NOTICE OF 30-DAY PERIOD
FOR PUBLIC COMMENT

Preliminary Findings Regarding a Significant Modification to a Part 70 Operating Permit

for CGS Services, Inc. in Shelby County

Significant Source Modification No.: 145-41594-00049
Significant Permit Modification No.: 145-41613-00049

The Indiana Department of Environmental Management (IDEM) has received an application from CGS Services, Inc., located at 2920 E. US 52, Morrisville, Indiana 46161, for a significant modification of its Part 70 Operating Permit issued on February 13, 2018. If approved by IDEM’s Office of Air Quality (OAQ), this proposed modification would allow CGS Services, Inc. to make certain changes at its existing source. CGS Services, Inc. has applied to construct and operate a new open flare to control gas from the landfill waste and to include insignificant activities not currently listed in the permit.

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 are available at:

Shelby County Public Library
57 West Broadway
Shelbyville, IN 46176

A copy of the preliminary findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/.

A copy of the preliminary findings is also available via IDEM’s Virtual File Cabinet (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 145-41594-00049 and SPM 145-41613-00046 in all correspondence.

Comments should be sent to:

William Altman
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGON 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for William Altman or (317) 233-9664
Or dial directly: (317) 233-9664
Fax: (317) 232-6749 attn: William Altman
E-mail: WAltman@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, at the local library 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 William Altman of my staff at the above address.

Madhurima Das
Madhurima D. Moulik, Ph.D., Section Chief
Permits Branch
Office of Air Quality
David Klene  
CGS Services, Inc.  
2920 E US 52, PO BOX 12  
Morristown, IN 46161

Re: 145-41594-00049  
Significant Source Modification

Dear David Klene:

CGS Services, Inc. was issued Part 70 Operating Permit Renewal No. T145-38046-00049 on February 13, 2018 for a stationary municipal solid waste landfill located at 2920 E. US 52, Morristown, IN 46161. An application to modify the source was received on June 20, 2019. Pursuant to the provisions of 326 IAC 2-7-10.5, a Significant Source Modification is hereby approved as described in the attached Technical Support Document.

Pursuant to 326 IAC 2-7-10.5, the following emission units are approved for construction at the source:

(a) One (1) open flare, identified as OPENFLR, approved in 2019 for construction, with a rated capacity of 3,000 CFM, uncontrolled, and exhausting FL1.

(b) Three (3) solar vent flares, identified as SF1, SF2, and SF3, approved in 2019 for construction, each with a maximum capacity of 50 cubic feet per minute of landfill gas.

The following construction conditions are applicable to the proposed modification:

**General Construction Conditions**

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).

2. This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

**Effective Date of the Permit**

3. Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

**Commenced Construction**

4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(j), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.
Approval to Construct

6. Pursuant to 326 IAC 2-7-10.5(h)(2), this Significant Source Modification authorizes the construction of the new emission unit(s), when the Significant Source Modification has been issued.

Pursuant to 326 IAC 2-7-10.5(m), the emission units constructed under this approval shall not be placed into operation prior to revision of the source’s Part 70 Operating Permit to incorporate the required operation conditions.

Pursuant to 326 IAC 2-7-12, operation of the new emission unit(s) is not approved until the Significant Permit Modification has been issued. Operating conditions shall be incorporated into the Part 70 Operating Permit as a Significant Permit Modification in accordance with 326 IAC 2-7-10.5(m)(2) and 326 IAC 2-7-12 (Permit Modification).

A copy of the permit is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/. A copy of the permit is also available via IDEM’s Virtual File Cabinet (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 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 William Altman, 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) 233-9664 or (800) 451-6027, and ask for William Altman or (317) 233-9664.

Sincerely,

Madhurima D. Moulik, Ph.D., Section Chief
Permits Branch
Office of Air Quality

Attachments: Significant Source Modification and Technical Support Document

cc: File - Shelby County
Shelby County Health Department
U.S. EPA, Region 5
Compliance and Enforcement Branch
Significant Source Modification to a Part 70 Source

OFFICE OF AIR QUALITY

CGS Services, Inc.
2920 E US 52
Morristown, IN 46161

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

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. This permit also addresses certain new source review requirements for new and/or existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-7-10.5, applicable to those conditions.

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| Issuance Date:                                      |

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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 municipal solid waste landfill.

Source Address: 2920 E US 52, Morristown, Indiana 46161
General Source Phone Number: (765) 763-1238
SIC Code: 4953 (Refuse Systems)
County Location: Shelby
Source Location Status: Attainment for all criteria pollutants
Source Status: Part 70 Operating Permit Program
Minor Source, under PSD Rules
Minor 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) One (1) stationary municipal solid waste landfill, beginning operation in 1969, modified in 1995 and 2019, with a design capacity of 31,855,364 bcy (4,355,173 m³) or 31,360,455 Megagrams (Mg) at the current projected density.

Under 40 CFR 60, Subpart WWW and 40 CFR 61, Subpart M this unit is considered an affected source.

(b) One (1) open flare, identified as OPENFLR, approved in 2019 for construction, with a rated capacity of 3,000 CFM, controlling emissions from the municipal solid waste landfill, and exhausting to stack FL1.

Under 40 CFR 60, Subpart WWW this unit is considered an affected source.

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

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

(a) Natural gas-fired units with a combined maximum capacity of less than or equal to 0.5 MMBtu per hour:

(1) One (1) natural gas-fired furnace, identified as the scale house furnace, installed in 2004, with a maximum capacity of 0.07 MMBtu per hour, uncontrolled, and exhausting to the outdoors.

(2) Three (3) natural gas-fired furnaces, identified as OF-E, OF-N, and OF-W, each installed in 2005, with a maximum capacity of 0.09 MMBtu per hour each, uncontrolled, and exhausting to the outdoors.
(3) One (1) natural gas-fired furnace, identified as OF-B, installed in 2005, with a maximum capacity of 0.045 MMBtu per hour, uncontrolled, and exhausting to the outdoors.

(4) One (1) natural gas-fired hot water heater, identified as the office hot water heater, installed in 2005, with a maximum capacity of 0.04 MMBtu per hour, uncontrolled, and exhausting to the outdoors.

(b) One (1) diesel-fired emergency generator, identified as the emergency generator-leachate, manufactured before 2006 and installed before 2006, with a maximum output of 22.8 HP, exhausting to the outdoors. Under 40 CFR 63, Subpart ZZZZ, this unit is considered an existing affected source.

(c) One (1) natural gas-fired emergency generator, manufactured before 2007 and installed before 2006, with a maximum output of 20.1 HP, exhausting to the outdoors. Under 40 CFR 63, Subpart ZZZZ, this unit is considered an existing affected source.

(d) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4][326 IAC 6-5]

(e) Three (3) solar vent flares, identified as SF1, SF2, and SF3, approved in 2019 for construction, each with a maximum capacity of 50 cubic feet per minute of landfill gas. Under 40 CFR 60, Subpart WWW this unit is considered an affected source.

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

This stationary source also includes the following insignificant activities which are not specifically regulated, as defined in 326 IAC 2-7-1(21):

(a) Natural gas-fired units with a combined maximum capacity of less than or equal to 1.5 MMBtu per hour:

(1) Four (4) natural gas-fired space heaters, identified as SCTH1 through SCTH4, installed after 1983, with a maximum capacity of 0.15 MMBtu per hour each, uncontrolled, and exhausting to the indoors.

(2) Four (4) natural gas-fired space heaters, identified as Truck1 through Truck4, installed after 1983, one with a maximum capacity of 0.15 MMBtu per hour, three with a maximum capacity of 0.2 MMBtu per hour, uncontrolled, and exhausting to the indoors.

(3) One (1) natural gas-fired space heater, identified as the tire center ceiling heater, installed after 1983, with a maximum capacity of 0.125 MMBtu per hour, uncontrolled, and exhausting to the indoors.

(b) Four (4) kerosene-fired portable shop heaters, identified as SH1 through SH4, installed after 1983, with a maximum capacity of 0.215 MMBtu per hour each, uncontrolled, and exhausting to the indoors.

(c) One (1) gasoline-fired generator, identified as the portable generator-landfill lights, manufactured in 2017 and installed in 2017, with a maximum output of 18 HP, exhausting
to the outdoors. The gasoline-fired generator is considered a nonroad engine as defined by 40 CFR 1068.30.

(d) One (1) offroad diesel dispensing facility, identified as S3, having a storage capacity of 6,000 gallons, and dispensing less than or equal to 230,000 gallons per month.

(e) One (1) onroad diesel dispensing facility, identified as S12, constructed after 1984, having a storage capacity of 30,000 gallons, and dispensing less than or equal to 230,000 gallons per month.

(f) Combustion source flame safety purging on startup.

(g) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.

(h) On-site fire and emergency response training approved by the department.

(i) Groundwater interceptor pond,

(j) Gasoline storage tank,

(k) Use of petroleum contaminated soils as alternate daily cover,

(l) Liquid waste solidification,

(m) recycling center,

(n) Two (2) safety-kleen parts washing stations,

(o) Stationary natural gas-fired pressure washer (0.38 MMBtu/hour),

(p) Composting activities,

(q) Stationary natural-gas tube (comfort) heaters in building 24: three (3) 200,000 BTU/hour, two (2) 150,000 BTO/hour, and one (1) 125,000 BTU/hour

(r) Spray paint gun, and

(s) 10,000 gallon CAMU leachate storage tank.

A.5 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, T145-38046-00049, 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 13-15-3-6. 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 V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

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

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

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

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

(b) If required by specific condition(s) in Sections D.1, D.2, D.3, E.1, E.2, or E.3 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 T145-38046-00049 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 V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

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

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

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

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

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

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

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ or U.S. EPA is required.

(e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.20 Source Modification Requirement [326 IAC 2-7-10.5]
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 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

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

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

<table>
<thead>
<tr>
<th>Emission Limitations and Standards [326 IAC 2-7-5(1)]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>C.1</strong> Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]</td>
</tr>
<tr>
<td>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.</td>
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<tr>
<td><strong>C.2</strong> Opacity [326 IAC 5-1]</td>
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<tr>
<td>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:</td>
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<tr>
<td>(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.</td>
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<tr>
<td>(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.</td>
</tr>
<tr>
<td><strong>C.3</strong> Open Burning [326 IAC 4-1][IC 13-17-9]</td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td><strong>C.4</strong> Incineration [326 IAC 4-2][326 IAC 9-1-2]</td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td><strong>C.5</strong> Fugitive Dust Emissions [326 IAC 6-4]</td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td><strong>C.6</strong> Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]</td>
</tr>
<tr>
<td>Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the attached plan as in Attachment A. The provisions of 326 IAC 6-5 are not federally enforceable.</td>
</tr>
<tr>
<td><strong>C.7</strong> Asbestos Abatement Projects [326 IAC 14-10][326 IAC 18][40 CFR 61, Subpart M]</td>
</tr>
<tr>
<td>(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</td>
</tr>
</tbody>
</table>
326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

   (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

   (2) If there is a change in the following:

      (A) Asbestos removal or demolition start date;

      (B) Removal or demolition contractor; or

      (C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

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

All required notifications shall be submitted to:

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

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

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.
Testing Requirements  [326 IAC 2-7-6(1)]

C.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
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 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.13 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.14 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.15 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

Pursuant to 326 IAC 2-6-3(b)(2), starting in 2005 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.16 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.17 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.18 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:

Specifically Regulated Insignificant Activities:

(a) Natural gas-fired units with a combined maximum capacity of less than or equal to 2 MMBtu per hour:

(1) One (1) natural gas-fired furnace, identified as the scale house furnace, installed in 2004, with a maximum capacity of 0.07 MMBtu per hour, uncontrolled, and exhausting to the outdoors.

(2) Three (3) natural gas-fired furnaces, identified as OF-E, OF-N, and OF-W, each installed in 2005, with a maximum capacity of 0.09 MMBtu per hour each, uncontrolled, and exhausting to the outdoors.

(3) One (1) natural gas-fired furnace, identified as OF-B, installed in 2005, with a maximum capacity of 0.045 MMBtu per hour, uncontrolled, and exhausting to the outdoors.

(4) One (1) natural gas-fired hot water heater, identified as the office hot water heater, installed in 2005, with a maximum capacity of 0.04 MMBtu per hour, uncontrolled, and exhausting to the outdoors.

(o) Stationary natural gas-fired pressure washer (0.38 MMBtu/hour),

(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 Particulate Emissions [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), particulate emissions from the indirect heating units shall be limited to 0.6 pounds per MMBtu heat input each.
SECTION D.2  EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Descriptions:

(f) Two (2) safety-kleen parts washing stations,

(g) Stationary natural gas-fired pressure washer (0.38 MMBtu/hour),

(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.2.1 Cold Cleaner Degreaser Control Equipment and Operating Requirements [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold cleaner degreaser control equipment and operating requirements), for cold cleaning operations constructed after January 1, 1980, the Permittee shall comply with the following:

(a) The owner or operator of a cold cleaner degreaser shall ensure the following control equipment and operating requirements are met:

(1) Equip the degreaser with a cover;

(2) Equip the degreaser with a device for draining cleaned parts;

(3) Close the degreaser cover whenever parts are not being handled in the degreaser;

(4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(5) Provide a permanent, conspicuous label that lists the operation requirements in subdivisions (3), (4), (6), and (7);

(6) Store waste solvent only in closed containers; and

(7) Prohibit the disposal or transfer of waste solvent in such a manner that could allow greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.

(b) The owner or operator of a cold cleaner degreaser subject to this subsection shall ensure the following additional control equipment and operating requirements are met:

(1) Equip the degreaser with one (1) of the following control devices if the solvent is heated to a temperature of greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent used is insoluble in, and heavier than, water.

(C) A refrigerated chiller.
(D) Carbon adsorption.

(E) An alternative system of demonstrated equivalent or better control as those outlined in clauses (A) through (D) that is approved by the department. An alternative system shall be submitted to the U.S. EPA as a SIP revision.

(2) Ensure the degreaser cover is designed so that it can be easily operated with one (1) hand if the solvent is agitated or heated.

(3) If used, solvent spray:
   (A) must be a solid, fluid stream; and
   (B) shall be applied at a pressure that does not cause excessive splashing.

