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

Eric J. Holcomb
Governor

Bruno L. Pigott
Commissioner

NOTICE OF 30-DAY PERIOD
FOR PUBLIC COMMENT

Preliminary Findings Regarding a Significant Modification to a Part 70 Operating Permit
for Zimmerman Energy, LLC in Fulton County

Significant Source Modification No.: 049-42921-00038
Significant Permit Modification No.: 049-43058-00038

The Indiana Department of Environmental Management (IDEM) has received an application from Zimmerman Energy, LLC, located at 7922 N. Hwy. 31, Argos, IN 46501, for a significant modification of its Part 70 Operating Permit issued on August 30, 2018. If approved by IDEM's Office of Air Quality (OAQ), this proposed modification would allow Zimmerman Energy, LLC to make certain changes at its existing source. Zimmerman Energy, LLC has applied to add a new land fill gas-fueled reciprocating internal combustion engine generator set, which uses natural gas as a back-up combustion fuel, and is identified as ENG04.

The applicant intends to construct and operate new equipment that will emit air pollutants; therefore, the permit contains new or different permit conditions. In addition, some conditions from previously issued permits/approvals have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes (e.g., changes that add or modify synthetic minor emission limits). IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow the applicant to make this change.

A copy of the permit application and IDEM's preliminary findings have been sent to:

Argos Public Library
142 North Michigan Street,
Argos, IN 46501

Fulton County Public Library
320 West 7th Street
Rochester, IN 46975

IDEM Northern Regional Office
300 North Dr. Martin Luther King
Jr. Boulevard, Suite 450
South Bend, IN 46601-1295

A copy of the preliminary findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/.
A copy of the application and preliminary findings is also available via IDEM's Virtual File Cabinet (VFC). To access VFC, please go to: http://www.in.gov/idem/ and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria.

How can you participate in this process?

The date that this notice is posted on IDEM's website (https://www.in.gov/idem/5474.htm) marks the beginning of a 30-day public comment period. If the 30th day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the **air pollution impact** of this draft permit are received, with a request for a public hearing, IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing,

you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM's mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number SSM 049-42921-00038 and SPM 049-43058-00038 in all correspondence.

Comments should be sent to:

Daniel W. Pell
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for Daniel W. Pell or (317) 234-8532
Or dial directly: (317) 234-8532
Fax: (317) 232-6749 attn: Daniel W. Pell
E-mail: dpell@idem.IN.gov

All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor, or noise. For such issues, please contact your local officials.

For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: http://www.in.gov/idem/airquality/2356.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

What will happen after IDEM makes a decision?

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM's response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM's decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above and will also be sent to the local library indicated above, the IDEM Regional Office indicated above, and the IDEM public file room on the 12th floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251.

If you have any questions, please contact Daniel W. Pell of my staff at the above address.

Heath Hartley, Section Chief
Permits Branch
Office of Air Quality

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DRAFT

Ms. Emily Zambuto
Zimmerman Energy, LLC
2999 Judge Road
Oakfield, NY 14125-9771

Re: 049-43058-00038
Significant Permit Modification

Dear Ms. Zambuto:

Zimmerman Energy, LLC was issued Part 70 Operating Permit Renewal No. T049-39490-00038 on August 30, 2018 for a stationary electricity generating facility located at 7922 North US Hwy. 31, Argos, IN 46501. An application requesting changes to this permit was received on June 4, 2020. 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 attachments. 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 Part 60, Subpart JJJJ, New Source Performance Standards for Stationary Spark Ignition Internal Combustion Engines
Attachment B - 40 CFR Part 60, Subpart WWW, New Source Performance Standards for Municipal Solid Waste Landfills
Attachment C - 40 CFR Part 60, Subpart IIII, New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines
Attachment D - 40 CFR 63, Subpart AAAA - National Emissions Standards for Hazardous Air Pollutants for Municipal Solid Waste Landfills
Attachment E - 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

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

Previously issued approvals for this source are also available via IDEM's Virtual File Cabinet (VFC). To access VFC, please go to: http://www.in.gov/idem/ and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria.

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.

A copy of the permit is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/. A copy of the application and permit is also available via IDEM's Virtual File Cabinet (VFC). To access VFC, please go to: http://www.in.gov/idem/ and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on

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the Internet at: http://www.in.gov/idem/airquality/2356.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 regarding this matter, please contact Daniel W. Pell, 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) 234-8532 or (800) 451-6027, and ask for Daniel W. Pell or (317) 234-8532.

Sincerely,

Heath Hartley, Section Chief
Permits Branch
Office of Air Quality

Attachments: Modified Permit, PTE Calculations, and Technical Support Document

cc: File – Fulton County
Fulton County Health Department
U.S. EPA, Region 5
Compliance and Enforcement Branch
IDEM Northern Regional Office

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Part 70 Operating Permit Renewal
OFFICE OF AIR QUALITY

Zimmerman Energy, LLC
7922 N Hwy 31
Argos, Indiana 46501

(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.: T049-39490-00038 Master Agency Interest ID.: 105706	
Issued by: Original signed by: Tripurari P. Sinha, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: August 30, 2018 Expiration Date: August 30, 2023

Significant Permit Modification No.: 049-43058-00038	
Issued by: Heath Hartley, Section Chief Permits Branch Office of Air Quality	Issuance Date: Expiration Date: August 30, 2023

TABLE OF CONTENTS

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 electricity generating facility.

Source Address:	7922 N Hwy 31, Argos, Indiana 46501
General Source Phone Number:	248-380-3920
SIC Code:	4911(Electric Services)
County Location:	Fulton
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Minor Source, under PSD Major Source, Section 112 of the Clean Air Act 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) Three (3) Caterpillar Model G3520C 1500 rpm 4-stroke lean burn Internal Combustion (IC) Engines with a power generation rating of 2,740 brake horsepower (bhp), identified as ENG01 - ENG03, constructed in 2013, firing landfill gas (LFG) from County Line Landfill as a primary fuel, utilizing pipeline Natural Gas as a backup fuel, with a maximum heat input capacity of 20.8 MMBtu/hr (Higher Heating Value) each, equipped with an air-to-fuel ratio controller and exhausting to stack S01 - S03, respectively. Each engine is connected to 1,966 kW electricity generators.

[Under 40 CFR 60, Subpart JJJJ, reciprocating internal combustion engines are considered new affected facilities]

[Under 40 CFR 63, Subpart ZZZZ reciprocating internal combustion engines are considered new affected facilities]

(b) One (1) Caterpillar Model G3520C 1,200 rpm 4-stroke lean burn Internal Combustion (IC) Engine with a power generation rating of 2,242 brake horsepower (bhp), identified as ENG04, approved in 2020 for construction, manufactured on July 20, 2005, firing landfill gas (LFG) from County Line Landfill as a primary fuel, utilizing pipeline Natural Gas as a backup fuel, with a maximum heat input capacity of 17.5 MMBtu/hr (Higher Heating Value), equipped with an air-to-fuel ratio controller and exhausting to stack S04. Engine is connected to 1,600 kW electricity generator.

[Under 40 CFR 63, Subpart ZZZZ reciprocating internal combustion engines are considered new affected facilities]

(c) Landfill Gas Treatment and Conditioning System by passing gas through siloxane removal system, identified as GCS01, equipped with one (1) enclosed flare to control purge gas produced during vessel regeneration process, identified as FLR01 with a

maximum heat input capacity of 3.8 MMBtu/hr (Lower Heating Value), constructed in 2013, and exhausting to stack S05. Removal System is capable of treating 2,500 SCFM of landfill gas.

[Under 40 CFR 60, Subpart WWW, Landfill Gas conditioning system (GCS01), FLR01 is considered an affected facility]

[Under 40 CFR 63, Subpart AAAA, Landfill Gas conditioning system (GCS01), FLR01 is considered an affected facility]

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

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

(a) Paved and unpaved roads.

(b) One (1) 157 hp (100 kW-hr) Caterpillar Model C4.4, emergency diesel-fired generator, identified as EGEN01, constructed in 2013, and equipped with 200 gallons diesel fuel storage tank.

[Under 40 CFR 60, Subpart IIII emergency diesel-fired engine is considered a new affected facility]

[Under 40 CFR 63, Subpart ZZZZ emergency diesel fired engine is considered a new affected facility]

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

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]

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)]

(a) This permit, T 049-39490-00038, 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]

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]

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)]

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)]

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)]

(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 5
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]

(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 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

(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 T 049-39490-00038 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]

(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)]

(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]

(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)]

(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]

(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 5
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]

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]

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]

(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 317-233-8590 (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 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-1(3), 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4, and 326 IAC 1-7-5(a), (b), and (d) are not federally enforceable.

C.7 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(c).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(d).

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.8 Performance Testing [326 IAC 3-6]

(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.9 Compliance Requirements [326 IAC 2-1.1-11]

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

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

(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.12 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.13 Risk Management Plan [326 IAC 2-7-5(11)] [40 CFR 68]

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.14 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

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.15 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.16 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]

In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), starting in 2004 and every three (3) years thereafter, the Permittee shall submit by July 1 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.17 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.18 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.19 Compliance with 40 CFR 82 and 326 IAC 22-1

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:

(a) Three (3) Caterpillar Model G3520C 1500 rpm 4-stroke lean burn Internal Combustion (IC) Engines with a power generation rating of 2,740 brake horsepower (bhp), identified as ENG01 - ENG03, constructed in 2013, firing landfill gas (LFG) from County Line Landfill as a primary fuel, utilizing pipeline Natural Gas as a backup fuel, with a maximum heat input capacity of 20.8 MMBtu/hr (Higher Heating Value) each, equipped with an air-to-fuel ratio controller and exhausting to stack S01 - S03 respectively. Each engine is connected to 1,966 kW electricity generators.

[Under 40 CFR 60, Subpart JJJJ, reciprocating internal combustion engines are considered new affected facilities]

[Under 40 CFR 63, Subpart ZZZZ reciprocating internal combustion engines are considered new affected facilities]

(b) One (1) Caterpillar Model G3520C 1,200 rpm 4-stroke lean burn Internal Combustion (IC) Engine with a power generation rating of 2,242 brake horsepower (bhp), identified as ENG04, approved in 2020 for construction, manufactured on July 20, 2005, firing landfill gas (LFG) from County Line Landfill as a primary fuel, utilizing pipeline Natural Gas as a backup fuel, with a maximum heat input capacity of 17.5 MMBtu/hr (Higher Heating Value), equipped with an air-to-fuel ratio controller and exhausting to stack S04. Engine is connected to 1,600 kW electricity generator.

[Under 40 CFR 63, Subpart ZZZZ reciprocating internal combustion engines are considered new affected facilities]

Insignificant Activity

(b) One (1) 157 hp (100 kW-hr) Caterpillar Model C4.4, emergency diesel-fired generator, identified as EGEN01, constructed in 2013, and equipped with 200 gallons diesel fuel storage tank.

[Under 40 CFR 60, Subpart IIII emergency diesel-fired engine is considered a new affected facility]

[Under 40 CFR 63, Subpart ZZZZ emergency diesel fired engine is considered a new affected facility]

(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 PSD Minor Limit [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

(a) The total hours of operation for the diesel fired emergency generator, identified as EGEN01, shall be limited to less than 50 hours per twelve (12) consecutive month period with compliance determined at the end of each month.

(b)

Emission Unit	Unit ID	CO (lb/hp-hr)
Emergency Generator	EGEN01	0.0067

(c) The combined CO emissions from the four genset engines ENG01, ENG02, ENG03, and ENG04, shall be less than 245 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with these limits, combined with the potential to emit CO from all other emission units at this source, shall limit the source-wide total potential to emit CO to less than two-hundred fifty (250) tons per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.2 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements [326 IAC 2-7-5(1)]

D.1.3 Carbon Monoxide (CO) Emission Determination

In order to determine compliance with the CO emission limitation in Condition D.1.1(c), the Permittee shall determine the CO emissions for each month for the engines as follows:

CO Emissions (ton/month) =

$$\sum_{m=1}^{12}\left[[Ef1 * Y1] + [Ef2 * Y2] + [Ef3 * Y3] + [\,Ef4 * Y4]\right]_m * \frac{1\ lb}{453.5g} * \frac{1\ ton}{2{,}000\ lbs}$$

Where:

Ef1 = 2.89 g/bhp-hr, or the emission factor determined from the latest IDEM approved stack test for ENG01.
Y1 = No. of brake horsepower hours (bhp-hr) operated per month for Engine ENG01
Ef2 = 2.65 g/bhp-hr, or the emission factor determined from the latest IDEM approved stack test for ENG02.
Y2 = No. of brake horsepower hours (bhp-hr) operated per month for Engine ENG02
Ef3 = 2.56 g/bhp-hr, or the emission factor determined from the latest IDEM approved stack test for ENG03.
Y3 = No. of brake horsepower hours (bhp-hr) operated per month for Engine ENG03
Ef4 = 2.56 g/bhp-hr, or the emission factor determined from the latest IDEM approved stack test for ENG04.
Y4 = No. of brake horsepower hours (bhp-hr) operated per month for Engine ENG04

D.1.4 Testing Requirements [326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Condition D.1.1(d), the Permittee shall perform CO testing of the Engines ENG01 through ENG03 utilizing methods as approved by the Commissioner at least once every 5 years from the date of the most recent valid compliance demonstration. 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.

