



# Indiana Department of Environmental Management

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • [www.idem.IN.gov](http://www.idem.IN.gov)

**Michael R. Pence**  
Governor

**Carol S. Comer**  
Commissioner

To: Interested Parties

Date: August 23, 2016

From: Matthew Stuckey, Chief  
Permits Branch  
Office of Air Quality

Source Name: Deercroft Recycling & Disposal Facility

Permit Level: Title V Significant Permit Modification

Permit Number: 091-36926-00067

Source Location: 10501 West 300 North  
Michigan City, Indiana

Type of Action Taken: Modification at an existing source

## **Notice of Decision: Approval - Effective Immediately**

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the matter referenced above.

The final decision is available on the IDEM website at: <http://www.in.gov/apps/idem/caats/>  
To view the document, select Search option 3, then enter permit 36926.

If you would like to request a paper copy of the permit document, please contact IDEM's central file room:

Indiana Government Center North, Room 1201  
100 North Senate Avenue, MC 50-07  
Indianapolis, IN 46204  
Phone: 1-800-451-6027 (ext. 4-0965)  
Fax (317) 232-8659

Pursuant to IC 13-17-3-4 and 326 IAC 2, this permit modification is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

*(continues on next page)*

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of a Title V operating permit or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency  
401 M Street  
Washington, D.C. 20406

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.



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Michael R. Pence  
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Carol S. Comer  
*Commissioner*

Mr. Phillip Mazor  
Deercroft Recycling & Disposal Facility  
700 56th Ave.  
Zeeland, MI 49464

August 23, 2016

Re: 091-36926-00067  
Significant Permit Modification to  
Part 70 Renewal No. T091-35561-00067

Dear Mr. Mazor:

Deercroft Recycling & Disposal Facility was issued Part 70 Operating Permit Renewal No. T091-35561-00067 on December 3, 2015 for a stationary closed municipal landfill located at 10501 W. 300 N., Michigan City, Indiana 46360. An application requesting changes to this permit was received on February 29, 2016. Pursuant to the provisions of 326 IAC 2-7-12, a Significant Permit Modification to this permit is hereby approved as described in the attached Technical Support Document.

Please find attached the entire Part 70 Operating Permit as modified. The permit references the below listed attachment(s). Since these attachments have been provided in previously issued approvals for this source, IDEM OAQ has not included a copy of these attachments with this modification:

Attachment A: 40 CFR 60, Subpart WWW  
Attachment B: 40 CFR 61, Subpart M  
Attachment C: 40 CFR 63, Subpart AAAA  
Attachment D: 40 CFR 63, Subpart ZZZZ

Previously issued approvals for this source containing these attachments are available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>.

Federal rules under Title 40 of United States Code of Federal Regulations may also be found on the U.S. Government Printing Office's Electronic Code of Federal Regulations (eCFR) website, located on the Internet at: [http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40tab\\_02.tpl](http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40tab_02.tpl).

A copy of the permit is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: <http://www.in.gov/idem/5881.htm>; and the Citizens' Guide to IDEM on the Internet at: <http://www.in.gov/idem/6900.htm>.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5.

If you have any questions on this matter, please contact Brian Wright, of my staff, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana, 46204-2251 at 317-234-6544 or 1-800-451-6027, and ask for extension 4-6544.

Sincerely,



Nathan C. Bell, Section Chief  
Permits Branch  
Office of Air Quality

Attachments: Modified Permit and Technical Support Document

cc: File - LaPorte County  
LaPorte County Health Department  
U.S. EPA, Region 5  
Compliance and Enforcement Branch  
IDEM Northwest Regional Office



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## Part 70 Operating Permit Renewal OFFICE OF AIR QUALITY

**Deercroft Recycling & Disposal Facility  
10501 W. 300 North  
Michigan City, IN 46360**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

**The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. 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 conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.**

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No. T091-35561-00067	
Issued by: Original Signed Nathan Bell, Section Chief Permits Branch, Office of Air Quality	Issuance Date: December 3, 2015  Expiration Date: December 3, 2020

First Significant Modification No. 091-36926-00067	
Issued by:  Nathan C. Bell, Section Chief, Permits Branch Office of Air Quality	Issuance Date: August 23, 2016  Expiration Date: December 3, 2020

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**Attachment C: 40 CFR 63, Subpart AAAA** - National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste landfill

**Attachment D: 40 CFR 63, Subpart ZZZZ** - National Emission Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines

**SECTION A SOURCE SUMMARY**

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

**A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(14)][326 IAC 2-7-1(22)]**

The Permittee owns and operates a stationary closed municipal landfill.

Source Address:	10501 W. 300 N., Michigan City, Indiana 46360
General Source Phone Number:	616-953-5909
SIC Code:	4953 and 4911
County Location:	LaPorte
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Greenhouse Gas (GHG) potential to emit (PTE) is equal to or more than one hundred thousand (100,000) tons of CO2 equivalent (CO2e) emissions per year Not 1 of 28 Source Categories

**A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(14)]**

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) closed solid waste disposal facility meeting the definition in 40 CFR 60.751, constructed in 1980, modified in 2002, with a maximum design capacity of 9.615 million megagrams of solid waste, with landfill gas emissions collected by a collection system installed in 1994. This facility is closed, has met the 15 year minimum control period, and has demonstrated that NMOC emissions are less than 50 Mg/year.

This unit is an affected source under 40 CFR 60, Subpart WWW  
 This unit is an affected source under 40 CFR 61, Subpart M  
 This unit is an affected source under 40 CFR 63, Subpart AAAA

- (b) Eight (8) gas fueled 4-stroke, lean-burn reciprocating engine/generator sets, capable of burning landfill gas or natural gas, permitted in 2016, and approved in 2016 to burn natural gas, consisting of the following:

Unit ID	Engine Manufacture Date	Date of Original (First) Installation*	Date of Installation or Proposed Installation At This Source	NESHAP Subpart ZZZZ Affected Source Status	Maximum Break Horsepower (bhp)	Maximum Heat Input Capacity (MMBtu/hr)	Maximum Landfill Gas Flow Rate (scfm)
EG-1	prior to 2008	2007	2014	New	1,148	9.1	333
EG-2	prior to 2008	2001	2008	Existing	1,148	9.1	333
EG-3	prior to 2008	1994	2013	Existing	1,148	9.1	333

Unit ID	Engine Manufacture Date	Date of Original (First) Installation*	Date of Installation or Proposed Installation At This Source	NESHAP Subpart ZZZZ Affected Source Status	Maximum Break Horsepower (bhp)	Maximum Heat Input Capacity (MMBtu/hr)	Maximum Landfill Gas Flow Rate (scfm)
EG-4 current**	prior to 2008	1986	2007	Existing	1,148	9.1	333
EG-4 (2017)**	prior to 2008	TBD	Proposed for 2017	Existing	1,148	9.1	333
EG-5	prior to 2008	2007	2013	New	1,148	9.1	333
EG-6	prior to 2008	1994	Proposed for 2016	Existing	1,148	9.1	333
EG-7	prior to 2008	2007	2013	New	1,148	9.1	333
EG-8	prior to 2008	2007	2013	New	1,148	9.1	333

\*This date is used for NESHAP Subpart ZZZZ applicability and does not necessarily reflect the date of installation at this source.  
 \*\*Unit EG-4 will be replaced in 2017 with an engine of similar capacity. The date of original (first) installation and NESHAP Subpart ZZZZ affected source status of the proposed 2017 engine is to be determined (TBD) and will be specified in a future permit modification.

These units are each an affected source under 40 CFR 63, Subpart ZZZZ

- (c) One (1) open flare, identified as FL-3, constructed in 2004, with a maximum heat input capacity of 144 MMBtu per hour and a maximum flow rate of 4,000 standard cubic feet per minute (scfm) of landfill gas. This flare does not have a bypass.

This unit is an affected source under 40 CFR 60, Subpart WWW  
 This unit is an affected source under 40 CFR 63, Subpart AAAA

A.3 Specifically Regulated Insignificant Activities  
 [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(14)]

This stationary source does not currently have any insignificant activities, as defined in 326 IAC 2-7-1(21) that have applicable requirements.

A.4 Not Specifically Regulated Insignificant Activities  
 [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(14)]

This stationary source consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) One (1) 20,000 gallon leachate storage tank, constructed in 1980, containing a liquid having a vapor pressure less than 3.5 kPa and emitting less than fifteen pounds per day of VOC.
- (b) VOC and HAP storage containers, consisting of vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids
- (c) Equipment used exclusively for filling drums, pails or other packaging containers with lubricating oils, waxes, and greases.
- (d) Application of oils, greases, lubricants, or other nonvolatile materials applied as temporary protective coatings.
- (e) Paved and unpaved roads and parking lots with no public access.

- (f) Purging of gas lines and vessels that is related to routing maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
- (g) A crankcase breather vent, for each engine, ducted to a single emission point at each gas plant.

A.5 Part 70 Permit Applicability [326 IAC 2-7-2]

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This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

## SECTION B GENERAL CONDITIONS

### B.1 Definitions [326 IAC 2-7-1]

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Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

### B.2 Permit Term [326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)][IC 13-15-3-6(a)]

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- (a) This permit, T091-35561-00067, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

### B.3 Term of Conditions [326 IAC 2-1.1-9.5]

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Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

### B.4 Enforceability [326 IAC 2-7-7] [IC 13-17-12]

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Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

### B.5 Severability [326 IAC 2-7-5(5)]

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The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

### B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

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

### B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

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- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

- (a) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:
- (1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(35), and
  - (2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) A "responsible official" is defined at 326 IAC 2-7-1(35).

B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than July 1 of each year to:

Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
- (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was continuous or intermittent;
  - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and

- (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(12)][326 IAC 1-6-3]

- (a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

- (b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

The Permittee shall implement the PMPs.

- (c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance

causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

#### B.11 Emergency Provisions [326 IAC 2-7-16]

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- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
  - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ or Northwest Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or  
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)  
Facsimile Number: 317-233-6865  
Northwest Regional Office phone: (219) 464-0233; fax: (219) 464-0553.

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;

- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(8) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable

requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
  - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
  - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
  - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
  - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]

- (a) All terms and conditions of permits established prior to T091-35561-00067 and issued pursuant to permitting programs approved into the state implementation plan have been either:
  - (1) incorporated as originally stated,
  - (2) revised under 326 IAC 2-7-10.5, or
  - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination  
[326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

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- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
- (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.16 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

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- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(42). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permit Administration and Support Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

- (b) A timely renewal application is one that is:
- (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
  - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the

document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

**B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]**

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- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Permit Administration and Support Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251  
  
Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

**B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]**

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- (a) No Part 70 permit revision or notice shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

**B.19 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]**

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- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b) or (c) without a prior permit revision, if each of the following conditions is met:
  - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
  - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management  
Permit Administration and Support Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b)(1) and (c)(1). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-7-20(b)(1) and (c)(1).

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(37)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(c) Emission Trades [326 IAC 2-7-20(c)]  
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

- (d) **Alternative Operating Scenarios [326 IAC 2-7-20(d)]**  
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

**B.20 Source Modification Requirement [326 IAC 2-7-10.5]**

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A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

**B.21 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]**

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Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

**B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]**

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- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management  
Permit Administration and Support Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

## SECTION C SOURCE OPERATION CONDITIONS

Entire Source

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (Applicability) and 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

- (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
- (2) If there is a change in the following:
  - (A) Asbestos removal or demolition start date;
  - (B) Removal or demolition contractor; or
  - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (e) **Procedures for Asbestos Emission Control**  
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**  
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Licensed Asbestos Inspector**  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

## Testing Requirements [326 IAC 2-7-6(1)]

### C.7 Performance Testing [326 IAC 3-6]

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- (a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

## Compliance Requirements [326 IAC 2-1.1-11]

### C.8 Compliance Requirements [326 IAC 2-1.1-11]

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The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

## Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]

### C.9 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

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- (a) For new units:  
Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units shall be implemented on and after the date of initial start-up.
- (b) For existing units:  
Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance to begin such monitoring. If, due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

**C.10 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

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- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale. The analog instrument shall be capable of measuring values outside of the normal range.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

**Corrective Actions and Response Steps [326 IAC 2-7-5][326 IAC 2-7-6]**

**C.11 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]**

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If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

**C.12 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]**

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Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

- (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
  - (1) initial inspection and evaluation;
  - (2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or
  - (3) any necessary follow-up actions to return operation to normal or usual manner of operation.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

- (1) monitoring results;
  - (2) review of operation and maintenance procedures and records; and/or
  - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall record the reasonable response steps taken.

