfide (H2S) emissions shall not exceed</p>	

Issued: To be entered upon final issuance**2. Additional Terms and Conditions**

- 2.a** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC paragraph 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC paragraph 3745-31-05(A)(3) in this permit-to-install.

On February 14, 2005, OAC rule 3745-23-06 was rescinded and is no longer part of State regulations. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the U.S. EPA approves Ohio's requested revision to the SIP, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC paragraph 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC paragraph 3745-31-05(A)(3) in this permit-to-install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. On June 24, 2003, that rule revision was submitted to the USEPA as a revision to Ohio's State Implementation Plan(SIP), however, that rule revision has not yet been approved by the U.S. EPA. Therefore, until the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.b** The active collection system shall satisfy the following requirements, as specified in 40 CFR Part 60.752(b)(2)(ii)(A):
- i. The system shall be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment.
 - ii. The system shall collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of 5 years or more if active, or 2 years or more if closed or at final grade.
 - iii. The system shall collect gas at a sufficient extraction rate.

- iv. The system shall be designed to minimize off-site migration of subsurface gas.

2.c The permittee shall comply with either of the following:

- i. All landfill gas collected shall be routed to a control system designed and operated within the parameters demonstrated during the performance test to reduce non-methane organic compound (NMOC) emissions by 98%, by weight, or when an enclosed combustion device is used for control, to either reduce NMOC emissions by 98%, by weight, or reduce the outlet NMOC emission concentration to less than 20 parts per million (ppm), by volume, dry basis as hexane at 3% oxygen. The reduction efficiency or ppm, by volume, shall be established by an initial performance test to be completed no later than 180 days after initial startup of the approved new control system (control system for the southern expansion) using the test methods specified in 40 CFR Part 60.754(d). The term enclosed combustor shall include the thermal oxidizers (TOX) - units 1 and 2 at the Rumpke Recovery Plant.
- ii. Route the collected gas to a treatment system that processes the collected gas for subsequent sale or use. All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of 40 CFR Part 60.752(b)(2)(iii)(A) or (B).

2.d The collection and control system may be capped or removed provided that all of the following conditions, as specified in 40 CFR Part 60.752(b)(2)(v), are met:

- i. The landfill shall be a closed landfill as defined in 40 CFR Part 60.751. A closure report shall be submitted to the Department of Environmental Services as provided in 40 CFR Part 60.757(d).
- ii. The collection and control system shall have been in operation a minimum of 15 years.
- iii. Following the procedures specified in 40 CFR Part 60.754(b), the calculated NMOC gas produced by the landfill shall be less than 55 tons per year on 3 successive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart.

2.e The equipment that constitutes the gas collection and control system shall be properly maintained and kept in good operating condition at all times.

2.f For all waste handling materials, except asbestos-containing materials:

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

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- ii. Use of reasonably available control measures, to minimize or eliminate the emissions of fugitive dust.
- 2.g** For Asbestos-Containing Material (ACM):
 - i. There shall be no visible emissions.
 - ii. Use of handling procedures and control measures, to prevent the emissions of fugitive dust.
- 2.h** Visible particulate emissions from the stack serving the existing gas recovery plant shall not exceed 10% opacity, as a 6-minute average.

Visible particulate emissions from the stack serving the new gas recovery plant shall not exceed 20% opacity, as a 6-minute average.
- 2.i** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the visible particulate emission limitations, a well designed and well operated landfill gas collection system and a control system capable of reducing NMOC in the collected gas by 98% or an outlet concentration of 20 ppmv hexane at 3% oxygen, reasonable available control measures to minimize or eliminate emissions of fugitive dust from solid waste disposal operations, compliance with 40 CFR Part 60, Subpart WWW, 40 CFR Part 61, Subpart M and 40 CFR Part 63, Subpart AAAA.
- 2.j** The hourly emission limitations are based upon the emissions unit's potentials to emit. Therefore, no additional monitoring, record keeping or reporting requirements are required to demonstrate compliance with these emission limitations.
- 2.k** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.
- 2.l** 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.

- 2.m** There shall be no visible emissions from an open flare, except for periods not to exceed 5 minutes during any 2 consecutive hours.

II. Operational Restrictions

1. Whenever the enclosed combustor is in operation, the average combustion temperature shall be at least 1,400 degrees Fahrenheit, for any 3-hour block of time (or higher temperature needed to ensure a 98%, by weight, destruction of the NMOCs), measured by the temperature indicator.
2. The permittee shall operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for 5 years or more if active, or for 2 years or more if closed or at final grade.
3. The permittee shall operate the collection system with negative pressure at each wellhead except under the following conditions:
 - a. A fire or increased well temperature (the permittee shall record all instances when positive pressure occurs in efforts to avoid a fire).
 - b. Use of a geomembrane or synthetic cover (the permittee shall develop acceptable pressure limits in the design plan).
 - c. A decommissioned well (a well may experience a static positive pressure after shutdown to accommodate for declining flows). All design changes shall be approved by the Director of Ohio EPA.
4. The permittee shall operate each interior wellhead in the collection system with a landfill gas temperature less than 65 degrees Celsius and with either a nitrogen level less than 20% or an oxygen level less than 5%. The permittee may establish a higher operating temperature, nitrogen level, or oxygen level at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.
5. The permittee shall operate the collection system so that the methane concentration is less than 500 ppm above background at the surface of the landfill.
6. The permittee shall operate the collection system such that all collected gases are vented to a control system designed and operated in compliance with Section A.I.2.c. In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour.