D.2.2 Material Requirements for Cold Cleaner Degreasers [326 IAC 8-3-8]

Pursuant to 326 IAC 8-3-8, on and after January 1, 2015, the Permittee shall not operate a cold cleaner degreaser with a solvent that has a VOC composite partial vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

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

D.2.3 Record Keeping Requirements

(a) Pursuant to 326 IAC 8-3-8(c)(2), the Permittee shall maintain the following records for each solvent purchase:

   (1) The name and address of the solvent supplier;
   (2) The date of purchase (or invoice/bill date of contract servicer indicating service date);
   (3) The type of solvent purchased;
   (4) The total volume of solvent purchased; and
   (5) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

(b) In order to document the compliance status with Condition D.2.2, the Permittee shall maintain a copy of the current fire prevention plan.

(c) To document the compliance status with Condition D.2.2, the Permittee shall maintain training program records, including copies of the training program, the list of trained personnel, the initial training and refresher training completion date(s), and whether personnel successfully completed the training.

(d) In order to document the compliance status with Condition D.2.2, the Permittee shall maintain records of random load and suspicious load inspections.

(e) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.
SECTION D.3  EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Descriptions:

(a) One (1) stationary municipal solid waste landfill, beginning operation in 1969, modified in 1995 and 2019, with a design capacity of 31,855,364 bcy (4,355,173 m³) or 31,360,455 Megagrams (Mg) at the current projected density.

Under 40 CFR 60, Subpart WWW and 40 CFR 61, Subpart M this unit is considered an affected source.

(b) One (1) open flare, identified as OPENFLR, approved in 2019 for construction, with a rated capacity of 3,000 CFM, controlling emissions from the municipal solid waste landfill, and exhausting to stack FL1.

(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.3.1 Hazardous Air Pollutants (HAPs) [326 IAC 20]

In order to render the source an area source of HAP emissions under Section 112 of the Clean Air Act (CAA), the Permittee shall comply with the following:

(a) Single HAP emissions from the landfill (after flare) shall be less than 9.5 tons per twelve (12) consecutive month period, with compliance determined at the end of each month; and

(b) Combined HAP emissions from the landfill (after flare) shall be less than 23.5 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 HAP from all other emission units at the source, shall limit the source-wide potential to emit single HAP to less than 10 tons per twelve (12) consecutive month period and the source-wide potential to emit total HAPs to less than 25 tons per twelve (12) consecutive month period, and shall render the source an area source of HAP emissions under Section 112 of the Clean Air Act (CAA).

Compliance Determination Requirements

D.3.2 Hazardous Air Pollutants (HAP)

Compliance with the HAP limitations contained in Condition D.3.1 shall be determined as follows:

(a) When controlling landfill gas HAP emissions with one (1) or more flares at the Landfill to comply with Condition D.3.1, the flares shall be operated in accordance with 40 CFR 60.18.

(b) From the date of issuance of this permit (145-41594-00049) until landfill gas collection and control systems (GCCS) with flares are installed and operated at the Landfill, the Permittee shall determine the landfill HAP emissions utilizing one (1) or more of the following options:

(2) Using HAP emission estimates from the Landfill Gas Emissions Model (LandGEM) Version 3.02 (or most recent final EPA-approved version), U.S. Environmental Protection Agency; and/or

(3) Conducting site-specific HAP emission testing at least once every year using methods in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

(c) From the date of issuance of this permit (145-41594-00049) until landfill gas collection and control systems (GCCS) with flares are installed and operated at the Landfill, the Permittee shall determine the HAP emissions per twelve (12) consecutive month period from each of the Landfill using the following equations:

Single HAP Emissions = \[\text{Captured/Uncontrolled Single HAP Emissions} \times (1 - \text{Overall Control Efficiency when flare control(s) is used for HAP control}) + \text{Captured/Uncontrolled Single HAP Emissions when flare control(s) is not used for HAP control}) + \text{Uncaptured Single HAP Emissions} + \text{Single HAP Emissions from Combustion of Landfill Gas in flare control(s)}\]

Combined HAP Emissions = \[\text{Captured/Uncontrolled Combined HAP Emissions} \times (1 - \text{Overall Control Efficiency when flare control(s) is used for HAP control}) + \text{Captured/Uncontrolled Combined HAP Emissions when flare control(s) is not used for HAP control}) + \text{Uncaptured Combined HAP Emissions} + \text{Combined HAP Emissions from Combustion of Landfill Gas in flare control(s)}\]

Overall Control Efficiency = \[1 - (\text{Flare HAP Destruction Efficiency}) \times (\text{Landfill Gas Capture Efficiency})\]

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

D.3.3 Parametric Monitoring: Flares

(a) When controlling landfill gas HAP emissions with the open flare to comply with Condition D.3.1, the Permittee shall monitor the flare flame using a thermocouple or any other equivalent device to indicate the continuous presence of a flame. If a condition exists which should result in a response step, the Permittee shall take a reasonable response step(s). Section C - Response to Excursions or Exceedances contains the Permittee’s obligation with regard to the reasonable response steps required by this condition. Failure to take a response step(s) shall be considered a deviation of this permit.

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

D.3.4 Record Keeping Requirements

(a) To document compliance with Condition D.3.1, the Permittee shall maintain records in accordance with (1) through (2) below from the date of issuance of this permit (145-41594-00049) until the open flare is installed and operated at the Landfill. Records
maintained for (1) through (2) shall be taken monthly and shall be complete and sufficient to establish compliance with the requirements in Condition D.3.1.

(1) Methods utilized and parameter values used to determine HAP emissions as specified in Conditions D.3.2(b) and D.3.2(c);

(2) Single HAP and Combined HAP emissions each month and each compliance period using the equations contained in Condition D.1.2(c).

(b) To document compliance with Conditions D.3.1 and D.3.3, the Permittee shall maintain records of the following for each flare:

(1) Date and time when the landfill emissions were controlled by a flare and documentation that a flare flame was present.

(2) Date and time when the landfill emissions were not controlled by a flare.

(3) Records of the flare flame monitoring that indicate the continuous presence of a flame and records of all periods of operations during which the flare flame is absent.

(4) A copy of the manufacturer's operation and maintenance manual that defines operating procedures that will ensure destruction efficiency at the flare.

(5) The design specifications for the flare.

(6) Calibration data and maintenance records for the flare and thermocouple or equivalent device.

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

D.3.5 Reporting Requirements

From the date of issuance of this permit (145-41594-00049) until the open flare is installed and operated at the Landfill, the Permittee shall submit quarterly summaries of the information to document the compliance status with Conditions D.3.1(a) and D.3.1(b) using the reporting forms located at the end of this permit, or their equivalent, no later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The reports submitted by the Permittee 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). Once the landfill gas collection and control systems (GCCS) with flares are installed and operated at the landfill, the requirements to submit this report cease and the permittee shall state this in a final quarterly report, along with the date that the flarees were installed and began operating.
**SECTION E.1 NSPS**

Emissions Unit Description:

(a) One (1) stationary municipal solid waste landfill, beginning operation in 1969, modified in 1995 and approved in 2019 for modification, with a design capacity of 31,855,364 bcy (4,355,173 m³) or 31,360,455 Megagrams (Mg) at the current projected density. Under 40 CFR 60, Subpart WWW and 40 CFR 61, Subpart M this unit is considered an affected source.

(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)]**


(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.1.2 New Source Performance Standard for Municipal Solid Waste Landfills NSPS [326 IAC 12][40 CFR Part 60, Subpart WWW][326 IAC 8-8.1]

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 60.750(a)
(2) 40 CFR 60.750(b)
(3) 40 CFR 60.750(c)
(4) 40 CFR 60.751
(5) 40 CFR 60.752(b)
(6) 40 CFR 60.752(d)
(7) 40 CFR 60.754(a)
(8) 40 CFR 60.757(b)
SECTION E.2 NESHAP

Emissions Unit Description:

(a) One (1) stationary municipal solid waste landfill, beginning operation in 1969, modified in 1995 and approved in 2019 for modification, with a design capacity of 31,855,364 bcy (4,355,173 m³) or 31,360,455 Megagrams (Mg) at the current projected density.

Under 40 CFR 60, Subpart WWW and 40 CFR 61, Subpart M this unit is considered an affected source.

(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)]


(a) Pursuant to 40 CFR 61 the Permittee shall comply with the provisions of 40 CFR Part 61, 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 61, Subpart M.

(b) Pursuant to 40 CFR 61, 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 National Emission Standards for Asbestos [40 CFR Part 61, Subpart M][326 IAC 14-2-1]

The Permittee shall comply with the following provisions of 40 CFR Part 61, Subpart M (included as Attachment C to the operating permit), which are incorporated by reference as 326 IAC 14-2-1, for the emission unit(s) listed above:

(1) 40 CFR 61.140
(2) 40 CFR 61.141
(3) 40 CFR 61.153
(4) 40 CFR 61.154
(5) 40 CFR 61.156
(6) 40 CFR 61.157
Emissions Unit Description:

Specifically Regulated Insignificant Activities:

(b) One (1) diesel-fired emergency generator, identified as the emergency generator-leachate, manufactured before 2006 and installed before 2006, with a maximum output of 22.8 HP, exhausting to the outdoors.

Under 40 CFR 63, Subpart ZZZZ, this unit is considered an existing affected source.

(c) One (1) natural gas-fired emergency generator, manufactured before 2007 and installed before 2006, with a maximum output of 20.1 HP, exhausting to the outdoors.

Under 40 CFR 63, Subpart ZZZZ, this unit is considered an existing affected source.

(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)]


(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


The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment D to the operating permit), which are incorporated by reference as 326 IAC 20-82,

(a) Diesel-Fired Emergency Generator-Leachate
   (1) 40 CFR 63.6580
   (2) 40 CFR 63.6585(a), (c), (d)
   (3) 40 CFR 63.6590(a)(1)(iii) and (iv)
   (4) 40 CFR 63.6595(a)(1),(b), and (c)
   (5) 40 CFR 63.6603(a)
   (6) 40 CFR 63.6605
   (7) 40 CFR 63.6612
   (8) 40 CFR 63.6615
   (9) 40 CFR 63.6625(e)(3), (f), (h), & (i)
(10) 40 CFR 63.6630(a), (b), (c)
(11) 40 CFR 63.6635
(12) 40 CFR 63.6640(a), (b), (e), (f)(1), (f)(2)(i), (f)(3), and (f)(4)
(13) 40 CFR 63.6645(a)(2), (b), (h)
(14) 40 CFR 63.6650
(15) 40 CFR 63.6655(a), (d), (e) & (f)
(16) 40 CFR 63.6660
(17) 40 CFR 63.6665
(18) 40 CFR 63.6670
(19) 40 CFR 63.6675
(20) Table 2d (Item 4)
(21) Table 6 (item 9)
(22) Table 8

(b) Natural Gas-Fired Emergency Generator
(1) 40 CFR 63.6580
(2) 40 CFR 63.6585(a), (c), (d)
(3) 40 CFR 63.6590(a)(1)(iii) and (iv)
(4) 40 CFR 63.6595(a)(1)(b), and (c)
(5) 40 CFR 63.6603(a)
(6) 40 CFR 63.6605
(7) 40 CFR 63.6612
(8) 40 CFR 63.6615
(9) 40 CFR 63.6625(e)(3), (f), (h), & (j)
(10) 40 CFR 63.6630(a), (b), (c)
(11) 40 CFR 63.6635
(12) 40 CFR 63.6640(a), (b), (e), (f)(1), (f)(2)(i), (f)(3), and (f)(4)
(13) 40 CFR 63.6645(a)(2), (b), (h)
(14) 40 CFR 63.6650
(15) 40 CFR 63.6655(a), (d), (e) & (f)
(16) 40 CFR 63.6660
(17) 40 CFR 63.6665
(18) 40 CFR 63.6670
(19) 40 CFR 63.6675
(20) Table 2d (Item 5)
(21) Table 6 (item 9)
(22) Table 8
source Name: CGS Services, Inc.  
Source Address: 2920 E US 52, Morristown, Indiana 46161  
Part 70 Permit No.: T145-38046-00049

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:
### PART 70 OPERATING PERMIT

**EMERGENCY OCCURRENCE REPORT**

Source Name: CGS Services, Inc.  
Source Address: 2920 E US 52, Morristown, Indiana 46161  
Part 70 Permit No.: T145-38046-00049

<table>
<thead>
<tr>
<th>This form consists of 2 pages</th>
<th>Page 1 of 2</th>
</tr>
</thead>
</table>

- 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

<table>
<thead>
<tr>
<th>Facility/Equipment/Operation:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Control Equipment:</th>
</tr>
</thead>
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<table>
<thead>
<tr>
<th>Permit Condition or Operation Limitation in Permit:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Description of the Emergency:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Describe the cause of the Emergency:</th>
</tr>
</thead>
<tbody>
<tr>
<td>If any of the following are not applicable, mark N/A</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
</tr>
</tbody>
</table>

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, SO₂, VOC, NOₓ, 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: CGS Services, Inc.  
Source Address: 2920 E US 52, Morristown, Indiana 46161  
Part 70 Permit No.: T145-38046-00049  
Facility: Landfill (including flare and solar flares emissions)  
Parameter: Single HAP  
Limit: Shall be less than 9.5 tons per twelve (12) consecutive month period, with compliance determined at the end of each month

<table>
<thead>
<tr>
<th>QUARTER</th>
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</tr>
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<tbody>
<tr>
<td>Month</td>
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</tr>
<tr>
<td></td>
<td>This Month (tons)</td>
</tr>
<tr>
<td></td>
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</tbody>
</table>

- 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:** CGS Services, Inc.  
- **Source Address:** 2920 E US 52, Morristown, Indiana 46161  
- **Part 70 Permit No.:** T145-38046-00049  
- **Facility:** Landfill (including flare and solar flares emissions)  
- **Parameter:** Combined HAPs  
- **Limit:** Shall be less than 23.5 tons per twelve (12) consecutive month period, with compliance determined at the end of each month

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<th>YEAR</th>
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<tbody>
<tr>
<td>Month</td>
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</tbody>
</table>

- □ 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: CGS Services, Inc.
Source Address: 2920 E US 52, Morristown, Indiana 46161
Part 70 Permit No.: T145-38046-00049

Months: _____ to _____ Year: _______

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

<table>
<thead>
<tr>
<th>Permit Requirement (specify permit condition #)</th>
<th>Date of Deviation:</th>
<th>Duration of Deviation:</th>
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<tbody>
<tr>
<td>Number of Deviations:</td>
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<tr>
<td>Probable Cause of Deviation:</td>
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<td>Response Steps Taken:</td>
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<tr>
<th>Response Steps Taken:</th>
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</tbody>
</table>

Form Completed by:______________________________

Title / Position: ________________________________

Date:__________________________________________

Phone:__________________________________________
Source Name: CGS Services, Inc.
Source Location: 2920 E. US 52, Morristown, Indiana 46161
County: Shelby
SIC Code: 4953 (Refuse Systems)
Operation Permit No.: T145-38046-00049
Operation Permit Issuance Date: February 13, 2018
Significant Source Modification No.: 145-41594-00049
Significant Permit Modification No.: 145-41613-00049
Permit Reviewer: William Altman

In order for the plants to be considered one major source, they must meet all three of the following criteria:

1. the plants must be under common ownership or common control;
2. the plants must have the same two-digit Standard Industrial Classification (SIC) Code or one must serve as a support facility for the other; and,
3. the plants must be located on the same, contiguous or adjacent properties.