**C.13 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]**

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ no later than seventy-five (75) days after the date of the test.
- (b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

**C.14 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]**

Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

- (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
- (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(33) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-50 IGCN 1003  
Indianapolis, Indiana 46204-2251

The emission statement does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

C.15 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. Support information includes the following, where applicable:

- (AA) All calibration and maintenance records.
- (BB) All original strip chart recordings for continuous monitoring instrumentation.
- (CC) Copies of all reports required by the Part 70 permit.

Records of required monitoring information include the following, where applicable:

- (AA) The date, place, as defined in this permit, and time of sampling or measurements.
- (BB) The dates analyses were performed.
- (CC) The company or entity that performed the analyses.
- (DD) The analytical techniques or methods used.
- (EE) The results of such analyses.
- (FF) The operating conditions as existing at the time of sampling or measurement.

These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

- (b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

C.16 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

- (b) The address for report submittal is:

Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or

before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

- (d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

### **Stratospheric Ozone Protection**

#### **C.17 Compliance with 40 CFR 82 and 326 IAC 22-1**

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Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with applicable standards for recycling and emissions reduction.

**SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS**

**Emissions Unit Description:**

- (b) Eight (8) gas fueled 4-stroke, lean-burn reciprocating engine/generator sets, capable of burning landfill gas or natural gas, permitted in 2016, and approved in 2016 to burn natural gas, consisting of the following:

Unit ID	Engine Manufacture Date	Date of Original (First) Installation*	Date of Installation or Proposed Installation At This Source	NESHAP Subpart ZZZZ Affected Source Status	Maximum Break Horsepower (bhp)	Maximum Heat Input Capacity (MMBtu/hr)	Maximum Landfill Gas Flow Rate (scfm)
EG-1	prior to 2008	2007	2014	New	1,148	9.1	333
EG-2	prior to 2008	2001	2008	Existing	1,148	9.1	333
EG-3	prior to 2008	1994	2013	Existing	1,148	9.1	333
EG-4 current**	prior to 2008	1986	2007	Existing	1,148	9.1	333
EG-4 (2017)**	prior to 2008	TBD	Proposed for 2017	Existing	1,148	9.1	333
EG-5	prior to 2008	2007	2013	New	1,148	9.1	333
EG-6	prior to 2008	1994	Proposed for 2016	Existing	1,148	9.1	333
EG-7	prior to 2008	2007	2013	New	1,148	9.1	333

\*This date is used for NESHAP Subpart ZZZZ applicability and does not necessarily reflect the date of installation at this source.

\*\*Unit EG-4 will be replaced in 2017 with an engine of similar capacity. The date of original (first) installation and NESHAP Subpart ZZZZ affected source status of the proposed 2017 engine is to be determined (TBD) and will be specified in a future permit modification.

These units are each an affected source under 40 CFR 63, Subpart ZZZZ

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

**Emission Limitations and Standards [326 IAC 2-7-5(1)]**

**D.1.1 HAP Limits**

In order to assure that the source is a minor source of HAPs under Section 112 of the Clean Air Act, as defined in 40 CFR 63.41, the Permittee shall comply with the following limits:

- (a) The total natural gas usage for all of the eight (8) gas fired engine sets (EG-1 through EG-8) shall not exceed 300 million cubic feet (MMcf) per twelve (12) month consecutive period, with compliance determined at the end of each month.
- (b) Formaldehyde emissions from each of the eight (8) gas fired engine sets (EG-1 through EG-8) shall not exceed 53.86 pounds per MMcf of natural gas.

Compliance with these limits, combined with formaldehyde emissions from all other emission units at this source, shall limit the source-wide single HAP emissions to less than 10 tons per 12 consecutive month period, and shall assure that the source is a minor source of HAPs under Section 112 of the Clean Air Act.

## **Compliance Determination Requirements**

### **D.1.2 Testing Requirements [326 IAC 2-1.1-11]**

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In order to determine the NOx emissions rates for natural gas combustion, the Permittee shall perform stack testing of one of the gas fueled generator sets (EG-1 through EG-8) not later than 180 days after issuance of SPM No. 091-36926-00067, utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

## **Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

### **D.1.3 Record Keeping Requirements**

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- (a) To document the compliance status with Conditions D.1.1(a), the Permittee shall keep records of the total amount of natural gas used by the eight (8) gas fueled engine sets. Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.
  
- (b) Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.

### **D.1.4 Reporting Requirements**

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A quarterly summary of the information to document the compliance status with Conditions D.1.1(a), shall be submitted using the reporting form located at the end of this permit, or its equivalent, no later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).

## SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

- (a) One (1) closed solid waste disposal facility meeting the definition in 40 CFR 60.751, constructed in 1980, modified in 2002, with a maximum design capacity of 9.615 million megagrams of solid waste, with landfill gas emissions collected by a collection system installed in 1994. This facility is closed, has met the 15 year minimum control period, and has demonstrated that NMOC emissions are less than 50 Mg/year.

This unit is an affected source under 40 CFR 60, Subpart WWW  
This unit is an affected source under 40 CFR 61, Subpart M  
This unit is an affected source under 40 CFR 63, Subpart AAAA

- (c) One (1) open flare, identified as FL-3, constructed in 2004, with a maximum heat input capacity of 144 MMBtu per hour and a maximum flow rate of 4,000 standard cubic feet per minute (scfm) of landfill gas. This flare does not have a bypass.

This unit is an affected source under 40 CFR 60, Subpart WWW  
This unit is an affected source under 40 CFR 63, Subpart AAAA

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

- E.1.1 General Provisions Relating to New Source Performance Standards (NSPS) [326 IAC 12-1] [40 CFR 60, Subpart A]

The provisions of 40 CFR 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the solid waste disposal facility, the gas collection system, and the open flare except when otherwise specified in 40 CFR 60, Subpart WWW.

- E.1.2 Standards of Performance for Municipal Solid Waste Landfills [40 CFR Part 60, Subpart WWW] [326 IAC 12] [326 IAC 8-8.1]

Pursuant to 40 CFR Part 60, Subpart WWW and 326 IAC 8-8.1 (Municipal Solid Waste Landfills Not Located in Clark, Floyd, Lake, and Porter Counties), the Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart WWW (included as Attachment A), which are incorporated by reference as 326 IAC 12, for the solid waste disposal facility, the gas collection system, and the open flare:

- (1) 40 CFR 60.750;
- (2) 40 CFR 60.751;
- (3) 40 CFR 60.752(b)(2)(v); and
- (4) 40 CFR 60.757(d) and (e).

## SECTION E.2 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

- (a) One (1) closed solid waste disposal facility meeting the definition in 40 CFR 60.751, constructed in 1980, modified in 2002, with a maximum design capacity of 9.615 million megagrams of solid waste, with landfill gas emissions collected by a collection system installed in 1994. This facility is closed, has met the 15 year minimum control period, and has demonstrated that NMOC emissions are less than 50 Mg/year.

This unit is an affected source under 40 CFR 60, Subpart WWW

This unit is an affected source under 40 CFR 61, Subpart M

This unit is an affected source under 40 CFR 63, Subpart AAAA

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### E.2.1 General Provisions Relating to NESHAP [326 IAC 14-1] [40 CFR Part 61, Subpart A]

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The provisions of 40 CFR Part 61, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 14-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 61, Subpart M.

#### E.2.2 National Emissions Standards for Hazardous Air Pollutants for Asbestos Requirements [40 CFR Part 61, Subpart M] [326 IAC 14-10]

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Pursuant to 40 CFR Part 61, Subpart M, the Permittee shall comply with the following provisions of 40 CFR Part 61, Subpart M (included as Attachment B), incorporated by reference as 326 IAC 14-10, for the solid waste disposal facility:

- (1) 40 CFR 61.140;
- (2) 40 CFR 61.141;
- (3) 40 CFR 61.151;
- (4) 40 CFR 61.156; and
- (5) 40 CFR 61.157.

## SECTION E.3 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

- (a) One (1) closed solid waste disposal facility meeting the definition in 40 CFR 60.751, constructed in 1980, modified in 2002, with a maximum design capacity of 9.615 million megagrams of solid waste, with landfill gas emissions collected by a collection system installed in 1994. This facility is closed, has met the 15 year minimum control period, and has demonstrated that NMOC emissions are less than 50 Mg/year.

This unit is an affected source under 40 CFR 60, Subpart WWW  
This unit is an affected source under 40 CFR 61, Subpart M  
This unit is an affected source under 40 CFR 63, Subpart AAAA

- (c) One (1) open flare, identified as FL-3, constructed in 2004, with a maximum heat input capacity of 144 MMBtu per hour and a maximum flow rate of 4,000 standard cubic feet per minute (scfm) of landfill gas. This flare does not have a bypass.

This unit is an affected source under 40 CFR 60, Subpart WWW  
This unit is an affected source under 40 CFR 63, Subpart AAAA

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### E.3.1 General Provisions Relating to NESHAP [326 IAC 20-1] [40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63. Subpart AAAA.

#### E.3.2 National Emissions Standards for Hazardous Air Pollutants for Municipal Solid Waste Landfills Requirements [40 CFR 63, Subpart AAAA] [326 IAC 20-67]

Pursuant to 40 CFR 63.1945, the Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart AAAA (included as Attachment C), which are incorporated by reference as 326 IAC 20-67, for the solid waste disposal facility:

- (1) 40 CFR 63.1930;
- (2) 40 CFR 63.1935(a);
- (3) 40 CFR 63.1940;
- (4) 40 CFR 63.1945(b); and
- (5) 40 CFR 63.1950.

**SECTION E.4 EMISSIONS UNIT OPERATION CONDITIONS**

**Emissions Unit Description:**

- (b) Eight (8) gas fueled 4-stroke, lean-burn reciprocating engine/generator sets, capable of burning landfill gas or natural gas, permitted in 2016, and approved in 2016 to burn natural gas, consisting of the following:

Unit ID	Engine Manufacture Date	Date of Original (First) Installation*	Date of Installation or Proposed Installation At This Source	NESHAP Subpart ZZZZ Affected Source Status	Maximum Break Horsepower (bhp)	Maximum Heat Input Capacity (MMBtu/hr)	Maximum Landfill Gas Flow Rate (scfm)
EG-1	prior to 2008	2007	2014	New	1,148	9.1	333
EG-2	prior to 2008	2001	2008	Existing	1,148	9.1	333
EG-3	prior to 2008	1994	2013	Existing	1,148	9.1	333
EG-4 current**	prior to 2008	1986	2007	Existing	1,148	9.1	333
EG-4 (2017)**	prior to 2008	TBD	Proposed for 2017	Existing	1,148	9.1	333
EG-5	prior to 2008	2007	2013	New	1,148	9.1	333
EG-6	prior to 2008	1994	Proposed for 2016	Existing	1,148	9.1	333
EG-7	prior to 2008	2007	2013	New	1,148	9.1	333

\*This date is used for NESHAP Subpart ZZZZ applicability and does not necessarily reflect the date of installation at this source.

\*\*Unit EG-4 will be replaced in 2017 with an engine of similar capacity. The date of original (first) installation and NESHAP Subpart ZZZZ affected source status of the proposed 2017 engine is to be determined (TBD) and will be specified in a future permit modification.

These units are each an affected source under 40 CFR 63, Subpart ZZZZ

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

**Emission Limitations and Standards [326 IAC 2-7-5(1)]**

**E.4.1 General Provisions Relating to NESHAP [326 IAC 20-1] [40 CFR Part 63, Subpart A]**

Pursuant to 40 CFR 63.6665, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1, for EG-2, EG-3, EG-4, and EG-6 as specified in Appendix A of 40 CFR Part 63, Subpart ZZZZ, in accordance with the schedule in 40 CFR 63 Subpart ZZZZ.

