State of Ohio Environmental Protection Agency

STREET ADDRESS:
Lazarus Government Center
50 W. Town St., Suite 700
Columbus, Ohio 43215

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MAILING ADDRESS:
P.O. Box 1049
Columbus, OH 43216-1049

6/25/2009

Certified Mail

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

Liza Mireles
Carbon Limestone Landfill Gas Power Station
16360 Park Ten Place, Suite 218
Houston, TX 77084

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0250050996
Permit Number: P0104593
Permit Type: Administrative Modification
County: Mahoning

Dear Permit Holder:

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

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

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

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Northeast District Office. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page http://www.epa.state.oh.us/dapc.

Sincerely,

Michael W. Ahern

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

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

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

FINAL

Air Pollution Permit-to-Install
for
Carbon Limestone Landfill Gas Power Station

Facility ID: 0250050996
Permit Number: P0104593
Permit Type: Administrative Modification
Issued: 6/25/2009
Effective: 6/25/2009

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Air Pollution Permit-to-Install
for
Carbon Limestone Landfill Gas Power Station

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Authorization

Facility ID: 0250050996
Facility Description: Landfill gas power station
Application Number(s): M0000410
Permit Number: P0104593
Permit Description: Adminstrative modification for the addition of alternative compliance demontrations.
Permit Type: Administrative Modification
Permit Fee: $2,800.00
Issue Date: 6/25/2009
Effective Date: 6/25/2009

This document constitutes issuance to:

Carbon Limestone Landfill Gas Power Station
8100 South Stateline Road
Lowellville, OH 44436

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

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

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

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

Authorization (continued)

Permit Number: P0104593
Permit Description: Adminstrative modification for the addition of alternative compliance demontrations.

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

Group Name: Engines P001-P014

Emissions Unit ID:	**P001**
Company Equipment ID:	IC Engine #1
Superseded Permit Number:	02-16880
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P002**
Company Equipment ID:	IC Engine #2
Superseded Permit Number:	02-16880
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P003**
Company Equipment ID:	IC Engine #3
Superseded Permit Number:	02-16880
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P004**
Company Equipment ID:	IC Engine #4
Superseded Permit Number:	02-16880
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P005**
Company Equipment ID:	IC Engine #5
Superseded Permit Number:	02-16880
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P006**
Company Equipment ID:	IC Engine #6
Superseded Permit Number:	02-16880
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P007**
Company Equipment ID:	IC Engine #7
Superseded Permit Number:	02-16880
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P008**
Company Equipment ID:	IC Engine #8
Superseded Permit Number:	02-16880
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P009**
Company Equipment ID:	IC Engine #9
Superseded Permit Number:	02-16880
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P010**

Company Equipment ID:	IC Engine #10
Superseded Permit Number:	02-16880
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P011**
Company Equipment ID:	IC Engine #11
Superseded Permit Number:	02-16880
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P012**
Company Equipment ID:	IC Engine #12
Superseded Permit Number:	02-16880
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P013**
Company Equipment ID:	IC Engine #13
Superseded Permit Number:	02-16880
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P014**
Company Equipment ID:	IC Engine #14
Superseded Permit Number:	02-16880
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:

(1) Standard Term and Condition A. 2.a), Severability Clause

(2) Standard Term and Condition A. 3.c) through A. 3.e) General Requirements

(3) Standard Term and Condition A. 6.c) and A. 6.d), Compliance Requirements

(4) Standard Term and Condition A. 9., Reporting Requirements

(5) Standard Term and Condition A. 10., Applicability

(6) Standard Term and Condition A. 11.b) through A. 11.e), Construction of New Source(s) and Authorization to Install

(7) Standard Term and Condition A. 14., Public Disclosure

(8) Standard Term and Condition A. 15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(9) Standard Term and Condition A. 16., Fees

(10) Standard Term and Condition A. 17., Permit Transfers

2. Severability Clause

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

b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. General Requirements

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

b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d) This permit does not convey any property rights of any sort, or any exclusive privilege.

e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

4. Monitoring and Related Record Keeping and Reporting Requirements

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

(1) The date, place (as defined in the permit), and time of sampling or measurements.

(2) The date(s) analyses were performed.

(3) The company or entity that performed the analyses.