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7. Disposal Requirements for ACM:

- a. There shall be no visible emissions from ACM during on-site transportation, transfer, unloading, deposition or compacting operations.
- b. The permittee shall implement and maintain an "Asbestos Disposal Operating Procedure and Spill Contingency Plan" ("Plan") consisting of: authorized personnel training, inspection and disposal operating procedures, non-conforming load response procedures, inventory and maintenance procedures for safety and emission control equipment, record keeping procedures, and emergency notification procedures. Authorized personnel shall be knowledgeable in the procedures, and the Plan shall be available for inspection at this facility at all times.
- c. The permittee shall inspect each load of ACM delivered to the facility. The inspection shall consist of a visual examination to ensure that each shipment of ACM is received in intact, leak-tight containers labeled with appropriate hazard warning labels, the name of the waste generator, and the location of waste generation. The inspection also shall determine whether the waste shipment records accompany the consignment and accurately describe the waste material and quantity.

If on the basis of the inspection, the waste material is found to be improperly received, the load shall be disposed of in accordance with the procedures in the "Asbestos Spill Contingency Plan," and the discrepancy shall be noted on the waste shipment record.

- d. Deposition and burial operations shall be conducted in a careful manner that prevents asbestos-containing waste materials from being broken up or dispersed before the materials are buried.
- e. The permittee shall establish restricted access, adequate to deter the unauthorized entry of the general public and any unauthorized personnel, within 100 feet of the unloading, deposition, and burial areas for the asbestos-containing waste materials. A hazard warning shall be displayed on signs not less than 20 x 14 inches in size, posted so they are visible before entering an area with asbestos waste disposal operations in progress; or, alternatively, mark vehicles used to transport asbestos-containing waste materials with 21 x 14 inch signs so that the signs are displayed in such a manner and location that a person can easily read the legend. Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in

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this paragraph.

Legend:

ASBESTOS WASTE DISPOSAL SITE
DO NOT CREATE DUST
BREATHING ASBESTOS IS HAZARDOUS TO YOUR HEALTH

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Notation

2.5 cm (1 inch) Sans Serif, Gothic or Block

2.5 cm (1 inch) Sans Serif, Gothic or Block

1.9 cm (3/4 inch) Sans Serif, Gothic or Block

14 Point Gothic

Spacing between any two lines must be at least equal to the height of the upper of the two lines.

8. The permittee shall cover and compact asbestos wastes in accordance with the following:
 - a. As soon as practicable after the placement of friable asbestos, but no later than the end of each working day, the asbestos-containing waste materials deposited at the site during the operating day shall be covered with at least 12 inches of non-ACM. Once the ACM are covered, the area may be compacted.
 - b. Care shall be taken to ensure that disposed asbestos shall not be re-excavated in subsequent operations. Any accidentally exposed material shall be immediately recovered in accordance with the provisions of condition 8a. above.
 - c. Asbestos-containing waste materials shall be separated from the landfill final grade by no less than 24 inches of compacted non-asbestos-containing materials and a permanent cover of vegetation, or in accordance with current requirements for closure, whichever is more stringent.

Emission control equipment shall be available for wetting and containing asbestos in the event of a release or non-conforming load disposal. All equipment required to implement the Plan shall be maintained in accordance with good engineering practices to ensure that the equipment is in a ready-to-use condition and in an appropriate location for use.

9. The permittee shall ensure that solid wastes are deposited, spread and compacted in such a manner as to minimize or prevent visible emissions of dust. All truckloads of solid waste shall be unloaded in a manner which will minimize the drop height of the solid wastes. Any dusty materials or wastes likely to become airborne shall be watered as necessary prior to or during dumping operations in order to minimize or eliminate visible emissions of fugitive dust. Watering shall be conducted in such a manner as to avoid the pooling of liquids and runoff. No dusty material shall be dumped during periods of high wind speed, unless the material has been treated to prevent fugitive

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- dust emissions from becoming airborne.
10. The permittee shall operate the recovery and treatment system at all times when the collected gas is routed to the system.
 11. A pilot flame shall be maintained at all times in the flare's pilot light burner.
 12. The permittee shall either burn the gas in an enclosed combustor and/or an energy recovery piece of equipment, as required above, or collect and sell the gas as fuel.
 13. The collection system shall be designed to meet the requirements of 40 CFR Part 60.759.
 14. The permittee shall place each well or design component as specified in the approved design plan as provided in 40 CFR Part 60.752(b)(2)(i). Each well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of
 - a. 5 years or more if active; or
 - b. 2 years or more if closed or at final grade.
 15. The permittee shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.
 16. There shall be no open burning in violation of OAC Chapter 3745-19.
 17. The permittee shall develop a written startup, shutdown and malfunction plan and follow the requirements as outlined in 40 CFR Part 63.6 (e). This plan shall be developed by January 16, 2004 or upon reconstruction, whichever comes first and be maintained on site.
 18. The permittee shall comply with the general provisions outlined in Table 1 of 40 CFR Part 63, Subpart AAAA.
 19. The maximum amount of landfill waste (i.e., excluding composting raw material and unprocessed and/or shredded tires) received daily shall not exceed 10,000 tons.