(b) Not later than 180 days after the startup of ENG04, the Permittee shall perform CO testing of ENG04 utilizing methods approved by the commissioner at least once every 5 years from the date of the most recent valid compliance demonstration. 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.1.5 Record Keeping Requirement

(a) In order to document the compliance status with Condition D.1.1(a), the Permittee shall maintain monthly records of hours of operation of the emergency generator identified as EGEN01.

(b) In order to document the compliance status with Condition D.1.1(c), the Permittee shall maintain monthly records of the combined CO emissions from the four genset engines ENG01, ENG02, ENG03, and ENG04, including bhp-hr/month of each engine.

(c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the record keeping required by this condition.

D.1.6 Reporting Requirement

(a) A quarterly report of the information to document the compliance status with Condition D.1.1(a) shall be submitted not later than thirty (30) days following the end of each calendar quarter. Section C - General Reporting Requirements 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).

(b) A quarterly report of the information to document the compliance status with Condition D.1.1(c) shall be submitted not later than thirty (30) days following the end of each calendar quarter. Section C - General Reporting Requirements 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 NSPS

Emissions Unit Description:

(a) Three (3) Caterpillar Model G3520C 1500 rpm 4-stroke lean burn Internal Combustion (IC) Engines with a power generation rating of 2,740 brake horsepower (bhp), identified as ENG01 - ENG03, constructed in 2013, firing landfill gas (LFG) from County Line Landfill as a primary fuel, utilizing pipeline Natural Gas as a backup fuel, with a maximum heat input capacity of 20.8 MMBtu/hr (Higher Heating Value) each, equipped with an air-to-fuel ratio controller and exhausting to stack S01 - S03, respectively. Each engine is connected to 1,966 kW electricity generators.

[Under 40 CFR 60, Subpart JJJJ, reciprocating internal combustion engines are considered new affected facilities]

[Under 40 CFR 63, Subpart ZZZZ reciprocating internal combustion engines are considered new affected facilities]

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

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

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

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 60, Subpart JJJJ.

(b) Pursuant to 40 CFR 60.4, the Permittee shall submit all required notifications and reports 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

E.1.2 Stationary Spark Ignition Internal Combustion Engines NSPS [326 IAC 12] [40 CFR Part 60, Subpart JJJJ]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart JJJJ (included as Attachment A to the operating permit), which are incorporated by reference as 326 IAC 12, for the emission unit(s) listed above:

1. 40 CFR 60.4230(a)(4)(i)
2. 40 CFR 60.4233
3. 40 CFR 60.4234
4. 40 CFR 60.4243(a)(2) and (b)(2)(ii)
5. 40 CFR 60.4244
6. 40 CFR 60.4245(a)(c) and (d)
7. 40 CFR 60.4246
8. 40 CFR 60.4248
9. Table 1 to Subpart JJJJ
10. Table 3 to Subpart JJJJ

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

E.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for this facility. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

SECTION E.2 NSPS

Emissions Unit Description:

(b) Landfill Gas Treatment and Conditioning System by passing gas through siloxane removal system, identified as GCS01, equipped with one (1) enclosed flare to control purge gas produced during vessel regeneration process, identified as FLR01 with a maximum heat input capacity of 3.8 MMBtu/hr (Lower Heating Value), constructed in 2013, and exhausting to stack S05. Removal System is capable of treating 2,500 SCFM of landfill gas.

[Under 40 CFR 60, Subpart WWW, Landfill Gas conditioning system (GCS01), FLR01 is considered an affected facility]

[Under 40 CFR 63, Subpart AAAA, Landfill Gas conditioning system (GCS01), FLR01 is considered an affected facility]

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

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

E.2.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 60, Subpart WWW.

(b) Pursuant to 40 CFR 60.4, the Permittee shall submit all required notifications and reports 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

E.2.2 Municipal Solid Waste Landfills NSPS [326 IAC 12] [40 CFR Part 60, Subpart WWW]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart WWW (included as Attachment B to the operating permit), which are incorporated by reference as 326 IAC 12, for the emission unit(s) listed above:

1. 40 CFR 60.752(b)(2)(iii)(B)
2. 40 CFR 60.752(b)(2)(iii)(C)

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

E.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for this facility. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

SECTION E.3 NSPS

Emissions Unit Description:

Insignificant Activity

(b) One (1) 157 hp (100 kW-hr) Caterpillar Model C4.4, emergency diesel-fired generator, identified as EGEN01, constructed in 2013, and equipped with 200 gallons diesel fuel storage tank.

[Under 40 CFR 60, Subpart IIII emergency diesel-fired engine is considered a new affected facility]

[Under 40 CFR 63, Subpart ZZZZ emergency diesel fired engine is considered a new affected facility]

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

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

E.3.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 60, Subpart IIII.

(b) Pursuant to 40 CFR 60.4, the Permittee shall submit all required notifications and reports 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

E.3.2 Stationary Compression Ignition Internal Combustion Engine NSPS [326 IAC 12] [40 CFR Part 60, Subpart IIII]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart IIII (included as Attachment C to the operating permit), which are incorporated by reference as 326 IAC 12, for the emission unit(s) listed above:

1. 40 CFR 60.4200(2)(i)
2. 40 CFR 60.4202(a)(2)
3. 40 CFR 60.4205(b)
4. 40 CFR 60.4206
5. 40 CFR 60.4207(b)
6. 40 CFR 60.4211(c) and (f)
7. 40 CFR 60.4214(b)
8. 40 CFR 60.4218
9. 40 CFR 60.4219
10. Table 8 to Subpart IIII

SECTION E.4 NESHAP

Emissions Unit Description:

(b) Landfill Gas Treatment and Conditioning System by passing gas through siloxane removal system, identified as GCS01, equipped with one (1) enclosed flare to control purge gas produced during vessel regeneration process, identified as FLR01 with a maximum heat input capacity of 3.8 MMBtu/hr (Lower Heating Value), constructed in 2013, and exhausting to stack S05. Removal System is capable of treating 2,500 SCFM of landfill gas.

[Under 40 CFR 60, Subpart WWW, Landfill Gas conditioning system (GCS01), FLR01 is considered an affected facility]

[Under 40 CFR 63, Subpart AAAA, Landfill Gas conditioning system (GCS01), FLR01 is considered an affected facility]

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

E.4.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.1 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 the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 63, Subpart AAAA.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports 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

E.4.2 Municipal Solid Waste Landfills NESHAP [40 CFR Part 63, Subpart AAAA] [326 IAC 20-67]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart AAAA (included as Attachment D to the operating permit), which are incorporated by reference as 326 IAC 20-67, for the emission unit(s) listed above:

1. 40 CFR 63.1930
2. 40 CFR 63.1980(b)

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

E.4.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for this facility. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

SECTION E.5 NESHAP

Emissions Unit Description:

(a) Three (3) Caterpillar Model G3520C 1500 rpm 4-stroke lean burn Internal Combustion (IC) Engines with a power generation rating of 2,740 brake horsepower (bhp), identified as ENG01 - ENG03, constructed in 2013, firing landfill gas (LFG) from County Line Landfill as a primary fuel, utilizing pipeline Natural Gas as a backup fuel, with a maximum heat input capacity of 20.8 MMBtu/hr (Higher Heating Value) each, equipped with an air-to-fuel ratio controller and exhausting to stack S01 - S03, respectively. Each engine is connected to 1,966 kW electricity generators.

[Under 40 CFR 60, Subpart JJJJ, reciprocating internal combustion engines are considered new affected facilities]

[Under 40 CFR 63, Subpart ZZZZ reciprocating internal combustion engines are considered new affected facilities]

(b) One (1) Caterpillar Model G3520C 1,200 rpm 4-stroke lean burn Internal Combustion (IC) Engine with a power generation rating of 2,242 brake horsepower (bhp), identified as ENG04, approved in 2020 for construction, manufactured on July 20, 2005, firing landfill gas (LFG) from County Line Landfill as a primary fuel, utilizing pipeline Natural Gas as a backup fuel, with a maximum heat input capacity of 17.5 MMBtu/hr (Higher Heating Value), equipped with an air-to-fuel ratio controller and exhausting to stack S04. Engine is connected to 1,600 kW electricity generator.

[Under 40 CFR 63, Subpart ZZZZ reciprocating internal combustion engines are considered new affected facilities]

Insignificant Activity

(c) One (1) 157 hp (100 kW-hr) Caterpillar Model C4.4, emergency diesel-fired generator, identified as EGEN01, constructed in 2013, and equipped with 200 gallons diesel fuel storage tank.

[Under 40 CFR 60, Subpart IIII emergency diesel-fired engine is considered a new affected facility]

[Under 40 CFR 63, Subpart ZZZZ emergency diesel fired engine is considered a new affected facility]

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

E.5.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.1 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 the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 63, Subpart ZZZZ.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports 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

E.5.2 Stationary Reciprocating Internal Combustion Engines NESHAP [40 CFR Part 63, Subpart ZZZZ] [326 IAC 20-82]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment E to the operating permit), which are incorporated by reference as 326 IAC 20-82, for the emission unit(s) listed above:

IC Engines ENG01, ENG02, ENG03, and EGEN01:

1. 40 CFR 63.6580
2. 40 CFR 63.6585
3. 40 CFR 63.6590(a)(2), (b)(2) and (c)(6)
4. 40 CFR 63.6595(a)(3)
5. 40 CFR 63.6600(b) and (c)
6. 40 CFR 63.6605
7. 40 CFR 63.6615
8. 40 CFR 63.6620(a), (b) and (d) - (i)
9. 40 CFR 63.6625
10. 40 CFR 63.6630
11. 40 CFR 63.6635
12. 40 CFR 63.6640
13. 40 CFR 63.6645(a), (c), (g) and (h)
14. 40 CFR 63.6650
15. 40 CFR 63.6655
16. 40 CFR 63.6665
17. Table 3 to Subpart ZZZZ, (item 5)

IC Engine ENG04:

1. 40 CFR 63.6580
2. 40 CFR 63.6585(a), (b)
3. 40 CFR 63.6590(a)(2), (b)(2)
4. 40 CFR 63.6595(a)(3)
5. 40 CFR 63.6605
6. 40 CFR 63.6625(c), (h)
7. 40 CFR 63.6640(e)
8. 40 CFR 63.6645(a)(4), (c), (f)
9. 40 CFR 63.6650
10. 40 CFR 63.6655
11. 40 CFR 63.6660
12. 40 CFR 63.6665
13. 40 CFR 63.6670
14. 40 CFR 63.6675
15. 40 CFR 63, Subpart ZZZZ, Table 7 (item 1), (item 2)
16. 40 CFR 63, Subpart ZZZZ, Table 8

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

E.5.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

Source Name: Zimmerman Energy, LLC
Source Address: 7922 N Hwy 31, Argos, Indiana 46501
Part 70 Permit No.: T 049-39490-00038

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: Zimmerman Energy, LLC
Source Address: 7922 N Hwy 31, Argos, Indiana 46501
Part 70 Permit No.: T 049-39490-00038

This form consists of 2 pages **Page 1 of 2**

□ This is an emergency as defined in 326 IAC 2-7-1(12)

- 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
- 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.

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_2, VOC, NO_X, 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: Zimmerman Energy, LLC
Source Address: 7922 N Hwy 31, Argos, Indiana 46501
Part 70 Permit No.: T 049-39490-00038
Facility: Emergency Generator (EGEN01)
Parameter: Number of hours
Limit: Less than 50 hours per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER : _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month (Hrs)	Previous 11 Months (Hrs)	12 Month Total (Hrs)

☐ 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 Quarterly Report

Source Name: Zimmerman Energy, LLC
Source Address: 7922 N. Hwy 31, Argos, Indiana 46501
FESOP Permit No.: T 049-39490-00038
Facility: Engines ENG01 through ENG04
Parameter: CO Emissions
Limit: The combined CO emissions from genset engines, identified as ENG01 through ENG04, shall be less than 245 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

$$\sum_{m=1}^{12}\left[\left[\left[[Ef1*(Y1)]+[Ef2*Y2]+[Ef3*(Y3)]+[\,Ef4*(Y4)]\right]\right]_m * \frac{1\ lb}{453.5g} * \frac{1\ ton}{2{,}000\ lbs}\right.$$

Where:
Ef1 = 2.89 g/bhp-hr, or the emission factor determined from the latest IDEM approved stack test for Engine ENG01.
Y1 = No. of brake horsepower hours (bhp-hr) operated per month for Engine ENG01

Ef2 = 2.65 g/bhp-hr, or the emission factor determined from the latest IDEM approved stack test for Engine ENG02.
Y2 = No. of brake horsepower hours (bhp-hr) operated per month for Engine ENG02

Ef3 = 2.56 g/bhp-hr, or the emission factor determined from the latest IDEM approved stack test for Engine ENG03.
Y3 = No. of brake horsepower hours (bhp-hr) operated per month for Engine ENG03

Ef4 = 2.56 g/bhp-hr, or the emission factor determined from the latest IDEM approved stack test for Engine ENG04.
Y4 = No. of brake horsepower hours (bhp-hr) operated per month for Engine ENG04

QUARTER: _____YEAR:_____

Month	Column 1 This Month	Column 2 Previous 11 Months	Column 1 + Column 2 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: Zimmerman Energy, LLC
Source Address: 7922 N Hwy 31, Argos, Indiana 46501
Part 70 Permit No.: T 049-39490-00038

Months: _____ to _____ Year: _____

Page 1 of 2

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".

☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

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

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

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

Form Completed by:_____

Title / Position: _____

Date:_____

Phone: _____

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:	**Zimmerman Energy, LLC**
Source Location:	**7922 N. Hwy. 31, Argos, IN 46501**
County:	**Fulton**
SIC Code:	**4911 (Electric Services)**
Operation Permit No.:	**T049-39490-00038**
Operation Permit Issuance Date:	**August 30, 2018**
Significant Source Modification No.:	**049-42921-00038**
Significant Permit Modification No.:	**049-43058-00038**
Permit Reviewer:	**Daniel W. Pell**

Source Definition

This Zimmerman Energy, LLC Company consists of two (2) plants:

(1) Zimmerman Energy plant is located at 7922 N. Hwy. 31, Argos, Indiana; and
(2) County Line Landfill plant is located at 7922 N. Old US 31, Argos, Indiana.

These two (2) plants are located on contiguous properties and also have the same two-digit Standard Industrial Classification (SIC) Code. However the two plants are not under a common ownership or common control. The two plants do not meet all three parts of the major source definition and therefore are not part of the same major source as defined by 326 IAC 2-7-1(22).

This determination was initially made under Part 70 Operating Permit T 049-33190-00038 issued on October 25, 2013.

Existing Approvals

The source was issued Part 70 Operating Permit Renewal No. T049-39490-00038 on August 30, 2018. There have been no subsequent approvals issued.

County Attainment Status

The source is located in Fulton County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective January 16, 2018, for the 2015 8-hour ozone standard.
$PM_{2.5}$	Unclassifiable or attainment effective April 15, 2015, for the 2012 annual $PM_{2.5}$ standard.
$PM_{2.5}$	Unclassifiable or attainment effective December 13, 2009, for the 2006 24-hour $PM_{2.5}$ standard.
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Unclassifiable or attainment effective January 29, 2012, for the 2010 NO_2 standard.
Pb	Unclassifiable or attainment effective December 31, 2011, for the 2008 lead standard.

(a) Ozone Standards
Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) 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_x emissions are considered when evaluating the rule applicability relating to ozone. Fulton County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) $PM_{2.5}$
Fulton County has been classified as attainment for $PM_{2.5}$. Therefore, direct $PM_{2.5}$, SO_2, and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Other Criteria Pollutants
Fulton County has been classified as attainment or unclassifiable in Indiana for all the 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 (1) of the twenty-eight (28) listed source categories under 326 IAC 2-2-1(ff)(1), 326 IAC 2-3-2(g), or 326 IAC 2-7-1(22)(B), and there is no applicable New Source Performance Standard or National Emission Standard for Hazardous Air Pollutants 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 of hazardous air pollutants (HAP) are counted toward the determination of Part 70 Permit applicability and source status under Section 112 of the Clean Air Act (CAA).

Greenhouse Gas (GHG) Emissions

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) 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 GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.

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. If the control equipment

has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

	Source-Wide Emissions Prior to Modification (ton/year)								
	PM[1]	**PM_{10}[1]**	**$PM_{2.5}$[1, 2]**	**SO_2**	**NO_X**	**VOC**	**CO**	**Single HAP[3]**	**Total HAPs**
Total PTE of Entire Source Excluding Fugitive Emissions*	19.03	19.03	19.03	32.94	65.72	44.62	249.97	49.7 (Formaldehyde)	58.54
Title V Major Source Thresholds	NA	100	100	100	100	100	100	10	25
PSD Major Source Thresholds	250	250	250	250	250	250	250	--	--
Emission Offset Major Source Thresholds	---	NA	NA	NA	NA	NA	NA	--	--

[1]Under the Part 70 Permit program (40 CFR 70), PM_{10} and $PM_{2.5}$, not particulate matter (PM), are each considered as a "regulated air pollutant."

[2]$PM_{2.5}$ listed is direct $PM_{2.5}$.

[3]Single highest source-wide HAP.

*Fugitive HAP emissions are always included in the source-wide emissions.

(a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no PSD regulated pollutant 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) This existing source is a major source of HAP, as defined in 40 CFR 63.2, because HAP emissions are equal to or greater than ten (10) tons per year for a single HAP and equal to or greater than twenty-five (25) tons per year for a combination of HAPs.

(c) These emissions are based on the TSD of TVOP Renewal No. T049-39490-00038, issued on August 30, 2018.

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed an application, submitted by Zimmerman Energy, LLC on June 4, 2020, relating to a request to install a new landfill gas-fueled reciprocating internal combustion engine generator set, which uses natural gas as a back-up combustion fuel, and is identified as ENG04.

The New Source Construction and Part 70 Operating Permit (T049-33190-00038) was issued to Zimmerman Energy on October 25, 2013. This operating permit allowed for the construction and operation of four landfill gas-fueled reciprocating internal combustion engine generator sets, which used natural gas as a back-up combustion fuel, and were identified as ENG01, ENG02, ENG03, and ENG04.

However, only engine generator sets ENG01, ENG02, and ENG03, were installed and are currently operating. Zimmerman Energy is requesting to add ENG04 at this time.

The four reciprocating internal combustion engine generator sets (ENG01 through ENG04) will become subject to a combined CO emissions limit.

The source is revising the hours of operation PSD Minor Limit for the diesel fired emergency generator, identified as EGEN01, from 100 hours of operation per year to 50 hours of operation per year. Also, the CO emissions limit for EGEN01 noted in the PSD Minor Limit will be revised.

The following is a list of the new emission unit:

(a) One (1) Caterpillar Model G3520C 1,200 rpm 4-stroke lean burn Internal Combustion (IC) Engine with a power generation rating of 2,242 brake horsepower (bhp), identified as ENG04, approved in 2020 for construction, manufactured on July 20, 2005, firing landfill gas (LFG) from County Line Landfill as a primary fuel, utilizing pipeline Natural Gas as a backup fuel, with a maximum heat input capacity of 17.5 MMBtu/hr (Higher Heating Value), equipped with an air-to-fuel ratio controller and exhausting to stack S04. Engine is connected to 1,600 kW electricity generator.

Enforcement Issues

There are no pending enforcement actions related to this modification.

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(12), 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. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

	PTE Before Controls of the New Emission Unit (ton/year)								
Process / Emission Unit	**PM**	**PM_{10}**	**$PM_{2.5}$[1]**	**SO_2**	**NO_X**	**VOC**	**CO**	**Single HAP[2]**	**Total HAPs**
IC Engine (ENG04) (worst case)	3.25	3.25	3.25	1.72	12.99	9.04	55.42	10.18 (Formalde-hyde)	10.76
Total PTE Before Controls of the IC Engine (ENG04) (worst case)	**3.25**	**3.25**	**3.25**	**1.72**	**12.99**	**9.04**	**55.42**	**10.18 (Formalde-hyde)**	**10.76**

[1]$PM_{2.5}$ listed is direct $PM_{2.5}$.
[2]Single highest HAP.

Appendix A of this TSD reflects the detailed potential emissions of the modification.

(a) Approval to Construct

Pursuant to 326 IAC 2-7-10.5(g)(6), a Significant Source Modification is required because this modification has a potential to emit equal to or greater than ten (10) tons per year of a single HAP.

(b) Approval to Operate

Pursuant to 326 IAC 2-7-12(d)(1), this change to the permit is being made through a Significant Permit Modification because this modification does not qualify as a Minor Permit Modification or as an Administrative Amendment.

Permit Level Determination – PSD

The table below summarizes the potential to emit of the modification, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of the Part 70 source modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

	Project Emissions (ton/year)						
Process / Emission Unit	**PM**	**PM_{10}**	**$PM_{2.5}$[1]**	**SO_2**	**NO_X**	**VOC**	**CO**
IC Engine (ENG04) (worst case)	**3.25**	**3.25**	**3.25**	**1.72**	**12.99**	**9.04**	**< 250**
PSD Major Source Thresholds	250	250	250	250	250	250	250
[1]$PM_{2.5}$ listed is direct $PM_{2.5}$.							

The source opted to take limits in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to this modification. See Technical Support Document (TSD) State Rule Applicability – Individual Facilities section and 326 IAC 2-2 (PSD) for more information regarding the limits.

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

PTE of the Entire Source After Issuance of the Part 70 Modification

The table below summarizes the after issuance source-wide potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of the 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. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

	Source-Wide Emissions After Issuance (ton/year)								
	PM[1]	**PM_{10}[1]**	**$PM_{2.5}$[1, 2]**	**SO_2**	**NO_X**	**VOC**	**CO**	**Single HAP[3]**	**Total HAPs**
Total PTE of Entire Source Excluding Fugitives*	18.31	18.31	18.31	32.62	62.83	42.92	248.36	12.44 (Formalde -hyde)	56.17
Title V Major Source Thresholds	NA	100	100	100	100	100	100	10	25
PSD Major Source Thresholds	250	250	250	250	250	250	250	--	--

[1]Under the Part 70 Permit program (40 CFR 70), PM_{10} and $PM_{2.5}$, not particulate matter (PM), are each considered as a "regulated air pollutant."

[2]$PM_{2.5}$ listed is direct $PM_{2.5}$.

[3]Single highest source-wide HAP.

*Fugitive HAP emissions are always included in the source-wide emissions.

(a) This existing minor PSD stationary source will continue to be minor under 326 IAC 2-2 because the emissions of each PSD regulated pollutant will continue to be less than the PSD major source thresholds.

(b) This existing major source of HAP will continue to be a major source of HAP, as defined in 40 CFR 63.2, because HAP emissions will continue to be equal to or greater than ten (10) tons per year for any single HAP and/or equal to or greater than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).

Federal Rule Applicability Determination

Due to the modification at this source, federal rule applicability has been reviewed as follows:

New Source Performance Standards (NSPS):

(a) The requirements of the New Source Performance Standard for Stationary Spark Ignition Internal Combustion, 40 CFR 60, Subpart JJJJ and 326 IAC 12, are not included in the permit for the engine generator set, identified as ENG04. The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) where the SI ICE are manufactured:

(i) On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP).

The engine generator set, ENG04, was manufactured on July 20, 2005, which is prior to the date of applicability.

(b) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this proposed modification.

National Emission Standards for Hazardous Air Pollutants (NESHAP):

(c) The engine generator set, ENG04, is subject to the National Emission Standards for Hazardous Air Pollutants (HAP) for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR 63, Subpart ZZZZ, which is incorporated by reference as 326 IAC 20-82. This subpart applies to each affected source, where each affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand. A new stationary RICE is defined as follows: a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after December 19, 2002. The engine generator set, ENG04, is defined as a new stationary RICE because it was manufactured on July 20, 2005.

Pursuant to 40 CFR 63.6590(b)(2), a new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis must meet the initial notification requirements of 40 CFR 63.6645(f) and the requirements of 40 CFR 63.6625(c), 40 CFR 63.6650(g), and 40 CFR 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart ZZZZ. The engine generator set, ENG04, has a site rating of more than 500 brake HP and is located at a major source of HAP emissions and it combusts landfill gas. The unit subject to this rule includes the following:

(A) One (1) Caterpillar Model G3520C 1,200 rpm 4-stroke lean burn Internal Combustion (IC) Engine with a power generation rating of 2,242 brake horsepower (bhp), identified as ENG04, approved in 2020 for construction, manufactured on July 20, 2005, firing landfill gas (LFG) from County Line Landfill as a primary fuel, utilizing pipeline Natural Gas as a backup fuel, with a maximum heat input capacity of 17.5 MMBtu/hr (Higher Heating

Value), equipped with an air-to-fuel ratio controller and exhausting to stack S04. Engine is connected to 1,600 kW electricity generator.

The engine generator set, ENG04, is subject to the following portions of Subpart ZZZZ:

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585(a), (b)
(3) 40 CFR 63.6590(a)(2), (b)(2)
(4) 40 CFR 63.6595(a)(3)
(5) 40 CFR 63.6605
(6) 40 CFR 63.6625(c), (h)
(7) 40 CFR 63.6640(e)
(8) 40 CFR 63.6645(a)(4), (c), (f)
(9) 40 CFR 63.6650
(10) 40 CFR 63.6655
(11) 40 CFR 63.6660
(12) 40 CFR 63.6665
(13) 40 CFR 63.6670
(14) 40 CFR 63.6675
(15) 40 CFR 63, Subpart ZZZZ, Table 7 (item 1), (item 2)
(16) 40 CFR 63, Subpart ZZZZ, Table 8

The requirements of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated as 326 IAC 20-1, apply to the engine generator set, ENG04, except as otherwise specified in 40 CFR 63, Subpart ZZZZ.

(d) There are no other National Emission Standards for Hazardous Air Pollutants under 40 CFR 63, 326 IAC 14 and 326 IAC 20 included for this proposed modification.