(4) The analytical techniques or methods used.

(5) The results of such analyses.

(6) The operating conditions existing at the time of sampling or measurement.

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

c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

(1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Northeast District Office.

(2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Northeast District Office. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.

(3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the Ohio EPA DAPC, Northeast District Office every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

(4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

5. Scheduled Maintenance/Malfunction Reporting

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

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

6. Compliance Requirements

a) The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

b) Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

c) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

(1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.

(3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

(4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

d) The permittee shall submit progress reports to the Ohio EPA DAPC, Northeast District Office concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

(1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

(2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

7. Best Available Technology

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

8. Air Pollution Nuisance

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

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

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

b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Northeast District Office. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted

(i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

10. Applicability

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

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

a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed through completion of the annual PER covering the last period of operation of the affected emissions unit(s).

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

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

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

12. Permit-To-Operate Application

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

13. Construction Compliance Certification

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

a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.

b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. Public Disclosure

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

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

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

16. Fees

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

17. Permit Transfers

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

18. Risk Management Plans

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

19. Title IV Provisions

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

B. Facility-Wide Terms and Conditions

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

   a) The permit-to-install for emissions units P001 through P016 was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit-to-install application. Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit-to-install application and the ISC model. The predicted 1-hour maximum ground_level concentration from the use of the ISC model was compared to the maximum acceptable ground_level concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

      Pollutant: Hydrogen Chloride

      Ceiling Value (mg/m^3): 2.47

      Maximum Hourly Emission Rate (lbs/hr): 2.1

      Predicted 1-Hour Maximum Ground_Level Concentration (:g/m^3): 4.86

      MAGLC (:g/m^3): 57

      Pollutant: Formaldehyde

      Ceiling Value (mg/m^3): 0.18

      Maximum Hourly Emission Rate (lbs/hr): 0.60

      Predicted 1-Hour Maximum Ground_Level Concentration (:g/m^3): 1.42

      MAGLC (:g/m^3): 4.3

   b) Changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

      (1) changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower threshold limit value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

      (2) changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

      (3) physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

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

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

(1) a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

(2) documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

(3) where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change

2. MACT Subpart AAAA and Subpart A Requirements

a) Applicable Emissions Limitations and/or Control Requirements

(1) The following emissions units contained in this permit are subject to MACT Subpart AAAA as control equipment for an existing affected source: P001-P014. The applicable sections of the MACT Subpart AAAA been cited in the appropriate sections for the emissions units subject to this rule.

(2) The permittee shall comply with the applicable compliance standards required under 40 CFR Part 63, Subpart AAAA including the following sections:

a.	63.1935(a)(3)	existing, affected area sources
b.	63.1945(f) 63.1955(b)	compliance requirements and compliance date for existing, area sources
c.	63.1930, Table 1	applicable General Provisions

b) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall comply with the applicable monitoring and record keeping requirements required under 40 CFR Part 63, Subpart AAAA, including the following sections:

a.	63.1960	compliance methods require 40 CFR 60, Subpart WWW compliance and a written SSM plan

b.	63.1965	deviation clarifications for SSM plans and control device operating parameters
c.	63.1975	calculating 3-hour block average for control device operating parameters
d.	63.1980(a) and (b)	required records

c) Reporting Requirements

(1) The permittee shall submit semiannual reports and such other notifications and reports to the Ohio EPA, Northeast District Office as are required pursuant to 40 CFR Part 63, Subpart AAAA, per the following sections:

a	63.1980(a) and (b)	semi-annual reporting requirements

C. Emissions Unit Terms and Conditions

1. Emissions Unit Group - Engines P00-P014: P001, P002, P003, P004, P005, P006, P007, P008, P009, P010, P011, P012, P013, and P014