III. Monitoring and/or Record keeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and

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

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

- a. All 3-hour blocks of time during which the average combustion temperature within the enclosed combustor, when the emissions unit was in operation, was less than 1,400 degrees Fahrenheit.
 - b. A log of the downtime for the capture (collection) system, control device and monitoring equipment when the associated emissions unit was in operation.
2. For the active gas collection system, the permittee shall install a sampling port and a thermometer, or other temperature measuring device, or an access port for temperature measurements at each wellhead and record the following information on a monthly basis:
- a. The gauge pressure in the gas collection header at each individual well, in psi.
 - b. The nitrogen or oxygen concentration in the landfill gas, in percent.
 - c. The temperature of the landfill gas, in degrees Fahrenheit.

If a well exceeds one of the operating parameters specified in Sections A.II.3 and A.II.4, except as provided under 40 CFR Parts 60.753(b) and (c), action shall be initiated to correct the exceedances within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative time line for correcting the exceedance may be submitted to the Hamilton County Department of Environmental Services for approval.

3. The permittee shall either install, calibrate, maintain, and operate, according to the manufacturer's specifications, a device that records the flow to the enclosed combustor and/or flare, treatment system, and bypass stack, and collect and record the flow at least every 15 minutes; or

Secure the bypass line valve in the closed position with a car-seal or lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

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4. The permittee shall maintain, for the life of the collection system, an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.
5. The permittee shall keep for at least 5 years up-to-date, readily accessible, on-site records of the maximum design capacity of the landfill, the current amount of solid waste in-place, and the year-to-year waste acceptance rate, and maximum expected gas generation flow rate. Off-site records may be maintained if they are retrievable within 4 hours. Either hardcopy or electronic formats are acceptable. These records, may be also required by the Ohio EPA, Division of Solid and Infectious Waste Management.
6. The permittee shall monitor surface concentrations of methane on a quarterly basis as follows:
 - a. Monitor surface concentrations of methane, in ppm along the entire perimeter of the collection area and along a pattern spaced 30 meters apart (or a site-specific established spacing) and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover for each collection area.
 - b. The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells.
 - c. Surface emission monitoring shall be performed in accordance with Section 4.3.1 of Method 21 of Appendix A of 40 CFR Part 60, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.
 - d. Any reading of 500 ppm or more above background at any location shall be recorded as a monitored exceedance and the actions specified below shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements listed in Section A.II.:
 - i. The location of each monitored exceedance shall be marked and the location recorded.
 - ii. Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each

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asbestos-containing waste material.

- c. The name, mailing address, telephone number and site location of the active waste disposal site designated by the generator to receive the asbestos-containing waste material for disposal.
- d. The name and address of the local, State or USEPA regional agency responsible for administering the asbestos NESHAP program.
- e. A description of the asbestos-containing waste materials included in the waste shipment.
- f. The number and type of containers included in the waste shipment.
- g. The approximate volume of asbestos-containing waste material included in the waste shipment, in cubic yards.
- h. Special handling instructions or additional information relative to the waste shipment the waste generator may specify.
- i. A certification that the contents of this consignment are fully and accurately described by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations.
- j. The name, address and phone number of the transporter.
- k. Signature by the transporter to acknowledge receipt of the asbestos-containing waste shipment described by the waste generator in Conditions 9a through 9i.
- l. A discrepancy indication space to be completed by the transporter or waste shipment owner or operator if any improperly contained asbestos waste is observed or if there is any discrepancy in the quantity of asbestos shipped and the quantity of asbestos waste received at the asbestos waste disposal site. Significant amounts of improperly contained waste shall be reported in writing to the Ohio EPA by the following working day. The report shall include a copy of the waste shipment.
- m. The name and telephone number of the disposal site operator.
- n. Signature by the waste disposal site operator to acknowledge receipt of the asbestos-containing waste shipment described by the waste generator in conditions a through i above, except as noted in the discrepancy indication space.
- o. The date of receipt.

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The waste shipment record forms shall be retained at the facility for at least 2 years, and shall be made available for inspection upon request.

10. The permittee shall maintain the following information for the life of the control equipment (recovery and treatment system and/or flare) as measured during the initial performance test or compliance demonstration:
- a. The maximum expected gas generation flow rate, in cubic meters/year as calculated based on the following:
- i. For sites with unknown year-to-year solid waste acceptance rate:

$$Q_m = 2L_o \times R \times \{(e \text{ to the power } -kc) - (e \text{ to the power } -kt)\}$$

where,

Q_m = maximum expected gas generation flow rate, cubic meters per year

L_o = methane generation potential, cubic meters per megagram solid waste

R = average annual acceptance rate, megagram per year

k = methane generation rate constant, per year

t = age of the landfill at equipment installation plus the time the owner or operator intends to use the gas mover equipment or active life of the landfill, whichever is less (If the equipment is installed after closure, t is the age of the landfill at installation), years

c = time since closure, years (for an active landfill $c = 0$ and $(e \text{ to the power } -kc) = 1$)