IDEM’s Nonrule Policy Document Air-005, Guidance on Definition of “Source” for Collocated Activities (available at http://www.in.gov/idem/4694.htm on IDEM’s website) applies to the definition of “major source”. Air-005 states that if two or more plants are owned by the same person or entity, both common ownership and common control exist. CGS Services, Inc. owns all of the plants. Since CGS Services is the common owner, common control also exists. The first part of the major source definition is met.

The Standard Industrial Classification Manual of 1987 sets out how to determine the proper SIC Code for each type of business. More information about SIC Codes is available at http://www.osha.gov/pls/imis/sic_manual.html on the Internet. The SIC Code is determined by looking at the principal product or activity of each plant. The landfill plant has the two-digit SIC Code 49, for the Major Group Electric, Gas, And Sanitary Services. The two asphalt plants have the two-digit SIC Code 29 for the Major Group Petroleum Refining and Related Industries. The sand and gravel plant has the two-digit SIC Code 14 for the Major Group Mining and Quarrying of Nonmetallic Minerals, Except Fuels. The two (2) asphalt plants have the same two-digit SIC Code, the sand and gravel plant and landfill do not.

A plant is considered a support facility if at least 50% of its output is dedicated to another plant. The landfill does not send any output to any of the other plants. The asphalt plants do not send any of their
output to the sand and gravel plant, the landfill, or each other. The sand and gravel plant sends at most 15% of its annual output to the two asphalt plants and some (less than 50%) of output to the landfill for roads and cell drainage materials. Therefore, there is no support facility relationship between any of the plants. Since only the asphalt plants have the same two-digit SIC Code and none of the plants have a support relationship, only the asphalt plants meet the second part of the major source definition.

The plants are located on properties that share common boundaries and are separated only by transportation rights of way. Since all of the plants are located on contiguous properties, the third part of the major source definition is met.

The two asphalt plants meet all three parts of the major source definition and IDEM, OAQ finds that they are part of the same major source. The landfill and sand and gravel plant do not meet all three parts of the major source definition and IDEM, OAQ, finds that they are not part of the same major source as the asphalt plants, that the landfill is a separate major source from all of the other plants and the sand and gravel plant is a separate source from all the other plants.

### Existing Approvals

The source was issued Part 70 Operating Permit Renewal No. T145-38046-00049 on February 13, 2018. The source has since received the following approvals:

(a) MSM No. 145-41252-00049, issued on May 30, 2019; and

(b) SPM No. 145-41335-00049, issued on June 27, 2019.

### County Attainment Status

The source is located in Shelby County.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO₂</td>
<td>Better than national standards.</td>
</tr>
<tr>
<td>CO</td>
<td>Unclassifiable or attainment effective November 15, 1990.</td>
</tr>
<tr>
<td>O₃</td>
<td>Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard.¹</td>
</tr>
<tr>
<td>PM₂.₅</td>
<td>Unclassifiable or attainment effective April 5, 2005, for the annual PM₂.₅ standard.</td>
</tr>
<tr>
<td>PM₁₀</td>
<td>Unclassifiable effective November 15, 1990.</td>
</tr>
<tr>
<td>NO₂</td>
<td>Cannot be classified or better than national standards.</td>
</tr>
<tr>
<td>Pb</td>
<td>Unclassifiable or attainment effective December 31, 2011.</td>
</tr>
</tbody>
</table>

¹Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.

(a) Ozone Standards

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

(b) PM₂.₅

Shelby County has been classified as attainment for PM₂.₅. Therefore, direct PM₂.₅, SO₂, and NOₓ emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
(c) Other Criteria Pollutants
Shelby 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 of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard or National Emission Standard for Hazardous Air Pollutants that was in effect on August 7, 1980, that the landfill was subject to at that time, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability. The fugitive emissions of hazardous air pollutants are counted toward the determination of Part 70 Permit applicability.

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

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](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.

<table>
<thead>
<tr>
<th>Source-Wide Emissions Prior to Modification (ton/year)</th>
<th>PM¹</th>
<th>PM⁰¹</th>
<th>PM₂.⁵¹,²</th>
<th>SO₂</th>
<th>NOₓ</th>
<th>VOC</th>
<th>CO</th>
<th>Single HAP³</th>
<th>Total HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total PTE of Entire Source Excluding Fugitive Emissions*</td>
<td>0.25</td>
<td>0.32</td>
<td>0.32</td>
<td>0.22</td>
<td>4.69</td>
<td>16.81</td>
<td>13.22</td>
<td>10.55</td>
<td>30.93</td>
</tr>
</tbody>
</table>
### Source-Wide Emissions Prior to Modification (ton/year)

<table>
<thead>
<tr>
<th>Source-Wide Emissions Prior to Modification</th>
<th>PM¹</th>
<th>PM₁₀¹</th>
<th>PM₂.₅¹,₂</th>
<th>SO₂</th>
<th>NOₓ</th>
<th>VOC</th>
<th>CO</th>
<th>Single HAP³</th>
<th>Total HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title V Major Source Thresholds</td>
<td>NA</td>
<td>100</td>
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<td>100</td>
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<td>100</td>
<td>10</td>
<td>25</td>
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</tr>
<tr>
<td>PSD Major Source Thresholds</td>
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<td>250</td>
<td>250</td>
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</tr>
</tbody>
</table>

¹ Under the Part 70 Permit program (40 CFR 70), PM₁₀ and PM₂.₅, not particulate matter (PM), are each considered as a "regulated air pollutant."

² PM₂.₅ listed is direct PM₂.₅.

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 MSM No. 145-41252-00049, issued on May 30, 2019.

### Emission Units and Pollution Control Equipment

#### Constructed Under the Provisions of 326 IAC 2-1.1-3 (Exemptions)

The following existing emissions unit(s), constructed under the provisions of 326 IAC 2-1.1-3 (Exemptions), are being incorporated in the permit as part of this permitting action:

**Project #1 (Grinding)**

(a) Composting activities,

**Project #2 (Insignificant Activities)**

(a) Groundwater interceptor pond,

(b) One (1) 500 gallon gasoline storage tank,

(c) Use of petroleum contaminated soils as alternate daily cover,

(d) Liquid waste solidification,

(e) recycling center,

(f) Two (2) safety-kleen parts washing stations,

(g) Stationary Natural gas-fired pressure washer (0.38 MMBtu/hour),

(h) Stationary natural-gas tube (comfort) heaters in building 24: three (3) 200,000 BTU/hour, two (2) 150,000 BTU/hour and one (1) 125,000 BTU/hour.

(i) Spray paint gun,

(j) 10,000 gallon CAMU leachate storage tank
The total potential to emit of each project is less than levels specified at 326 IAC 2-1.1-3(e)(1)(A) through (G) and the addition of the emission units did not require the source to transition to a higher operation permit level. Therefore, pursuant to 326 IAC 2-1.1-3(e), the modification approval requirements under 326 IAC 2-7-10.5, including the requirement to submit an application, do not apply to these emission units. See Appendix A of this Technical Support Document for detailed emission calculations.

### Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed an application, submitted by CGS Services Inc. on June 20, 2019, relating to the addition of one open flare for landfill gas collection and control and the addition of several insignificant activities not currently included in the permit.

The following is a list of the new emission units and pollution control device(s):

(a) One (1) open flare, identified as OPENFLR, approved in 2019 for construction, with a rated capacity of 3,000 CFM, controlling emissions from the municipal solid waste landfill, and exhausting to stack FL1.

(b) Three (3) solar vent flares, identified as SF1, SF2, and SF3, approved in 2019 for construction, each with a maximum capacity of 50 cubic feet per minute of landfill gas.

The following insignificant activities are being incorporated into the permit in this Significant Source Modification:

(a) Groundwater interceptor pond,

(b) One (1) 500 gallon gasoline storage tank,

(c) Use of petroleum contaminated soils as alternate daily cover,

(d) Liquid waste solidification,

(e) Recycling center,

(f) Two (2) safety-kleen parts washing stations,

(g) Stationary natural gas-fired pressure washer (0.38 MMBtu/hour),

(h) Composting activities,

(i) Stationary natural-gas tube (comfort) heaters in building 24: three (3) 200,000 BTU/hour, two (2) 150,000 BTU/hour, and one (1) 125,000 BTU/hour.

(j) Spray paint gun,

(k) One (1) 10,000 gallon CAMU leachate storage tank, and

As part of this permitting action, the following emission units are being removed the permit:

(a) One (1) diesel-fired generator, identified as E245, manufactured in 1999 and installed in 2010, with a maximum output of 22.5 HP, exhausting to the outdoors.

Under 40 CFR 63, Subpart ZZZZ, this unit is considered an existing affected source.

(b) One (1) diesel-fired emergency generator, identified as the emergency generator-leachate, manufactured before 2006 and installed before 2006, with a maximum output of 22.8 HP, exhausting to the outdoors.
Under 40 CFR 63, Subpart ZZZZ, this unit is considered an existing affected source.

### 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.

<table>
<thead>
<tr>
<th>Process / Emission Unit</th>
<th>PM</th>
<th>PM_{10}</th>
<th>PM_{2.5}</th>
<th>SO_{2}</th>
<th>NO_{x}</th>
<th>VOC</th>
<th>CO</th>
<th>Single HAP(^2) (HCl)</th>
<th>Total HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open Flare</td>
<td>6.37</td>
<td>6.37</td>
<td>6.37</td>
<td>226.88</td>
<td>27.13</td>
<td>0.78</td>
<td>123.67</td>
<td>1.97</td>
<td>2.38</td>
</tr>
<tr>
<td>Solar Vent Flares</td>
<td>0.33</td>
<td>0.33</td>
<td>0.33</td>
<td>11.34</td>
<td>1.23</td>
<td>0.04</td>
<td>6.63</td>
<td>0.10</td>
<td>1.19</td>
</tr>
<tr>
<td><strong>Total PTE Before Controls of the New Emission Units:</strong></td>
<td>6.70</td>
<td>6.70</td>
<td>6.70</td>
<td>238.22</td>
<td>28.36</td>
<td>0.82</td>
<td>130.30</td>
<td>2.07</td>
<td>3.57</td>
</tr>
</tbody>
</table>

\(^1\)PM\(_{2.5}\) listed is direct PM\(_{2.5}\).
\(^2\)Single 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)(4), a Significant Source Modification is required because this modification has the potential to emit nitrogen oxides (NO\(_x\)) at greater than or equal to twenty-five (25) tons per year, each.

Pursuant to 326 IAC 2-7-10.5(g)(7), a Significant Source Modification is required because this modification has a potential to emit greater than or equal to one hundred (100) tons per year of carbon monoxide (CO).

(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.
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 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.

<table>
<thead>
<tr>
<th>Process / Emission Unit</th>
<th>PM</th>
<th>PM₁₀</th>
<th>PM₂.₅¹</th>
<th>SO₂</th>
<th>NOₓ</th>
<th>VOC</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open Flare</td>
<td>6.37</td>
<td>6.37</td>
<td>6.37</td>
<td>226.88</td>
<td>27.13</td>
<td>0.78</td>
<td>123.67</td>
</tr>
<tr>
<td>Solar Vent Flares</td>
<td>0.33</td>
<td>0.33</td>
<td>0.33</td>
<td>11.34</td>
<td>1.23</td>
<td>0.04</td>
<td>6.63</td>
</tr>
<tr>
<td>Total for Modification</td>
<td>6.70</td>
<td>6.70</td>
<td>6.70</td>
<td>238.22</td>
<td>28.36</td>
<td>0.82</td>
<td>130.30</td>
</tr>
</tbody>
</table>

1PM₂.₅ listed is direct PM₂.₅.

(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.

<table>
<thead>
<tr>
<th>Source-Wide Emissions After Issuance (ton/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM¹</td>
</tr>
<tr>
<td>-----</td>
</tr>
<tr>
<td>Total PTE of Entire Source Excluding Fugitives*</td>
</tr>
<tr>
<td>Title V Major Source Thresholds</td>
</tr>
<tr>
<td>PSD Major Source Thresholds</td>
</tr>
</tbody>
</table>

¹Under the Part 70 Permit program (40 CFR 70), PM₁₀ and PM₂.₅, not particulate matter (PM), are each considered as a "regulated air pollutant."
²PM₂.₅ listed is direct PM₂.₅.
³Single 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 become an area source of HAP, as defined in 40 CFR 63.2, upon issuance of this modification because HAP emissions will be less than ten (10) tons
per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

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 storage vessels for petroleum liquids for which construction, reconstruction, or modification commenced after June 11, 1973, and prior to May 19, 1978 40 CFR 60, Subpart K and 326 IAC 12, are not included in the permit for the gasoline storage tank, because it was not constructed, reconstructed, or modified after June 11, 1973 and prior to May 19, 1978.

(b) The requirements of the New Source Performance Standard for storage vessels for petroleum liquids for which construction, reconstruction, or modification commenced after May 19, 1978, and prior to July 23, 1984. 40 CFR 60, Subpart Ka and 326 IAC 12, are not included in the permit for the gasoline storage tank, because it was not constructed, reconstructed, or modified after May 19, 1978 and prior to July 23, 1984.

(c) The requirements of the New Source Performance Standard for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid Storage Vessels) for Which construction, Reconstruction, or Modification Commenced After July 23, 1984 40 CFR 60, Subpart Kb and 326 IAC 12, are not included in the permit for the gasoline storage tank, because the gasoline storage tank does not have a capacity greater than or equal to 75 cubic meters (m3).

(d) Subpart WWW - Standards of performance for Municipal Solid Waste Landfills

The existing 40 CFR 60, Subpart WWW, requirements specified in the existing permit for this municipal solid waste landfill will not change as a result of this modification. The source shall continue to comply with these requirements.