**E.4.2 National Emission Standards for Hazardous Air Pollutants (NESHAP) [40 CFR 63, Subpart ZZZZ] [326 IAC 20-82]**

Pursuant to 40 CFR 63.1945, the Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment D), which are incorporated by reference as 326 IAC 20-82, for generators EG-1 through EG-8, as specified as follows:

- (a) The engine/generator sets EG-2, EG-3, EG-4, and EG-6 are subject to the following portions of 40 CFR 63, Subpart ZZZZ for existing non-emergency stationary RICE at an area source of HAP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis:

- (1) 40 CFR 63.6580
- (2) 40 CFR 63.6585(a), (c), and (d)
- (3) 40 CFR 63.6590(a)(1)(iii) and (iv)
- (4) 40 CFR 63.6595(a)(1)
- (5) 40 CFR 63.6603(a)
- (6) 40 CFR 63.6605
- (7) 40 CFR 63.6625(e)(6), (h) and (j)
- (8) 40 CFR 63.6640(a) and (b)
- (9) 40 CFR 63.6645(a)(5)
- (10) 40 CFR 63.6650(f)
- (11) 40 CFR 63.6655(e)(3)
- (12) 40 CFR 63.6660
- (13) 40 CFR 63.6665
- (14) 40 CFR 63.6670
- (15) 40 CFR 63.6675
- (16) Table 2d (item 13)
- (17) Table 6 (item 9)
- (18) Table 8 as applicable
- (19) Appendix A

- (b) The engine/generator sets EG-1, EG-5, EG-7 and EG-8 are subject to the following portions of 40 CFR 63, Subpart ZZZZ for new non-emergency stationary RICE at an area source of HAP:

- (1) 40 CFR 63.6580
- (2) 40 CFR 63.6585(a), (c), and (d)
- (3) 40 CFR 63.6590(a)(2)(iii) and (c)(1)
- (4) 40 CFR 63.6595(a)(7)
- (5) 40 CFR 63.6665
- (6) 40 CFR 63.6670; and
- (7) 40 CFR 63.6675

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE AND ENFORCEMENT BRANCH  
PART 70 OPERATING PERMIT  
CERTIFICATION**

Source Name: Deercroft Recycling & Disposal Facility  
Source Address: 10501 W. 300 N., Michigan City, Indiana 46360  
Part 70 Permit No.: T091-35561-00067

**This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.**

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify) \_\_\_\_\_.
- Report (specify) \_\_\_\_\_.
- Notification (specify) \_\_\_\_\_.
- Affidavit (specify) \_\_\_\_\_.
- Other (specify) \_\_\_\_\_.

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE AND ENFORCEMENT BRANCH  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251  
Phone: (317) 233-0178  
Fax: (317) 233-6865**

**PART 70 OPERATING PERMIT  
EMERGENCY OCCURRENCE REPORT**

Source Name: Deercroft Recycling & Disposal Facility  
Source Address: 10501 W. 300 N., Michigan City, Indiana 46360  
Part 70 Permit No.: T091-35561-00067

**This form consists of 2 pages**

**Page 1 of 2**

- |   |
|---|
| <p><input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12)</p> <ul style="list-style-type: none"><li>• The Permittee must notify the Office of Air Quality (OAQ), within four (4) daytime business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and</li><li>• The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.</li></ul> |
|---|

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

**Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency?    Y    N
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE AND ENFORCEMENT BRANCH**

**Part 70 Quarterly Report**

Source Name: Deercroft Recycling & Disposal Facility  
Source Address: 10501 W. 300 N., Michigan City, Indiana 46360  
Part 70 Permit No.: T091-35561-00067  
Facility: Gas Fueled Engine Sets (EG-1 through EG-8)  
Parameter: Natural Gas Usage  
Limit: The total natural gas usage for all of the eight (8) gas fueled engine sets (EG-1 through EG-8) shall not exceed 300 million cubic feet (MMcf) per twelve (12) month consecutive period, with compliance determined at the end of each month.

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE AND ENFORCEMENT BRANCH  
PART 70 OPERATING PERMIT  
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Deercroft Recycling & Disposal Facility  
Source Address: 10501 W. 300 N., Michigan City, Indiana 46360  
Part 70 Permit No.: T091-35561-00067

Months: \_\_\_\_\_ to \_\_\_\_\_ Year: \_\_\_\_\_

Page 1 of 2

<p>This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C- General Reporting. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
<b>Permit Requirement (specify permit condition #)</b>	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement (specify permit condition #)</b>	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

Form Completed by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

**Indiana Department of Environmental Management  
Office of Air Quality**

Addendum to the Technical Support Document (ATSD) for a  
Significant Source Modification and Significant Permit Modification

**Source Background and Description**

<b>Source Name:</b>	<b>Deercroft Recycling &amp; Disposal Facility</b>
<b>Source Location:</b>	<b>10501 W. 300 N., Michigan City, Indiana 46360</b>
<b>County:</b>	<b>LaPorte</b>
<b>SIC Code:</b>	<b>4953 and 4911</b>
<b>Operation Permit No.:</b>	<b>T091-35561-00067</b>
<b>Operation Permit Issuance Date:</b>	<b>December 3, 2015</b>
<b>Significant Source Modification No.:</b>	<b>091-36884-00067</b>
<b>Significant Permit Modification No.:</b>	<b>091-36926-00067</b>
<b>Permit Reviewer:</b>	<b>Brian Wright</b>

On June 29, 2016, the Office of Air Quality (OAQ) had a notice published in the News Dispatch, Michigan City, Indiana, stating that Deercroft Recycling & Disposal Facility had applied for a significant modification to their Part 70 Operating Permit to construct and operate two (2) new gas fired engine/generator sets (EG-3 and EG-6) capable of burning landfill gas or natural gas, to update the permit to indicate that all the other existing landfill gas-fired engines had been previously replaced, and to allow all the engine/generator sets at the landfill to burn natural gas in addition to landfill gas. The notice also stated that the OAQ proposed to issue a Significant Source Modification (SSM) and Significant Permit Modification (SPM) for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

**Comments and Responses**

On July 13, 2016, Laura Niemann, on behalf of Deercroft Recycling & Disposal Facility submitted comments to IDEM, OAQ on the draft SSM and SPM.

The Technical Support Document (TSD) is used by IDEM, OAQ for historical purposes. IDEM, OAQ does not make any changes to the original TSD, but the Permit will have the updated changes. The comments and revised permit language are provided below with deleted language as ~~strikeouts~~ and new language **bolded**.

**Comment 1:**

Deercroft was concerned about the accuracy of the engine descriptions in the draft permit since one engine (EG-4) was planned for installation in 2017 and the company was unsure about what the date of manufacture and original instillation of the new engine would be.

I've looked through the permit, and the only comment that I have is on the engine table. Again, there is only one engine that is coming to the site in 2016. Before it gets there, an engine will be removed from Plant 2 (EG-6) and will move into the currently empty slot in Plant 1 (EG-3). The 8th engine, when it arrives in 2016 (after the final permit is issued), will go into the now-empty berth in Plant 2 (EG-6).

The company DOES plan to do an engine switchout at Deercroft in 2017, but not until September according to their current schedule. We don't have any information on the 2017 engine switchout status with respect to Quad Z applicability (new vs. existing).

**Response to Comment 1:**

IDEM has agreed to amend the permit in order to make the unit descriptions for the engines more accurate. The permit has been revised as follows:

- (b) Eight (8) gas fueled 4-stroke, lean-burn reciprocating engine/generator sets, capable of burning landfill gas or natural gas, permitted in 2016, and approved in 2016 to burn natural gas, consisting of the following:

Unit ID	Engine Manufacture Date	Date of Original (First) Installation*	Date of Installation or Proposed Installation At This Source	NESHAP Subpart ZZZZ Affected Source Status	Maximum Break Horsepower (bhp)	Maximum Heat Input Capacity (MMBtu/hr)	Maximum Landfill Gas Flow Rate (scfm)
EG-1	prior to 2008	2007	2014	New	1,148	9.1	333
EG-2	prior to 2008	2001	2008	Existing	1,148	9.1	333
EG-3	prior to 2008	1994	<del>Proposed for 2016</del> 2013	Existing	1,148	9.1	333
EG-4 (current)**	prior to 2008	1986	2007	Existing	1,148	9.1	333
<b>EG-4 (2017)**</b>	<b>prior to 2008</b>	<b>TBD**</b>	<b>Proposed for 2017</b>	<b>New/ Existing (TBD)**</b>	<b>1,148</b>	<b>9.1</b>	<b>333</b>
EG-5	prior to 2008	2007	2013	New	1,148	9.1	333
EG-6	prior to 2008	1994	Proposed for 2016	Existing	1,148	9.1	333
EG-7	prior to 2008	2007	2013	New	1,148	9.1	333
EG-8	prior to 2008	2007	2013	New	1,148	9.1	333

\*This date is used for NESHAP Subpart ZZZZ applicability and does not necessarily reflect the date of installation at this source.  
**\*\*Unit EG-4 will be replaced in 2017 with an engine of similar capacity. The date of original (first) installation and NESHAP Subpart ZZZZ affected source status of the proposed 2017 engine is to be determined (TBD) and will be specified in a future permit modification.**

These units are each an affected source under 40 CFR 63, Subpart ZZZZ

<b>IDEM Contact</b>
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- (a) Questions regarding this proposed SSM and SPM can be directed to Brian Wright at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-6544 or toll free at 1-800-451-6027 extension 4-6544.
- (b) A copy of the permit is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: <http://www.in.gov/idem/5881.htm>; and the Citizens' Guide to IDEM on the Internet at: <http://www.in.gov/idem/6900.htm>.

**Indiana Department of Environmental Management  
Office of Air Quality**

Technical Support Document (TSD) for a Part 70 Significant Source Modification and  
Significant Permit Modification

**Source Description and Location**

Source Name:	Deercroft Recycling and Disposal Facility
Source Location:	10501 W 300 N, Michigan City, IN 46360
County:	LaPorte
SIC Code:	4953 (Refuse Systems) and 4911 (Electric Services)
Operation Permit No.:	T091-35561-00067
Operation Permit Issuance Date:	December 3, 2015
Significant Source Modification No.:	091-36884-00067
Significant Permit Modification No.:	091-36926-00067
Permit Reviewer:	Brian Wright

**Existing Approvals**

The source was issued Part 70 Operating Permit Renewal No. T091-35561-00067 on December 3, 2015. There have been no subsequent approvals issued.

**County Attainment Status**

The source is located in LaPorte County.

Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O <sub>3</sub>	Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard. <sup>1</sup>
PM <sub>2.5</sub>	Unclassifiable or attainment effective April 5, 2005, for the annual PM <sub>2.5</sub> standard.
PM <sub>2.5</sub>	Unclassifiable or attainment effective December 13, 2009, for the 24-hour PM <sub>2.5</sub> standard.
PM <sub>10</sub>	Unclassifiable effective November 15, 1990.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Unclassifiable or attainment effective December 31, 2011.
<sup>1</sup> Unclassifiable or attainment effective November 15, 1990, for the 1-hour standard which was revoked effective June 15, 2005.	

- (a) **Ozone Standards**  
Volatile organic compounds (VOC) and Nitrogen Oxides (NO<sub>x</sub>) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to ozone. LaPorte County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) **PM<sub>2.5</sub>**  
LaPorte County has been classified as attainment for PM<sub>2.5</sub>. Therefore, direct PM<sub>2.5</sub>, SO<sub>2</sub>, and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (c) **Other Criteria Pollutants**  
LaPorte County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

### Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability. The fugitive emissions hazardous air pollutants are counted toward Part 70 Permit applicability.

Note: The landfill is subject to 40 CFR 61, Subpart M; however, landfills were not subject to this National Emission Standard for Hazardous Air Pollutants until after August 7, 1980.

### Source Status - Existing Source

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

Pollutant	Emissions (ton/yr)
PM	13.60
PM <sub>10</sub>	13.60
PM <sub>2.5</sub>	13.60
SO <sub>2</sub>	0.14
NO <sub>x</sub>	84.86
VOC	7.63
CO	193.25
<b>HAPs</b>	
Toluene	4.57
<b>Total</b>	<b>14.65</b>

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at [http://www.supremecourt.gov/opinions/13pdf/12-1146\\_4g18.pdf](http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf)) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHGs emissions to determine operating permit applicability or PSD applicability to a source or modification.