- ii. For sites with known year-to-year solid waste acceptance rate:

$$Q_m = \text{Summation of } 2kL_oM_i \times (e \text{ to the power } -kti \text{ for } i=1 \text{ through } i=n)$$

where,

Q_m = maximum expected gas generation flow rate, cubic meters per year

k = methane generation rate constant, per year

L_o = methane generation potential, cubic meters per megagram solid

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waste

M_i = mass of solid waste in the i th section, in megagrams

t_i = age of the i th section, in years

- iii. If a collection and control system has been installed, actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, the equations in paragraphs A.III.10.a.i. and ii. If the landfill is still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations using the equations in paragraphs A.III.10.i. or ii or other methods shall be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment. (The permittee may use another method to determine the maximum gas generation flow rate, if the method has been approved by the Ohio EPA.).
 - b. The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 40 CFR Part 60.759(a)(1).
 - c. The flare type (i.e., steam-assisted, air-assisted, or non-assisted).
 - d. All visible emissions readings.
 - e. Heat content determinations of the gas.
 - f. Flow rate or bypass flow rate measurements.
 - g. Exit velocity determinations made during the performance test as specified in 40 CFR Part 60.18.
 - h. Continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the flare pilot flame or flare flame was absent.
11. The permittee shall properly install, operate, and maintain a device to continuously monitor the flare pilot flame when the emissions unit is in operation. The monitoring device and any recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall record the following information each day:

- a. All periods during which there was no pilot flame.
 - b. The downtime for the flare and monitoring equipment when the collection and control system was in operation.
12. Except as otherwise provided in this section, the permittee shall perform inspections of the landfill operation areas for visible emissions of fugitive dust in accordance with the following frequencies:
- | <u>landfill areas</u> | <u>minimum inspection frequency</u> |
|-----------------------|-------------------------------------|
| all landfill areas | once daily during normal operation |
13. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures for fugitive dust emissions. The inspections shall be performed during representative, normal operating conditions. No inspection shall be necessary for a landfill operating area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within 1 week.
14. The permittee may, upon receipt of written approval from the Hamilton County Department of Environmental Services, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
15. The permittee shall maintain records of the following information:
- a. The date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation.
 - b. The date of each inspection where it was determined by the permittee that it was necessary to implement the control measures.
 - c. The dates the control measures were implemented.
 - d. On a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.
16. The permittee shall maintain daily records of the amount of landfill waste (i.e., excluding composting raw material and unprocessed and/or shredded tires) received.

IV. Reporting Requirements

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1. Any breakdown or malfunction of the landfill gas collection and control system resulting in the release of raw landfill gas emissions to the atmosphere shall be reported to the Hamilton County Department of Environmental Services within 1 hour after the occurrence, or as soon as reasonably possible, and immediate remedial measures shall be undertaken to correct the problem and prevent further emissions to the atmosphere.
2. In the event of a potential emergency, such as a fire within the landfill, wells affected may be temporarily shut off, which could result in a positive gauge pressure. The Hamilton County Department of Environmental Services shall be notified within 1 working day of any shutdowns of any wells due to emergency only.
3. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. An identification of each month during which the gauge pressure in the gas collection header gave a positive pressure reading, and the actual gauge pressure reading for each such month.
 - b. An identification of each period during which the temperature in the enclosed combustor was less than 1,400 degrees Fahrenheit for any 3-hour blocks of time, and a copy of the recorded chart for each such period.
 - c. An identification of each month during which the temperature and nitrogen or oxygen limitations specified in Section A.II.4 were exceeded.
 - d. An identification of each quarter during which the methane concentration measured at the surface of the landfill was greater than 500 ppm above the background levels.
 - e. All periods when the gas stream is diverted from the control device or recovery system through a bypass line or the indication of bypass flow or any record which indicates that the bypass line valve was not maintained in the closed position.
 - f. A listing of all periods when the collection system was not operating in excess of 5 days.
 - g. A listing of all days when visible emissions were present at the open flare and the corrective actions taken to eliminate the visible emissions.
 - h. Each day during which an inspection was not performed by the required

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frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation.

- i. Each instance when a control measure that was to be implemented as a result of an inspection, was not implemented.
- j. All periods of time during which the flare pilot flame was not present (the reports shall include the date, time, and duration of each such period).
- k. Description and duration of all periods when the recovery and treatment system was not operating for a period exceeding 1 hour and the length of time the recovery and treatment system was not operating.

Should a deviation occur, the deviation report shall include details sufficient to determine compliance with the time line provisions established under 40 CFR Part 60.755.

4. The permittee shall submit semi-annual reports that include any record indicating the date of installation and the location of each well or collection system expansion added pursuant to 40 CFR Parts 60.755(a)(3), (b), and (c)(4). The reports shall be submitted by January 31 and July 31 of each year.
5. The permittee shall submit a closure report to the Hamilton County Department of Environmental Services within 30 days of waste acceptance cessation. The Ohio EPA may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR Part 258.60. If a closure report has been submitted to the Ohio EPA, no additional wastes may be placed into the landfill without filing a notification of modification as described in 40 CFR Part 60.7(a)(4).
6. The permittee shall submit an equipment removal report to the Hamilton County Department of Environmental Services 30 days prior to removal or cessation of operation of the control equipment. The equipment removal report shall contain the information specified in 40 CFR Part 60.757(e)(1). The Ohio EPA may request additional information as may be necessary to verify that all of the conditions for removal in 40 CFR Part 60.752(b)(2)(v) have been met.
7. The permittee shall submit the following information with the initial performance test report required pursuant to 40 CFR Part 60.8:
 - a. A diagram of the collection system showing collection system positioning including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for the future collection system expansion.
 - b. The data upon which the sufficient density of wells, horizontal collectors, surface