The new open flare is considered a control device for this municipal solid waste landfill under this NSPS once NMOC emissions are greater than 50 Mg/year and the landfill becomes subject to NSPS control requirements.

Nonapplicable portions of the NSPS will not be included in the permit. The proposed flare will be subject to the following portions of 40 CFR 60, Subpart WWW 30 months after the landfill's NMOC emissions exceed 50 MG/year:

(1) 40 CFR 60.750(a)
(2) 40 CFR 60.750(b)
(3) 40 CFR 60.750(c)
(4) 40 CFR 60.751
(5) 40 CFR 60.752(b)
(6) 40 CFR 60.752(d)
(7) 40 CFR 60.754(a)
(8) 40 CFR 60.757(b)
(9) 40 CFR 60.758(a), (b), (c), (d), (e)

(e) There are no other 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):**
(a) The emergency generators are subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines 40 CFR 63, Subpart ZZZZ, which is incorporated by reference as 326 IAC 20-82., because these emission units meet the definition of a stationary reciprocating internal combustion engine and are located at a major source of HAPs. The compliance date for the emergency generators is May 3, 2013. The emergency generators subject to this rule include the following:

The emergency generators are subject to the following portions of Subpart ZZZZ:

(a) Diesel-Fired Emergency Generator-Leachate
   (1) 40 CFR 63.6580
   (2) 40 CFR 63.6585
   (3) 40 CFR 63.6590(a)(1)(iii) and (iv)
   (4) 40 CFR 63.6595(a)(1), (b), and (c)
   (5) 40 CFR 63.6603
   (6) 40 CFR 63.6605
   (7) 40 CFR 63.6625(e)(3), (f), (h), & (i)
   (8) 40 CFR 63.6635
   (9) 40 CFR 63.6640(a), (b), (e), (f)(1), (f)(2)(i), (f)(3), and (f)(4)
   (10) 40 CFR 63.6645(a)(5)
   (11) 40 CFR 63.6650
   (12) 40 CFR 63.6655
   (13) 40 CFR 63.6660
   (14) 40 CFR 63.6665
   (15) 40 CFR 63.6670
   (16) 40 CFR 63.6675
   (17) Table 2d (Item 4)
   (18) Table 6 (item 9)
   (19) Table 8

(b) Natural Gas-Fired Emergency Generator
   (1) 40 CFR 63.6580
   (2) 40 CFR 63.6585
   (3) 40 CFR 63.6590(a)(1)(iii) and (iv)
   (4) 40 CFR 63.6595(a)(1), (b), (c)
   (5) 40 CFR 63.6603(a)
   (6) 40 CFR 63.6605
   (7) 40 CFR 63.6625(e)(3), (f), (h), and (j)
   (8) 40 CFR 63.6635
   (9) 40 CFR 63.6640(a), (b), (e), (f)(1), (f)(2)(i), (f)(3), and (f)(4)
   (10) 40 CFR 63.6645(a)(5)
   (11) 40 CFR 63.6650
   (12) 40 CFR 63.6655
   (13) 40 CFR 63.6660
   (14) 40 CFR 63.6665
   (15) 40 CFR 63.6670
   (16) 40 CFR 63.6675
   (17) Table 2d (Item 5)
   (18) Table 6 (item 9)
   (19) Table 8

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

(b) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs) (40 CFR Part 63, 326 IAC 14, and 326 IAC 20) included in the permit 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.

The following table is used to identify the applicability of CAM to new and modified emission unit and each emission limitation or standard for a specified pollutant based on the criteria specified under 40 CFR 64.2:

<table>
<thead>
<tr>
<th>Emission Unit/Pollutant</th>
<th>Control Device</th>
<th>Applicable Emission Limitation</th>
<th>Uncontrolled PTE ( tons/year )</th>
<th>Controlled PTE ( tons/year )</th>
<th>CAM Applicable (Y/N)</th>
<th>Large Unit ( Y/N )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landfill/VOC</td>
<td>Open Flare</td>
<td>326 IAC 8-8.1</td>
<td>&lt;100</td>
<td>&lt;100</td>
<td>N ¹ N</td>
<td></td>
</tr>
<tr>
<td>Landfill/CO</td>
<td>Open Flare</td>
<td>326 IAC 9</td>
<td>&lt;100</td>
<td>&lt;100</td>
<td>N ¹ N</td>
<td></td>
</tr>
<tr>
<td>Landfill/HAPs</td>
<td>Open Flare</td>
<td>40 CFR 63</td>
<td>&lt;10 (Single) &amp; &lt;25 (Total)</td>
<td>N ¹ N</td>
<td>N</td>
<td></td>
</tr>
</tbody>
</table>

Uncontrolled PTE (tpy) and controlled PTE (tpy) are evaluated against the Major Source Threshold for each pollutant. Major Source Threshold for criteria pollutants (PM10, PM2.5, SO2, NOx, VOC and CO) is 100 tpy, for a single HAP ten (10) tpy, and for total HAPs twenty-five (25) tpy.

Under the Part 70 Permit program (40 CFR 70), PM is not a regulated pollutant.

PM* For limitations under 326 IAC 6-3-2, 326 IAC 6.5, and 326 IAC 6.8, IDEM OAQ uses PM as a surrogate for the regulated air pollutant PM10. Therefore, uncontrolled PTE and controlled PTE reflect the emissions of the regulated air pollutant PM10.

N ¹ CAM does not apply because the uncontrolled PTE is less than the major source threshold.

Controls: BH = Baghouse, C = Cyclone, DC = Dust Collection System, RTO = Regenerative or Recuperative Thermal Oxidizer, WS = Wet Scrubber, ESP = Electrostatic Precipitator

Emission units without air pollution controls are not subject to CAM. Therefore, they are not listed.

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

State Rule Applicability - Entire Source

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

326 IAC 2-2 (PSD)

PSD is discussed under the Permit Level Determination – PSD and PTE of the Entire Source After Issuance of the Part 70 Modification of this document.
326 IAC 20 (Hazardous Air Pollutants)
In order to render the source an area source of HAP emissions under Section 112 of the Clean Air Act (CAA), the Permittee shall comply with the following:

(a) Single HAP emissions from the entire source shall be less than 9.5 tons per twelve (12) consecutive month period, with compliance determined at the end of each month; and

(b) Combined HAP emissions from the entire source shall be less than 24.5 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 HAP from all other emission units at the source, shall limit the source-wide potential to emit single HAP to less than 10 tons per twelve (12) consecutive month period and the source-wide potential to emit total HAPs to less than 25 tons per twelve (12) consecutive month period, and shall render the source an area source of HAP emissions under Section 112 of the Clean Air Act (CAA).

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The provisions of 326 IAC 2-4.1 apply to any owner or operator who constructs or reconstructs a major source of hazardous air pollutants (HAP), as defined in 40 CFR 63.41, after July 27, 1997, unless the major source has been specifically regulated under or exempted from regulation under a NESHAP that was issued pursuant to Section 112(d), 112(h), or 112(j) of the Clean Air Act (CAA) and incorporated under 40 CFR 63. On and after June 29, 1998, 326 IAC 2-4.1 is intended to implement the requirements of Section 112(g)(2)(B) of the Clean Air Act (CAA).

The operation of municipal solid waste landfill will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

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

326 IAC 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)
The source is subject to the requirements of 326 IAC 6-4, because the paved and unpaved roads have the potential to emit fugitive particulate emissions. 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 (Fugitive Particulate Matter Emission Limitations)
This source was constructed after December 13, 1985 and has potential fugitive particulate emissions of twenty-five (25) tons per year or more. Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the Fugitive Dust Control Plan that is included as Attachment A to the permit.
326 IAC 6.5 (Particulate Matter Limitations Except Lake County)
Pursuant to 326 IAC 6.5-1-1(a), this source (located in Shelby 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 Shelby County) is not subject to the requirements of 326 IAC 6.8 because it is not located in Lake County.

326 IAC 6.8 (Lake County: Fugitive Particulate Matter)
Pursuant to 326 IAC 6.8-10-1, this source (located in Shelby County) is not subject to the requirements of 326 IAC 6.8-10 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:

Open Flare
326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
The open flare is not subject to the requirements of 326 IAC 8-1-6 because is regulated by other rules in 326 IAC 8. The open flare is subject to the requirements of 326 IAC 8-8.1.

326 IAC 8-8.1 (VOC Rules: Municipal Solid Waste Landfills Not Located in Clark, Floyd, Lake, and Porter Counties)
The open flare is subject to the requirements of 326 IAC 8-8.1 because it is a municipal solid waste landfill not located in the Clark, Floyd, Lake, or Porter county. The Permittee shall comply with the requirements under 326 IAC 8-8.1 by complying with the requirements under 40 CFR Part 60, Subpart WWW.

326 IAC 9-1 (Carbon Monoxide Emission Limits)
The requirements of 326 IAC 9-1 do not apply to the open flare, because this source does not operate a catalyst regeneration petroleum cracking system or a petroleum fluid coker, grey iron cupola, blast furnace, basic oxygen steel furnace, or other ferrous metal smelting equipment.

326 IAC 10-3 (Nitrogen Oxide Reduction Program for Specific Source Categories)
The requirements of 326 IAC 10-3 do not apply to the open flare, since this unit is not a blast furnace gas-fired boiler, a Portland cement kiln, or a facility specifically listed under 326 IAC 10-3-1(a)(2).

Natural Gas Fired Units
326 IAC 6-2 (Particulate Emissions Limitations for Sources of Indirect Heating)
The natural gas fired units are subject to the provisions of 326 IAC 6-2-4, since each was constructed after the rule applicability date of September 21, 1983 and meet the definition of “combustion for indirect heating” in 326 IAC 1-2-19.

Pursuant to 326 IAC 6-2-4, the emission limitation for these units, as provided in 326 IAC 6-2-4, is based on the following equation:

\[ Pt = \frac{1.09}{Q^{2.26}} \]

Where:
Pt = Emission rate limit (lbs PM per MMBtu)
Pt = pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.
Q = Total source maximum operating capacity in MMBtu/hr heat input. Maximum operating capacity is defined as the maximum capacity at which the unit is operated or the nameplate capacity, whichever is
specified in the permit application, except when a lower limitation is contained in the facility's operating permit.

However, according to 326 IAC 6-2-4(a), for Q less than ten (10) MMBtu per hour, Pt shall not exceed six tenths (0.6) lbs PM per MMBtu. Therefore, the natural gas fired units are each limited to six tenths (0.6) lbs of PM per MMBtu heat input.

The natural gas fired units each have PM emissions of 0.00745 lb/MMBtu; therefore, they are in compliance with 326 IAC 6-2 without the use of a control device.

**Spray Paint Gun**

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-1(b)15, the spray paint gun is not subject to the requirements of 326 IAC 6-3, since this paint booth uses less than than 5 gallons per day of coating.

**Solar Vent Flare**

326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)

The solar vent flare is not subject to the requirements of 326 IAC 8-1-6 because is regulated by other rules in 326 IAC 8. The solar vent flare is subject to the requirements of 326 IAC 8-8.1 once the landfill becomes subject to the control requirements of the Landfill NSPS - 40 CFR 60, Subpart WWW.

326 IAC 8-8.1 (VOC Rules: Municipal Solid Waste Landfills Not Located in Clark, Floyd, Lake, and Porter Counties)

The open flare is subject to the requirements of 326 IAC 8-8.1 because it is a municipal solid waste landfill not located in the Clark, Floyd, Lake, or Porter county. The Permittee shall comply with the requirements under 326 IAC 8-8.1 by complying with the requirements under 40 CFR Part 60, Subpart WWW (Landfill NSPS) once the landfill becomes subject to the control requirements of the Landfill NSPS.

**Degreasers**

326 IAC 6-2 (Particulate Emissions Limitations for Sources of Indirect Heating)

The degreasers are subject to the provisions of 326 IAC 6-2-4, since it was constructed after the rule applicability date of September 21, 1983 and meets the definition of "combustion for indirect heating" in 326 IAC 1-2-19.

Pursuant to 326 IAC 6-2-4, the emission limitation for these units, as provided in 326 IAC 6-2-4, is based on the following equation:

\[
Pt = \frac{1.09}{Q^{0.26}}
\]

Where:

- Pt = Emission rate limit (lbs PM per MMBtu)
- Pt = pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.

Q = Total source maximum operating capacity in MMBtu/hr heat input. Maximum operating capacity is defined as the maximum capacity at which the unit is operated or the nameplate capacity, whichever is specified in the permit application, except when a lower limitation is contained in the facility's operating permit.

However, according to 326 IAC 6-2-4(a), for Q less than ten (10) MMBtu per hour, Pt shall not exceed six tenths (0.6) lbs PM per MMBtu. Therefore, the pressure washer is limited to six tenths (0.6) lbs of PM per MMBtu heat input.

The pressure washer has PM emissions of 0.007 lb/MMBtu; therefore, they are in compliance with 326 IAC 6-2 without the use of a control device.

326 IAC 8-3-2 (Cold Cleaner Degreaser Control Equipment and Operating Requirements)
The provisions of 326 IAC 8-3-2 apply to each owner or operator of a degreaser using solvents that contain one (1) or more volatile organic compounds (VOC). The degreasers located at CGS Services Inc. are subject to the requirements of 326 IAC 8-3-2 and they are included in the permit. Pursuant to 326 IAC 8-3-2 (Cold cleaner degreaser control equipment and operating requirements), for cold cleaning operations constructed after January 1, 1980, the Permittee shall comply with the following:

(a) The owner or operator of a cold cleaner degreaser shall ensure the following control equipment and operating requirements are met:

1. Equip the degreaser with a cover;
2. Equip the degreaser with a device for draining cleaned parts;
3. Close the degreaser cover whenever parts are not being handled in the degreaser;
4. Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
5. Provide a permanent, conspicuous label that lists the operation requirements in subdivisions (3), (4), (6), and (7);
6. Store waste solvent only in closed containers.
7. Prohibit the disposal or transfer of waste solvent in such a manner that could allow greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.

(b) The owner or operator of a cold cleaner degreaser subject to this subsection shall ensure the following additional control equipment and operating requirements are met:

1. Equip the degreaser with one (1) of the following control devices if the solvent is heated to a temperature of greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):
   A. A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
   B. A water cover when solvent used is insoluble in, and heavier than, water.
   C. A refrigerated chiller.
   D. Carbon adsorption.
   E. An alternative system of demonstrated equivalent or better control as those outlined in clauses (A) through (D) that is approved by the department. An alternative system shall be submitted to the U.S. EPA as a SIP revision.