EU ID	Operations, Property and/or Equipment Description
P001	1400 bkW (16.7 million Btu/hr) Deutz TBG 620 V16 K Internal combustion engine to produce electricity from landfill gas. Admin. Modified
P002	1400 bkW (16.7 million Btu/hr) Deutz TBG 620 V16 K Internal combustion engine to produce electricity from landfill gas. Admin. Modified
P003	1400 bkW (16.7 million Btu/hr) Deutz TBG 620 V16 K Internal combustion engine to produce electricity from landfill gas. Admin. Modified
P004	1400 bkW (16.7 million Btu/hr) Deutz TBG 620 V16 K Internal combustion engine to produce electricity from landfill gas. Admin. Modified
P005	1400 bkW (16.7 million Btu/hr) Deutz TBG 620 V16 K Internal combustion engine to produce electricity from landfill gas. Admin. Modified
P006	1400 bkW (16.7 million Btu/hr) Deutz TBG 620 V16 K Internal combustion engine to produce electricity from landfill gas. Admin. Modified
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P008	1400 bkW (16.7 million Btu/hr) Deutz TBG 620 V16 K Internal combustion engine to produce electricity from landfill gas. Admin. Modified
P009	1400 bkW (16.7 million Btu/hr) Deutz TBG 620 V16 K Internal combustion engine to produce electricity from landfill gas. Admin. Modified
P010	1400 bkW (16.7 million Btu/hr) Deutz TBG 620 V16 K Internal combustion engine to produce electricity from landfill gas. Admin. Modified
P011	1400 bkW (16.7 million Btu/hr) Deutz TBG 620 V16 K Internal combustion engine to produce electricity from landfill gas. Admin. Modified
P012	1400 bkW (16.7 million Btu/hr) Deutz TBG 620 V16 K Internal combustion engine to produce electricity from landfill gas. Admin. Modified
P013	1400 bkW (16.7 million Btu/hr) Deutz TBG 620 V16 K Internal combustion engine to produce electricity from landfill gas. Admin. Modified
P014	1400 bkW (16.7 million Btu/hr) Deutz TBG 620 V16 K Internal combustion engine to produce electricity from landfill gas. Admin. Modified

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Visible emissions shall not exceed 10% opacity as a six-minute average.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Particulate emissions (PE) shall not exceed 0.9 pound per hour, nor 3.8 tons per year. PM_{10} emissions shall not exceed 0.4 pound per hour, nor 1.7 tons per year. Sulfur dioxide (SO_2) emissions shall not exceed 0.23 pound per hour, nor 1.0 ton per year. Volatile organic compound (VOC) emissions shall not exceed 0.7 pound per hour, nor 3.0 tons per year. Hydrogen chloride (HCl) emissions shall not exceed 0.13 pound per hour, nor 0.6 tons per year. Compliance with this rule also includes compliance with the requirements of 40 CFR Part 52, Section 52.21, and OAC rules 3745-31-10 through -20
b.	40 CFR Part 52, Section 52.21 and OAC rules 3745-31-10 through -20	Carbon monoxide (CO) emissions shall not exceed 9.4 pounds per hour, 0.67 lb/MMBtu, nor 41.2 tons per year. Oxides of nitrogen (NO_x) emissions shall not exceed 4.9 pounds per hour, 0.36 lb/MMBtu, nor 21.5 tons per year.
c.	40 CFR Part 60, Subpart WWW	See b)(2)c. and b)(2)d.
d.	OAC rule 3745-17-11(B)(5)	The emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-17-07(A)	The emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).
f.	OAC rule 3745-18-06	The emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).
g.	OAC rule 3745-21-08(B)	See b)(2)c.
h.	OAC rule 3745-21-07(B)	See b)(2)c.
i.	OAC rule 3745-114	See a)(1)a. through a)(1)d. of section B.

(2) Additional Terms and Conditions

a. The internal combustion engine shall operate using lean burn technology.

b. The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-07(B) and the “latest available control techniques and operating practices” required pursuant to OAC rules 3745-21-08(B) by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

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, the rule revision was submitted to the U.S. EPA as a revision to Ohio=s State Implementation Plan (SIP); however, until the U.S. EPA approves the revision 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.

On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio=s State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio.

c. Collected landfill gas shall be treated for sale or additional use per 40 CFR 60.752(b)(2)(iii)(C) or shall be routed to a control system per 40 CFR 60.752(b)(2)(iii)(B). The control system shall be designed and operated to reduce the non-methane organic compound (NMOC)by 98 weight-percent or the outlet NMOC emissions shall be reduced to less than 20 parts per million by volume, dry basis (ppmvd) as hexane at 3 percent oxygen.

d. All untreated landfill gas from any vent shall be routed to a control system per 40 CFR 60.752(b)(2)(iii)(C).

c) Operational Restrictions Operational Restrictions

(1) This emissions unit shall burn only landfill gas.