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- collectors, or other gas extraction devices and the gas mover equipment sizing are based.
- c. The documentation of the presence of asbestos or nondegradable material for each area from which collection wells have been excluded based on the presence of asbestos or nondegradable material.
 - d. The sum of the gas generation flow rate for all areas from which collection wells have been excluded based on nonproductivity and the calculations of gas generation flow rate for each excluded area.
 - e. The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill.
 - f. The provisions for the control of off-site migration.
8. The permittee shall submit written notification to the Director and to the board of health having jurisdiction, and place a copy of the notification in the operating record, as to the actual date that the unit(s) of the sanitary landfill facility ceased to accept solid waste, in accordance with paragraph (E) of rule OAC rule 3745-27-11. Written notification shall be received by the Director by no later than 7 days after the date specified in the notification.
 9. As soon as possible and no later than 30 days after receipt of the asbestos waste, the permittee shall send a copy of the signed waste shipment record to the waste generator.
 10. The permittee shall submit quarterly reports summarizing the asbestos disposal activities. The reports shall contain the following information:
 - a. The name, address and location of the facility; the calendar period covered by the report, and any changes in the methods of storage or the disposal operations.
 - b. A list of all asbestos-containing waste consignments received including: the date received, the name of the waste generator, the name and location of the facility where the load originated, the quantity of asbestos, and any discrepancy or non-conformity discovered.

The quarterly reports shall be submitted no later than January 31, April 30, July 31, and October 31 and shall cover the previous calendar quarters.

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11. Upon discovering a discrepancy between the quantity of waste designated on a waste shipment record and the quantity actually received, the permittee shall attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within 15 days after receiving the waste, immediately report in writing to the State, local, district, or USEPA regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and, if different, the Hamilton County Department of Environmental Services. Describe the discrepancy and attempts to reconcile it, and submit a copy of the waste shipment record along with the report.
12. The permittee shall submit, upon closure of the facility, a copy of the records of the asbestos waste disposal locations and quantities.
13. The permittee shall notify the Hamilton County Department of Environmental Services in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site and is covered. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. The following information shall be included in the notice:
 - a. Scheduled starting and completion dates.
 - b. Reason for disturbing the waste.
 - c. Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. (If deemed necessary, the Director may require changes in the proposed emission control procedures).
 - d. Location of any temporary storage site and the final disposal site.
14. The permittee shall notify the Hamilton County Department of Environmental Services of any load of ACM which is rejected, or any non-conforming load disposed of in accordance with the "Asbestos Spill Contingency Plan." Notification shall be provided as soon as possible by a phone contact, followed in writing by the next working day. The written notification shall provide a copy of the waste shipment record ("WSR"), if available, or when waste is not shipped with a WSR, provide available information concerning vehicle identification, source of the load, a description of the load, nature of discrepancy, and the location of disposal. If possible, non-conforming loads of suspect friable material shall be detained, or the location of disposal protected from damage, until the Hamilton County Department of Environmental Services is informed and provided the opportunity to inspect.
15. The permittee shall submit quarterly deviation reports that identify any of the following

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occurrences:

- a. Each day during which an asbestos and/or non-asbestos material handling operation inspection was not performed by the required frequency.
 - b. Each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
16. As outlined in 40 CFR Part 63.1965, a deviation occurs when the control device operating parameter boundaries described in 40 CFR Part 60.758(c)(1) of Subpart WWW are exceeded. A deviation also occurs when 1 hour or more of the hours during the 3-hour block averaging period does not constitute a valid hour of data. A valid hour of data must have measured values for at least three 15-minute monitoring periods within the hour.
 17. A deviation occurs when a startup, shutdown, malfunction plan is not developed, implemented, or maintained on site.
 18. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any daily record which shows that the amount of landfill waste (i.e., excluding composting raw material and unprocessed and/or shredded tires) received exceeded 10,000 tons. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 30 days after the exceedance occurs.
 19. All quarterly deviation reports shall be submitted in accordance with General Term and Condition A.1.c.ii of this permit.
 20. The permittee shall also submit annual reports that specify the total NMOC, CO, PE, PM-10, NO_x, SO₂, HCl, HF, H₂S, methane, , CFC-11, and CFC-12 emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

V. Testing Requirements

1. Compliance with the no visible emission limitation from an open flare shall be determined through visible emissions observations performed in accordance with Method 22 of 40 CFR Part 60, Appendix A.
2. Emission Limitation: Control efficiency of 98%, by weight, or reduce the outlet NMOC emission concentration to less than 20 ppm.

Applicable Compliance Method: Emission testing (see Section A.V.3) using the following test methods to demonstrate compliance:

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for NMOC - Methods 1 through 4 and 25, 25C or 18, as appropriate, of 40 CFR Part 60, Appendix A

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

3. The permittee shall conduct, or have conducted, emission testing for enclosed combustors and gas plant TOX units in accordance with the following requirements:

- a. The emission testing shall be conducted within 6 months after startup of the new gas recovery plant and/or control system for the Southern Expansion area.
- b. The emission testing shall be conducted to demonstrate compliance with the PE, NO_x, CO, HCl, and NMOC stack emission limitations specified in Section A.I.1 of these terms.
- c. The following test methods shall be employed to demonstrate compliance with the emission limitations:

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

for NO_x, Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A.

for CO, Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A.

for HCl, Methods 1 through 4 and 26 of 40 CFR Part 60, Appendix A.

for NMOC, Methods 1 through 4 and 25, 25C or Method 18, as appropriate, 40 CFR Part 60, Appendix A.