2. Ensure the degreaser cover is designed so that it can be easily operated with one (1) hand if the solvent is agitated or heated.
3. If used, solvent spray:
   A. must be a solid, fluid stream; and
   B. shall be applied at a pressure that does not cause excessive splashing.

326 IAC 8-3-8 (Material Requirements for Cold Cleaner Degreasers)
The provisions of 326 IAC 8-3-8 apply to all cold cleaner degreasers subject to 326 IAC 8-3-2 and located
anywhere in the state. The degreasers located at CGS services Inc. are subject to the requirements of 326 IAC 8-3-8 and they are included in the permit. Pursuant to 326 IAC 8-3-8, on and after January 1, 2015, material requirements for cold cleaner degreasers are as follows:

(a) The Permittee shall not operate a cold cleaner degreaser with a solvent that has a VOC composite partial vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

(b) The Permittee shall maintain the following records for each purchase:

1. The name and address of the solvent supplier
2. The date of purchase (or invoice/bill date of contract servicer indicating service date);
3. The type of solvent purchased;
4. The total volume of solvent purchased;
5. The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

### 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 applicable to this modification are as follows:

There are no compliance determination requirements for for this modification.

(b) The Compliance Monitoring Requirements applicable to this proposed modification are as follows:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Type of Parametric Monitoring</th>
<th>Frequency</th>
<th>Range or Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open Flare</td>
<td>Presence of flame</td>
<td>Continuous</td>
<td>Presence of flame</td>
</tr>
</tbody>
</table>

These monitoring conditions are necessary because the open flare for the municipal solid waste landfill must operate properly to render the source an area source of HAP emissions under Section 112 of the Clean Air Act (CAA).
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. Condition A.2, A.3, and A.4 of the permit has been modified to describe the new emission units and insignificant activities.

2. Sections D.2 and D.3 have been added to incorporate the requirements for the proposed emission units.

3. Condition E.1 of the permit has been modified to include the new emission unit.

4. Conditions E.3 of the permit has been modified to display the changes to applicable requirements since the source is now an area source.

5. Quarterly report forms have been added for single and combined HAP emissions.

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 municipal solid waste landfill.

Source Address: 2920 E US 52, Morristown, Indiana 46161
General Source Phone Number: (765) 763-1238
SIC Code: 4953 (Refuse Systems)
County Location: Shelby
Source Location Status: Attainment for all criteria pollutants
Source Status: Part 70 Operating Permit Program

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

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

(a) One (1) stationary municipal solid waste landfill, beginning operation in 1969, modified in 1995 and 2019, with a design capacity of 31,855,364 bcy (4,355,173 m3) or 31,360,455 Megagrams (Mg) at the current projected density.

Under 40 CFR 60, Subpart WWW and 40 CFR 61, Subpart M this unit is considered an affected source.

(b) One (1) open flare, identified as OPENFLR, approved in 2019 for construction, with a rated capacity of 3,000 CFM, controlling emissions from the municipal solid waste landfill, and exhausting to stack FL1.

Under 40 CFR 60, Subpart WWW this unit is considered an affected source.

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

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):
(b) One (1) diesel-fired generator, identified as E245, manufactured in 1999 and installed in 2010, with a maximum output of 22.5 HP, exhausting to the outdoors. Under 40 CFR 63, Subpart ZZZZ, this unit is considered an existing affected source.

(cb) One (1) diesel-fired emergency generator, identified as the emergency generator-leachate, manufactured before 2006 and installed before 2006, with a maximum output of 22.8 HP, exhausting to the outdoors. Under 40 CFR 63, Subpart ZZZZ, this unit is considered an existing affected source.

(dc) One (1) natural gas-fired emergency generator, manufactured before 2007 and installed before 2006, with a maximum output of 20.1 HP, exhausting to the outdoors. Under 40 CFR 63, Subpart ZZZZ, this unit is considered an existing affected source.

(ed) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4][326 IAC 6-5]

(e) Three (3) solar vent flares, identified as SF1, SF2, and SF3, approved in 2019 for construction, each with a maximum capacity of 50 cubic feet per minute of landfill gas. Under 40 CFR 60, Subpart WWW this unit is considered an affected source.

A.4 Not Specifically Regulated Insignificant Activities

This stationary source also includes the following insignificant activities which are not specifically regulated, as defined in 326 IAC 2-7-1(21):

(i) Groundwater interceptor pond,

(j) Gasoline storage tank,

(k) Use of petroleum contaminated soils as alternate daily cover,

(l) Liquid waste solidification,

(m) recycling center,

(n) Two (2) safety-kleen parts washing stations,

(o) Stationary Natural gas-fired pressure washer (0.38 MMBtu/hour),

(p) Composting activities,

(q) Stationary natural-gas tube (comfort) heaters in building 24: three (3) 200,000 BTU/hour, two (2) 150,000 BTU/hour, and one (1) 125,000 BTU/hour.

(r) Spray paint gun, and
(s) 10,000 gallon CAMU leachate storage tank

*****

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 Sections D.1, D.2, D.3, E.1, E.2, or E.3 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:

*****

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

<table>
<thead>
<tr>
<th>Emissions Unit Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specifically Regulated Insignificant Activities:</td>
</tr>
<tr>
<td>(a) Natural gas-fired units with a combined maximum capacity of less than or equal to 2 MMBtu per hour:</td>
</tr>
<tr>
<td>(1) One (1) natural gas-fired furnace, identified as the scale house furnace, installed in 2004, with a maximum capacity of 0.07 MMBtu per hour, uncontrolled, and exhausting to the outdoors.</td>
</tr>
<tr>
<td>(2) Three (3) natural gas-fired furnaces, identified as OF-E, OF-N, and OF-W, each installed in 2005, with a maximum capacity of 0.09 MMBtu per hour each, uncontrolled, and exhausting to the outdoors.</td>
</tr>
<tr>
<td>(3) One (1) natural gas-fired furnace, identified as OF-B, installed in 2005, with a maximum capacity of 0.045 MMBtu per hour, uncontrolled, and exhausting to the outdoors.</td>
</tr>
<tr>
<td>(4) One (1) natural gas-fired hot water heater, identified as the office hot water heater, installed in 2005, with a maximum capacity of 0.04 MMBtu per hour, uncontrolled, and exhausting to the outdoors.</td>
</tr>
</tbody>
</table>

(o) Stationary natural gas-fired pressure washer (0.38 MMBtu/hour).

(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 Particulate Emissions [326 IAC 6-2-4]
Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), particulate emissions from the indirect heating units shall be limited to 0.6 pounds per MMBtu heat input each.

*****

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

<table>
<thead>
<tr>
<th>Emissions Unit Descriptions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(f) Two (2) safety-kleen parts washing stations,</td>
</tr>
<tr>
<td>(g) Stationary natural gas-fired pressure washer (0.38 MMBtu/hour),</td>
</tr>
</tbody>
</table>

(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.2.1 Cold Cleaner Degreaser Control Equipment and Operating Requirements [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold cleaner degreaser control equipment and operating requirements), for cold cleaning operations constructed after January 1, 1980, the Permittee shall comply with the following:

(a) The owner or operator of a cold cleaner degreaser shall ensure the following control equipment and operating requirements are met:

(1) Equip the degreaser with a cover;
(2) Equip the degreaser with a device for draining cleaned parts;
(3) Close the degreaser cover whenever parts are not being handled in the degreaser;
(4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
(5) Provide a permanent, conspicuous label that lists the operation requirements in subdivisions (3), (4), (6), and (7);
(6) Store waste solvent only in closed containers; and
(7) Prohibit the disposal or transfer of waste solvent in such a manner that could allow greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.

(b) The owner or operator of a cold cleaner degreaser subject to this subsection shall ensure the following additional control equipment and operating requirements are met:

(1) Equip the degreaser with one (1) of the following control devices if the solvent is heated to a temperature of greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):
(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent used is insoluble in, and heavier than, water.

(C) A refrigerated chiller.

(D) Carbon adsorption.

(E) An alternative system of demonstrated equivalent or better control as those outlined in clauses (A) through (D) that is approved by the department. An alternative system shall be submitted to the U.S. EPA as a SIP revision.

(2) Ensure the degreaser cover is designed so that it can be easily operated with one (1) hand if the solvent is agitated or heated.

(3) If used, solvent spray:

(A) must be a solid, fluid stream; and

(B) shall be applied at a pressure that does not cause excessive splashing.

D.2.2 Material Requirements for Cold Cleaner Degreasers [326 IAC 8-3-8]

Pursuant to 326 IAC 8-3-8, on and after January 1, 2015, the Permittee shall not operate a cold cleaner degreaser with a solvent that has a VOC composite partial vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

D.2.3 Record Keeping Requirements

(a) Pursuant to 326 IAC 8-3-8(c)(2), the Permittee shall maintain the following records for each solvent purchase:

(1) The name and address of the solvent supplier;

(2) The date of purchase (or invoice/bill date of contract servicer indicating service date);

(3) The type of solvent purchased;

(4) The total volume of solvent purchased; and

(5) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

(b) In order to document the compliance status with Condition D.2.2, the Permittee shall maintain a copy of the current fire prevention plan.

(c) To document the compliance status with Condition D.2.2, the Permittee shall maintain training program records, including copies of the training program, the list of trained personnel, the initial training and refresher training completion date(s), and whether personnel successfully completed the training.
(d) In order to document the compliance status with Condition D.2.2, the Permittee shall maintain records of random load and suspicious load inspections.

(e) Section C - General Record Keeping Requirements contains the Permittee’s obligations with regard to the records required by this condition.

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Descriptions:

(a) One (1) stationary municipal solid waste landfill, beginning operation in 1969, modified in 1995 and 2019, with a design capacity of 31,855,364 bcy (4,355,173 m3) or 31,360,455 Megagrams (Mg) at the current projected density.

Under 40 CFR 60, Subpart WWW and 40 CFR 61, Subpart M this unit is considered an affected source.

(b) One (1) open flare, identified as OPENFLR, approved in 2019 for construction, with a rated capacity of 3,000 CFM, controlling emissions from the municipal solid waste landfill, and exhausting to stack FL1.

(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.3.1 Hazardous Air Pollutants (HAPs) [326 IAC 20]

In order to render the source an area source of HAP emissions under Section 112 of the Clean Air Act (CAA), the Permittee shall comply with the following:

(a) Single HAP emissions from the landfill (after flare) shall be less than 9.5 tons per twelve (12) consecutive month period, with compliance determined at the end of each month; and

(b) Combined HAP emissions from the landfill (after flare) shall be less than 23.5 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 HAP from all other emission units at the source, shall limit the source-wide potential to emit single HAP to less than 10 tons per twelve (12) consecutive month period and the source-wide potential to emit total HAPs to less than 25 tons per twelve (12) consecutive month period, and shall render the source an area source of HAP emissions under Section 112 of the Clean Air Act (CAA).

Compliance Determination Requirements

D.3.2 Hazardous Air Pollutants (HAP)

Compliance with the HAP limitations contained in Condition D.3.1 shall be determined as follows:

(a) When controlling landfill gas HAP emissions with one (1) or more flares at the Landfill to comply with Condition D.3.1, the flares shall be operated in accordance with 40 CFR 60.18.
From the date of issuance of this permit (145-41594-00049) until landfill gas collection and control systems (GCCS) with flares are installed and operated at the Landfill, the Permittee shall determine the landfill HAP emissions utilizing one (1) or more of the following options:


2. Using HAP emission estimates from the Landfill Gas Emissions Model (LandGEM) Version 3.02 (or most recent final EPA-approved version), U.S. Environmental Protection Agency; and/or

3. Conducting site-specific HAP emission testing at least once every year using methods in accordance with 326 IAC 3 or other methods approved by the commissioner or the U.S. EPA.

From the date of issuance of this permit (145-41594-00049) until landfill gas collection and control systems (GCCS) with flares are installed and operated at the Landfill, the Permittee shall determine the HAP emissions per twelve (12) consecutive month period from each of the Landfill using the following equations:

Single HAP Emissions = [Captured/Uncontrolled Single HAP Emissions x (1 - Overall Control Efficiency when flare control(s) is used for HAP control)] + [Captured/Uncontrolled Single HAP Emissions when flare control(s) is not used for HAP control] + [Uncaptured Single HAP Emissions] + [Single HAP Emissions from Combustion of Landfill Gas in flare control(s)]

Combined HAP Emissions = [Captured/Uncontrolled Combined HAP Emissions x (1 - Overall Control Efficiency when flare control(s) is used for HAP control)] + [Captured/Uncontrolled Combined HAP Emissions when flare control(s) is not used for HAP control] + [Uncaptured Combined HAP Emissions] + [Combined HAP Emissions from Combustion of Landfill Gas in flare control(s)]

Overall Control Efficiency = [1 - (Flare HAP Destruction Efficiency) x (Landfill Gas Capture Efficiency)]

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

D.3.3 Parametric Monitoring: Flares

(a) When controlling landfill gas HAP emissions with the open flare at the Landfill to comply with Condition D.3.1, the Permittee shall monitor the flare flame using a thermocouple or any other equivalent device to indicate the continuous presence of a flame. If a condition exists which should result in a response step, the Permittee shall take a reasonable response step(s). Section C - Response to Excursions or Exceedances contains the Permittee’s obligation with regard to the reasonable response steps required by this condition. Failure to take a response step(s) shall be considered a deviation of this permit.
Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.4 Record Keeping Requirements

(a) To document compliance with Condition D.3.1, the Permittee shall maintain records in accordance with (1) through (2) below from the date of issuance of this permit (145-41594-00049) until the open flare is installed and operated at the Landfill. Records maintained for (1) through (2) shall be taken monthly and shall be complete and sufficient to establish compliance with the requirements in Condition D.3.1.

(1) Methods utilized and parameter values used to determine HAP emissions as specified in Conditions D.3.2(b) and D.3.2(c);  

(2) Single HAP and Combined HAP emissions each month and each compliance period using the equations contained in Condition D.3.2(c).

(b) To document compliance with Conditions D.3.1 and D.3.3, the Permittee shall maintain records of the following for each flare:

(1) Date and time when the landfill emissions were controlled by a flare and documentation that a flare flame was present.

(2) Date and time when the landfill emissions were not controlled by a flare.

(3) Records of the flare flame monitoring that indicate the continuous presence of a flame and records of all periods of operations during which the flare flame is absent.

(4) A copy of the manufacturer's operation and maintenance manual that defines operating procedures that will ensure destruction efficiency at the flare.