Compliance Assurance Monitoring (CAM):

(a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each pollutant-specific emission unit that meets the following criteria:

(1) has a potential to emit before controls equal to or greater than the major source threshold for the regulated pollutant involved;

(2) is subject to an emission limitation or standard for that pollutant (or a surrogate thereof); and

(3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

(b) Pursuant to 40 CFR 64.2(b)(1)(i), emission limitations or standards proposed after November 15, 1990 pursuant to a NSPS or NESHAP under Section 111 or 112 of the Clean Air Act are exempt from the requirements of CAM. Therefore, an evaluation was not conducted for any emission limitations or standards proposed after November 15, 1990 pursuant to a NSPS or NESHAP under Section 111 or 112 of the Clean Air Act.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM, are not applicable to the engine generator set, ENG04, as part of this modification because it does not use a control device.

State Rule Applicability - Entire Source

Due to this modification, state rule applicability has been reviewed as follows:

326 IAC 2-2 (PSD)
PSD applicability is discussed under the Permit Level Determination – PSD section of this document.

326 IAC 5-1 (Opacity Limitations)
This source is subject to the opacity limitations specified in 326 IAC 5-1-2(1).

326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source 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.

326 IAC 6.5 (Particulate Matter Limitations Except Lake County)
Pursuant to 326 IAC 6.5-1-1(a), this source (located in Fulton County) is not subject to the requirements of 326 IAC 6.5 because it is not located in one of the following counties: Clark, Dearborn, Dubois, Howard, Marion, St. Joseph, Vanderburgh, Vigo or Wayne.

326 IAC 6.8 (Particulate Matter Limitations for Lake County)
Pursuant to 326 IAC 6.8-1-1(a), this source (located in Fulton County) is not subject to the requirements of 326 IAC 6.8 because it is not located in Lake County.

State Rule Applicability – Individual Facilities

Due to this modification, state rule applicability has been reviewed as follows:

IC Engines ENG01 - ENG04:

PSD Minor Limits

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

(a) The combined CO emissions from the four genset engines ENG01, ENG02, ENG03, and ENG04, shall be less than 245 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with these limits, combined with the potential to emit CO from all other emission units at this source, shall limit the source-wide total potential to emit CO to less than two-hundred fifty (250) tons per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

IC Engine ENG04:

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The operation of IC Engine, ENG04, will emit greater than ten (10) tons per year for a single HAP. Therefore, 326 IAC 2-4.1 would apply to this emission unit; however, pursuant to 326 IAC 2-4.1-1(b)(2), because this unit is specifically regulated by NESHAP 40 CFR 63, Subpart ZZZZ, which was issued pursuant to Section 112(d) of the CAA, this emission unit is exempt from the requirements of 326 2-4.1.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1.5(2), the IC Engine, ENG04, is not subject to the requirements of 326 IAC 6-3, since it does not meet the definition of a manufacturing process.

326 IAC 7-1.1 Sulfur Dioxide Emission Limitations
The IC Engine, ENG04, is not subject to 326 IAC 326 IAC 7-1.1 because it has a potential to emit (or limited potential to emit) sulfur dioxide (SO2) of less than 25 tons per year or 10 pounds per hour.

326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
Even though, the IC Engine, ENG04, was constructed after January 1, 1980, it is not subject to the requirements of 326 IAC 8-1-6 because its unlimited VOC potential emissions are less than twenty-five (25) tons per year.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to assure 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.

(a) The Compliance Determination Requirements included with this modification are as follows.

The Permittee shall determine the CO emissions for each month for the engines as follows:

Engines ENG01 through ENG04:

$$\sum_{m=1}^{12}\left[\left[\left[[Ef1*(Y1)]+[Ef2*Y2]+[Ef3*(Y3)]+[\,Ef4*(Y4)]\right]\right]_m * \frac{1\ lb}{453.5g} * \frac{1\ ton}{2{,}000\ lbs}\right.$$

Engine ENG01:

Where:
Ef1 = 2.89 g/bhp-hr, or the emission factor determined from the latest IDEM approved stack test.
Y1 = No. of brake horsepower hours (bhp-hr) operated per month for Engine ENG01

Engine ENG02:

Where:
Ef2 = 2.65 g/bhp-hr, or the emission factor determined from the latest IDEM approved stack test.
Y2 = No. of brake horsepower hours (bhp-hr) operated per month for Engine ENG02

Engine ENG03:

Where:

Ef3 = 2.56 g/bhp-hr, or the emission factor determined from the latest IDEM approved stack test.
Y3 = No. of brake horsepower hours (bhp-hr) operated per month for Engine ENG03

Engine ENG04:

Where:
Ef4 = 2.56 g/bhp-hr, or the emission factor determined from the latest IDEM approved stack test.
Y4 = No. of brake horsepower hours (bhp-hr) operated per month for Engine ENG04

(b) The testing requirements applicable to this proposed modification are as follows:

Summary of Testing Requirements					
Emission Unit	**Control Device**	**Timeframe for Testing or Date of Initial Valid Demonstration)**	**Pollutant/ Parameter**	**Frequency of Testing**	**Authority**
ENG01	NA	January 9, 2020	CO	every 5 years	326 IAC 2-2 NESHAP, Subpart ZZZZ
ENG02	NA	January 9, 2020	CO	every 5 years	326 IAC 2-2 NESHAP, Subpart ZZZZ
ENG03	NA	January 9, 2020	CO	every 5 years	326 IAC 2-2 NESHAP, Subpart ZZZZ
ENG04	NA	180 *	CO	every 5 years	326 IAC 2-2 NESHAP, Subpart ZZZZ
* No later than 180 days after the startup of ENG04.					

Proposed Changes

As part of this permit approval, the permit may contain new or different permit conditions and some conditions from previously issued permits/approvals may have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes.

The following changes listed below are due to the proposed modification. Deleted language appears as ~~strikethrough~~ text and new language appears as **bold** text (these changes may include Title I changes):

(1) IDEM OAQ has added the IC Engine, ENG04, to Section A.2 in the permit as a separate unit description. The remaining unit descriptions have been renumbered.

(2) IDEM OAQ has revised PSD Minor Limits in Condition D.1.1 in the permit to note the combined CO emissions limit for the gensets ENG01 through ENG04. Each of the unit descriptions for the four gensets, ENG01 through ENG04, has been added to Section D.1.

A compliance determination requirement has been added to Section D.1 which provides an equation to calculate the combined horsepower–hour per month for the gensets ENG01 through ENG04 which will determine the PTE CO.

The annual hours of operation for the diesel fired emergency generator, identified as EGEN01, have been revised to 50 hours per year from 100 hours per year. Also, the CO emissions from EGEN01 have been revised.

In addition, CO testing requirements for the gensets ENG01 through ENG04, have been added to Section D.1.

The condition numbers in Section D.1 have been renumbered.

(3) IDEM OAQ has modified the unit description in Section A.2 and Section E.1 in the permit to note only that there are three Internal Combustion (IC) Engines ENG01, ENG02, and ENG03, and not four internal combustion engines. The heating value for each of these three IC engines was revised to show the higher heating value rather than the lower heating value in the unit description.

(4) IDEM OAQ has added the IC Engine, ENG04, to Section E.5 in the permit as a separate unit description and has added its applicable NESHAP, Subpart ZZZZ rules. Rule 17 for the IC Engines ENG01, ENG02, ENG03, and EGEN01, Table 3, Subpart ZZZZ, was revised.

(5) The Part 70 Report Form for the number of annual operation hours for the Emergency Generator (EGEN01) was revised and now indicates less than 50 operational hours from 100 operational hours per twelve (12) consecutive month period to IDEM OAQ.

(6) One Part 70 Report Form was added to the permit for the Gensets ENG01 through ENG04 to be used to submit the combined CO emissions for the gensets ENG01 through ENG04 per twelve (12) consecutive month period to IDEM OAQ.

Additional Changes

IDEM, OAQ made additional changes to the permit as described below in order to update the language to match the most current version of the applicable rule, to eliminate redundancy within the permit, and to provide clarification regarding the requirements of these conditions.

These permit changes include model updates to standard permit language that are applicable to this source.

(1) IDEM, OAQ has revised the United States Environmental Protection Agency region designation in Conditions B.9 and B.19 in the permit for the Annual Compliance Certification and Operational Flexibility. The previous region designations used a Roman numeral “V” for Region 5. The “V” has been replaced with numeral “5” in both locations.

(2) IDEM, OAQ has updated the telephone number noted in Condition B.23(c) 'Annual Fee Payment' of the permit. The previous telephone number listed was a typographical error.

(3) Effective June 8, 2019, the requirements of 326 IAC 14-10 (Emission Standards for Asbestos Demolition and Renovation Operations) were amended. Based on the amended rule, Section C.7 - Asbestos Abatement Projects of the permit has been revised.

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) **Three** ~~Four~~ (**3**~~4~~) Caterpillar Model G3520C 1500 rpm 4-stroke lean burn Internal Combustion (IC) Engines with a power generation rating of 2,740 brake horsepower (bhp), identified as ENG01 - **ENG03** ~~ENG04~~, constructed in 2013, firing landfill gas (LFG) from County Line Landfill as a primary fuel, utilizing pipeline Natural Gas as a backup fuel, with a maximum heat input capacity of **20.8** ~~18.7~~ MMBtu/hr (**Higher** ~~Lower~~ Heating Value) each, equipped with an air-to-fuel ratio controller and exhausting to stack S01 - **S03** ~~S04~~ respectively. Each engine is connected to 1,966 kW electricity generators.

*****

(b) **One (1) Caterpillar Model G3520C 1,200 rpm 4-stroke lean burn Internal Combustion (IC) Engine with a power generation rating of 2,242 brake horsepower (bhp), identified as ENG04, approved in 2020 for construction, manufactured on**

July 20, 2005, firing landfill gas (LFG) from County Line Landfill as a primary fuel, utilizing pipeline Natural Gas as a backup fuel, with a maximum heat input capacity of 17.5 MMBtu/hr (Higher Heating Value), equipped with an air-to-fuel ratio controller and exhausting to stack S04. Engine is connected to 1,600 kW electricity generator.

[Under 40 CFR 63, Subpart ZZZZ reciprocating internal combustion engines are considered new affected facilities]

(**c**~~b~~) *****

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

(a) *****
United States Environmental Protection Agency, Region **5**~~V~~
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

*****

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

(a) *****
United States Environmental Protection Agency, Region **5**~~V~~
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

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

(a) *****
*****

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-**8590** ~~4230~~ (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

*****

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

*****

(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~~**c**).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(~~3~~**d**).

*****

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) **Three** ~~Four~~ (**3**~~4~~) Caterpillar Model G3520C 1500 rpm 4-stroke lean burn Internal Combustion (IC) Engines with a power generation rating of 2,740 brake horsepower (bhp), identified as ENG01 - **ENG03** ~~ENG04~~, constructed in 2013, firing landfill gas (LFG) from County Line Landfill as a primary fuel, utilizing pipeline Natural Gas as a backup fuel, with a maximum heat input capacity of **20.8** ~~18.7~~ MMBtu/hr (**Higher** ~~Lower~~ Heating Value) each, equipped with an air-to-fuel ratio controller and exhausting to stack S01 - **S03** ~~S04~~ respectively. Each engine is connected to 1,966 kW electricity generators.

*****

(b) **One (1) Caterpillar Model G3520C 1,200 rpm 4-stroke lean burn Internal Combustion (IC) Engine with a power generation rating of 2,242 brake horsepower (bhp), identified as**

ENG04, approved in 2020 for construction, manufactured on July 20, 2005, firing landfill gas (LFG) from County Line Landfill as a primary fuel, utilizing pipeline Natural Gas as a backup fuel, with a maximum heat input capacity of 17.5 MMBtu/hr (Higher Heating Value), equipped with an air-to-fuel ratio controller and exhausting to stack S04. Engine is connected to 1,600 kW electricity generator.

[Under 40 CFR 63, Subpart ZZZZ reciprocating internal combustion engines are considered new affected facilities]

Insignificant Activity
*****

(b) One (1) 157 hp (100 kW-hr) Caterpillar Model C4.4, emergency diesel-fired generator, identified as EGEN01, constructed in 2013, and equipped with 200 gallons diesel fuel storage tank.

[Under 40 CFR 60, Subpart IIII emergency diesel-fired engine is considered a new affected facility]

[Under 40 CFR 63, Subpart ZZZZ emergency diesel fired engine is considered a new affected facility]

(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 PSD Minor Limit [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

(a) The total hours of operation for the diesel fired emergency generator, identified as EGEN01, shall be limited to less than **50** ~~100~~ hours per twelve (12) consecutive month period with compliance determined at the end of each month.