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

- d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Hamilton County Department of Environmental Services.
- e. Visible emission testing of gas plant open utility flares and off-spec combustors shall be conducted in accordance with the methods specified in Method 22 of 40 CFR Part 60, Appendix A.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test

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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 Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

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

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

4. The nitrogen level shall be determined using Method 3C of 40 CFR Part 60, Appendix A, unless an alternative test method is established, as allowed by 40 CFR Part 60.752(b)(2)(i).
5. The oxygen level shall be determined by an oxygen meter using Method 3A or 3C of 40 CFR Part 60, Appendix A, unless an alternative test method is established, as allowed by 40 CFR Part 60.752(b)(2)(i), except that:
 - a. the span shall be set so that the regulatory limit is between 20% and 50% of the span;
 - b. a data recorder is not required;
 - c. only 2 calibration gases are required, a zero and span, and ambient air may be used as the span;
 - d. a calibration error check is not required; and
 - e. the allowable sample bias, zero drift, and calibration drift are plus or minus 10%.
6. After the installation of a collection and control system in compliance with 40 CFR Part 60.755, the permittee shall calculate the NMOC emission rate for the purposes of

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determining when the system can be removed as provided in 40 CFR Part 60.752(b)(2)(v) in accordance with the equation and procedures specified in 40 CFR Parts 60.754(b), (b)(1), and (b)(2). The permittee may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Ohio EPA, as provided in 40 CFR Part 60.752(b)(2)(i)(B).

7. The flow rate of landfill gas, Q_{lfg} , shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according to the provisions of section 4 of Method 2E of Appendix A of 40 CFR Part 60.
8. The average NMOC concentration, C_{nmoc} , shall be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in Method 25, 25C or 18, as appropriate, of Appendix A of 40 CFR Part 60. If using Method 18 of Appendix A of 40 CFR Part 60, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The permittee shall divide the NMOC concentration from Method 25C of Appendix A of 40 CFR Part 60 by 6 to convert from C_{nmoc} as carbon to C_{nmoc} as hexane.
9. The permittee may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Director.
10. Emission Limitation: Visible emissions of fugitive dust shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method: If required, compliance with this emission limitation shall be determined through visible emissions observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A.

11. Emission Limitation: Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average.

Applicable Compliance Method: If required, compliance with this emission limitation shall be determined through visible emissions observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A.

12. Emission Limitation: No visible emissions from asbestos-containing materials.

Applicable Compliance Method: If required, compliance with this emission limitation shall be determined through visible emissions observations performed in accordance with Method 22 of 40 CFR Part 60, Appendix A.

13. Emission Limitations: Emissions from the existing gas recovery plant (stack emissions) shall not exceed the following:

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NMOC emissions shall not exceed 7.91 lbs/hr and 34.65 tons/yr.

CO emissions shall not exceed 9.68 lbs/hour and 42.44 tons/yr.

PE shall not exceed 0.2 lb/hr and 0.86 ton/yr.

Emissions of PM-10 shall not exceed 0.2 lb/hr and 0.86 ton/yr.

NOx emissions shall not exceed 1.5 lbs/hr and 6.66 tons/yr.

SO2 emissions shall not exceed 1.62 lbs/hr and 7.11 tons/yr.

Applicable Compliance Methods: If required, compliance with the hourly emission limitations shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4, 18, 25 or 25C, 10, 5, 7, and 6 for NMOC, CO, PE, NOx, and SO2, respectively, and 40 CFR Part 51, Appendix M, Method 201, for PM-10. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

The annual emission limitations were established by multiplying the hourly emission limitations by 8,760 and dividing by 2,000 lbs/ton. Therefore, provided that the permittee complies with the hourly emission limitations compliance with the annual emission limitations will also be demonstrated.

14. Emission Limitations: Emissions from the existing gas recovery plant (stack emissions) shall not exceed the following:

Methane emissions shall not exceed 599 tons/yr.

Hydrogen chloride (HCl) emissions shall not exceed 25.62 tons/yr.

Hydrogen fluoride (HF) emissions shall not exceed 3.28 tons/yr.

Applicable Compliance Method: Compliance with these emission limitations shall be demonstrated by the emission factors, control efficiencies (if applicable) and the operational parameters as submitted in PTI application 14-05302 (April 8, 2002). The emission factors used were USEPA's Landfill Gas Emissions Model along with AP-42 Section 2.4 dated 11/98.

15. Emission Limitations: Emissions from the new gas recovery plant and/or control system (stack emissions) shall not exceed the following:

NMOC emissions shall not exceed 3.83 lbs/hr and 16.79 tons/yr.

CO emissions shall not exceed 95.4 lbs/hr (new enclosed combustor) 48.18 lbs/hr (new

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gas recovery plant) and 417.91 tons/yr (new enclosed flare, utility flare, and gas recovery plant).*

CO emissions from gas recovery plant only shall not exceed 211.03 tons/year. CO emissions from the gas plant open utility flares shall not exceed 123.44 lbs/hr.

PE shall not exceed 7.3 lbs/hr and 31.87 tons/yr (from enclosed combustors).

PE shall not exceed 2.75 lbs/hr and 12.04 tons/yr (from the new gas recovery plant).