(5) The design specifications for the flare.

(6) Calibration data and maintenance records for the flare and thermocouple or equivalent device.

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

D.3.5 Reporting Requirements

From the date of issuance of this permit (145-41594-00049) until the open flare is installed and operated at the Landfill, the Permittee shall submit quarterly summaries of the information to document the compliance status with Conditions D.3.1(a) and D.3.1(b) using the reporting forms located at the end of this permit, or their equivalent, no later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The reports submitted by the Permittee 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). Once the landfill gas collection and control systems (GCCS) with flares are installed and operated at the landfill, the requirements to submit this report ceases and the permittee shall state this in a final quarterly report, along with the date that the flarees were installed and began operating.
**SECTION E.3  NESHAP**

**Emissions Unit Description:**

**Specifically Regulated Insignificant Activities:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>(b)</td>
<td>One (1) diesel-fired generator, identified as E245, manufactured in 1999 and installed in 2010, with a maximum output of 22.5 HP, exhausting to the outdoors. Under 40 CFR 63, Subpart ZZZZ, this unit is considered an existing affected source.</td>
</tr>
<tr>
<td>(eb)</td>
<td>One (1) diesel-fired emergency generator, identified as the emergency generator-leachate, manufactured before 2006 and installed before 2006, with a maximum output of 22.8 HP, exhausting to the outdoors. Under 40 CFR 63, Subpart ZZZZ, this unit is considered an existing affected source.</td>
</tr>
<tr>
<td>(dc)</td>
<td>One (1) natural gas-fired emergency generator, manufactured before 2007 and installed before 2006, with a maximum output of 20.1 HP, exhausting to the outdoors. Under 40 CFR 63, Subpart ZZZZ, this unit is considered an existing affected source.</td>
</tr>
</tbody>
</table>

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

*****


The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment D to the operating permit), which are incorporated by reference as 326 IAC 20-82,

<table>
<thead>
<tr>
<th>(a) Diesel-Fired Generator E245:</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) 40 CFR 63.6580</td>
<td></td>
</tr>
<tr>
<td>(2) 40 CFR 63.6585(a), (b), (d)</td>
<td></td>
</tr>
<tr>
<td>(3) 40 CFR 63.6590(a),(i)ii</td>
<td></td>
</tr>
<tr>
<td>(4) 40 CFR 63.6595(a),(1)(b)</td>
<td></td>
</tr>
<tr>
<td>(5) 40 CFR 63.6602</td>
<td></td>
</tr>
<tr>
<td>(6) 40 CFR 63.6605</td>
<td></td>
</tr>
<tr>
<td>(7) 40 CFR 63.6625(e), (h), (i)</td>
<td></td>
</tr>
<tr>
<td>(8) 40 CFR 63.6640(a), (b), (d) &amp; (e)</td>
<td></td>
</tr>
<tr>
<td>(9) 40 CFR 63.6655(a), (d) &amp; (e)</td>
<td></td>
</tr>
<tr>
<td>(10) Table 2c (item 2)</td>
<td></td>
</tr>
<tr>
<td>(11) Table 6 (item 9)</td>
<td></td>
</tr>
<tr>
<td>(12) Table 8—except for 40 CFR 63.7(b) &amp; (c), 40 CFR 63.8(e), (f)(4) &amp; (f)(6), and 40 CFR 63.9(b) — (e), (g) &amp; (h)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(ba) Diesel-Fired Emergency Generator-Leachate</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) 40 CFR 63.6580</td>
<td></td>
</tr>
<tr>
<td>(2) 40 CFR 63.6585(a), (bc), (d)</td>
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</tr>
<tr>
<td>(3) 40 CFR 63.6590(a)(1)(iii) and (iv)</td>
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<tr>
<td>(4) 40 CFR 63.6595(a),(1),(b), (c)</td>
<td></td>
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<tr>
<td>(5) 40 CFR 63.66023(a)</td>
<td></td>
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<tr>
<td>(6) 40 CFR 63.6605</td>
<td></td>
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<tr>
<td>(7) 40 CFR 63.6612</td>
<td></td>
</tr>
<tr>
<td>(8) 40 CFR 63.6615</td>
<td></td>
</tr>
</tbody>
</table>
(69) 40 CFR 63.6625(e)(23), (f), (h), & (i)
(10) 40 CFR 63.6630(a), (b), (c)
(11) 40 CFR 63.6635
(7) 40 CFR 63.6665
(812) 40 CFR 63.6640(a), (b), (d), (e), (f)(1), (f)(2)(i), (f)(3), and (f)(4)
(13) 40 CFR 63.6645(a)(2), (b), (h)
(14) 40 CFR 63.6650
(915) 40 CFR 63.6655(a), (d), (e) & (f)
(16) 40 CFR 63.6660
(17) 40 CFR 63.6665
(18) 40 CFR 63.6670
(19) 40 CFR 63.6675
(4020) Table 2c (Item 1
(4421) Table 6 (item 9)
(4222) Table 8 - except for 40 CFR 63.7(b) & (c), 40 CFR 63.8(e), (f)(4) & (f)(6), and 40 CFR 63.9(b) - (e), (g) & (h)

(sb) Natural Gas-Fired Emergency Generator
(1) 40 CFR 63.6580
(2) 40 CFR 63.6585(a), (bc), (d)
(3) 40 CFR 63.6590(a)(1)(iii) and (iv)
(4) 40 CFR 63.6595(a)(1), (b), and (c)
(5) 40 CFR 63.66023(a)
(6) 40 CFR 63.6605
(7) 40 CFR 63.6612
(8) 40 CFR 63.6615
(69) 40 CFR 63.6625(e)(23), (f), (h), & (j)
(10) 40 CFR 63.6630(a), (b), (c)
(11) 40 CFR 63.6635
(7) 40 CFR 63.6665
(812) 40 CFR 63.6640(a), (b), (d), (e), (f)(1), (f)(2)(i), (f)(3), and (f)(4)
(13) 40 CFR 63.6645(a)(2), (b), (h)
(14) 40 CFR 63.6650
(915) 40 CFR 63.6655(a), (d), (e) & (f)
(16) 40 CFR 63.6660
(17) 40 CFR 63.6665
(18) 40 CFR 63.6670
(19) 40 CFR 63.6675
(1020) Table 2c (Item 15)
(4421) Table 6 (item 9)
(4222) Table 8 - except for 40 CFR 63.7(b) & (c), 40 CFR 63.8(e), (f)(4) & (f)(6), and 40 CFR 63.9(b) - (e), (g) & (h)

*****

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

Part 70 Quarterly Report

Source Name: CGS Services, Inc.
Source Address: 2920 E US 52, Morristown, Indiana 46161
Part 70 Permit No.: T145-38046-00049
Facility: Landfill (including flare and solar flares emissions)
Parameter: Single HAP  
Limit: Shall be less than 9.5 tons per twelve (12) consecutive month period, with compliance determined at the end of each month

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</table>

- 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: CGS Services, Inc.  
Source Address: 2920 E US 52, Morristown, Indiana 46161  
Part 70 Permit No.: T145-38046-00049  
Facility: Landfill (including flare and solar flares emissions)  
Parameter: Combined HAPs  
Limit: Shall be less than 23.5 tons per twelve (12) consecutive month period, with compliance determined at the end of each month

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<td>This Month (tons)</td>
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☐ 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 20, 2019. Additional information was received on June 26, 2019.

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 145-41594-00049. The operation of this proposed modification shall be subject to the conditions of the attached proposed Significant Permit Modification No. 145-41613-00049.

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 William Altman, 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) 233-9664 or (800) 451-6027, and ask for William Altman or (317) 233-9664.

(b) A copy of the findings is available on the Internet at: [http://www.in.gov/ai/appfiles/idem-caats/](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](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](http://www.in.gov/idem/6900.htm).
# Appendix A: Emissions Calculations

## Modification Emissions Summary

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<th>Company Name:</th>
<th>CGS Services, Inc.</th>
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<td>SSM No.</td>
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<td>SPM No.</td>
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<td>Permit Reviewer:</td>
<td>William Altman</td>
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### PM PM$_{10}$ PM$_{2.5}$ SO$_2$ NO$_x$ VOC CO Single HAP Combined HAPs

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<th>PM</th>
<th>PM$_{10}$</th>
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<th>SO$_2$</th>
<th>NO$_x$</th>
<th>VOC</th>
<th>CO</th>
<th>Single HAP</th>
<th>Combined HAPs</th>
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**Existing insignificant activities (incorporated into SSM 145-41594-00049)**

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</table>

Based on the potential usage and low vapor pressure of diesel fuel, the potential to emit VOC and HAP from the diesel dispensing facilities are assumed to be negligible.

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<th>HN</th>
<th>PM2.5</th>
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<th>HN</th>
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<th>SO2</th>
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<td>0</td>
</tr>
<tr>
<td>Pond</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Paint</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Solar Vent Flare</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Waste Handling</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Emissions</td>
<td>0</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Based on the potential usage and low vapor pressure of diesel fuel, the potential to emit VOC and HAP from the diesel dispensing facilities are assumed to be negligible.

*This site may contain paved and unpaved roads. As a worst case scenario, all roads are assumed unpaved.

**This site may contain paved and unpaved roads. As a worst case scenario, all roads are assumed unpaved.
**Appendix A: Emissions Calculations**

**Potential to Emit - Landfill HAP and CO**

- **Company Name:** CGS Services, Inc.
- **Source Address:** 2920 E US 52, Morristown, IN 46161
- **SSM No.:** 145-41613-00049
- **SPM No.:** 145-41613-00049
- **Permit Reviewer:** William Altman

---

**VOC emissions**

After Modification

- **Peak NMOC Emissions:** 38.28 (Mg/year)
- **Peak NMOC Emissions:** 42.21 TPY
- **Year of Occurrence:** 2053
- **% VOC in NMOC:** 39% ([AP-42, Ch 2.4, 11/1998])
- **VOC Generated in Landfill:** 16.46 TPY
- **Control Device Destruction Efficiency:** 98%
- **Controlled VOC Emissions:** 0.33

The peak NMOC emissions are determined using U.S. EPA LandGEM software. Please refer Appendix B of this TSD for the details.

---

**CO and HAPs emissions**

<table>
<thead>
<tr>
<th>Temperature</th>
<th>°R</th>
<th>Atmospheric Pressure</th>
<th>atm</th>
</tr>
</thead>
<tbody>
<tr>
<td>527.67</td>
<td></td>
<td>1.00</td>
<td></td>
</tr>
</tbody>
</table>

- **Peak LandGEM Generation Rate:** 5,740 SCFM
- **Collection Efficiency:** 75.00%
- **LFG for PTE Calculation:** 4,305 SCFM
- **Uncollected Generation Rate:** 1,435 SCFM

---

**PTE of CO - LandGEM**

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Molecular Weight</th>
<th>Concentration (ppmv)</th>
<th>Average Pollutant Flow (SCFM)</th>
<th>Collected Landfill Emission (TPY)</th>
<th>Landfill Fugitive CO Emissions (TPY)</th>
<th>Control Efficiency</th>
<th>Controlled Emissions (TPY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO at 4305 SCFM</td>
<td>25.03</td>
<td>140.00</td>
<td>0.0027</td>
<td>11.32</td>
<td>0.84</td>
<td>0.38</td>
<td></td>
</tr>
</tbody>
</table>

**PTE of Hazardous Air Pollutants - LandGEM**

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Molecular Weight</th>
<th>Concentration (ppmv)</th>
<th>Average Pollutant Flow (SCFM)</th>
<th>Collected Landfill PTE (TPY)</th>
<th>Landfill Fugitive HAP Emissions (TPY)</th>
<th>Control Efficiency</th>
<th>Controlled Emissions (TPY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,1,1-Trichloroethane</td>
<td>88</td>
<td>0.0027</td>
<td>0.183</td>
<td>0.183</td>
<td>93%</td>
<td>0.0470</td>
<td></td>
</tr>
<tr>
<td>1,1,2,2-Tetrachloroethane</td>
<td>143</td>
<td>0.0047</td>
<td>0.320</td>
<td>0.320</td>
<td>93%</td>
<td>0.0630</td>
<td></td>
</tr>
<tr>
<td>1,1-Dichloroethane</td>
<td>92</td>
<td>0.0071</td>
<td>0.500</td>
<td>0.500</td>
<td>93%</td>
<td>0.0630</td>
<td></td>
</tr>
<tr>
<td>1,1-Dichloroethene</td>
<td>92</td>
<td>0.0027</td>
<td>0.190</td>
<td>0.190</td>
<td>93%</td>
<td>0.0243</td>
<td></td>
</tr>
<tr>
<td>Benzene (1.9 or 11)</td>
<td>78</td>
<td>0.0036</td>
<td>0.243</td>
<td>0.243</td>
<td>93%</td>
<td>0.0324</td>
<td></td>
</tr>
<tr>
<td>Carbon Tetrachloride</td>
<td>154</td>
<td>0.0020</td>
<td>0.143</td>
<td>0.143</td>
<td>93%</td>
<td>0.0243</td>
<td></td>
</tr>
<tr>
<td>Chloroethane</td>
<td>64</td>
<td>0.0020</td>
<td>0.143</td>
<td>0.143</td>
<td>93%</td>
<td>0.0243</td>
<td></td>
</tr>
<tr>
<td>Chloroform</td>
<td>90</td>
<td>0.0013</td>
<td>0.098</td>
<td>0.098</td>
<td>93%</td>
<td>0.0151</td>
<td></td>
</tr>
<tr>
<td>Dichlorobenzene</td>
<td>147</td>
<td>0.0013</td>
<td>0.108</td>
<td>0.108</td>
<td>93%</td>
<td>0.0151</td>
<td></td>
</tr>
<tr>
<td>Dichloromethane</td>
<td>85</td>
<td>0.0056</td>
<td>0.418</td>
<td>0.418</td>
<td>93%</td>
<td>0.0345</td>
<td></td>
</tr>
<tr>
<td>Ethanone</td>
<td>44</td>
<td>0.0002</td>
<td>0.017</td>
<td>0.017</td>
<td>93%</td>
<td>0.0015</td>
<td></td>
</tr>
<tr>
<td>Ethylene Dibromide</td>
<td>187</td>
<td>4.31E-06</td>
<td>5.52E-04</td>
<td>5.52E-04</td>
<td>98%</td>
<td>0.0001</td>
<td></td>
</tr>
<tr>
<td>Hexane</td>
<td>86</td>
<td>0.0007</td>
<td>0.057</td>
<td>0.057</td>
<td>93%</td>
<td>0.0172</td>
<td></td>
</tr>
<tr>
<td>Mercury</td>
<td>200.61</td>
<td>1.71E-04</td>
<td>1.71E-04</td>
<td>1.71E-04</td>
<td>93%</td>
<td>0.0020</td>
<td></td>
</tr>
<tr>
<td>Methyl Isobutyl Ketone</td>
<td>100</td>
<td>0.0081</td>
<td>0.643</td>
<td>0.643</td>
<td>93%</td>
<td>0.0643</td>
<td></td>
</tr>
<tr>
<td>Perchloroethylene</td>
<td>166</td>
<td>0.0159</td>
<td>1.248</td>
<td>1.248</td>
<td>93%</td>
<td>0.0345</td>
<td></td>
</tr>
<tr>
<td>Toluene (39 or 170)</td>
<td>92</td>
<td>0.1679</td>
<td>10.553</td>
<td>10.553</td>
<td>93%</td>
<td>2.6383</td>
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<tr>
<td>Trichloroethylene</td>
<td>131</td>
<td>0.0121</td>
<td>1.080</td>
<td>1.080</td>
<td>93%</td>
<td>0.0243</td>
<td></td>
</tr>
<tr>
<td>Vinyl Chloride</td>
<td>62</td>
<td>0.0314</td>
<td>1.340</td>
<td>1.340</td>
<td>93%</td>
<td>0.0345</td>
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<tr>
<td>Xylene</td>
<td>106</td>
<td>0.0517</td>
<td>3.742</td>
<td>3.742</td>
<td>93%</td>
<td>0.0935</td>
<td></td>
</tr>
<tr>
<td>Xylenes</td>
<td>106</td>
<td>0.0517</td>
<td>3.742</td>
<td>3.742</td>
<td>93%</td>
<td>0.0935</td>
<td></td>
</tr>
</tbody>
</table>