(b) ~~The CO emissions from emergency diesel fire generator shall not exceed 1.04 pounds per hour.~~

Emission Unit	Unit ID	CO (lb/hp-hr)
Emergency Generator	EGEN01	**0.0067**

~~Compliance with this limit will limit the CO emissions from the entire source to less than 250 tons per twelve (12) consecutive month period with compliance determined at the end of each month and will make 326 IAC 2-2 not applicable to the entire source.~~

(c) The combined CO emissions from the four genset engines ENG01, ENG02, ENG03, and ENG04, shall be less than 245 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with these limits, combined with the potential to emit CO from all other emission units at this source, shall limit the source-wide total potential to emit CO to less than two-hundred fifty (250) tons per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.2 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for **these facilities** ~~this facility~~. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements [326 IAC 2-7-5(1)]

D.1.3 Carbon Monoxide (CO) Emission Determination

In order to determine compliance with the CO emission limitation in Condition D.1.1(c), the Permittee shall determine the CO emissions for each month for the engines as follows:

CO Emissions (ton/month) =

$$\sum_{m=1}^{12}\left[\left[\left[[Ef1*(Y1)]+[Ef2*Y2]+[Ef3*(Y3)]+[Ef4*(Y4)]\right]\right]_m * \frac{1\ lb}{453.5g} * \frac{1\ ton}{2{,}000\ lbs}\right.$$

Engine ENG01:

Where:
Ef1 = 2.89 g/bhp-hr, or the emission factor determined from the latest IDEM approved stack test for Engine ENG01.
Y1 = No. of brake horsepower hours (bhp-hr) operated per month for Engine ENG01

Engine ENG02:

Where:
Ef2 = 2.65 g/bhp-hr, or the emission factor determined from the latest IDEM approved stack test for Engine ENG02.
Y2 = No. of brake horsepower hours (bhp-hr) operated per month for Engine ENG02

Engine ENG03:

Where:
Ef3 = 2.56 g/bhp-hr, or the emission factor determined from the latest IDEM approved stack test for Engine ENG03.
Y3 = No. of brake horsepower hours (bhp-hr) operated per month for Engine ENG03

Engine ENG04:

Where:
Ef4 = 2.56 g/bhp-hr, or the emission factor determined from the latest IDEM approved stack test for Engine ENG04.
Y4 = No. of brake horsepower hours (bhp-hr) operated per month for Engine ENG04

D.1.4 Testing Requirements [326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Condition D.1.1(d), the Permittee shall perform CO testing of the Internal Combustion (IC) Engines ENG01 through ENG03 utilizing methods as approved by the Commissioner at least once every 5 years from the date of the most recent valid compliance demonstration. 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.

(b) Not later than 180 days after the startup of ENG04, the Permittee shall perform CO testing of ENG04 utilizing methods approved by the commissioner at least once every 5 years from the date of the most recent valid compliance demonstration.

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.~~5~~**3** Record Keeping Requirement

(a) In order to document the compliance status with Condition **D.1.1(a)** ~~D.1.4~~, the Permittee shall maintain monthly records of hours of operation of the emergency generator identified as EGEN01.

(b) **In order to document the compliance status with Condition D.1.1(c), the Permittee shall maintain monthly records of the combined CO emissions from the four genset engines ENG01, ENG02, ENG03, and ENG04, including bhp-hr/month of each engine.**

(c~~b~~) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the record keeping required by this condition.

D.1.**6**~~4~~ Reporting Requirement

(a) A quarterly report of the information to document the compliance status with Condition **D.1.1(a)** ~~D.1.4~~ shall be submitted not later than thirty (30) days following the end of each calendar quarter. Section C - General Reporting Requirements 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).

(b) A quarterly report of the information to document the compliance status with Condition D.1.1(c) shall be submitted not later than thirty (30) days following the end of each calendar quarter. Section C - General Reporting Requirements 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).

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SECTION E.1 NSPS

Emissions Unit Description:

(a) **Three** ~~Four~~ (**3**~~4~~) Caterpillar Model G3520C 1500 rpm 4-stroke lean burn Internal Combustion (IC) Engines with a power generation rating of 2,740 brake horsepower (bhp), identified as ENG01 - **ENG03** ~~ENG04~~, constructed in 2013, firing landfill gas (LFG) from County Line Landfill as a primary fuel, utilizing pipeline Natural Gas as a backup fuel, with a maximum heat input capacity of **20.8** ~~18.7~~ MMBtu/hr (**Higher** ~~Lower~~ Heating Value) each, equipped with an air-to-fuel ratio controller and exhausting to stack S01 - **S03** ~~S04~~ respectively. Each engine is connected to 1,966 kW electricity generators.

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SECTION E.5 NESHAP

Emissions Unit Description:

(a) **Three** ~~Four~~ (**3**~~4~~) Caterpillar Model G3520C 1500 rpm 4-stroke lean burn Internal Combustion (IC) Engines with a power generation rating of 2,740 brake horsepower (bhp), identified as ENG01 - **ENG03** ~~ENG04~~, constructed in 2013, firing landfill gas (LFG) from County Line Landfill as a primary fuel, utilizing pipeline Natural Gas as a backup fuel, with a maximum heat input capacity of **20.8** ~~18.7~~ MMBtu/hr (**Higher** ~~Lower~~ Heating Value) each, equipped with an air-to-fuel ratio controller and exhausting to stack S01 - **S03** ~~S04~~ respectively. Each engine is connected to 1,966 kW electricity generators.

*****

(b) **One (1) Caterpillar Model G3520C 1,200 rpm 4-stroke lean burn Internal Combustion (IC) Engine with a power generation rating of 2,242 brake horsepower (bhp), identified as ENG04, approved in 2020 for construction, manufactured on July 20, 2005, firing landfill gas (LFG) from County Line Landfill as a primary fuel, utilizing pipeline Natural Gas as a backup fuel, with a maximum heat input capacity of 17.5 MMBtu/hr (Higher Heating Value), equipped with an air-to-fuel ratio controller and exhausting to stack S04. Engine is connected to 1,600 kW electricity generator.**

[Under 40 CFR 63, Subpart ZZZZ reciprocating internal combustion engines are considered new affected facilities]

Insignificant Activity
(**c**~~b~~) *****

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National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

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E.5.2 Stationary Reciprocating Internal Combustion Engines NESHAP [40 CFR Part 63, Subpart ZZZZ] [326 IAC 20-82]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment E to the operating permit), which are incorporated by reference as 326 IAC 20-82, for the emission unit(s) listed above:

IC Engines ENG01, ENG02, ENG03, and EGEN01:

1. 40 CFR 63.6580
2. 40 CFR 63.6585
3. 40 CFR 63.6590(a)(2), (b)(2) and (c)(6)
4. 40 CFR 63.6595(a)(3)
5. 40 CFR 63.6600(b) and (c)
6. 40 CFR 63.6605
7. 40 CFR 63.6615
8. 40 CFR 63.6620(a), (b) and (d)- (i)
9. 40 CFR 63.6625
10. 40 CFR 63.6630
11. 40 CFR 63.6635
12. 40 CFR 63.6640
13. 40 CFR 63.6645(a), (c), (g) and (h)
14. 40 CFR 63.6650
15. 40 CFR 63.6655
16. 40 CFR 63.6665

17. Table 3 to Subpart ZZZZ**, (item 5)**

IC Engine ENG04:

1. 40 CFR 63.6580
2. 40 CFR 63.6585(a), (b)
3. 40 CFR 63.6590(a)(2), (b)(2)
4. 40 CFR 63.6595(a)(3)
5. 40 CFR 63.6605
6. 40 CFR 63.6625(c), (h)
7. 40 CFR 63.6640(e)
8. 40 CFR 63.6645(a)(4), (c), (f)
9. 40 CFR 63.6650
10. 40 CFR 63.6655
11. 40 CFR 63.6660
12. 40 CFR 63.6665
13. 40 CFR 63.6670
14. 40 CFR 63.6675
15. 40 CFR 63, Subpart ZZZZ, Table 7 (item 1), (item 2)
16. 40 CFR 63, Subpart ZZZZ, Table 8

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

Part 70 Quarterly Report

Source Name:	Zimmerman Energy, LLC
Source Address:	7922 N Hwy 31, Argos, Indiana 46501
Part 70 Permit No.:	T 049-39490-00038
Facility:	Emergency Generator (EGEN01)
Parameter:	Number of hours
Limit:	Less than ~~100~~ **50** hours per twelve (12) consecutive month period with compliance determined at the end of each month.

*****

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

FESOP Quarterly Report

Source Name:	**Zimmerman Energy, LLC**
Source Address:	**7922 N Hwy 31, Argos, Indiana 46501**
FESOP Permit No.:	**T 049-39490-00038**
Facility:	**Engines ENG01 through ENG04**
Parameter:	**CO Emissions**
Limit:	**The combined CO emissions from genset engines, identified as ENG01 through ENG04, shall be less than 245 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.**

$$\sum_{m=1}^{12}\left[\left[\left[[Ef1*(Y1)]+[Ef2*Y2]+[Ef3*(Y3)]+[Ef4*(Y4)]\right]\right]_m * \frac{1\ lb}{453.5g} * \frac{1\ ton}{2{,}000\ lbs}\right.$$

Where:
Ef1 = 2.89 g/bhp-hr, or the emission factor determined from the latest IDEM approved stack test.
Y1 = No. of brake horsepower hours (bhp-hr) operated per month for Engine ENG01

Ef2 = 2.65 g/bhp-hr, or the emission factor determined from the latest IDEM approved stack test.
Y2 = No. of brake horsepower hours (bhp-hr) operated per month for Engine ENG02

Ef3 = 2.56 g/bhp-hr, or the emission factor determined from the latest IDEM approved stack test.
Y3 = No. of brake horsepower hours (bhp-hr) operated per month for Engine ENG03

Ef4 = 2.56 g/bhp-hr, or the emission factor determined from the latest IDEM approved stack test.
Y4 = No. of brake horsepower hours (bhp-hr) operated per month for Engine ENG04

QUARTER: _____YEAR:_____

Month	Column 1 This Month	Column 2 Previous 11 Months	Column 1 + Column 2 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: _____

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on June 6, 2020.

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 049-42921-00038. The operation of this proposed modification shall be subject to the conditions of the attached proposed Significant Permit Modification No. 049-43058-00038.

The staff recommends to the Commissioner that the Part 70 Significant Source Modification and Significant Permit Modification be approved.

IDEM Contact

(a) If you have any questions regarding this permit, please contact Daniel W. Pell, 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) 234-8532 or (800) 451-6027, and ask for Daniel W. Pell or (317) 234-8532.

(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 Air Permits page on the Internet at: http://www.in.gov/idem/airquality/2356.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

Appendix A: Emission Calculations
Soure PTE Summary

Company Name: Zimmerman Energy, LLC
Address City IN Zip: 7922 N. Hwy. 31, Argos, IN 46501
SSM No.: 049-42921-00038
SPM No.: 049-43058-00038
Reviewer: Daniel W. Pell

Uncontrolled/Unlimited Potential to Emit (tons/year)									
Emission Unit	**PM**	**PM_{10}**	**PM2.5**	**SO_2**	**NO_x**	**VOC**	**CO**	**Total HAPs**	**Single HAP**
IC Engine ENG01 (worst case) *	3.97	3.97	3.97	2.03	15.87	10.75	76.46	13.13	12.44
IC Engine ENG02 (worst case) *	3.97	3.97	3.97	2.03	15.87	10.75	70.11	13.13	12.44
IC Engine ENG03 (worst case) *	3.97	3.97	3.97	2.03	15.87	10.75	67.73	13.13	12.44
IC Engine ENG04 (worst case) *	3.25	3.25	3.25	1.72	12.99	9.04	55.42	10.76	10.18
Gas Conditioning System(GCS01) & Flare (FLR01)	3.07	3.07	3.07	24.73	1.00	1.52	3.33	6.04	5.81
Emergency Generator (EGEN01) *	0.09	0.09	0.09	0.08	1.22	0.10	0.26	1.06E-03	3.24E-04
Total	**18.31**	**18.31**	**18.31**	**32.62**	**62.83**	**42.92**	**273.33**	**56.17**	**12.44**

*Worst Single HAP - Formaldehyde

Limited Potential to Emit (tons/year)									
Emission Unit	**PM**	**PM_{10}**	**PM2.5**	**SO_2**	**NO_x**	**VOC**	**CO**	**Total HAPs**	**Single HAP**
IC Engine ENG01 (worst case) *	3.97	3.97	3.97	2.03	15.87	10.75	245	13.13	12.44
IC Engine ENG02 (worst case) *	3.97	3.97	3.97	2.03	15.87	10.75		13.13	12.44
IC Engine ENG03 (worst case) *	3.97	3.97	3.97	2.03	15.87	10.75		13.13	12.44
IC Engine ENG04 (worst case) *	3.25	3.25	3.25	1.72	12.99	9.04		10.76	10.18
Gas Conditioning System(GCS01) & Flare (FLR01)	3.07	3.07	3.07	24.73	1.00	1.52	3.33	6.04	5.81
Emergency Generator (EGEN01) *	0.09	0.09	0.09	0.08	1.22	0.10	0.03	1.06E-03	3.24E-04
Total	**18.31**	**18.31**	**18.31**	**32.62**	**62.83**	**42.92**	**248.36**	**56.17**	**12.44**

*Worst Single HAP - Formaldehyde

Note: Shaded cells indicate PTE limits.

Note: The source has revised the hours per year operating limit for EGEN01 from 100 hours per year to 50 hours per year operating limit in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable due to PTE CO from ENG01 through ENG04.