(2) The permittee shall install, calibrate, maintain and operate according to the manufacturer’s specifications a device at the inlet to the internal combustion engine which completely shuts off gas flow to the internal combustion engine when the internal combustion engine is not operating.

(3) When demonstrating compliance with 40 CFR 60.752(b)(2)(iii)(C), the permittee has committed to compressing, filtering for particles up to 10 microns in diameter, and dewatering the landfill gas.

Dewatering shall be defined as a reduction of the dew point of the landfill gas by at least 20 degrees Fahrenheit.

(4) The allowable gas flow rate to the internal combustion engine's combustion chamber shall be determined during the most recent compliance test.

(5) When demonstrating compliance with 40 CFR 60.752(b)(2)(iii)(B), the minimum allowable temperature of the internal combustion engine's combustion chamber shall not be lower than the minimum combustion temperature that was established during the most recent compliance test.

(6) When an internal combustion is not operating, the landfill gas shall be diverted to the existing enclosed combustor at the Carbon Limestone Landfill or to an internal combustion engine that is operating.

d) Monitoring and/or Recordkeeping Requirements

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

a. the color of the emissions;

b. the cause of the visible emissions

c. the total duration of any visible emissions incident; and,

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

(2) The permittee shall record the dates and times when the landfill gas is treated for sale or additional use and when the internal combustion engines are operated as landfill gas control devices.

(3) The permittee shall install, calibrate and maintain a continuous device that monitors and records the temperature of the landfill gas prior to dewatering and after dewatering. When demonstrating compliance with 40 CFR 60.752(b)(2)(iii)(C), landfill gas treatment, the temperatures shall be monitored at all times.

(4) The permittee shall install, calibrate and maintain a engine combustion chamber temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of +/- 1 percent of the temperature being measured expressed in degrees Celsius or +/- 0.5 degrees Celsius, whichever is greater. When demonstrating compliance with 40 CFR 60.752(b)(2)(iii)(B), landfill gas control, the temperatures shall be monitored at all times.

(5) The permittee shall install, calibrate, and maintain a device that monitors and records gas flow to, or bypass of, the internal combustion engines. The gas flow rate measuring device shall record the flow to the control device at least every 15 minutes.

(6) When attempting to demonstrate compliance with 40 CFR 60.752(b)(2)(iii)(B), landfill gas control, the permittee shall collect and record each day all 3-hour blocks of time

during which the average combustion chamber temperature within the internal combustion engine was less than the allowable minimum operating temperature as established during the most recent compliance test.

(7) The permittee shall collect and record each day all 3-hour blocks of time during which the average landfill gas flow rate to the internal combustion engine exceeds the maximum allowable gas flow as established during the most recent compliance test.

(8) The permittee shall record each day when a fuel other than landfill gas was burned in this emissions unit.

e) Reporting Requirements

(1) The permittee shall submit semiannual written reports which:

a. identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit;

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

c. identify the date(s) and duration the gas flow rate to the internal combustion engine exceeded the maximum gas flow rate requirements, as established during the most recent compliance stack test, as a three-hour average;

d. when demonstrating compliance with 40 CFR 60.752 (b)(2)(iii)(C), landfill gas treatment, identify the date(s) and duration when the temperature after dewatering exceeded the temperature prior to dewatering by less than 20 degrees Fahrenheit;

e. when demonstrating compliance with 40 CFR 60.752(b)(2)(iii)(B), landfill gas control, identify the date(s) and duration of each 3-hour block of time when the average temperature within the internal combustion engine did not meet the minimum temperature requirements.

These reports shall be submitted to the Northeast District Office of the Ohio EPA by January 31 and July 31 of each year and shall cover the previous 6-month period.