- (a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no PSD regulated pollutant, excluding GHGs, is emitted at a rate of two hundred fifty (250) tons per year or more and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).
- (b) These emissions are based upon the TSD of permit renewal No. T091-35561-00067.
- (c) This existing source is not a major source of HAPs, as defined in 40 CFR 63.2, because HAPs emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

**Description of Proposed Modification**

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Deercroft Recycling and Disposal Facility (operated by Waste Management of Indiana LLC) on February 29, 2016, relating to the construction and operation of two (2) new gas fired engine/generator sets (EG-3 and EG-6) capable of burning landfill gas or natural gas. In addition, Waste Management notified IDEM OAQ that all the other existing landfill gas-fired engines had been previously replaced as part of Waste Management's landfill-gas fired-engine maintenance "switchout" program. Finally, Waste Management also requested approval to burn natural gas in addition to landfill gas in all the engines. The following is a list of the proposed new emission units (EG-3 and EG-6) and unpermitted emission units (EG-1, EG-2, EG-4, EG-5, EG-7, and EG-8):

- (a) Eight (8) gas fueled 4-stroke, lean-burn reciprocating engine/generator sets, capable of burning landfill gas or natural gas, permitted in 2016, and approved in 2016 to burn natural gas, consisting of the following:

Unit ID	Engine Manufacture Date	Date of Original (First) Installation*	Date of Installation or Proposed Installation At This Source	NESHAP Subpart ZZZZ Affected Source Status	Maximum Break Horsepower (bhp)	Maximum Heat Input Capacity (MMBtu/hr)	Maximum Landfill Gas Flow Rate (scfm)
EG-1	prior to 2008	2007	2014	New	1,148	9.1	333
EG-2	prior to 2008	2001	2008	Existing	1,148	9.1	333
EG-3	prior to 2008	1994	Proposed for 2016	Existing	1,148	9.1	333
EG-4	prior to 2008	1986	2007	Existing	1,148	9.1	333
EG-5	prior to 2008	2007	2013	New	1,148	9.1	333
EG-6	prior to 2008	1994	Proposed for 2016	Existing	1,148	9.1	333
EG-7	prior to 2008	2007	2013	New	1,148	9.1	333
EG-8	prior to 2008	2007	2013	New	1,148	9.1	333

\*This date is used for NESHAP Subpart ZZZZ applicability and does not necessarily reflect the date of installation at this source.

These units are each an affected source under 40 CFR 63, Subpart ZZZZ

**Enforcement Issues**

Waste Management notified IDEM OAQ that the landfill gas-fired engines previously permitted for construction and operation at this source had been previously replaced as part of Waste Management's landfill-gas fired-engine maintenance "switchout" program. IDEM is aware that the replacement engines were installed and operated prior to receipt of the proper permit. IDEM is reviewing this matter and will take the appropriate action. This proposed approval is intended to satisfy the requirements of the construction permit and operating rules.

**Emission Calculations**

See Appendix A of this Technical Support Document for detailed emission calculations.

**Permit Level Determination – Part 70 Modification to an Existing Source**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational

design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency.”

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit. If the control equipment has been determined to be integral, the table reflects the PTE after consideration of the integral control device.

<b>Increase in PTE Before Controls of the Modification</b>	
<b>Pollutant</b>	<b>Potential To Emit (ton/yr)</b>
PM	16.80
PM <sub>10</sub>	16.80
PM <sub>2.5</sub>	16.80
SO <sub>2</sub>	0.18
NO <sub>x</sub>	177.09
VOC	216.82
CO	197.31
Single HAPs	21.62
Total HAPs	15.93 Formaldehyde

This source modification is subject to 326 IAC 2-7-10.5(g)(4), because the potential to emit of nitrogen oxides (NO<sub>x</sub>) and VOC are each greater than twenty-five (25) tons per year before control. Additionally, the modification will be incorporated into the Part 70 Operating Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12(d), because the modification requires significant changes in existing Part 70 monitoring permit terms and conditions.

The source is not a major source of HAPs, as defined in 40 CFR 63.41, because emissions of any single HAP shall be limited to less than ten (10) tons per year for any single HAP. Therefore, this source is an area source under Section 112 of the Clean Air Act.

In order to assure that the source is a minor source of HAPs under Section 112 of the Clean Air Act, as defined in 40 CFR 63.41, the Permittee shall comply with the following limits:

- (a) The total natural gas usage for all of the eight (8) gas fired engine sets (EG-1 through EG-8) shall not exceed 300 million cubic feet (MMcf) per twelve (12) month consecutive period, with compliance determined at the end of each month.
- (b) Formaldehyde emissions from each of the eight (8) gas fired engine sets (EG-1 through EG-8) shall not exceed 53.86 pounds per MMcf of natural gas.

Compliance with these limits, combined with formaldehyde emissions from all other emission units at this source, shall limit the source-wide single HAP emissions to less than 10 tons per 12 consecutive month period, and shall assure that the source is a minor source of HAPs under Section 112 of the Clean Air Act.

**Permit Level Determination – PSD**

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this Part 70 source and permit modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process / Emission Unit	Project Emissions (ton/yr)						
	PM	PM <sub>10</sub>	PM <sub>2.5</sub> *	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO
Total for Modification	16.80	16.80	16.80	0.18	177.09	216.82	197.31
PSD Major Source Thresholds	250	250	250	250	250	250	250

\*PM<sub>2.5</sub> listed is direct PM<sub>2.5</sub>.

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at [http://www.supremecourt.gov/opinions/13pdf/12-1146\\_4g18.pdf](http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf)) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHGs emissions to determine operating permit applicability or PSD applicability to a source or modification.

This modification to an existing minor PSD stationary source is not major because the emissions increase of each PSD regulated pollutant are less than the PSD major source thresholds. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

**Federal Rule Applicability Determination**

The following federal rules are applicable to the source due to this modification:

**NSPS:**

- (a) The eight (8) gas fueled generators are not subject to the requirements of the New Source Performance Standard for Stationary Spark Ignition Internal Combustion Engines, 40 CFR 60, Subpart JJJJ, since each of the engines were manufactured prior to January 1, 2008.
- (b) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.

**NESHAP:**

- (c) The four (4) gas fueled lean-burn reciprocating engine/generator sets (EG-2, EG-3, EG-4, and EG-6) (1,148 HP each) are each subject the requirements of the 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (326 IAC 20-82), because each is considered an existing stationary reciprocating internal combustion engine (RICE)

(construction commenced before December 19, 2002) at an area source of hazardous air pollutants (HAP).

EPA has previously clarified that it considers "commenced construction or reconstruction" to mean the start of on-site fabrication, erection, or installation of the affected source (engine) at the site of the "final operator" (note: other EPA memos in the Applicability Determination Index (ADI) specify that commencement of construction means the start of the "physical" construction, which does not include planning and design work). Based on discussions with EPA, "final operator" is referring to the first owner/operator of the engine after being manufactured or reconstructed. Under the NESHAP general definitions in 40 CFR 63.2, relocation of a unit is not considered "construction" of a new unit. Finally, under 40 CFR 63.6590(a)(1)(iv), it says a change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

The four (4) landfill gas fueled 4-stroke, lean-burn reciprocating engine/generator sets (EG-2, EG-3, EG-4, and EG-6) were originally (first) installed by the first owner/operator in 2001, 1994, 1986, and 1994, respectively.

The four (4) gas fueled lean-burn reciprocating engine/generator sets (EG-2, EG-3, EG-4, and EG-6) (1,148 HP each) are subject the following applicable portions of the NESHAP for existing non-emergency stationary RICE (construction commenced before June 12, 2006) at an area source of HAP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis:

- (1) 40 CFR 63.6580
- (2) 40 CFR 63.6585(a), (c), and (d)
- (3) 40 CFR 63.6590(a)(1)(iii) and (iv)
- (4) 40 CFR 63.6595(a)(1)
- (5) 40 CFR 63.6603(a)
- (6) 40 CFR 63.6605
- (7) 40 CFR 63.6625(e)(6), (h) and (j)
- (8) 40 CFR 63.6640(a) and (b)
- (9) 40 CFR 63.6645(a)(5)
- (10) 40 CFR 63.6650(f)
- (11) 40 CFR 63.6655(e)(3)
- (12) 40 CFR 63.6660
- (13) 40 CFR 63.6665
- (14) 40 CFR 63.6670
- (15) 40 CFR 63.6675
- (16) Table 2d (item 13)
- (17) Table 6 (item 9)
- (18) Table 8 as applicable
- (19) Appendix A

Note: Existing non-emergency stationary spark ignition (SI) RICE that are located at an area source of HAP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis are not subject to numerical CO or formaldehyde emission limitations, but are only subject to work and management practices under Table 2d and Table 6.

The requirements of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated as 326 IAC 20-1, apply to the source except as otherwise specified in 40 CFR 63, Subpart ZZZZ.

- (d) The four (4) gas fueled lean-burn reciprocating engine/generator sets (EG-1, EG-5, EG-7 and EG-8) (1,148 HP each) are each subject the requirements of the 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (326 IAC 20-82), because each is

considered a new stationary reciprocating internal combustion engine (RICE) (construction commenced after December 19, 2002) at an area source of hazardous air pollutants (HAP). The four (4) landfill gas fueled 4-stroke, lean-burn reciprocating engine/generator sets (EG-1, EG-5, EG-7, and EG-7) were originally (first) installed by the first owner/operator in 2007, 2007, 2007, and 2007 respectively.

The four (4) gas fueled lean-burn reciprocating engine/generator sets (EG-1, EG-5, EG-7 and EG-8) (1,148 HP each) are subject the following applicable portions of the NESHAP for new non-emergency stationary RICE (construction commenced before June 12, 2006) at an area source of HAP:

- (1) 40 CFR 63.6580
- (2) 40 CFR 63.6585(a), (c), and (d)
- (3) 40 CFR 63.6590(a)(2)(iii) and (c)(1)
- (4) 40 CFR 63.6595(a)(7)
- (5) 40 CFR 63.6665
- (6) 40 CFR 63.6670; and
- (7) 40 CFR 63.6675

Pursuant to 40 CFR 63.6665, the four (4) gas fueled lean-burn reciprocating engine/generator sets (EG-1, EG-5, EG-7 and EG-8) do not have to meet the requirements of 40 CFR 63, Subpart A (General Provisions), since they are considered a new stationary RICE located at an area source of HAP emissions.

- (d) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) applicable to this proposed modification.

**CAM:**

- (e) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to new or modified emission units that involve a pollutant-specific emission unit and meet the following criteria:
  - (1) has a potential to emit before controls equal to or greater than the Part 70 major source threshold for the pollutant involved;
  - (2) is subject to an emission limitation or standard for that pollutant; and
  - (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each new or modified emission unit involved:

CAM Applicability Analysis							
Emission Unit	Control Device Used	Emission Limitation or Standard (Y/N)	Uncontrolled PTE (ton/yr)	Controlled PTE (ton/yr)	Part 70 Major Source Threshold (ton/yr)	CAM Applicable (Y/N)	Large Unit (Y/N)
EG-1 through EG-8 - CO	None	N	24.66, each	NA	100	N	N
EG-1 through EG-8 - NOx	None	N	22.14, each	NA	100	N	N

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to any of the new units as part of this modification.

### State Rule Applicability Determination

The following state rules are applicable to the source due to the modification:

#### **326 IAC 2-2 (PSD)**

PSD applicability is discussed under the Permit Level Determination – PSD section.

#### **326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))**

The operation of each of the eight (8) gas fired generator sets (EG-1 through EG-8) will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

#### **326 IAC 2-6 (Emission Reporting)**

Since this source is required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, this source is subject to 326 IAC 2-6 (Emission Reporting). In accordance with the compliance schedule in 326 IAC 2-6-3, an emission statement must be submitted triennially. The first report is due no later than July 1, 2016, and subsequent reports are due every three (3) years thereafter. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

#### **326 IAC 2-7-6(5) (Annual Compliance Certification)**

The U.S. EPA Federal Register 79 FR 54978 notice does not exempt Title V Permittees from the requirements of 40 CFR 70.6(c)(5)(iv) or 326 IAC 2-7-6(5)(D), but the submittal of the Title V annual compliance certification to IDEM satisfies the requirement to submit the Title V annual compliance certifications to EPA. IDEM does not intend to revise any permits since the requirements of 40 CFR 70.6(c)(5)(iv) or 326 IAC 2-7-6(5)(D) still apply, but Permittees can note on their Title V annual compliance certification that submission to IDEM has satisfied reporting to EPA per Federal Register 79 FR 54978. This only applies to Title V Permittees and Title V compliance certifications.

#### **326 IAC 12 (New Source Performance Standards)**

See Federal Rule Applicability Section of this TSD.

#### **326 IAC 20 (Hazardous Air Pollutants)**

See Federal Rule Applicability Section of this TSD.

#### **326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)**

Each of the landfill gas-fired generators (EG-1 through EG-8) is not subject to 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating), because, pursuant to 326 IAC 1-2-19, each emission unit does not meet the definition of an indirect heating unit.