Appendix A: Emission Calculations
PTE Summary for New IC Genset Engine (ENG04)

Company Name: Zimmerman Energy, LLC
Address City IN Zip: 7922 N. Hwy. 31, Argos, IN 46501
SSM No.: 049-42921-00038
SPM No.: 049-43058-00038
Reviewer: Daniel W. Pell

Uncontrolled / Unlimited Potential to Emit (tons/year)									
Emission Unit	**PM**	**PM_{10}**	**PM2.5**	**SO_2**	**NO_x**	**VOC**	**CO**	**Total HAPs**	**Single HAP**
IC Engine (ENG04) (LFG Combustion)	3.25	3.25	3.25	1.72	12.99	6.93	55.42	10.76	10.18 (Formaldehyde)
IC Engine (ENG04) (NG Combustion)	0.76	0.76	0.76	0.05	12.98	9.04	55.42	5.44	4.05 (Formaldehyde)
IC Engine (ENG04) (worst case scenario)	**3.25**	**3.25**	**3.25**	**1.72**	**12.99**	**9.04**	**55.42**	**10.76**	**10.18 (Formaldehyde)**

Appendix A: Emission Calculations
Landfill Gas-Fueled
Reciprocating Internal Combustion Engine
Uncontrolled/Unlimited PTE for Engines ENG01 - ENG03

Company Name: Zimmerman Energy, LLC
Address City IN Zip: 7922 N. Hwy. 31, Argos, IN 46501
SSM No.: 049-42921-00038
SPM No.: 049-43058-00038
Reviewer: Daniel W. Pell

ENGINE DATA for ENG01 - ENG03	
Make	Caterpillar
Model	G3520C - 1500 rpm
Net Power Output	2,740 bhp
Heat Input Rate (LHV)	18.7 MMBtu/hr
Heat Input Rate (HHV)	20.8 MMBtu/hr
Minimum LFG Heat Content	500 MMBtu/MMSCF
Max. LFG Consumption (scf/hr)	37400 scf/hr
Max. LFG Consumption (MMSCF/hr)	0.0374 MMSCF/hr
Max. LFG Consumption (MMSCF/yr)	327.624 MMSCF/yr

Methodology:

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

PTE from ENG01				
Pollutant	**Emission Factor**		**Hrs of Operation (hrs/yr)**	**PTE (tons/year)**
PM/PM10/PM2.5	0.15	g/bhb-hr	8760	3.97
SO2	12.4	lb/MMscf		2.03
NOX *	0.6	g/bhp-hr		15.87
VOC **	0.32	g/bhp-hr		8.47
CO ***	2.89	g/bhp-hr		76.46
Non-Methane Hydrocarbons NMOC	0.32	g/bhp-hr		8.47

PTE from ENG02				
Pollutant	**Emission Factor**		**Hrs of Operation (hrs/yr)**	**PTE (tons/year)**
PM/PM10/PM2.5	0.15	g/bhb-hr	8760	3.97
SO2	12.4	lb/MMscf		2.03
NOX *	0.6	g/bhp-hr		15.87
VOC **	0.32	g/bhp-hr		8.47
CO ***	2.65	g/bhp-hr		70.11
Non-Methane Hydrocarbons NMOC	0.32	g/bhp-hr		8.47

PTE from ENG03				
Pollutant	**Emission Factor**		**Hrs of Operation (hrs/yr)**	**PTE (tons/year)**
PM/PM10/PM2.5	0.15	g/bhb-hr	8760	3.97
SO2	12.4	lb/MMscf		2.03
NOX *	0.6	g/bhp-hr		15.87
VOC **	0.32	g/bhp-hr		8.47
CO ***	2.56	g/bhp-hr		67.73
Non-Methane Hydrocarbons NMOC	0.32	g/bhp-hr		8.47

* On January 9, 2020, stack tests were performed on existing IC engine ENG01, ENG02, and ENG03. The test results for the NOx EF were as follows: ENG01: 0.441 grams/bhp-hr; ENG02: 0.016 grams/bhp-hr; ENG03: 0.47 grams/bhp-hr.

** On January 9, 2020, stack tests were performed on existing IC engine ENG01, ENG02, and ENG03. The test results for the VOC EF were as follows: ENG01: 0.006 grams/bhp-hr; ENG02: 0.439 grams/bhp-hr; ENG03: 0.13 grams/bhp-hr.

*** On January 9, 2020, stack tests were performed on existing IC engine ENG01, ENG02, and ENG03. The test results for the CO EF were as follows: ENG01: 2.89 grams/bhp-hr; ENG02: 2.65 grams/bhp-hr; ENG03: 2.50 grams/bhp-hr. Since CO EF stack test results were greater than 2.33 grams/hp-hr (provided by manfacturer), for ENG01, the maximum stack test results will be utilized for revised CO emission factor of 2.89 g/bhp-hr. Since CO EF stack test results were greater than 2.33 grams/hp-hr (provided by manfacturer), for ENG02, the maximum stack test results will be utilized for revised CO emission factor of 2.65 g/bhp-hr. Since CO EF stack test results were greater than 2.33 grams/hp-hr (provided by manfacturer), for ENG03, a conservative emission factor for CO will be utilized for the revised CO emission factor of 2.56 g/bhp-hr. ENG04 will use a conservative emission factor of 2.56 g/bhp-hr. All four engines will be stack tested to demonstrate compliance with these CO emission factor limits.

Emissions Factors for PM/PM10/PM2.5, NOX, and VOC, are provided by source and based on manufacturer specification or testing.

SO2 emission factor is based on 250 ppmv sulfur as H2S, and 70% removal of sulfur bearing compunds in gas conditioning system see Calculations below.

lb/hr = (NOx g/bhp/hr)*(bhp)*(lb/453.59 g)

lb/hr = (lb/MMscf)*(MMscf/hr)

SO2 Emission Factor for LFG Combustion:

LFG Influent Sulfur Compound	AP-42 Concentration (ppmv)	Utilized Concentration (ppmv)	Molecular Formula	No. of Sulfur Atoms	Sulfur Content as H2S (ppmv)	Resulting SO2 Emission Rate (lb/MMCF)
Hydrogen Sulfide	35.5	234	H2S	1	234	38.87
Carbon Disulfide	0.58	0.58	CS2	2	1.2	0.19
Carbonyl Sulfide	0.49	0.49	CSO	1	0.5	0.08
Dimethyl Sulfide	7.82	7.82	C2H6S	1	7.8	1.30
Ethyl Mercaptan	2.28	2.28	C2H6S	1	2.3	0.38
Methyl Mercaptan	2.49	2.49	CH4S	1	2.5	0.41
Sulfur Dioxide (SO2)	-	-	-	-	-	12.40
						53.63

Appendix A: Emission Calculations
Landfill Gas-Fueled
Reciprocating Internal Combustion Engine
Uncontrolled/Unlimited PTE for Engines ENG01 - ENG03
HAPs Emissions

Company Name: Zimmerman Energy, LLC
Address City IN Zip: 7922 N. Hwy. 31, Argos, IN 46501
SSM No.: 049-42921-00038
SPM No.: 049-43058-00038
Reviewer: Daniel W. Pell

ted PTE HAPs for Each Engine (ENG01 - ENG03)

HAPs	Landfill Gas Concentration (ppmv)	Molecualr weight	Gas Conditioning Removal Efficiency	Destruction Efficiency	HAP Emission Factor (lb/MMCF)	PTE HAP per Each Engine (tons/year)
Acrylonitrile	6.33	53.06	70.0%	86.1%	0.036	0.006
Benzene	1.91	78.11	70.0%	86.1%	0.016	0.003
Dichloromethane	14.3	84.94	70.0%	93.0%	0.066	0.011
Ethyl Benzene	4.61	106.16	70.0%	86.1%	0.053	0.009
Hexane	6.57	86.17	70.0%	86.1%	0.061	0.010
Methyl isobutyl Ketone	1.87	100.16	70.0%	86.1%	0.020	0.003
Perchloroethylene	3.73	165.83	70.0%	93.0%	0.034	0.006
Toluene	39.3	92.13	70.0%	86.1%	0.392	0.064
trichloroethylene	2.82	131.4	70.0%	93.0%	0.020	0.003
Vinyl Chloride	7.34	62.5	70.0%	93.0%	0.025	0.004
Xylene	12.1	106.16	70.0%	86.1%	0.139	0.023
HCl	NA	36.46	70.0%	0.0%	3.351	0.549
					EF (g/bhp-hr)	
Formaldehyde	NA	NA	NA	NA	0.470	12.44
Total						**13.13**

Methodology:
The highest HAPs emission factors are provided above.
Landfill gas concentration are based on AP-42, table 2.4-1 and table 2.4-2 (11/98)
Destruction Efficiency are based on AP-42, table 2.4-3
Gas conditioning removal efficiency for HAPs and chlorinated compound removal is taken as 70%.
HAP EF (lb/MMCF) = ppmv*MW*(1-RE)*(1-DE)/385
HCL EF based on default concentration of chlorinated compound from LFG, which was calculated to be 11.17 lb/MMCF
PTE (tons/yr) = EF (lb/MMCF) * Throughput (MMCF/yr) * (ton/2000 lb)
PTE (tons/yr) for formaldehyde = EF (g/bhp-hr) * bhp * (g/453.59 lb) *(tons/2000 lb) * (8760 hrs/yr)

Appendix A: Emission Calculations
Natural Gas-Fueled
Reciprocating Internal Combustion Engine
Uncontrolled/Unlimited PTE for Engines ENG01 - ENG03

Company Name: Zimmerman Energy, LLC
Address City IN Zip: 7922 N. Hwy. 31, Argos, IN 46501
SSM No.: 049-42921-00038
SPM No.: 049-43058-00038
Reviewer: Daniel W. Pell

ENGINE DATA for ENG01 - ENG03	
Make	Caterpillar
Model	G3520C - 1500 rpm
Net Power Output	2,740 bhp
Heat Input Rate (LHV)	18.7 MMBtu/hr
Heat Input Rate (HHV)	20.8 MMBtu/hr
Minimum NG Heat Content	1020 MMBtu/MMSCF
Max. LFG Consumption (scf/hr)	20392.2 scf/hr
Max. LFG Consumption (MMSCF/hr)	0.0204 MMSCF/hr

PTE from ENG01				
Pollutant	**Emission Factor**		**Hrs of Operation (hrs/yr)**	**PTE (tons/year)**
PM/PM10/PM2.5	0.00991	lb/MMBtu	8760	0.90
SO2	0.000588	lb/MMBtu		0.05
NOX *	0.6	g/bhp-hr		15.87
VOC **	0.118	lb/MMBtu		10.75
CO ***	2.89	g/bhp-hr		76.46

PTE from ENG02				
Pollutant	**Emission Factor**		**Hrs of Operation (hrs/yr)**	**PTE (tons/year)**
PM/PM10/PM2.5	0.00991	lb/MMBtu	8760	0.90
SO2	0.000588	lb/MMBtu		0.05
NOX *	0.6	g/bhp-hr		15.87
VOC **	0.118	lb/MMBtu		10.75
CO ***	2.65	g/bhp-hr		70.11

PTE from ENG03				
Pollutant	**Emission Factor**		**Hrs of Operation (hrs/yr)**	**PTE (tons/year)**
PM/PM10/PM2.5	0.00991	lb/MMBtu	8760	0.90
SO2	0.000588	lb/MMBtu		0.05
NOX *	0.6	g/bhp-hr		15.87
VOC **	0.118	lb/MMBtu		10.75
CO ***	2.56	g/bhp-hr		67.73

Methodology:

MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

* On January 9, 2020, stack tests were performed on existing IC engine ENG01, ENG02, and ENG03. The test results for the NOx EF were as follows: ENG01: 0.441 grams/bhp-hr; ENG02: 0.016 grams/bhp-hr; ENG03: 0.47 grams/bhp-hr.

** On January 9, 2020, stack tests were performed on existing IC engine ENG01, ENG02, and ENG03. The test results for the VOC EF were as follows: ENG01: 0.006 grams/bhp-hr; ENG02: 0.439 grams/bhp-hr; ENG03: 0.13 grams/bhp-hr.

*** On January 9, 2020, stack tests were performed on existing IC engine ENG01, ENG02, and ENG03. The test results for the CO EF were as follows: ENG01: 2.89 grams/bhp-hr; ENG02: 2.65 grams/bhp-hr; ENG03: 2.50 grams/bhp-hr. Since CO EF stack test results were greater than 2.33 grams/hp-hr (provided by manfacturer), for ENG01, the maximum stack test results will be utilized for revised CO emission factor of 2.89 g/bhp-hr. Since CO EF stack test results were greater than 2.33 grams/hp-hr (provided by manfacturer), for ENG02, the maximum stack test results will be utilized for revised CO emission factor of 2.65 g/bhp-hr. Since CO EF stack test results were greater than 2.33 grams/hp-hr (provided by manfacturer), for ENG03, a conservative emission factor for CO will be utilized for the revised CO emission factor of 2.56 g/bhp-hr. ENG04 will use a conservative emission factor of 2.56 g/bhp-hr. All four engines will be stack tested to demonstrate compliance with these CO emission factor limits.

Emissions Factors for PM/PM10/PM2.5, NOX, and VOC, are provided by source and based on manufacturer specification or testing.