(2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than landfill gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(3) Any breakdown or malfunction resulting in the emission of raw landfill gas emissions to the atmosphere shall be reported by phone to the Northeast District Office of Ohio EPA within one hour after the occurrence, or as soon as reasonably possible, and immediately remedial measures shall be undertaken to correct the problem and prevent further emissions to the atmosphere. A summary of the breakdown or malfunction, including the date(s) and time(s) and the measure(s) taken to correct the problem shall be included in the semi-annual deviation report.

f) Testing Requirements

(1) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted 6 months prior to permit renewal in accordance with the Title V permit.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates, nitrogen oxides (NO_x), carbon monoxide (CO), volatile organic compounds (VOC), and hydrogen chloride (HCl);

c. The emission testing shall be conducted to demonstrate compliance with either the removal of 98 weight-percent of NMOC or the reduction of the outlet concentration of NMOC to less than 20 parts per million by volume, dry basis (ppmvd) as hexane at 3 percent oxygen;

d. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): particulates - Method 5; NO_x - Method 7; or 7E; CO - Method 10; HCl - Method 26 or 26A; VOC - Method 25 or 25A.

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

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

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

f. Personnel from the Ohio EPA Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Northeast District Office.

(2) Compliance with the emission limitation(s) established in this permit shall be determined in accordance with the following method(s):

a. Emission Limitation: VOC emissions shall not exceed 0.7 pound per hour, nor 3.0 tons per year.

Applicable Compliance Method: Compliance with the hourly emission limitation shall be determined in accordance with the performance test requirement. Compliance with the annual limitation is based on the hourly emission rate multiplied by 8,760 (hours per year) and divided by 2,000 (pounds per ton).

b. Emission Limitation: Visible emissions shall not exceed 10% opacity as a six-minute average.

Applicable Compliance Method: Compliance shall be demonstrated by using 40 CFR, Part 60, Appendix A, Method 9.

c. Emission Limitation: PE shall not exceed 0.9 pound per hour. nor 3.8 tons per year.

Applicable Compliance Method: Compliance with the hourly emission limitation shall be determined in accordance with the performance test requirement. Compliance with the annual limitation is based on the hourly emission rate multiplied by 8,760 (hours per year) and divided by 2,000 (pounds per ton).

d. Emission Limitation: NO_x emissions shall not exceed 4.9 pounds per hour, nor 0.36 lb/MMBtu, nor 21.5 tons per year.

Applicable Compliance Method: Compliance with the hourly emission and technical limitations shall be determined in accordance with the performance test requirement. Compliance with the annual limitation is based on the hourly emission rate multiplied by 8,760 (hours per year) and divided by 2,000 (pounds per ton).

e. Emission Limitation: CO emissions shall not exceed 9.4 pounds per hour, 0.67 lb/MMBtu, nor 41.2 tons per year.

Applicable Compliance Method: Compliance with the hourly emission and technical limitations shall be determined in accordance with the performance test requirement. Compliance with the annual limitation is based on the hourly emission rate multiplied by 8,760 (hours per year) and divided by 2,000 (pounds per ton).

f. Emission Limitation: SO_2 emissions shall not exceed 0.23 pound per hour, nor 1.0 ton per year.

Applicable Compliance Method: Compliance with the hourly emission limitation shall be determined in accordance with the performance test requirement. Compliance with the annual limitation is based on the hourly emission rate multiplied by 8,760 (hours per year) and divided by 2,000 (pounds per ton).

g. Emission Limitation: HCl emissions shall not exceed 0.13 pound per hour, nor 0.6 tons per year.

Applicable Compliance Method: Compliance with the hourly emission limitation shall be determined in accordance with the performance test requirement. Compliance with the annual limitation is based on the hourly emission rate multiplied by 8,760 (hours per year) and divided by 2,000 (pounds per ton).

h. Emission Limitation: NMOC emissions shall be reduced by 98 weight-percent or the outlet NMOC emissions shall be reduced to less than 20 parts per million by volume, dry basis (ppmvd) as hexane at 3 percent oxygen.

Applicable Compliance Method:

Compliance with the control efficiency limitation shall be determined in accordance with the performance test requirement specified in f)(1)c.

Compliance with this condition is not required if all landfill gas is treated in compliance with 40 CFR 60.752(b)(2)(iii)(C).

g) Miscellaneous Requirements

(1) The terms and conditions listed in this permit to install shall supersede all the air pollution control requirements for emission units R001 through R014 contained in permit to 02-16880as issued on April10, 2003.