#### **326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)**

Each of the landfill gas-fired generators (EG-1 through EG-8) is exempt from the requirements of 326 IAC 6-3, because they each are not considered manufacturing processes and, pursuant to 326 IAC 1-2-59, liquid and gaseous fuels and combustion air are not considered as part of the process weight.

#### **326 IAC 7-1.1-1 (Sulfur Dioxide Emission Limitations)**

Each of the landfill gas-fired generators (EG-1 through EG-8) is not subject to 326 IAC 7-1.1-1 (Sulfur Dioxide Emission Limitations), because the potential to emit sulfur dioxide from each unit is less than twenty-five (25) tons per year and ten (10) pounds per hour.

**326 IAC 8-1-6 (General Reduction Requirements)**

This rule applies to facilities located anywhere in the state that were constructed on or after January 1, 1980, which have potential volatile organic compound (VOC) emission of 25 tons per year or more, and which are not otherwise regulated by another provision of Article 8.

Each of the landfill gas-fired generators (EG-1 through EG-8) is not subject to 326 IAC 8-1-6 (General Reduction Requirements), because each has potential VOC emissions of less than 25 tons per year.

**326 IAC 9-1-1 (Carbon Monoxide Emission Limits)**

Each of the landfill gas-fired generators (EG-1 through EG-8) is not subject to 326 IAC 9-1-1 (Carbon Monoxide Emission Limits), because there are no applicable emissions limits for the source under 326 IAC 9-1-2.

**326 IAC 10-1-1 (Nitrogen Oxides Control)**

Each of the landfill gas-fired generators (EG-1 through EG-8) is not subject to 326 IAC 10-1-1 (Nitrogen Oxides Control), because the source is not located in Clark or Floyd counties.

**Compliance Determination and Monitoring Requirements**

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The Compliance Determination Requirements applicable to this modification are as follows:

The testing requirements applicable to this source are as follows:

Testing Requirements			
Emission Unit	Pollutant	Timeframe for Testing	Frequency of Testing
One of the Gas-Fired Generator Sets (EG-1 through EG-8)	NOx	180 days after startup	One Time

The emission factor for NOx when combusting natural gas that was used by the source to determine the PTE for the generators was taken from the engine technical data sheet supplied by the manufacturer and IDEM OAQ considered this as an alternate emission factor.

If the NOx emission factor from the US EPA AP 42 Supplement F was used for the gas-fired generators, the resulting controlled PTE for NOx would be greater than 250 tons per year. Therefore, the source will be required to perform stack testing to verify the NOx emission rates and to confirm the PSD Minor status of the source.

**Proposed Changes**

The changes listed below have been made to Part 70 Operating Permit No. T091-35561-00067. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

**Modification No. 1:**

**Section A.2 has been amended as follows in order to incorporate the modification:**

A.2 Emission Units and Pollution Control Equipment Summary  
~~[326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(14)]~~

This stationary source consists of the following emission units and pollution control devices:

\*\*\*\*\*

- ~~(b) Three (3) landfill gas fueled 4-stroke, lean-burn reciprocating engine/generator sets, each rated at 1,138 brake horsepower, identified as EG-1 and EG-2, installed in 1994, and, EG-4 was installed in 1999. The maximum heat input capacity of each engine/generator set is 8.9 MMBtu per hour and the maximum gas input flow rate of each engine/generator set is 275 standard cubic feet per minute (scfm) of landfill gas.~~

~~These units are an affected source under 40 CFR 63, Subpart ZZZZ~~

- ~~(c) Four (4) landfill gas fueled 4-stroke, lean-burn reciprocating engine/generator sets, each rated at 1,148 brake horsepower, identified as EG-5 through EG-8, constructed in 2007, all engines were manufactured prior to January 1, 2008. The maximum heat input capacity of each engine/generator set is 9.1 MMBtu per hour and the maximum flow rate of each engine/generator set is 333 standard cubic feet per minute (scfm) of landfill gas.~~

~~These units are an affected source under 40 CFR 63, Subpart ZZZZ~~

- (b) Eight (8) gas fueled 4-stroke, lean-burn reciprocating engine/generator sets, capable of burning landfill gas or natural gas, permitted in 2016, and approved in 2016 to burn natural gas, consisting of the following:**

Unit ID	Engine Manufacture Date	Date of Original (First) Installation*	Date of Installation or Proposed Installation At This Source	NESHAP Subpart ZZZZ Affected Source Status	Maximum Break Horsepower (bhp)	Maximum Heat Input Capacity (MMBtu/hr)	Maximum Landfill Gas Flow Rate (scfm)
EG-1	prior to 2008	2007	2014	New	1,148	9.1	333
EG-2	prior to 2008	2001	2008	Existing	1,148	9.1	333
EG-3	prior to 2008	1994	Proposed for 2016	Existing	1,148	9.1	333
EG-4	prior to 2008	1986	2007	Existing	1,148	9.1	333
EG-5	prior to 2008	2007	2013	New	1,148	9.1	333
EG-6	prior to 2008	1994	Proposed for 2016	Existing	1,148	9.1	333
EG-7	prior to 2008	2007	2013	New	1,148	9.1	333
EG-8	prior to 2008	2007	2013	New	1,148	9.1	333

\*This date is used for NESHAP Subpart ZZZZ applicability and does not necessarily reflect the date of installation at this source.

These units are each an affected source under 40 CFR 63, Subpart ZZZZ

- (dc) One (1) open flare, identified as FL-3, constructed in 2004, with a maximum heat input capacity of 144 MMBtu per hour and a maximum flow rate of 4,000 standard cubic feet per minute (scfm) of landfill gas. This flare does not have a bypass.

This unit is an affected source under 40 CFR 60, Subpart WWW  
 This unit is an affected source under 40 CFR 63, Subpart AAAA

**Modification No. 2:**

Section D.1 has been added as follows in order to incorporate the modification:

**SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS**

Emissions Unit Description:							
(b) Eight (8) gas fueled 4-stroke, lean-burn reciprocating engine/generator sets, capable of burning landfill gas or natural gas, permitted in 2016, and approved in 2016 to burn natural gas, consisting of the following:							
Unit ID	Engine Manufacture Date	Date of Original (First) Installation*	Date of Installation or Proposed Installation At This Source	NESHAP Subpart ZZZZ Affected Source Status	Maximum Break Horsepower (bhp)	Maximum Heat Input Capacity (MMBtu/hr)	Maximum Landfill Gas Flow Rate (scfm)
EG-1	prior to 2008	2007	2014	New	1,148	9.1	333
EG-2	prior to 2008	2001	2008	Existing	1,148	9.1	333
EG-3	prior to 2008	1994	Proposed for 2016	Existing	1,148	9.1	333
EG-4	prior to 2008	1986	2007	Existing	1,148	9.1	333
EG-5	prior to 2008	2007	2013	New	1,148	9.1	333
EG-6	prior to 2008	1994	Proposed for 2016	Existing	1,148	9.1	333
EG-7	prior to 2008	2007	2013	New	1,148	9.1	333
EG-8	prior to 2008	2007	2013	New	1,148	9.1	333
*This date is used for NESHAP Subpart ZZZZ applicability and does not necessarily reflect the date of installation at this source.							
These units are each an affected source under 40 CFR 63, Subpart ZZZZ							
(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)							

**Emission Limitations and Standards [326 IAC 2-7-5(1)]**

**D.1.1 HAP Limits**

In order to assure that the source is a minor source of HAPs under Section 112 of the Clean Air Act, as defined in 40 CFR 63.41, the Permittee shall comply with the following limits:

- (a) The total natural gas usage for all of the eight (8) gas fired engine sets (EG-1 through EG-8) shall not exceed 300 million cubic feet (MMcf) per twelve (12) month consecutive period, with compliance determined at the end of each month.
- (b) Formaldehyde emissions from each of the eight (8) gas fired engine sets (EG-1 through EG-8) shall not exceed 53.86 pounds per MMcf of natural gas.

Compliance with these limits, combined with formaldehyde emissions from all other emission units at this source, shall limit the source-wide single HAP emissions to less

than 10 tons per 12 consecutive month period, and shall assure that the source is a minor source of HAPs under Section 112 of the Clean Air Act.

### Compliance Determination Requirements

#### D.1.2 Testing Requirements [326 IAC 2-1.1-11]

In order to determine the NOx emissions rates for natural gas combustion, the Permittee shall perform stack testing of one of the gas fueled generator sets (EG-1 through EG-8) not later than 180 days after issuance of SPM No. 091-36926-00067, utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

#### Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

#### D.1.3 Record Keeping Requirements

- (a) To document the compliance status with Conditions D.1.1(a), the Permittee shall keep records of the total amount of natural gas used by the eight (8) gas fueled engine sets. Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.
- (b) Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.

#### D.1.4 Reporting Requirements

A quarterly summary of the information to document the compliance status with Conditions D.1.1(a), shall be submitted using the reporting form located at the end of this permit, or its equivalent, no later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).

\*\*\*\*\*

### SECTION E.3 EMISSIONS UNIT OPERATION CONDITIONS

#### Emissions Unit Description:

\*\*\*\*\*

- (dc) One (1) open flare, identified as FL-3, constructed in 2004, with a maximum heat input capacity of 144 MMBtu per hour and a maximum flow rate of 4,000 standard cubic feet per minute (scfm) of landfill gas. This flare does not have a bypass.

This unit is an affected source under 40 CFR 60, Subpart WWW  
This unit is an affected source under 40 CFR 63, Subpart AAAA

\*\*\*\*\*

\*\*\*\*\*

**Modification No. 3:**

**Section E.4 has been revised in order to incorporate the modification:**

**SECTION E.4 EMISSIONS UNIT OPERATION CONDITIONS**

Emissions Unit Description:

~~(b) Three (3) landfill gas fueled 4-stroke, lean-burn reciprocating engine/generator sets, each rated at 1,138 brake horsepower, identified as EG-1 and EG-2, installed in 1994, and, EG-4 was installed in 1999. The maximum heat input capacity of each engine/generator set is 8.9 MMBtu per hour and the maximum gas input flow rate of each engine/generator set is 275 standard cubic feet per minute (scfm) of landfill gas.~~

~~These units are an affected source under 40 CFR 63, Subpart ZZZZ~~

~~(c) Four (4) landfill gas fueled 4-stroke, lean-burn reciprocating engine/generator sets, each rated at 1,148 brake horsepower, identified as EG-5 through EG-8, constructed in 2007, all engines were manufactured prior to January 1, 2008. The maximum heat input capacity of each engine/generator set is 9.1 MMBtu per hour and the maximum flow rate of each engine/generator set is 333 standard cubic feet per minute (scfm) of landfill gas.~~

~~These units are an affected source under 40 CFR 63, Subpart ZZZZ~~

**(b) Eight (8) gas fueled 4-stroke, lean-burn reciprocating engine/generator sets, capable of burning landfill gas or natural gas, permitted in 2016, and approved in 2016 to burn natural gas, consisting of the following:**

Unit ID	Engine Manufacture Date	Date of Original (First) Installation*	Date of Installation or Proposed Installation At This Source	NESHAP Subpart ZZZZ Affected Source Status	Maximum Break Horsepower (bhp)	Maximum Heat Input Capacity (MMBtu/hr)	Maximum Landfill Gas Flow Rate (scfm)
EG-1	prior to 2008	2007	2014	New	1,148	9.1	333
EG-2	prior to 2008	2001	2008	Existing	1,148	9.1	333
EG-3	prior to 2008	1994	Proposed for 2016	Existing	1,148	9.1	333
EG-4	prior to 2008	1986	2007	Existing	1,148	9.1	333
EG-5	prior to 2008	2007	2013	New	1,148	9.1	333
EG-6	prior to 2008	1994	Proposed for 2016	Existing	1,148	9.1	333
EG-7	prior to 2008	2007	2013	New	1,148	9.1	333
EG-8	prior to 2008	2007	2013	New	1,148	9.1	333

\*This date is used for NESHAP Subpart ZZZZ applicability and does not necessarily reflect the date of installation at this source.

**These units are each an affected source under 40 CFR 63, Subpart ZZZZ**

\*\*\*\*\*

**E.4.1 General Provisions Relating to NESHAP [326 IAC 20-1] [40 CFR Part 63, Subpart A]**

Pursuant to 40 CFR 63.6665, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1, for ~~EG-1, EG-2, EG-3, and EG-4, and EG-6~~ as specified in Appendix A of 40 CFR Part 63, Subpart ZZZZ, in accordance with the schedule in 40 CFR 63 Subpart ZZZZ.