**Total CO (TPY) (before control):** 15.36 equal to fugitive + collected landfill PTE

**Total CO (TPY) (after control):** 4.07 equal to fugitive + after control

**Total CO (after control):** 4.97 equal to fugitive + after control

**Methodology:**

1. Average Flow (SCFM) = Maximum Landfill Flow (SCFM) x ppmv pollutant / 1,000,000
2. PTE (tons/yr) = Average Flow (SCFM) x MW (lb/lbmole) x P (atm) x T(°R)

---

**Appendix B: Emissions Calculations**

**Potential to Emit - Landfill HAP and CO**

- **Company Name:** CGS Services, Inc.
- **Source Address:** 2920 E US 52, Morristown, IN 46161
- **SSM No.:** 145-41613-00049
- **SPM No.:** 145-41613-00049
- **Permit Reviewer:** William Altman
Appendix A: Emissions Calculations

Potential to Emit - New Open Flare

Company Name: CGS Services, Inc.
Source Address: 2920 E US 52, Morristown, IN 46161
SSM No. 145-41594-00049
SPM No. 145-41613-00049
Permit Reviewer: William Altman

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flare Heat Input Capacity</td>
<td>91.08 MMBtu/hr</td>
</tr>
<tr>
<td>Heating Value of Landfill Gas</td>
<td>506.00 Btu/CF</td>
</tr>
<tr>
<td>Inlet Gas Temperature</td>
<td>559.67 °R</td>
</tr>
<tr>
<td>Inlet Gas Pressure</td>
<td>1.03 atm</td>
</tr>
<tr>
<td>Design Landfill Gas Flow</td>
<td>3,000 SCFM</td>
</tr>
<tr>
<td>Volume % Water in Landfill Gas (Saturated Gas)</td>
<td>5.00%</td>
</tr>
</tbody>
</table>

### Calculation Basis

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td>748.98 MMCF/yr, CH₄, dry</td>
</tr>
<tr>
<td>PM₁₀</td>
<td>748.98 MMCF/yr, CH₄, dry</td>
</tr>
<tr>
<td>Direct PM₂.₅</td>
<td>748.98 MMCF/yr, CH₄, dry</td>
</tr>
<tr>
<td>Sulfur</td>
<td>1775</td>
</tr>
<tr>
<td>SO₂</td>
<td>226.88</td>
</tr>
<tr>
<td>VOC</td>
<td>234.00</td>
</tr>
<tr>
<td>CO</td>
<td>91.08 MMBtu/hr</td>
</tr>
<tr>
<td>CL⁻</td>
<td>42</td>
</tr>
<tr>
<td>HCL</td>
<td>3.05</td>
</tr>
</tbody>
</table>

### Methane Flow Rate at PTE

<table>
<thead>
<tr>
<th>Landfill Gas Flow Rate, Wet Basis</th>
<th>Landfill Gas Flow Rate, Dry Basis</th>
<th>Volume % Methane</th>
<th>Methane Flow Rate (Dry Basis)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,000.00 SCFM</td>
<td>2,850.00 DSCFM</td>
<td>50.00%</td>
<td>1,425.00 SCFM</td>
</tr>
</tbody>
</table>

### Uncontrolled Potential to Emit Calculation for Flare

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Concentration (ppmv)</th>
<th>Pollutant Flow (SCFM)</th>
<th>Throughput</th>
<th>Emission Factor</th>
<th>PTE (TPY)</th>
<th>Emission Factor Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td>17.0</td>
<td>lb/MMCF, CH₄, dry</td>
<td>6.37</td>
<td>AP-42, Ch. 2.4, Table 2.4-5, 11/98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PM₁₀</td>
<td>17.0</td>
<td>lb/MMCF, CH₄, dry</td>
<td>6.37</td>
<td>Assumed the same as PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct PM₂.₅</td>
<td>17.0</td>
<td>lb/MMCF, CH₄, dry</td>
<td>6.37</td>
<td>Assumed the same as PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfur</td>
<td>5.3250</td>
<td></td>
<td>113.58</td>
<td>Site Testing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SO₂</td>
<td>226.88</td>
<td></td>
<td>= TPY S x (MW SO₂ / MW S)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VOC</td>
<td>0.7020</td>
<td></td>
<td>0.78</td>
<td>NMOC 600 ppmv, 39% VOC as hexane,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO</td>
<td>0.310</td>
<td>lb/MMBtu</td>
<td>123.67</td>
<td>Manufacturer Specification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOₓ</td>
<td>0.068</td>
<td>lb/MMBtu</td>
<td>27.13</td>
<td>Manufacturer Specification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CL⁻</td>
<td>2.97</td>
<td></td>
<td></td>
<td>AP-42, Ch. 2.4, 11/98, default</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCL</td>
<td>3.05</td>
<td></td>
<td>= TPY CL x (MW HCL / MW CL)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Methodology:

1) Methane Flow Rate = Flare Gas Flow Rate x (% Methane)
2) AP-42 does not include emission factors for PM10 or PM2.5. They were assumed the same as PM.
3) DSCFM = SCFM x (1 - % Water)
4) Pollutant Flow (SCFM) = [Total Landfill Gas Flow (SCFM)] x [ppmv pollutant / 1,000,000 ]
5) PTE (TPY) = Flow (SCFM) x Emission Factor (lb/MMCF) x (MMCF/1,000,000 CF) x [60 min/hr] x [4.38 hr-ton/lb-yr]
6) PTE (TPY) = Heat Input (MMBtu/hr) x Emission Factor (lb/MMBtu) x [4.38 hr-ton/lb-yr]
## Appendix A: Emissions Calculations
### Potential to Emit - New Open Flare-HAPs

**Company Name:** CGS Services, Inc.  
**Source Address:** 2920 E US 52, Morristown, IN 46161  
**SSM No.:** 145-41594-00049  
**SPM No.:** 145-41613-00049  
**Permit Reviewer:** William Altman

### Maximum Flare Flow Rate
- **3,000 Ft^3/min**
- **44,665,905 M^3/ year**

### Maximum Flare Operating Hours
- **8760 hours**

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Compound</th>
<th>Concentration PPMV</th>
<th>Molecular Weight</th>
<th>Gravimetric Concentration (mg/M^3)</th>
<th>Potential to Emit</th>
</tr>
</thead>
<tbody>
<tr>
<td>71556</td>
<td>1,1,1-Trichloroethane (methyl chloroform)</td>
<td>0.48</td>
<td>133.42</td>
<td>2.62</td>
<td>PTE (mg/yr) 0.0023</td>
</tr>
<tr>
<td>79345</td>
<td>1,1,2,2-Tetrachloroethane</td>
<td>1.11</td>
<td>167.86</td>
<td>7.62</td>
<td>PTE (mg/yr) 0.0068</td>
</tr>
<tr>
<td>75343</td>
<td>1,1-Dichloroethane (vinylidene chloride)</td>
<td>2.35</td>
<td>96.95</td>
<td>9.51</td>
<td>PTE (mg/yr) 0.0099</td>
</tr>
<tr>
<td>75354</td>
<td>1,1-Dichloroethane (ethylene dichloride)</td>
<td>0.2</td>
<td>96.95</td>
<td>0.79</td>
<td>PTE (mg/yr) 0.0007</td>
</tr>
<tr>
<td>107062</td>
<td>1,2-Dichloroethane (ethylene dichloride)</td>
<td>0.41</td>
<td>98.96</td>
<td>1.66</td>
<td>PTE (mg/yr) 0.0010</td>
</tr>
<tr>
<td>78875</td>
<td>1,2-Dichloropropane (propylene dichloride)</td>
<td>0.18</td>
<td>112.99</td>
<td>0.83</td>
<td>PTE (mg/yr) 0.0008</td>
</tr>
<tr>
<td>107151</td>
<td>Acrylonitrile</td>
<td>6.33</td>
<td>53.06</td>
<td>13.74</td>
<td>PTE (mg/yr) 0.0123</td>
</tr>
<tr>
<td>75150</td>
<td>Carbon disulfide</td>
<td>0.58</td>
<td>76.14</td>
<td>1.81</td>
<td>PTE (mg/yr) 0.0016</td>
</tr>
<tr>
<td>56235</td>
<td>Carbon tetrachloride</td>
<td>0</td>
<td>153.84</td>
<td>0.00</td>
<td>PTE (mg/yr) 0.0000</td>
</tr>
<tr>
<td>463581</td>
<td>Carbonyl sulfide</td>
<td>0.49</td>
<td>60.07</td>
<td>1.20</td>
<td>PTE (mg/yr) 0.0011</td>
</tr>
<tr>
<td>108907</td>
<td>Chlorobenzene</td>
<td>0.25</td>
<td>112.56</td>
<td>1.15</td>
<td>PTE (mg/yr) 0.0009</td>
</tr>
<tr>
<td>75903</td>
<td>Chloroethane (ethyl chloride)</td>
<td>1.25</td>
<td>64.52</td>
<td>3.30</td>
<td>PTE (mg/yr) 0.0027</td>
</tr>
<tr>
<td>47663</td>
<td>Chloroform</td>
<td>0.53</td>
<td>119.39</td>
<td>0.15</td>
<td>PTE (mg/yr) 0.0001</td>
</tr>
<tr>
<td>75902</td>
<td>Dichloromethane (ethyl chloride)</td>
<td>14.3</td>
<td>84.94</td>
<td>49.68</td>
<td>PTE (mg/yr) 0.0444</td>
</tr>
<tr>
<td>100144</td>
<td>Ethylbenzene</td>
<td>4.81</td>
<td>106.16</td>
<td>20.02</td>
<td>PTE (mg/yr) 0.0179</td>
</tr>
<tr>
<td>110543</td>
<td>Hexane</td>
<td>6.57</td>
<td>86.17</td>
<td>23.15</td>
<td>PTE (mg/yr) 0.0207</td>
</tr>
<tr>
<td>108107</td>
<td>Methyl isobutyl ketone</td>
<td>1.81</td>
<td>100.07</td>
<td>7.65</td>
<td>PTE (mg/yr) 0.0086</td>
</tr>
<tr>
<td>127184</td>
<td>Perchloroethylene (tetrachloroethene)</td>
<td>3.73</td>
<td>165.85</td>
<td>25.30</td>
<td>PTE (mg/yr) 0.0226</td>
</tr>
<tr>
<td>79016</td>
<td>Trichloroethylene</td>
<td>2.82</td>
<td>131.39</td>
<td>15.15</td>
<td>PTE (mg/yr) 0.0135</td>
</tr>
<tr>
<td>75014</td>
<td>Vinyl chloride</td>
<td>7.34</td>
<td>62.5</td>
<td>18.76</td>
<td>PTE (mg/yr) 0.0168</td>
</tr>
<tr>
<td>71432</td>
<td>Benzene</td>
<td>1.91</td>
<td>78.11</td>
<td>6.10</td>
<td>PTE (mg/yr) 0.0055</td>
</tr>
<tr>
<td>74873</td>
<td>Methyl chloride (Chloromethane)</td>
<td>1.21</td>
<td>50.49</td>
<td>2.50</td>
<td>PTE (mg/yr) 0.0022</td>
</tr>
<tr>
<td>108863</td>
<td>Toluene</td>
<td>39.3</td>
<td>92.13</td>
<td>148.09</td>
<td>PTE (mg/yr) 0.323</td>
</tr>
<tr>
<td>1330207</td>
<td>Xylene (isomers and mixtures)</td>
<td>12.1</td>
<td>106.16</td>
<td>52.54</td>
<td>PTE (mg/yr) 0.469</td>
</tr>
<tr>
<td>7647010</td>
<td>Hydrochloric acid</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>PTE (mg/yr) 1.7918</td>
</tr>
<tr>
<td></td>
<td>Mercury Compounds</td>
<td>0</td>
<td>200.61</td>
<td>0.00</td>
<td>PTE (mg/yr) 0.0000</td>
</tr>
</tbody>
</table>

### Notes:
1. Based on 11/98 AP-42 Factors for Landfill Gas  
2. Hydrochloric Acid calculations are taken from a final paper published by USEPA on April 12, 2007: Field Measurements at Five Municipal Solid Waste Landfills with Landfill Gas Control Technology. Emissions rate was for enclosed flares - highest of two tested values used (2.5 lbs HC/mmscf)

### Methodology:
Gravimetric Concentration (mg/M^3) = concentration PPMV * Molecular Weight

\[
PTE (\text{mg/yr}) = \text{Gravimetric Concentration (mg/M^3)} \times \text{Maximum Flow Rate (M^3/year)} \times \text{Flare Flow Rate (min)} \times (1-0.98) \times 1000000000
\]

\[
PTE (\text{lbs/hr}) = \text{PTE (mg/yr)} \times 0.251669
\]

\[
PTE (\text{tons/year}) = \text{PTE (lbs/hr)} \times 8760 / 2000
\]