NOx emissions shall not exceed 26.0 lbs/hr and 113.83 tons/yr.*

HCl emissions shall not exceed 10.3 lbs/hr and 45.18 tons/yr.

Applicable compliance Methods: Compliance with the hourly emission limitations shall be demonstrated through the emission testing requirements specified in Section A.V.3 above.

The annual emission limitations were established by multiplying the hourly emission limitations by 8,760 and dividing by 2,000 lbs/ton. Therefore, provided that the permittee complies with the hourly emission limitations compliance with the annual emission limitations will also be demonstrated.

16. Emission Limitations: Emissions from the new gas recovery plant and/or control system (stack emissions) shall not exceed the following:

PM-10 emissions shall not exceed 7.3 lbs/hr and 31.87 tons/yr (from enclosed combustors)*

PM-10 emissions shall not exceed 2.75 lbs/hr and 12.04 tons/yr (from the new gas recovery plant)*

SO2 emissions shall not exceed 6.7 lbs/hr and 29.3 tons/yr.

HF emissions shall not exceed 1.7 lbs/hr and 7.28 tons/yr.

Methane emissions shall not exceed 1563 tons/yr.

CFC-11 emissions shall not exceed 0.02 ton/yr.*

CFC-12 emissions shall not exceed 0.37 ton/yr.*

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Applicable Compliance Method: If required, compliance with the hourly emission limitations shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6, and 13 for SO₂, and HF respectively, and 40 CFR Part 51, Appendix M, Method 201 for PM-10. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

The annual emission limitations were established by multiplying the hourly emission limitations by 8,760 and dividing by 2,000 lbs/ton. Therefore, provided that the permittee complies with the hourly emission limitations compliance with the annual emission limitations will also be demonstrated.

Applicable Compliance Method: Compliance with the annual methane, CFC-11, and CFC-12 emission limitations shall be demonstrated by the emission factors, control efficiencies (if applicable) and the operational parameters as submitted in PTI application 14-05824 submitted March 14, 2006. The emission factors used were USEPA's Landfill Gas Emissions Model along with AP-42 Section 2.4 dated 11/98.

17. Emission Limitations: Fugitive emissions from this emissions unit shall not exceed the following:

NMOC emissions shall not exceed 745.70 tons/yr.

CO emissions shall not exceed 34.18 tons/yr.

PM emissions shall not exceed 0.56 ton/yr.

PM-10 emissions shall not exceed 0.27 ton/yr.

H₂S emissions shall not exceed 10.47 tons/yr.

CFC-11 emissions shall not exceed 0.90 ton/yr.

CFC-12 emissions shall not exceed 16.43 tons/yr.

Methane emissions before the vertical and southern expansion shall not exceed 28,588 tons/yr.

Methane emissions from both the vertical and southern expansion shall not exceed 45,029 tons/yr.

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Applicable Compliance Method: Compliance with these emission limitations shall be demonstrated by the emission factors, control efficiencies (if applicable) and the operational parameters as submitted in PTI application 14-05824 submitted March 14, 2006. The emission factors used were USEPA's Landfill Gas Emissions Model along with AP-42 Section 2.4 dated 11/98.

VI. Miscellaneous Requirements

1. The terms and conditions listed in this Permit to Install shall supersede all the air pollution control requirements contained in Permit to Install 14-05292 as issued on June 10, 2004.
2. The following terms and conditions in this Permit to Install will become effective upon commencement of construction of the phase of the Vertical Expansion that increases the capacity of the landfill above the permitted limitation in PTI 05-3567 as issued on February 17, 1994:

Part III.A.I.2.f and h, III.A.III.12-15, III.A.IV.3.h and i, III.A.IV.15, III.A.V.10, III.A.V.11

Commencement of construction is defined as placing of additional soil liner in the phase of the Vertical Expansion that increases the capacity of the landfill above the permitted limitation in PTI 05-3567 as issued on February 17, 1994.

The following terms and conditions in this Permit to Install will become effective upon commencement of construction of the first phase of the Southern Expansion as outlined in PTI application 14-05292:

Sections A.I.1 (emissions from the new gas recovery plant only), A.I.2.a, A.I.2.h, A.II.19, A.IV.18, A.IV.20 and A.V.15 through A.V.17 (emissions from the new gas recovery plant only)

Commencement of construction is defined as placement of the additional soil liner in the first phase of the Southern Expansion.

3. Nothing in Section A.VI.2 shall prohibit the permittee from complying with the requirements of OAC rule 3745-31-06.
4. Emissions from the gas plant include emissions from two thermal oxidizer (TOX) units and one off-spec gas combustor.

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B. State Only Enforceable Section

I. Applicable Emission Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emission Limitations/Control Measures</u>
P902 - Solid waste disposal and landfill gas generation - Landfill Southern Expansion modification MSW landfill equipped with active gas collection and control system (flare/landfill gas recovery for sale or use)		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

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Facility ID: 1431092049

Emissions Unit ID: P902

V. Testing Requirements

None

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VI. Miscellaneous Requirements

Emissions Unit ID: P902

None

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PTI A**

Emissions Unit ID: T007

Issued: To be entered upon final issuance

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emission Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emission Limitations/Control Measures</u>
T007 - 200,000-gallon leachate aeration basin	OAC rule 3745-31-05(A)(3) 40 CFR Part 60, Subpart Kb	Volatile organic compound (VOC) emissions shall not exceed 15.7 tons/yr. The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart Kb. See Sections A.I.2.c, A.III.1, A.III.2 and A.III.3.