E.4.2 National Emission Standards for Hazardous Air Pollutants (NESHAP) [40 CFR 63, Subpart ZZZZ] [326 IAC 20-82]

Pursuant to 40 CFR 63.1945, the Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment D), which are incorporated by reference as 326 IAC 20-82, for generators EG-1, ~~EG-2~~, and ~~EG-4~~ through EG-8, as specified as follows:

(a) The ~~existing four-stroke lean-burn landfill gas-fired reciprocating internal combustion engine-generator sets, identified as EG-1, EG-2, EG-3, and EG-4, and EG-6~~ are subject to the following portions of 40 CFR 63, Subpart ZZZZ **for existing non-emergency stationary RICE at an area source of HAP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis:**

\*\*\*\*\*

(b) The ~~existing four-stroke lean-burn landfill gas-fired reciprocating internal combustion engine-generator sets, identified as EG-5 through EG-8~~ are subject to the following portions of 40 CFR 63, Subpart ZZZZ **for new non-emergency stationary RICE at an area source of HAP:**

**Modification No. 4:**

The following reporting form has been added in order to incorporate the modification:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF AIR QUALITY  
 COMPLIANCE AND ENFORCEMENT BRANCH**

**Part 70 Quarterly Report**

**Source Name:** Deercroft Recycling & Disposal Facility  
**Source Address:** 10501 W. 300 N., Michigan City, Indiana 46360  
**Part 70 Permit No.:** T091-35561-00067  
**Facility:** Gas Fueled Engine Sets (EG-1 through EG-8)  
**Parameter:** Natural Gas Usage  
**Limit:** The total natural gas usage for all of the eight (8) gas fueled engine sets (EG-1 through EG-8) shall not exceed 300 million cubic feet (MMcf) per twelve (12) month consecutive period, with compliance determined at the end of each month.

**QUARTER:** \_\_\_\_\_ **YEAR:** \_\_\_\_\_

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.  
 Deviation has been reported on: \_\_\_\_\_

**Submitted by:** \_\_\_\_\_

**Title / Position:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Phone:** \_\_\_\_\_

<b>Conclusion and Recommendation</b>
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The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 091-36884-00067 and Significant Permit Modification No.091-36926-00067. The staff recommend to the Commissioner that this Part 70 Significant Source and Significant Permit Modification be approved.

<b>IDEM Contact</b>
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- (a) Questions regarding this proposed permit can be directed to Brian Wright at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-6544 or toll free at 1-800-451-6027 extension 4-6544.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: <http://www.in.gov/idem/5881.htm>; and the Citizens' Guide to IDEM on the Internet at: <http://www.in.gov/idem/6900.htm>.

**Appendix A: Emission Calculations  
Emission Summary**

**Company Name:** Deercroft Recycling and Disposal Facility  
**Source Address:** 10501 W 300 N, Michigan City, IN 46360  
**SSM No.:** 091-36884-00067  
**SPM No.:** 091-36926-00067  
**Reviewer:** Brian Wright

Uncontrolled Potential To Emit (ton/yr)										
Process / Emission Unit	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	Total HAPs	Single HAP	
Landfill (Collected)	0.00	0.00	0.00	0.00	0.00	7.63	4.24	10.82	3.88	Toluene
Landfill Gas Combustion*	16.80	16.80	16.80	0.17	97.35	0.75	216.82	1.91	1.91	HCl
Natural Gas Combustion*	0.02	3.01	3.01	0.18	177.09	35.60	197.31	21.62	15.93	Formaldehyde
<b>Worst Case Combustion*</b>	<b>16.80</b>	<b>16.80</b>	<b>16.80</b>	<b>0.18</b>	<b>177.09</b>	<b>35.60</b>	<b>216.82</b>	<b>21.62</b>	<b>15.93</b>	<b>Formaldehyde</b>
Landfill (Fugitive)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.91	0.69	Toluene
<b>Totals</b>	<b>16.80</b>	<b>16.80</b>	<b>16.80</b>	<b>0.18</b>	<b>177.09</b>	<b>43.23</b>	<b>221.06</b>	<b>32.44</b>	<b>15.93</b>	<b>Formaldehyde</b>
Landfill (Fugitive)	0.00	0.00	0.00	0.00	0.00	1.35	0.75	0.00	0.00	-
<b>Total Non-Fugitive and Fugitive</b>	<b>16.80</b>	<b>16.80</b>	<b>16.80</b>	<b>0.18</b>	<b>177.09</b>	<b>44.58</b>	<b>221.81</b>	<b>32.44</b>	<b>15.93</b>	<b>Formaldehyde</b>

Controlled Potential To Emit (ton/yr)										
Process / Emission Unit	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	Total HAPs	Single HAP	
Landfill (Collected)	-	-	-	-	-	-	-	-	-	-
Landfill Gas Combustion*	16.80	16.80	16.80	0.17	97.35	0.75	216.82	1.91	1.91	HCl
Natural Gas Combustion*	0.02	3.01	3.01	0.18	177.09	35.60	197.31	21.62	15.93	Formaldehyde
<b>Worst Case Combustion*</b>	<b>16.80</b>	<b>16.80</b>	<b>16.80</b>	<b>0.18</b>	<b>177.09</b>	<b>35.60</b>	<b>216.82</b>	<b>21.62</b>	<b>15.93</b>	<b>Formaldehyde</b>
Landfill (Fugitive)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.91	0.69	Toluene
<b>Totals</b>	<b>16.80</b>	<b>16.80</b>	<b>16.80</b>	<b>0.18</b>	<b>177.09</b>	<b>35.60</b>	<b>216.82</b>	<b>23.53</b>	<b>15.93</b>	<b>Formaldehyde</b>
Landfill (Fugitive)	0.00	0.00	0.00	0.00	0.00	1.35	0.75	0.00	0.00	-
<b>Total Non-Fugitive and Fugitive</b>	<b>16.80</b>	<b>16.80</b>	<b>16.80</b>	<b>0.18</b>	<b>177.09</b>	<b>36.95</b>	<b>217.57</b>	<b>23.53</b>	<b>15.93</b>	<b>Formaldehyde</b>

Limited/Controlled Potential To Emit (ton/yr)										
Process / Emission Unit	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	Total HAPs	Single HAP	
Landfill (Collected)	-	-	-	-	-	-	-	-	-	-
Landfill Gas Combustion*	16.80	16.80	16.80	0.17	97.35	0.75	216.82	1.91	1.91	HCl
Natural Gas Combustion*	0.01	1.53	1.53	0.09	89.81	18.05	100.06	10.96	8.08	Formaldehyde
<b>Worst Case Combustion*</b>	<b>16.80</b>	<b>16.80</b>	<b>16.80</b>	<b>0.17</b>	<b>97.35</b>	<b>18.05</b>	<b>216.82</b>	<b>10.96</b>	<b>8.08</b>	<b>Formaldehyde</b>
Landfill (Fugitive)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.91	0.69	Toluene
<b>Totals</b>	<b>16.80</b>	<b>16.80</b>	<b>16.80</b>	<b>0.17</b>	<b>97.35</b>	<b>18.05</b>	<b>216.82</b>	<b>12.87</b>	<b>8.08</b>	<b>Formaldehyde</b>
Landfill (Fugitive)	0.00	0.00	0.00	0.00	0.00	1.35	0.75	0.00	0.00	-
<b>Total Non-Fugitive and Fugitive</b>	<b>16.80</b>	<b>16.80</b>	<b>16.80</b>	<b>0.17</b>	<b>97.35</b>	<b>19.40</b>	<b>217.57</b>	<b>12.87</b>	<b>8.08</b>	<b>Formaldehyde</b>

LandGEM 3.02 is used to estimate the amount of landfill gas generated. AP 42, page 2.4-6, states 85% collection efficiency. Deercroft is a closed landfill (2002) with a gas collection system in place.

\*The engines are capable of burning landfill or natural gas. Potential emissions are based on worst case emissions between the landfill and natural gas for each specific pollutant.

**Appendix A: Emission Calculations  
Emission Summary**

**Company Name:** Deercroft Recycling and Disposal Facility  
**Source Address:** 10501 W 300 N, Michigan City, IN 46360  
**SSM No.:** 091-36884-00067  
**SPM No.:** 091-36926-00067  
**Reviewer:** Brian Wright

**326 IAC 2-7-10.5 Permit Level Determination – Part 70 Modification to an Existing Source**

		Uncontrolled Potential To Emit (ton/yr)									
Process / Emission Unit*		PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	Total HAPs	Single HAP	
New Units	Landfill Gas Combustion	16.80	16.80	16.80	0.17	97.35	216.82	1.91	1.91	1.91	HCl
	Natural Gas Combustion	0.023	3.01	3.01	0.18	177.09	35.60	197.31	21.62	15.93	Formaldehyde
	Worst Case PTE EG-1 through EG-8	<b>16.80</b>	<b>16.80</b>	<b>16.80</b>	<b>0.18</b>	<b>177.09</b>	<b>216.82</b>	<b>197.31</b>	<b>21.62</b>	<b>15.93</b>	<b>Formaldehyde</b>

\* The engines can burn landfill gas or natural gas. Potential emissions are based on the fuel with the highest emissions for each specific pollutant.

**Appendix A: Emission Calculations  
Landfill Emissions (Before Control)  
Collected and Fugitive Emissions**

**Company Name:** Deercroft Recycling and Disposal Facility  
**Source Address:** 10501 W 300 N, Michigan City, IN 46360  
**SSM No.:** 091-36884-00067  
**SPM No.:** 091-36926-00067  
**Reviewer:** Brian Wright

Total landfill gas production rate from EPA's Landfill Gas Emissions Model (LandGEM) Version 3.02 for year 2015

<b>Landfill Gas (LFG) Production Rate:</b>	2.780E+07	m <sup>3</sup> /yr (total landfill gas production rate from LandGEM for year 2015)
<b>Collection Efficiency:</b>	85%	(AP42, Chapter 2.4, page 2.4-6) Deercroft is a closed site with a collection efficiency of 75%.
<b>Control Efficiency:</b>	98.0%	(required by NSPS)

<b>Emissions from Landfill Gas Model* (Emissions Before Controls)</b>			
Product	m <sup>3</sup> /yr	Mg/yr	ton/yr
Total Landfill Gas	2.780E+07	3.472E+04	38,192
Methane	1.390E+07	9.274E+03	10,201
CO <sub>2</sub>	1.390E+07	2.545E+04	27,995
NMOC	5.838E+03	2.093E+01	23.02
CO	3.892E+03	4.535E+00	4.99
VOC**	-	-	8.98

<b>Landfill Gas Collected (Collection Efficiency 85%)</b>			
Product	m <sup>3</sup> /yr	Mg/yr	ton/yr
Total Landfill Gas	2.363E+07	2.951E+04	32,463
Methane	1.182E+07	7.883E+03	8,671
CO <sub>2</sub>	1.182E+07	2.163E+04	23,796
NMOC	4.962E+03	1.779E+01	19.57
CO	3.308E+03	3.854E+00	4.24
VOC**	-	-	7.63

<b>Fugitive Emissions from Landfill (15% Not Collected)</b>			
Product	m <sup>3</sup> /yr	Mg/yr	ton/yr
Total Landfill Gas	4.170E+06	5.208E+03	5,729
Methane	2.085E+06	1.391E+03	1,530
CO <sub>2</sub>	2.085E+06	3.818E+03	4,199
NMOC	8.757E+02	3.140E+00	3.45
CO	5.838E+02	6.802E-01	0.75
VOC**	-	-	1.35

Assume landfill gas is 50% methane (LandGEM 3.02)