Appendix A: Emission Calculations
Natural Gas-Fueled
Reciprocating Internal Combustion Engine
Uncontrolled/Unlimited PTE for Engines ENG01 - ENG03
HAPs Emissions

Company Name: Zimmerman Energy, LLC
Address City IN Zip: 7922 N. Hwy. 31, Argos, IN 46501
SSM No.: 049-42921-00038
SPM No.: 049-43058-00038
Reviewer: Daniel W. Pell

HAPs	Emission Fator (lb/MMBtu)	PTE from Each Engine (tons/yr)
Acetaldehyde	0.00836	0.762
Acrolein	0.00514	0.468
Benzene	0.00044	0.040
Ethyl Benzene	0.00004	0.004
Formaldehyde	0.05280	4.810
Methanol	0.00250	0.228
Toluene	0.00041	0.037
Xylene	0.00018	0.017
Hexane	0.00110	0.100
Total		6.47

The highest HAPs emission factors are provided above.
Emission Factor are from AP 42, Table 3.2-2 (Updated 7/00)

Appendix A: Emission Calculations
Landfill Gas-Fueled
Reciprocating Internal Combustion Engine
Uncontrolled/Unlimited PTE for ENG04

Company Name: Zimmerman Energy, LLC
Address City IN Zip: 7922 N. Hwy. 31, Argos, IN 46501
SSM No.: 049-42921-00038
SPM No.: 049-43058-00038
Reviewer: Daniel W. Pell

Heat Input Capacity MMBtu/hr (HHV)	Potential Throughput MMCF/yr
17.50	306.6

ENGINE DATA	
Make	Caterpillar
Model	G3520C - 1200 rpm
Net Power Output	2,242 bhp
Heat Input Rate (LHV)	15.8 MMBtu/hr
Heat Input Rate (HHV)	17.5 MMBtu/hr
Minimum LFG Heat Content	500 MMBtu/MMSCF
Max. LFG Consumption (scf/hr)	31600 scf/hr
Max. LFG Consumption (MMSCF/hr)	0.0316 MMSCF/hr
Max. LFG Consumption (MMSCF/yr)	276.816 MMSCF/yr

Pollutant	Emission Factor		Potential Emissions for Engine ENG04	
			(lbs/hr)	(tons/year)
PM/PM10/PM2.5	0.15	g/bhb-hr	0.74	3.25
SO2	12.4	lb/MMscf	0.39	1.72
NOX *	0.6	g/bhp-hr	2.97	12.99
VOC **	0.32	g/bhp-hr	1.58	6.93
CO ***	2.56	g/bhp-hr	12.65	55.42
Non-Methane Hydrocarbons NMOC	0.32	g/bhb-hr	1.58	6.93

Methodology:

MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

* On January 9, 2020, stack tests were performed on existing IC engine ENG01, ENG02, and ENG03. The test results for the NOx EF were as follows: ENG01: 0.441 grams/bhp-hr; ENG02: 0.016 grams/bhp-hr; ENG03: 0.47 grams/bhp-hr.

** On January 9, 2020, stack tests were performed on existing IC engine ENG01, ENG02, and ENG03. The test results for the VOC EF were as follows: ENG01: 0.006 grams/bhp-hr; ENG02: 0.439 grams/bhp-hr; ENG03: 0.13 grams/bhp-hr.

*** On January 9, 2020, stack tests were performed on existing IC engine ENG01, ENG02, and ENG03. The test results for the CO EF were as follows: ENG01: 2.89 grams/bhp-hr; ENG02: 2.65 grams/bhp-hr; ENG03: 2.50 grams/bhp-hr. Since CO EF stack test results were greater than 2.33 grams/hp-hr (provided by manfacturer), for ENG01, the maximum stack test results will be utilized for revised CO emission factor of 2.89 g/bhp-hr. Since CO EF stack test results were greater than 2.33 grams/hp-hr (provided by manfacturer), for ENG02, the maximum stack test results will be utilized for revised CO emission factor of 2.65 g/bhp-hr. Since CO EF stack test results were greater than 2.33 grams/hp-hr (provided by manfacturer), for ENG03, a conservative emission factor for CO will be utilized for the revised CO emission factor of 2.56 g/bhp-hr. ENG04 will use a conservative CO emission factor of 2.56 g/bhp-hr. All four engines will be stack tested to demonstrate compliance with these CO emission factor limits.

Emissions Factors for PM/PM10/PM2.5, NOX, and VOC, are provided by source based on manufacturer specification or testing.

SO2 emission factor is based on 250 ppmv sulfur as H2S, and 70% removal of sulfur bearing compunds in gas conditioning system see Calculations below.

lb/hr = (NOx g/bhp/hr)*(bhp)*(lb/453.59 g)

lb/hr = (lb/MMscf)*(MMscf/hr)

PTE (tons/yr) = (lbs/hr) *(tons/2000 lbs)*(8760 hrs/yr)

SO2 Emission Factor for LFG Combustion:

LFG Influent Sulfur Compound	AP-42 Concentration (ppmv)	Utilized Concentration (ppmv)	Molecular Formula	No. of Sulfur Atoms	Sulfur Content as H2S (ppmv)	Resulting SO2 Emission Rate (lb/MMCF)
Hydrogen Sulfide	35.5	234	H2S	1	234	38.87
Carbon Disulfide	0.58	0.58	CS2	2	1.2	0.19
Carbonyl Sulfide	0.49	0.49	CSO	1	0.5	0.08
Dimethyl Sulfide	7.82	7.82	C2H6S	1	7.8	1.30
Ethyl Mercaptan	2.28	2.28	C2H6S	1	2.3	0.38
Methyl Mercaptan	2.49	2.49	CH4S	1	2.5	0.41
Sulfur Dioxide (SO2)	-	-	-	-	-	12.40
						53.63

Appendix A: Emission Calculations
Landfill Gas-Fueled
Reciprocating Internal Combustion Engine
Uncontrolled/Unlimited PTE for ENG04
HAPs Emissions

Company Name: Zimmerman Energy, LLC
Address City IN Zip: 7922 N. Hwy. 31, Argos, IN 46501
SSM No.: 049-42921-00038
SPM No.: 049-43058-00038
Reviewer: Daniel W. Pell

HAPs	Landfill Gas Concentration (ppmv)	Molecualr weight	Gas Conditioning Removal Efficiency	Destruction Efficiency	HAP Emission Factor (lb/MMCF)	PTE HAPs for Engine ENG04 (tons/year)
Acrylonitrile	6.33	53.06	70.0%	86.1%	0.036	0.005
Benzene	1.91	78.11	70.0%	86.1%	0.016	0.002
Dichloromethane	14.3	84.94	70.0%	93.0%	0.066	0.009
Ethyl Benzene	4.61	106.16	70.0%	86.1%	0.053	0.007
Hexane	6.57	86.17	70.0%	86.1%	0.061	0.008
Methyl isobutyl Ketone	1.87	100.16	70.0%	86.1%	0.020	0.003
Perchloroethylene	3.73	165.83	70.0%	93.0%	0.034	0.005
Toluene	39.3	92.13	70.0%	86.1%	0.392	0.054
trichloroethylene	2.82	131.4	70.0%	93.0%	0.020	0.003
Vinyl Chloride	7.34	62.5	70.0%	93.0%	0.025	0.003
Xylene	12.1	106.16	70.0%	86.1%	0.139	0.019
HCl	NA	36.46	70.0%	0.0%	3.351	0.464
					EF (g/bhp-hr)	
Formaldehyde	NA	NA	NA	NA	0.470	10.18
Total						**10.76**

Methodology:
The highest HAPs emission factors are provided above.
Landfill gas concentration are based on AP-42, table 2.4-1 and table 2.4-2 (11/98)
Destruction Efficiency are based on AP-42, table 2.4-3
Gas conditioning removal efficiency for HAPs and chlorinated compound removal is taken as 70%.
HAP EF (lb/MMCF) = ppmv*MW*(1-RE)*(1-DE)/385
HCL EF based on default concentration of chlorinated compound from LFG, which was calculated to be 11.17 lb/MMCF
PTE (tons/yr) = EF (lb/MMCF) * Throughput (MMCF/yr) * (ton/2000 lb)
PTE (tons/yr) for formaldehyde = EF (g/bhp-hr) * bhp * (g/453.59 lb) *(tons/2000 lb) * (8760 hrs/yr)

Appendix A: Emission Calculations
Natural Gas-Fueled
Reciprocating Internal Combustion Engine
Uncontrolled/Unlimited PTE for ENG04

Company Name: Zimmerman Energy, LLC
Address City IN Zip: 7922 N. Hwy. 31, Argos, IN 46501
SSM No.: 049-42921-00038
SPM No.: 049-43058-00038
Reviewer: Daniel W. Pell

Heat Input Capacity MMBtu/hr (HHV)	Potential Throughput MMCF/yr
17.5	150.3

ENGINE DATA	
Make	Caterpillar
Model	G3520C - 1500 rpm
Net Power Output	2,242 bhp
Heat Input Rate (LHV)	15.8 MMBtu/hr
Heat Input Rate (LHV)	17.5 MMBtu/hr
Minimum NG Heat Content	1020 MMBtu/MMSCF
Max. LFG Consumption (scf/hr)	17156.9 scf/hr
Max. LFG Consumption (MMSCF/hr)	0.0172 MMSCF/hr

Pollutant	Emission Factor		Potential Emissions for Genset Engine ENG04	
			(lbs/hr)	(tons/year)
PM/PM10/PM2.5	0.00991	lb/MMBtu	0.17	0.76
SO2	0.000588	lb/MMBtu	0.01	0.05
NOX *	0.6	g/bhp-hr	2.96	12.98
VOC	0.118	lb/MMBtu	2.07	9.04
CO **	2.56	g/bhp-hr	12.65	55.42

Methodology:
Emissions Factors for PM/PM10/PM2.5, SO2 and VOC are from AP 42, Table 3.2-2 (Updated 7/00).
* Emissions Factor for NOX is provided by manufacturer. An emission Stack Test was performed on IC Engine ENG03, on January 9, 2020. The measured emission rate for NOx was 0.48 grams/hp-hr. The allowable emission rate was 2.0 grams/hp-hr per 40 CFR 60, Subpart JJJJ. The IC Engine ENG03 was in compliance with the regulation.

** On January 9, 2020, stack tests were performed on existing IC engine ENG01, ENG02, and ENG03. The test results for the CO EF were as follows: ENG01: 2.89 grams/bhp-hr; ENG02: 2.65 grams/bhp-hr; ENG03: 2.50 grams/bhp-hr. On January 9, 2020, stack tests were performed on existing IC engine ENG01, ENG02, and ENG03. The test results for the CO EF were as follows: ENG01: 2.89 grams/bhp-hr; ENG02: 2.65 grams/bhp-hr; ENG03: 2.50 grams/bhp-hr. Since CO EF stack test results were greater than 2.33 grams/hp-hr (provided by manfacturer), for ENG01, the maximum stack test results will be utilized for revised CO emission factor of 2.89 g/bhp-hr. Since CO EF stack test results were greater than 2.33 grams/hp-hr (provided by manfacturer), for ENG02, the maximum stack test results will be utilized for revised CO emission factor of 2.65 g/bhp-hr. Since CO EF stack test results were greater than 2.33 grams/hp-hr (provided by manfacturer), for ENG03, a conservative emission factor for CO will be utilized for the revised CO emission factor of 2.56 g/bhp-hr. All four engines will be stack tested to demonstrate compliance with these CO emission factor limits.

HAPs	Emission Fator (lb/MMBtu)	PTE HAPs for Engine ENG04 (tons/year)
Acetaldehyde	0.00836	0.641
Acrolein	0.00514	0.394
Benzene	0.00044	0.034
Ethyl Benzene	0.00004	0.003
Formaldehyde	0.05280	4.047
Methanol	0.00250	0.192
Toluene	0.00041	0.031
Xylene	0.00018	0.014
Hexane	0.00110	0.084
Total		5.44

The highest HAPs emission factors are provided above.
Emission Factor are from AP 42, Table 3.2-2 (Updated 7/00)

Appendix A: Emission Calculations
Gas Conditioning System (GSC01) & Flare (FLR-01)

Company Name: Zimmerman Energy, LLC
Address City IN Zip: 7922 N. Hwy. 31, Argos, IN 46501
SSM No.: 049-42921-00038
SPM No.: 049-43058-00038
Reviewer: Daniel W. Pell

Fuel to 4 IC Engines =	2,500	scfm
Fuel to 4 IC Engines per day =	3,600,000	ft^3/day
Fuel to 4 IC Engines per year =	1,314	MMSCF/yr
Flare LFG fuel Utilization =	126	scfm
Flow Rate to Flare per day =	181,440	ft^3/day (9 hr/day)
Fuel to 4 IC Engines =	3.6	MMSCF/day
Flare LFG fuel Utilization =	126	scfm
Minimum LFG Heat Content =	500	MMBtu/MMSCF
Flare Heat Input =	3.8	MMBtu/hr
Limited LFG fuel to Flare =	66.576	MMCF/yr
Potential LFG fuel to Flare =	66.576	MMCF/yr
Flare Operating Hour =	24	hr/day
SRS Capture Efficiency for Sulfur =	90%	max

LFG Concentration:

Siloxanes ≤	75	mg/m^3
Total NMOCs ≤	1,500	mg/m^3
Flow Rate =	2,500	scfm

Conversion Factor:
1 mg/m^3 = 6.243E-8 lb/ft^3

Pollutant	Throughput (mg/m^3)	Daily Mass Loading (lb/day)	Removal Efficiency %	Average Removal (lb/day)	Flow to Flare (lb/hr)
Siloxanes	75	16.83	99.75	16.79	0.85
NMOCs	1,500	337.12	90	303.41	16.99