2. Additional Terms and Conditions

- 2.a Compliance with OAC rule 3745-31-05(A) shall be demonstrated by compliance with the specified emission limitation.
- 2.b The annual emission limitation is based upon the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping or reporting requirements are required to demonstrate compliance with this emission limitation.
- 2.c The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also

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PTI A**

**Issued: To be entered upon final issuance
federally enforceable.**

Emissions Unit ID: T007

II. Operational Restrictions

None

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PTI A**

Emissions Unit ID: T007

Issued: To be entered upon final issuance**III. Monitoring and/or Record keeping Requirements**

1. In accordance with 40 CFR Parts 60.116b(a) and (b) the permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the life of the storage vessel.
2. Prior to the initial filling of the storage vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in 40 CFR Part 60.116b(e).
3. If the maximum true vapor pressure as determined in the vapor pressure test required by Part III.A.III.2 is above 3.5 kPa but below 5.2 kPa, the permittee shall conduct and maintain records of the initial physical test of the vapor pressure and a physical test of the vapor pressure at least once every 6 months thereafter as determined by the methods in 40 CFR Part 60.116b(f)(2).

IV. Reporting Requirements

1. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:
 - a. Construction date (no later than 30 days after such date);
 - b. Actual start-up date (within 15 days after such date); and
 - c. Date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P. O. Box 1049
Columbus, Ohio 43216-1049

and

Department of Environmental Services
250 William Howard Taft Road
Cincinnati, Ohio 45219

2. The permittee shall notify this Agency within 30 calendar days of any analysis in Section

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A.III.3 which shows that the control requirements in 40 CFR Part 60, Subpart Kb are triggered.

3. The permittee shall also submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

V. Testing Requirements

1. Compliance with the emission limitation in Section A.I. of these terms and conditions shall be determined in accordance with the following method:

Emission Limitation:

VOC emissions shall not exceed 15.7 tons/yr.

Applicable Compliance Method:

This emission limitation was established to reflect the emissions unit's potential to emit based on the maximum capacity of the basin, the maximum leachate VOC content and 100% volatilization of VOCs in the leachate.

VI. Miscellaneous Requirements

1. The terms and conditions listed in this Permit to Install shall supersede all the air pollution control requirements contained in Permit to Install 14-05292 as issued on June 10, 2004.

B. State Only Enforceable Section

I. Applicable Emission Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emission Limitations/Control Measures</u>
T007 - 200,000-gallon leachate aeration basin		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

**Rump
PTI A**

Emissions Unit ID: T008

Issued: To be entered upon final issuance

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emission Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emission Limitations/Control Measures</u>
T008 - 200,000-gallon leachate storage basin	OAC rule 3745-31-05(A)(3) 40 CFR Part 60, Subpart Kb	Volatile organic compound (VOC) emissions shall not exceed 1.67 tons/yr. The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart Kb. See Sections A.I.2.c, A.III.1, A.III.2 and A.III.3.

2. Additional Terms and Conditions

- 2.a Compliance with OAC rule 3745-31-05(A) shall be demonstrated by compliance with the specified emission limitation.
- 2.b The annual emission limitation is based upon the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping or reporting requirements are required to demonstrate compliance with this emission limitation.
- 2.c The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also

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PTI A**

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federally enforceable.

Emissions Unit ID: T008

II. Operational Restrictions

None

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Emissions Unit ID: T008

Issued: To be entered upon final issuance**III. Monitoring and/or Record keeping Requirements**

1. In accordance with 40 CFR Parts 60.116b(a) and (b) the permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the life of the storage vessel.
2. Prior to the initial filling of the storage vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in 40 CFR Part 60.116b(e).
3. If the maximum true vapor pressure as determined in the vapor pressure test required by Part III.A.III.2 is above 3.5 kPa but below 5.2 kPa, the permittee shall conduct and maintain records of the initial physical test of the vapor pressure and a physical test of the vapor pressure at least once every 6 months thereafter as determined by the methods in 40 CFR Part 60.116b(f)(2).

IV. Reporting Requirements

1. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:
 - a. Construction date (no later than 30 days after such date);
 - b. Actual start-up date (within 15 days after such date); and
 - c. Date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P. O. Box 1049
Columbus, Ohio 43216-1049

and

Department of Environmental Services
250 William Howard Taft Road
Cincinnati, Ohio 45219

2. The permittee shall notify this Agency within 30 calendar days of any analysis in Section

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A.III.3 which shows that the control requirements in 40 CFR Part 60, Subpart Kb are triggered.

3. The permittee shall also submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

V. Testing Requirements

1. Compliance with the emission limitation in Section A.I. of these terms and conditions shall be determined in accordance with the following method:

Emission Limitation:

VOC emissions shall not exceed 1.67 tons/yr.

Applicable Compliance Method:

Compliance shall be determined using USEPA Tanks 4.0 program to estimate (VOC) emissions from the leachate storage basin.

VI. Miscellaneous Requirements

- 1.. The terms and conditions listed in this Permit to Install shall supersede all the air pollution control requirements contained in Permit to Install 14-05292 as issued on June 10, 2004.

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PTI A**

Emissions Unit ID: T008

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B. State Only Enforceable Section

I. Applicable Emission Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emission Limitations/Control Measures</u>
T008 - 200,000-gallon leachate storage basin		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None