HAP	Total Landfill Emission Rate (Before Controls)*		
	(Mg/year)	(m <sup>3</sup> /year)	(tons/year)
1,1,1-Trichloroethane (methyl chloroform)	7.405E-02	1.335E+01	0.081
1,1,2,2-Tetrachloroethane	2.135E-01	3.058E+01	0.235
1,1-Dichloroethane (ethylidene dichloride)	2.747E-01	6.673E+01	0.302
1,1-Dichloroethane (vinylidene chloride)	2.242E-02	5.560E+00	0.025
1,2-Dichloroethane (ethylene dichloride)	4.692E-02	1.140E+01	0.052
1,2-Dichloropropane (propylene dichloride)	2.352E-02	5.004E+00	0.026
Acrylonitrile	3.865E-01	1.752E+02	0.425
Benzene - No or Unknown Co-disposal	1.716E-01	5.282E+01	0.189
Carbon disulfide	5.106E-02	1.613E+01	0.056
Carbon tetrachloride	7.116E-04	1.112E-01	0.001
Carbonyl sulfide	3.404E-02	1.362E+01	0.037
Chlorobenzene	3.254E-02	6.951E+00	0.036
Chloroethane (ethyl chloride)	9.699E-02	3.614E+01	0.107
Chloroform	4.142E-03	8.341E-01	0.005
Dichlorobenzene	3.570E-02	5.838E+00	0.039
Dichloromethane (methylene chloride)	1.375E+00	3.892E+02	1.513
Ethylbenzene	5.647E-01	1.279E+02	0.621
Ethylene dibromide	2.173E-04	2.780E-02	0.000
Hexane	6.577E-01	1.835E+02	0.724
Mercury (total)	6.727E-05	8.063E-03	0.000
Methyl ethyl ketone***	5.920E-01	1.974E+02	0.651
Methyl isobutyl ketone	2.201E-01	5.282E+01	0.242
Perchloroethylene (tetrachloroethylene)	7.095E-01	1.029E+02	0.780
Toluene - No or Unknown Co-disposal	4.155E+00	1.084E+03	4.570
Trichloroethylene (trichloroethene) -	4.255E-01	7.785E+01	0.468
Vinyl chloride	5.276E-01	2.030E+02	0.580
Xylenes	1.473E+00	3.336E+02	1.620

**Total HAP Emissions (Before Control): 12.73**  
**Highest Single HAP Emissions (Before Control): 4.570 (Toluene)**  
  
**Total HAP Emissions (85% Collected): 10.82**  
**Highest Single HAP Emissions (85% Collected): 3.88 (Toluene)**  
  
**Total Fugitive HAP Emissions (15% Not Collected): 1.91**  
**Highest Single Fugitive HAP Emissions (15% Not Collected): 0.69 (Toluene)**

\*These emissions come from the LandGEM (version 3.02) output for this landfill. Values represent the worst case scenario from the current year moving forward. Values used are from the year 2015, which represents the highest uncontrolled emission moving forward.  
\*\*VOC is assumed to be 39% of the non-methane organic compounds (NMOC) produced by the landfill (AP-42 Section 2.4, Municipal Solid Waste Landfills, Table 2.4-2, dated 11/1998)  
\*\*\*MEK emissions have been deleted from the total since MEK was removed from the HAP list by EPA and IDEM.

**Methodology**

Emissions Before Controls (tons/yr) = Emissions at Closure (Mg/yr) (from LandGEM 3.02) x 1.1 tons/Mg  
Landfill Gas Collected = Emissions Before Controls (ton/yr) x (Collection Efficiency)  
Fugitive Emissions = Emissions Before Control (ton/yr) x (1 - Collection Efficiency)

**Appendix A: Emission Calculations  
Flare and Engine Emissions  
Criteria Pollutants**

**Company Name:** Deercroft Recycling and Disposal Facility  
**Source Address:** 10501 W 300 N, Michigan City, IN 46360  
**SSM No.:** 091-36884-00067  
**SPM No.:** 091-36926-00067  
**Reviewer:** Brian Wright

Combustion Emissions From the Open Flare and Engines			
<b>Landfill Gas (LFG) Production Rate:</b>	2.780E+07	m <sup>3</sup> /yr (total landfill gas production rate from LandGEM for year 2015)	
	1,868	SCFM (total landfill gas production rate from LandGEM for year 2015)	
<b>Collection Efficiency:</b>	85%	(AP-42, Chapter 2.4, page 2.4-6) Deercroft is a closed site with a collection efficiency of 75%.	
<b>Control Efficiency:</b>	98.0%	(required by NSPS, Subpart WWW)	
<b>Landfill Gas Methane Content by Volume:</b>	50.0%	based on LandGEM Version 3.02	

Emission Unit ID #	Maximum LFG Flow Rate (Each Unit) (scfm)	Number of Units (scfm)	Total Maximum LFG Flow Rate (scfm)	Total Maximum Methane Flow Rate (scfm)	Maximum Brake Horsepower (Each) (bhp-hr)	Total Maximum Brake Horsepower (bhp-hr)
EG-1, through EG-4	333	4	1332	666	1,148	4,592
EG-5 through EG-8	333	4	1332	666	1,148	4,592
Flare	1868	1	1868	934	N/A	N/A

Pollutant Emission Factors (EF)							
Emission Unit	PM <sup>a</sup>	PM <sub>10</sub> <sup>a</sup>	PM <sub>2.5</sub> <sup>a</sup>	Total Reduced Sulfur <sup>b</sup>	NO <sub>x</sub> <sup>d,e</sup>	CO <sup>d,e</sup>	NMOC <sup>c</sup>
	(lb/10 <sup>6</sup> dscf methane)	(lb/10 <sup>6</sup> dscf methane)	(lb/10 <sup>6</sup> dscf methane)	(ppmv as S)	grams/bHp-hr	grams/bHp-hr	(ppmv as hexane)
Internal Combustion Engines	48	48	48	46.9	1.10	2.45	602
Flare	17	17	17	46.9	80	444	602

Molecular Weight (MW) of S = 32.07 lb/lb-mole  
Molecular Weight (MW) of SO<sub>2</sub> = 64.06 lb/lb-mole  
Molecular Weight (MW) of Hexane (C<sub>6</sub>H<sub>14</sub>) = 86.18 lb/lb-mole

Potential To Emit (ton/yr)								
Emission Unit	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	NMOC	VOC <sup>d,e</sup>
EG-1, EG-2, EG-4	8.40	8.40	8.40	0.09	48.67	108.41	0.96	0.37
EG-5 through EG-8	8.40	8.40	8.40	0.09	48.67	108.41	0.96	0.37
<b>Engine Total</b>	<b>16.80</b>	<b>16.80</b>	<b>16.80</b>	<b>0.17</b>	<b>97.35</b>	<b>216.82</b>	<b>1.91</b>	<b>0.75</b>
Flare	4.17	4.17	4.17	0.12	19.64	108.98	1.34	0.52
<b>Worst Case PTE<sup>h</sup></b>	<b>16.80</b>	<b>16.80</b>	<b>16.80</b>	<b>0.17</b>	<b>97.35</b>	<b>216.82</b>	<b>1.91</b>	<b>0.75</b>

Estimated heating value for the landfill gas is 506 British thermal units per cubic foot (Btu/ft<sup>3</sup>).

Assume landfill gas is 50% methane by volume (LandGEM Version 3.02)

Fuel Input to Flares (MMBtu/hr) = Flow rate (scfm) x 60 (min/hr) x 506 (Btu/scf) x 1/1,000,000 (MMBtu/Btu).

Assume PM emissions equal to PM<sub>10</sub> and PM<sub>2.5</sub> emissions.

<sup>a</sup> Emission Factors are from AP-42, Chapter 2.4 - Municipal Solid Waste Landfills, Table 2.4-5; Flares and IC Engines (AP-42, 11/98).

<sup>b</sup> The concentration of total reduced sulfur compounds from AP-42, Chapter 2.4 - Municipal Solid Waste Landfills (11/98) - page 2.4-6, which uses the default concentrations in Table 2.4-1 for reduced sulfur compounds and equation 8.

<sup>c</sup> The NMOC concentration is a site specific value that was submitted to IDEM in 2015 as part of Part 70 Renewal 091-36884-00067.

<sup>d</sup> The emission factors for NO<sub>x</sub> and CO for the 4,000 scfm open flare are provided by the manufacturer as guaranteed stack gas emission factors for this equipment.

<sup>e</sup> The emission factors for NO<sub>x</sub> and CO for the LFG-fired engines are provided by the source based off stack testing and data gathered for similar emission units at Prairie View RDF (141-00051)

<sup>f</sup> The total VOC emissions from the landfill, flares, and engines are assumed to be 39% of the NMOC produced, as found in AP-42, Chapter 2.4 - Municipal Solid Waste Landfills - Table 2.4

<sup>g</sup> The only limits that apply to these units is 40 CFR 60, subpart WWW. 40 CFR 60, subpart WWW requires the flare to operate at 98% efficiency for NMOC, therefore, worst case limited NMOC emissions are based on the engines consuming the majority of the landfill gas and the remaining emissions controlled by the flare

<sup>h</sup> Since the Deercroft Recycling and Disposal Facility is a close landfill, the landfill gas (LFG) flowrate and potential to emit pollution will decrease with time (see results from LandGEM Version 3.02). Since LandGEM predicts that the landfill will only produce 1,868 scfm of LFG in 2015, the landfill will not produce enough LFG to operate all the seven (7) generator sets and the open flare (FL-3) simultaneously. Therefore, the PTE was based on the worst case PTE between the seven (7) generator sets operating at maximum capacity and the open flare (FL-3) using the maximum landfill gas production from LandGEM for year 2015.

**Methodology**

Limited PTE of PM / PM<sub>10</sub> / PM<sub>2.5</sub> / NO<sub>x</sub> / CO (ton/yr) = (Methane Flow Rate scfm) / 106 x EF (lb/106 dscf methane) x (60 min/hr) x (8760 hr/yr) / (2000 lb/ton)

Limited PTE of SO<sub>2</sub> (ton/yr) = (LFG Flow Rate scfm) x (EF ppmv) / 1000000 x 1 atm / Gas Constant (0.7302 atm-cf/lb mole-R) / Temp (60F + 460) x (MW of SO<sub>2</sub> / MW of S) x (1 lb-mole S/lb-mole SO<sub>2</sub>) x (60 min/hr) x (8760 hr/yr) / (2000 lb/ton)

Limited PTE of NMOC (ton/yr) = (LFG Flow Rate scfm) x (EF ppmv) / 1000000 x 1 atm / Gas Constant (0.7302 atm-cf/lb mole-R) / Temp (60F + 460) x (MW of Hexane / lb/lb mole) x (60 min/hr) x (8760 hr/yr) / (2000 lb/ton) x (1-97.2% Control Efficiency)

Limited PTE of VOC (ton/yr) = (Limited PTE of NMOC ton/yr) \* (VOC content of 39%)

**Appendix A: Emission Calculations  
Flare and Engine Emissions  
HAP Emissions**

**Company Name:** Deercroft Recycling and Disposal Facility  
**Source Address:** 10501 W 300 N, Michigan City, IN 46360  
**SSM No.:** 091-36884-00067  
**SPM No.:** 091-36926-00067  
**Reviewer:** Brian Wright

Flare Heat Input Capacity	144.00	MMBtu/hr
Heating Value of Landfill Gas	506.00	Btu/CF
Inlet Gas Temperature	527.67	°R
Inlet Gas Pressure	1.00	atm
Design Flare Gas Flow	4,000.00	SCFM
Design Flare Gas Flow	2,102.40	MMCF/year
% by Volume Water in Landfill Gas*	0%	

Molecular Weight (S)	32.07	lb/lb.mole
Molecular Weight (SO <sub>2</sub> )	64.06	lb/lb.mole
Molecular Weight (HCL)	36.46	lb/lb.mole
Molecular Weight (CL)	35.45	lb/lb.mole
Molecular Weight (Hexane)	86.18	lb/lb.mole
Molecular Weight (HF)	20.01	lb/lb.mole
Molecular Weight (F)	19.00	lb/lb.mole

Flare HAP HCl Emissions				
Pollutant	Pollutant Concentration (ppmv)**	Flare Gas Flow Rate (SCFM)	Pollutant Flow Rate (SCFM)	PTE (tons/yr)
Cl	42.0	1,868.0	0.0785	1.90
HCl				<b>1.91</b>

\*0% is the most conservative estimate for calculating emissions  
 \*\*Default value was taken from AP-42 Ch. 2.4.4

**METHODOLOGY**

Pollutant Flow (SCFM) = [Total Landfill Gas Flow (SCFM)] x [ppmv pollutant / 1,000,000]  
 PTE VOC Prior Flare Tip (TPY) = 360 x Pollutant Flow (SCFM) x Molecular Weight (lb/lb.mole) x P (atm) / T (°R); AP-42 Ch. 2.4, Eq. 4, Converted to US Units  
 HCL PTE (tons/yr) = Cl PTE (tons/yr) \* Molecular Weight (HCL) / Molecular Weight (CL) \* 0.98