Pollutant	Emission Factor		PTE (tons/year)
PM/PM10/PM2.5-Fuel	17	lb/MMscf	3.10E-03
PM/PM10/PM2.5-Purge Gas	0.7	lb/hr	3.06
SO2 - Fuel	41.60	lb/MMscf	0.14
SO2 - Purge Gas	41.60	lb/MMscf	24.60
NOX - Fuel	0.06	lb/MMBtu	1.00
VOC/NMOC - Fuel	0.12	lb/hr	0.53
VOC/NMOC - Purge Gas	0.7	lb/hr	1.00
CO - Fuel	0.2	lb/MMBtu	3.33

PM/PM2.5/PM10 for fuel is from AP-42, table 2.4-5 (updated 11/98)
PM/PM2.5/PM10 for purge gas is based on mass balance estimates as shown in table.
SO2 emission factor for both fuel and purge gas (lb/mmcf) = 250 ppm as H2S * 64.06 SO2/lb-mol / 385scf/lb-mol

Methodology:
PM/PM10/PM2.5 (fuel) = 17 lb/MMscf * 126 scfm * 60 min/hr * 55% CH4 * 24 hr/day * 365 days/yr * tons/2000 lb * MMscf/100000 scf
PM/PM10/PM2.5 (purge gas) = 16.79 (lb/day) * 365 days/yr * ton/2000 lbs
SO2 for fuel = ((Emission Factor lb/mmcf *(1-90% capture efficiency) * Flare LFG fuel Utilization scfm * 60 min/day * 365 day/yr)/1000000)/2000 lb/ton
SO2 for purge gas = (Emission factor (lb/MMscf) * SRS Capture Efficiency for Sulfur (%) * Flow Rate scfm *60 min/hr * 24 hr/day* 365 day/yr) / 1000000 / 2000lbs
Nox for fuel = 0.06 lb/MMBtu * 3.8 MMBtu/hr * 24 hr/day * 365 days/yr * ton/2000 lb
VOC/NMOC Fuel = 0.12 lb/hr * 24 hr/day * 365 days/yr * ton/2000 lb
VOC/NMOC purge gas = 303.41 lb/day * 90% collected * 98% DE * 365 days/yr * ton/2000lbs
CO fuel = 0.2 lb/MMBtu * 3.8 MMbtu/hr * 24 hr/day * 365 days/yr * tons/2000 lbs

Appendix A: Emission Calculations
Gas Conditioning System (GSC01) & Flare (FLR-01)
HAPs

Company Name: Zimmerman Energy, LLC
Address City IN Zip: 7922 N. Hwy. 31, Argos, IN 46501
SSM No.: 049-42921-00038
SPM No.: 049-43058-00038
Reviewer: Daniel W. Pell

HAPs	Landfill Gas Concentration (ppmv)	Molecualr weight	Destruction Efficiency	Gas Conditioning Removal Efficiency	Emissions-purge gas (tons/yr)	Emissions-fuel (tons/yr)	Total PTE (tons/year)
Acrylonitrile	6.33	53.06	98.0%	70.0%	0.008	0.0006	0.009
Benzene	1.91	78.11	98.0%	70.0%	0.004	0.0003	0.004
Dichloromethane	14.3	84.94	98.0%	70.0%	0.029	0.0021	0.031
Ethyl Benzene	4.61	106.16	98.0%	70.0%	0.012	0.0008	0.013
Hexane	6.57	86.17	98.0%	70.0%	0.001	0.0010	0.002
Methyl isobutyl Ketone	1.87	100.16	98.0%	70.0%	0.004	0.0003	0.005
Perchloroethylene	3.73	165.83	98.0%	70.0%	0.015	0.0011	0.016
Toluene	39.3	92.13	98.0%	70.0%	0.087	0.0063	0.093
trichloroethylene	2.82	131.4	98.0%	70.0%	0.009	0.0006	0.009
Vinyl Chloride	7.34	62.5	98.0%	70.0%	0.011	0.0008	0.012
Xylene	12.1	106.16	98.0%	70.0%	0.031	0.0022	0.033
	Emission Factor (lb/MMCF)						
HCl	11.78	36.46	0.0%	70.0%	5.418	0.39	5.81
Total					5.627	0.4082	6.04

Methodology:
The highest HAPs emission factors are provided above.
Landfill gas concentration are based on AP-42, table 2.4-1 and table 2.4-2 (11/98)
Destruction Efficiency are based on AP-42, table 2.4-3
Gas conditioning removal efficiency for HAPs and chlorinated compound removal is taken as 70%.
Emissions Purge Gas 9tons/year) = ppmv * MW (lb/mol) * MMCF/yr conditioned gas * RE * (1-DE) * mol/385ft^3 * ton/2000lb
Emissions fuel (tons/yr) = Conc (ppmv) * MW (lb/mol) * (1-DE) * mol/385 ft^3 * ton/2000lb
Emission HCL - Purge Gas (tons/yr) = EF (lb/MMCF) * RE * MMCF/yr conditioned gas * ton/2000lb
Emission HCL - Fuel (tons/yr) = EF (lb/MMCF) * MMCF/yr LFG * ton/2000lb

Appendix A: Emission Calculations
Diesel Fired Emergency Generator (EGEN01)

Company Name: **Zimmerman Energy, LLC**
Address City IN Zip: **7922 N. Hwy. 31, Argos, IN 46501**
SSM No.: **049-42921-00038**
SPM No.: **049-43058-00038**
Reviewer: **Daniel W. Pell**

Unlimited	
Output Horsepower Rating (hp)	157.0
Maximum Hours Operated per Year	500
Potential Throughput (hp-hr/yr)	78,500

Limited	
Output Horsepower Rating (hp)	157.0
Maximum Hours Operated per Year	50
Potential Throughput (hp-hr/yr)	7,850

	PTE (Tons/yr)						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/hp-hr	0.0022	0.0022	0.0022	0.0021	0.0310	0.0025	0.0067
Uncontrolled/ Unlimited PTE (tons/yr	0.09	0.09	0.09	0.08	1.22	0.10	0.26
Limited PTE (tons/yr)**	-	-	-	-	-	-	0.03

*PM and PM2.5 emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable.
**The source has taken 50 hours operating limit for EGEN01 in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable due to PTE CO.

Hazardous Air Pollutants (HAPs)

	Pollutant							
	Benzene	Toluene	Xylene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH HAPs***
Emission Factor in lb/hp-hr****	6.53E-06	2.86E-06	2.00E-06	2.74E-07	8.26E-06	5.37E-06	6.48E-07	1.18E-06
Potential Emission in tons/yr	2.56E-04	1.12E-04	7.83E-05	1.07E-05	3.24E-04	2.11E-04	2.54E-05	4.62E-05

***PAH = Polyaromatic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter)
****Emission factors in lb/hp-hr were calculated using emission factors in lb/MMBtu and a brake specific fuel consumption of 7,000 Btu / hp-hr (AP-42 Table 3.3-1).

Potential Emission of Total HAPs (tons/yr)	**1.06E-03**

Methodology
Emission Factors are from AP 42 (Supplement B 10/96) Tables 3.3-1 and 3.3-2.
Potential Throughput (hp-hr/yr) = [Output Horsepower Rating (hp)] * [Maximum Hours Operated per Year]
Potential Emission (tons/yr) = [Potential Throughput (hp-hr/yr)] * [Emission Factor (lb/hp-hr)] / [2,000 lb/ton]

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Eric J. Holcomb
Governor

Bruno L. Pigott
Commissioner

September 24, 2020

Emily Zambuto
Zimmerman Energy, LLC
2999 Judge Road
Oakfield, NY 14125

Re: Public Notice
Zimmerman Energy, LLC
Permit Level: Title V-Significant Source Modification Minor PSD/EO & Title V-Significant Permit Modification
Permit Number: 049-42921-00038 &
049-43058-00038

Dear Ms. Emily Zambuto:

Enclosed is the Notice of 30-Day Period for Public Comment for your draft air permit.

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. The Notice of 30-Day Period for Public Comment has also been sent to the OAQ Permits Branch Interested Parties List and, if applicable, your Consultant/Agent and/or Responsible Official/Authorized Individual.

The preliminary findings, including the draft permit, technical support document, emission calculations, and other supporting documents, **are available electronically at**:

IDEM's online searchable database: http://www.in.gov/apps/idem/caats/ . Choose Search Option **by Permit Number**, then enter permit 42921 & 43058

and

IDEM's Virtual File Cabinet (VFC): http://www.IN.gov/idem. Enter VFC in the search box, then search for permit documents using a variety of criteria, such as Program area, date range, permit #, Agency Interest Number, or Source ID.

The Public Notice period will begin the date the Notice is published on the IDEM Official Public Notice website. Publication has been requested and is expected within 2-3 business days. You may check the exact Public Notice begins and ends date here: https://www.in.gov/idem/5474.htm

Please note that as of April 17, 2019, IDEM is no longer required to publish the notice in a newspaper.

OAQ has submitted the draft permit package to the Argos Public Library, 142 North Michigan Street in Argos, IN 46501 and Fulton County Public Library, 320 West 7th Street in Rochester, IN 46975. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

Please review the draft permit documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Daniel W. Pell, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 4-8532 or dial (317) 234-8532.

Sincerely,

Kathy Bourquein

Kathy Bourquein
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover Letter access via website 8/10/2020

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September 24, 2020

To: Argos Public Library and Fulton County Public Library

From: Jenny Acker, Branch Chief
Permits Branch
Office of Air Quality

Subject: **Important Information to Display Regarding a Public Notice for an Air Permit**

Applicant Name: Zimmerman Energy, LLC
Permit Number: 049-42921-00038 & 049-43058-00038

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. **Please make this information readily available until you receive a copy of the final package.**

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. Questions pertaining to the permit itself should be directed to the contact listed on the notice.

Enclosures
PN Library updated 4/2019

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Notice of Public Comment

September 24, 2020
Zimmerman Energy, LLC
049-42921-00038 & 049-43058-00038

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.

Enclosed is a Notice of Public Comment, which has posted on IDEM's Public Notice website at https://www.in.gov/idem/5474.htm.

The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana's Air Permitting Program.

Please Note: *If you feel you have received this Notice in error, or would like to be removed from the Air Permits mailing list, please contact Joanne Smiddie-Brush with the Air Permits Administration Section at 1-800-451-6027, ext. 3-0185 or via e-mail at JBRUSH@IDEM.IN.GOV. If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.*

Enclosure
PN AAA Cover Letter 2/28/2020

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Commissioner

AFFECTED STATE NOTIFICATION OF PUBLIC COMMENT PERIOD
DRAFT INDIANA AIR PERMIT

September 24, 2020

A 30-day public comment period has been initiated for:

Permit Number: **049-42921-00038 & 049-43058-00038**
Applicant Name: **Zimmerman Energy, LLC**
Location: **Argos, Fulton County, Indiana**

The public notice, draft permit and technical support documents can be accessed via the **IDEM Air Permits Online** site at:
http://www.in.gov/ai/appfiles/idem-caats/

Questions or comments on this draft permit should be directed to the person identified in the public notice by telephone or in writing to:

Indiana Department of Environmental Management
Office of Air Quality, Permits Branch
100 North Senate Avenue
Indianapolis, IN 46204

Questions or comments regarding this email notification or access to this information from the EPA Internet site can be directed to Chris Hammack at chammack@idem.IN.gov or (317) 233-2414.

Mail Code 61-53

IDEM Staff	KBOURQUE 9/24/2020 Zimmerman Energy LLC 049-42921-00038 & 049-43058-00038 (draft)		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: **CERTIFICATE OF MAILING ONLY**

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1		Emily Zambuto Zimmerman Energy LLC 2999 Judge Rd Oakfield NY 141259771 (Source CAATS)									
2		Dennis Plaster Vice President Zimmerman Energy LLC 46280 Dylan Dr Ste 200 Novi MI 48377 *(RO CAATS)*									
3		Fulton County Commissioners 1093 E 600 N Rochester IN 46975 *(Local Official)*									
4		Argos Public Library 142 N Michigan St Argos IN 46501-1098 *(Library)*									
5		Fulton County Public Library - Rochester Branch 320 W 7th St Rochester IN 46975-1332 *(Library)*									
6		Fulton County Health Department 125 E 9th Street, Ste 004 Rochester IN 46975-7119 *(Health Department)*									
7		Argos Town Council 201 W Walnut St Argos IN 46501 *(Local Official)*									
8		County Line Landfill (Republic Services) 7922 North Old US Highway Argos IN 46501 *(Affected Party)*									
9		Jeri Seely The Mail-Journal PO Box 188 Milford IN 46542 *(Affected Party)*									
10		Wesley Dehne The Rochester Sentinel 118 E 8th PO Box 260 Rochester IN 46975 *(Affected Party)*									
11		Christina Seiler The Rochester Sentinel PO Box 260 Rochester IN 46975 *(Affected Party)*									
12		Andy Rusnak Impact Compliance Testing 37660 Hills Tech Drive Farmington Hills MI 48331 *(Consultant)*									
13											
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