**Engine HAP Emissions**

HAP Collection Efficiency (%):	85.00%
HAP Control Efficiency* (%):	86.10%

HAP	Total Landfill Emission Rate (Before Controls) <sup>a</sup>			PTE (After Control)
	(Mg/year)	(m <sup>3</sup> /year)	(tons/year)	(tons/year)
1,1,1-Trichloroethane (methyl chloroform)	7.405E-02	1.335E+01	0.081	0.010
1,1,2,2-Tetrachloroethane	2.135E-01	3.058E+01	0.235	0.028
1,1-Dichloroethane (ethylidene dichloride)	2.747E-01	6.673E+01	0.302	0.036
1,1-Dichloroethene (vinylidene chloride)	2.242E-02	5.560E+00	0.025	0.003
1,2-Dichloroethane (ethylene dichloride)	4.692E-02	1.140E+01	0.052	0.006
1,2-Dichloropropane (propylene dichloride)	2.352E-02	5.004E+00	0.026	0.003
Acrylonitrile	3.865E-01	1.752E+02	0.425	0.050
Benzene - No or Unknown Co-disposal	1.716E-01	5.282E+01	0.189	0.022
Carbon disulfide	5.106E-02	1.613E+01	0.056	0.007
Carbon tetrachloride	7.116E-04	1.112E-01	0.001	0.000
Carbonyl sulfide	3.404E-02	1.362E+01	0.037	0.004
Chlorobenzene	3.254E-02	6.951E+00	0.036	0.004
Chloroethane (ethyl chloride)	9.699E-02	3.614E+01	0.107	0.013
Chloroform	4.142E-03	8.341E-01	0.005	0.001
Dichlorobenzene	3.570E-02	5.838E+00	0.039	0.005
Dichloromethane (methylene chloride)	1.375E+00	3.892E+02	1.513	0.179
Ethylbenzene	5.647E-01	1.279E+02	0.621	0.073
Ethylene dibromide	2.173E-04	2.780E-02	0.000	0.000
Hexane	6.577E-01	1.835E+02	0.724	0.085
Mercury (total)**	6.727E-05	8.063E-03	0.000	0.000
Methyl ethyl ketone***	5.920E-01	1.974E+02	0.651	0.077
Methyl isobutyl ketone	2.201E-01	5.282E+01	0.242	0.029
Perchloroethylene (tetrachloroethylene)	7.095E-01	1.029E+02	0.780	0.092
Toluene - No or Unknown Co-disposal	4.155E+00	1.084E+03	4.570	0.540
Trichloroethylene (trichloroethene)	4.255E-01	7.785E+01	0.468	0.055
Vinyl chloride	5.276E-01	2.030E+02	0.580	0.069
Xylenes	1.473E+00	3.336E+02	1.620	0.191
<b>Total HAP Emissions (Engines Only)</b>		<b>12.73</b>	<b>1.50</b>	
<b>Highest Single HAP Emissions (Engines Only)</b>		<b>4.57</b>	<b>0.54</b>	<b>(Toluene)</b>

Worst Case PTE (between flare and engines) HAP Emission Summary		
<b>Total HAP Emissions (tons/year):</b>	<b>1.91</b>	
<b>Highest Single HAP Emissions (tons/year):</b>	<b>1.91</b>	<b>(HCl)</b>

<sup>a</sup> Control Efficiency (%) is worse-case control efficiency from AP-42, Chapter 2.4 - Municipal Solid Waste Landfill - Table 2.4-3 for Internal Combustion (IC) Engines for Non-Halocarbonated Species  
 \*\*No data were available to associate total Hg into the elemental versus organic forms  
 \*\*\*Methyl ethyl ketone was removed from the list of HAPs contained in Section 112 of the Clean Air Act (CAA) by the EPA per Federal Register 70 FR 75047.

**Appendix A: Emission Calculations  
 Reciprocating Internal Combustion Engines - Natural Gas  
 4-Stroke Lean-Burn (4SLB) Engines  
 Eight (8) Gas Fueled Engine Sets (EG-1 through EG-8)**

**Company Name:** Deercroft Recycling and Disposal Facility  
**Source Address:** 10501 W 300 N, Michigan City, IN 46360  
**SSM No.:** 091-36884-00067  
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**Reviewer:** Brian Wright

Maximum Output Horsepower Rating (hp)	1148	(each unit)
Number of Units	8	
Total Maximum Output Horsepower Rating (hp)	9184	
Brake Specific Fuel Consumption (BSFC) (Btu/hp-hr)	7500	
Maximum Hours Operated per Year (hr/yr)	8760	
Potential Fuel Usage (MMBtu/yr)	603389	
High Heat Value (MMBtu/MMscf)	1020	
Potential Fuel Usage (MMcf/yr)	591.56	

Criteria Pollutants	Pollutant						
	PM*	PM10*	PM2.5*	SO2	NOx**	VOC	CO**
Emission Factor (lb/MMBtu)	7.71E-05	9.99E-03	9.99E-03	5.88E-04	5.87E-01	1.18E-01	6.54E-01
Potential Emissions (tons/yr)	0.0233	3.01	3.01	0.177	177.09	35.60	197.31

\*PM emission factor is for filterable PM-10. PM10 emission factor is filterable PM10 + condensable PM.  
 PM2.5 emission factor is filterable PM2.5 + condensable PM.

**Hazardous Air Pollutants (HAPs)**

Pollutant	Emission Factor (lb/MMBtu)	Potential Emissions (tons/yr)
Acetaldehyde	8.36E-03	2.522
Acrolein	5.14E-03	1.551
Benzene	4.40E-04	0.133
Biphenyl	2.12E-04	0.064
1,3-Butadiene	2.67E-04	0.081
Formaldehyde	5.28E-02	15.929
Methanol	2.50E-03	0.754
Hexane	1.10E-03	0.332
Toluene	4.08E-04	0.123
2,2,4-Trimethylpentane	2.50E-04	0.075
Xylene	1.84E-04	0.056
<b>Total</b>		<b>21.62</b>

HAP pollutants consist of the eleven highest HAPs included in AP-42 Table 3.2-2.

**Methodology**

Emission Factors are from AP-42 (Supplement F, July 2000), Table 3.2-2

\*\*Emission factors for Nox and CO are based on the engine technical data supplied by the manufacturer

Potential Fuel Usage (MMBtu/yr) = [Total Maximum Output Horsepower Rating (hp)] \* [Brake Specific Fuel Consumption (Btu/hp-hr)] \* [Maximum Hours Operated per Year (hr/yr)] / [1000000 Btu/MMBtu]

Potential Emissions (tons/yr) = [Potential Fuel Usage (MMBtu/yr)] \* [Emission Factor (lb/MMBtu)] / [2000 lb/ton]

**Appendix A: Emission Calculations  
 Reciprocating Internal Combustion Engines - Natural Gas  
 4-Stroke Lean-Burn (4SLB) Engines  
 Eight (8) Gas Fueled Engine Sets (EG-1 through EG-8)  
 Limited Potential to Emit**

**Company Name:** Deercroft Recycling and Disposal Facility  
**Source Address:** 10501 W 300 N, Michigan City, IN 46360  
**SSM No.:** 091-36884-00067  
**SPM No.:** 091-36926-00067  
**Reviewer:** Brian Wright

Limited Fuel Usage (MMcf/yr)	300.00
High Heat Value (MMBtu/MMscf)	1020
Limited Fuel Usage (MMBtu/yr)	306000
Formaldehyde Limit (lb/MMcf)	53.86

Criteria Pollutants	Pollutant						
	PM*	PM10*	PM2.5*	SO2	NOx**	VOC	CO**
Emission Factor (lb/MMBtu) (AP-42)	7.71E-05	9.99E-03	9.99E-03	5.88E-04	4.08E+00	1.18E-01	3.17E-01
Emission Factor (lb/MMBtu) (Manufacturer)*					5.87E-01		6.54E-01
Limited Emissions (tons/yr)	0.0118	1.53	1.53	0.090	89.81	18.05	100.06

\*PM emission factor is for filterable PM-10. PM10 emission factor is filterable PM10 + condensable PM.  
 PM2.5 emission factor is filterable PM2.5 + condensable PM.

**Hazardous Air Pollutants (HAPs)**

Pollutant	Emission Factor (lb/MMBtu)	Limited Emissions (tons/yr)
Acetaldehyde	8.36E-03	1.279
Acrolein	5.14E-03	0.786
Benzene	4.40E-04	0.067
Biphenyl	2.12E-04	0.032
1,3-Butadiene	2.67E-04	0.041
Formaldehyde	5.28E-02	8.078
Methanol	2.50E-03	0.383
Hexane	1.10E-03	0.168
Toluene	4.08E-04	0.062
2,2,4-Trimethylpentane	2.50E-04	0.038
Xylene	1.84E-04	0.028
<b>Total</b>		<b>10.96</b>

HAP pollutants consist of the eleven highest HAPs included in AP-42 Table 3.2-2.

**Methodology**

Emission Factors are from AP-42 (Supplement F, July 2000), Table 3.2-2

\*\*Emission factors for NOx and CO are based on the engine technical data supplied by the manufacturer. Since the NOx emission factor is less than the AP-42 emission factor, Deercroft Recycling and Disposal Facility shall perform NOx testing to verify the emission factor. The CO emission factor is greater than AP-42.

Limited Fuel Usage (MMBtu/yr) = [Maximum Output Horsepower Rating (hp)] \* [Brake Specific Fuel Consumption (Btu/hp-hr)] \* [Maximum Hours Operated per Year (hr/yr)] / [1000000 Btu/MMBtu]

Limited Emissions (tons/yr) = [Limited Fuel Usage (MMBtu/yr)] \* [Emission Factor (lb/MMBtu)] / [2000 lb/ton]



# Indiana Department of Environmental Management

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204

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**Michael R. Pence**  
*Governor*

**Carol S. Comer**  
*Commissioner*

## **SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED**

**TO:** Phillip Mazor  
Deercroft Recycling & Disposal Facility  
700 56<sup>th</sup> Avenue  
Zeeland, MI 49464

**DATE:** August 23, 2016

**FROM:** Matt Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

**SUBJECT:** Final Decision  
Title V Significant Permit Modification  
091-36926-00067

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:  
Laura Niemann, Environmental Information Logistics, LLC  
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at [jbrush@idem.IN.gov](mailto:jbrush@idem.IN.gov).

Final Applicant Cover letter.dot 2/17/2016



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**Michael R. Pence**  
*Governor*

**Carol S. Comer**  
*Commissioner*

August 23, 2016

TO: Michigan City Public Library

From: Matthew Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

Subject: **Important Information for Display Regarding a Final Determination**

**Applicant Name: Deercroft Recycling & Disposal Facility**  
**Permit Number: 091-36926-00067**

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures  
Final Library.dot 2/17/2016

# Mail Code 61-53

IDEM Staff	VHAUN 8/23/2016 Deercroft Recycling and Disposal Facility (RDF) 091-36926-00067 FINAL			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail:  <b>CERTIFICATE OF MAILING ONLY</b>	

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1		Phillip Mazor Deercroft Recycling and Disposal Facility (RDF) 700 56th Avenue Zeeland MI 49464-9328 (Source CAATS)										
2		LaPorte City Council/ Mayors Ofc. 801 Michigan Avenue LaPorte IN 46350 (Local Official)										
3		Laporte County Public Library-Michigan City Branch 100 East 4th Street Michigan City IN 46360-3393 (Library)										
4		LaPorte County Commissioners 555 Michigan Avenue # 202 LaPorte IN 46350 (Local Official)										
5		Mr. Dennis Hahney Pipefitters Association, Local Union 597 1461 East Summit St Crown Point IN 46307 (Affected Party)										
6		Michigan City-City Council and Mayors Office 100 E. Michigan Blvd. Michigan City IN 46360 (Local Official)										
7		LaPorte County Health Department County Complex, 4th Floor, 809 State St. LaPorte IN 46350-3329 (Health Department)										
8		Laura Niemann Environmental Information Logistics, LLC 130 E Main Street Caledonia MI 49316 (Consultant)										
9		Shaw R. Friedman Friedman & Associates PC 705 Lincolnway LaPorte IN 46350 (Affected Party)										
10		Mr. Dick Paulen Barnes & Thornburg 121 W Franklin Street Elkhart IN 46216 (Affected Party)										
11												
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