Total Potential to Emit:
- **2.1610 Mg/yr**
- **0.5429 lbs/hr**
- **2.3790 tons/year**
## Calculation Basis

<table>
<thead>
<tr>
<th>Calculation</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flare Heat Input Capacity</td>
<td>1.36 MMBtu/hr</td>
</tr>
<tr>
<td>Heating Value of Landfill Gas</td>
<td>454.50 Btu/CF</td>
</tr>
<tr>
<td>Inlet Gas Temperature</td>
<td>559.67 °F</td>
</tr>
<tr>
<td>Inlet Gas Pressure</td>
<td>1.03 atm</td>
</tr>
<tr>
<td>Design Landfill Gas Flow</td>
<td>50 SCFM</td>
</tr>
<tr>
<td>Volume % Water in Landfill Gas (Saturated Gas)</td>
<td>5.00%</td>
</tr>
</tbody>
</table>

## Methane Flow Rate at PTE

<table>
<thead>
<tr>
<th>Landfill Gas Flow Rate, Wet Basis</th>
<th>Landfill Gas Flow Rate, Dry Basis</th>
<th>Volume % Methane</th>
<th>Methane Flow Rate (Dry Basis)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50.00 SCFM</td>
<td>47.50 DSCFM</td>
<td>50.00%</td>
<td>23.75 SCFM</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12.48 MMCF Methane/year, dry</td>
</tr>
</tbody>
</table>

## Uncontrolled Potential to Emit Calculation for Flare

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Concentration (ppmv)</th>
<th>Pollutant Flow (SCFM)</th>
<th>Throughput</th>
<th>Emission Factor</th>
<th>PTE (TPY)</th>
<th>Emission Factor Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td></td>
<td>MMCF/yr, CH dry</td>
<td>17.0</td>
<td>lb/MMCF, CH dry</td>
<td>0.11</td>
<td>AP-42, Ch. 2.4, Table 2.4-5, 11/98</td>
</tr>
<tr>
<td>PM_{10}</td>
<td></td>
<td>MMCF/yr, CH dry</td>
<td>17.0</td>
<td>lb/MMCF, CH dry</td>
<td>0.11</td>
<td>Assumed the same as PM</td>
</tr>
<tr>
<td>Direct PM_{2.5}</td>
<td></td>
<td>MMCF/yr, CH dry</td>
<td>17.0</td>
<td>lb/MMCF, CH dry</td>
<td>0.11</td>
<td>Assumed the same as PM</td>
</tr>
<tr>
<td>Sulfur</td>
<td>1775</td>
<td>0.0888</td>
<td></td>
<td></td>
<td>0.33</td>
<td>Site Testing</td>
</tr>
<tr>
<td>NO_{2}</td>
<td>234.00</td>
<td>0.0117</td>
<td></td>
<td></td>
<td>0.01</td>
<td>NMOC 650 ppmv, 39% VOC as hexane,</td>
</tr>
<tr>
<td>CO</td>
<td>1.36</td>
<td>0.370</td>
<td></td>
<td></td>
<td>2.21</td>
<td>Manufacturer Specification</td>
</tr>
<tr>
<td>NO_{2}</td>
<td>1.36</td>
<td>0.068</td>
<td></td>
<td></td>
<td>0.41</td>
<td>Manufacturer Specification</td>
</tr>
<tr>
<td>CL</td>
<td>42</td>
<td>0.0021</td>
<td></td>
<td></td>
<td>0.05</td>
<td>AP-42, Ch. 2.4, 11/98, default</td>
</tr>
<tr>
<td>HCL</td>
<td>0.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Methodology:

1) Methane Flow Rate = Flare Gas Flow Rate x (% Methane)  
2) AP-42 does not include emission factors for PM10 or PM2.5. They were assumed the same as PM.  
3) DSCFM = SCFM x (1 - % Water)  
4) Pollutant Flow (SCFM) = [Total Landfill Gas Flow (SCFM)] x [ppmv pollutant / 1,000,000]  
5) PTE (TPY) = Flow (SCFM) x Emission Factor (lb/MMCF) x [MMCF/1,000,000 CF] x [60 min/hr] x [4.38 hr-ton/lb-yr]  
6) PTE (TPY) = Heat Input (MMBtu/hr) x Emission Factor (lb/MMBtu) x [4.38 hr-ton/lb-yr]
## Appendix A: Emissions Calculations
### Potential to Emit - Solar Vent Flare-HAPs

**Company Name:** CGS Services, Inc.

**Source Address:** 2920 E US 52, Morristown, IN 46161

**SSM No.:** 145-4104-00049

**SPM No.:** 145-41613-00049

**Permit Reviewer:** William Altman

---

### Maximum Flare Flow Rate (each):
50 scfm

### Annual Flow Rate:
744,265 m³/year

### Destruction Efficiency:
98%

### Number of Flares
3

### Uncontrolled Potential Emissions

<table>
<thead>
<tr>
<th>Compound</th>
<th>Median ppm</th>
<th>Molecular Weight</th>
<th>Mass Concentration (mg/M³)</th>
<th>Uncontrolled Potential Emissions (lbs/yr)</th>
<th>After Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric Acid</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Notes:</td>
<td>(1) Based on 11/98 AP-42 Factors for Landfill Gas</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) Hydrochloric Acid calculations are taken from a final paper published by USEPA on April 12, 2007: Field Measurements at Five Municipal Solid Waste Landfills with Landfill Gas Control Technology. Emissions rates were for enclosed flares - highest of two tested values used (2.5 lbs HCl/mmscf)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Methodology:

Gravimetric Concentration (mg/M³) = Median PPMV * Molecular Weight / 24.45

PTE Uncontrolled (mg/year) = Mass Concentration (mg/M³) * Annual Flow Rate (M³/year) / 1000000

PTE Uncontrolled (tons/year) = PTE (mg/year) * 1.023

PTE controlled (tons/year) = PTE uncontrolled (tons/year) * (1 - destruction efficiency)

---

### Calculations:

Total 0.36 x 0.40 x 0.04 x 0.01 = 0.000060

### Total:

2.5 lbs HCl x 50 scfm x 60 min x 1 mmsecf / 1000000000 ft³ x 0.0075 lbs HCl/hour

### Notes:

- [1] Based on 11/98 AP-42 Factors for Landfill Gas
- [2] Hydrochloric Acid calculations are taken from a final paper published by USEPA on April 12, 2007: Field Measurements at Five Municipal Solid Waste Landfills with Landfill Gas Control Technology. Emissions rates were for enclosed flares - highest of two tested values used (2.5 lbs HCl/mmsecf)
Company Name: CGS Services, Inc.
Source Address: 2920 E US 52, Morristown, IN 46161
SSM No. 145-41594-00049
SPM No. 145-41613-00049
Permit Reviewer: William Altman

Maximum Hourly Throughput 1.71 tons/hr
Maximum Annual Usage 15,000 tons/yr
Hours of Operation 8,760 hr/yr

### Grinding Emissions

<table>
<thead>
<tr>
<th>Pollutants</th>
<th>Emission Factor (lb/ton)</th>
<th>Process Rate (ton/hr)</th>
<th>PTE (TPY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td>0.35</td>
<td></td>
<td>2.625</td>
</tr>
<tr>
<td>PM10</td>
<td>0.2</td>
<td>1.71</td>
<td>1.5</td>
</tr>
<tr>
<td>PM2.5</td>
<td>0.2</td>
<td></td>
<td>1.5</td>
</tr>
</tbody>
</table>

### Screening Emissions

<table>
<thead>
<tr>
<th>Pollutants</th>
<th>Emission Factor (lb/ton)</th>
<th>Process Rate (ton/hr)</th>
<th>PTE (TPY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td>0.3</td>
<td></td>
<td>2.25</td>
</tr>
<tr>
<td>PM10</td>
<td>0.072</td>
<td>1.71</td>
<td>0.54</td>
</tr>
<tr>
<td>PM2.5</td>
<td>0.072</td>
<td></td>
<td>0.54</td>
</tr>
</tbody>
</table>

### Material Drop Emissions

Drop Equation - AP-42, Chapter 13.2.4, November 2006, Equation (1)

\[ E = 0.0032 \times k \times \left( \frac{U}{5} \right)^{1.2} \times \left( \frac{M}{2} \right)^{1.4} \]

- \( E \) = emission rate in lb/ton
- \( k \) = particle size multiplier (dimensionless)
- \( U \) = mean wind speed (miles per hour) 9.58 mph (Tanks 4.0.9d, average wind speed for Indianapolis, IN)
- \( M \) = material moisture content (%) 4.80 (max for above equation)

\[
\begin{align*}
  k \quad (PM) &= 0.74 & E \quad (PM) &= 1.62E-03 \quad \text{lb/ton material processed} \\
  k \quad (PM10) &= 0.35 & E \quad (PM10) &= 7.66E-04 \quad \text{lb/ton material processed} \\
  k \quad (PM2.5) &= 0.053 & E \quad (PM2.5) &= 1.16E-04 \quad \text{lb/ton material processed} \\
\end{align*}
\]

- Number of Drops = 3
- Throughput = 1.71
- Hours of Operation = 8760

<table>
<thead>
<tr>
<th>Pollutants</th>
<th>Emission Factor (lb/ton)</th>
<th>Process Rate (ton/hr)</th>
<th>PTE (TPY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td>1.62E-03</td>
<td></td>
<td>0.0364</td>
</tr>
<tr>
<td>PM10</td>
<td>7.66E-04</td>
<td>1.71</td>
<td>0.0172</td>
</tr>
<tr>
<td>PM2.5</td>
<td>1.16E-04</td>
<td></td>
<td>0.0026</td>
</tr>
</tbody>
</table>

### Total For Composting

<table>
<thead>
<tr>
<th>Process Step</th>
<th>PM</th>
<th>PM10</th>
<th>PM2.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grinding</td>
<td>2.625</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Screening</td>
<td>2.25</td>
<td>0.54</td>
<td>0.54</td>
</tr>
<tr>
<td>Conveying</td>
<td>0.04</td>
<td>0.02</td>
<td>0.00</td>
</tr>
</tbody>
</table>

| Total        | 4.91  | 2.06 | 2.04  |

Notes:
Equation for material drop calculations is from AP-42, chapter 13.2.4, November 2006, Equation (1)

Methodology:
\[
\begin{align*}
  \text{PTE Grinding (TPY)} &= \text{Emission Factor (lb/ton)} \times \text{Process Rate (ton/hr)} \times 8760/2000 \\
  \text{PTE Screening (TPY)} &= \text{Emission Factor (lb/ton)} \times \text{Process Rate (ton/hr)} \times 8760/2000 \\
  \text{PTE Material Drop (TPY)} &= (\text{Emission Factor (lb/ton)} \times \text{Process Rate (ton/hr)} \times 8760/2000) \times \text{number of drops}
\end{align*}
\]
**Appendix A: Emissions Calculations**

**Potential to Emit - Tube Heaters**

**Company Name:** CGS Services, Inc.
**Source Address:** 2920 E US 52, Morristown, IN 46161  
**SSM No.:** 145-41594-00049  
**SPM No.:** 145-41613-00049  
**Permit Reviewer:** William Altman

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Factor (lb/MMBtu)</th>
<th>Number of units</th>
<th>Heat value (mmbtu/hr)</th>
<th>PM</th>
<th>Nox</th>
<th>SO2</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Tube Heater (lb/hr)</td>
<td>0.00745</td>
<td>3</td>
<td>0.2</td>
<td>0.004</td>
<td>0.055</td>
<td>0.000</td>
<td>0.024</td>
<td>0.003</td>
</tr>
<tr>
<td>Large Tube Heater (ton/yr)</td>
<td>0.09216</td>
<td></td>
<td></td>
<td>0.020</td>
<td>0.242</td>
<td>0.002</td>
<td>0.103</td>
<td>0.014</td>
</tr>
<tr>
<td>Medium Tube Heater (lb/hr)</td>
<td>0.00059</td>
<td>2</td>
<td>0.15</td>
<td>0.002</td>
<td>0.028</td>
<td>0.000</td>
<td>0.012</td>
<td>0.002</td>
</tr>
<tr>
<td>Medium Tube Heater (ton/yr)</td>
<td>0.03822</td>
<td></td>
<td></td>
<td>0.010</td>
<td>0.121</td>
<td>0.001</td>
<td>0.052</td>
<td>0.007</td>
</tr>
<tr>
<td>Small Tube Heater (lb/hr)</td>
<td>0.00539</td>
<td>1</td>
<td>0.125</td>
<td>0.001</td>
<td>0.012</td>
<td>0.000</td>
<td>0.005</td>
<td>0.001</td>
</tr>
<tr>
<td>Small Tube Heater (ton/yr)</td>
<td></td>
<td></td>
<td></td>
<td>0.004</td>
<td>0.050</td>
<td>0.000</td>
<td>0.021</td>
<td>0.003</td>
</tr>
</tbody>
</table>

**Total (ton/yr)**
<table>
<thead>
<tr>
<th>PM</th>
<th>Nox</th>
<th>SO2</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.033</td>
<td>0.414</td>
<td>0.003</td>
<td>0.176</td>
<td>0.024</td>
</tr>
</tbody>
</table>

**Notes:**
(1) EMISSIONS FACTORS FROM AP-42 CHAPTER 1.4, TABLES 1.4-1 & 1.4-2; 7/98
(2) PER AP-42, TO CONVERT FROM LBS/10^6 SCF TO LBS/MMBTU, DIVIDE BY 1020

**Methodology:**
PTE (lb/hr) = Emission Factor (lb/MMBtu) * Heat Value (MMBtu/hr) * Number of units
PTE (tons/year) = PTE (lbs/hr) * 8760/2000
## Appendix A: Emissions Calculations

### Potential to Emit - Tube Heaters-HAPs

**Company Name:** CGS Services, Inc.  
**Source Address:** 2920 E US 52, Morristown, IN 46161  
**SSM No.** 145-41594-00049  
**SPM No.** 145-41613-00049  
**Permit Reviewer:** William Altman

### No. of units

<table>
<thead>
<tr>
<th>Heat Rate/ unit (MMBtu/hr)</th>
<th>No. of units</th>
<th>Heat Rate/ unit (MMBtu/hr)</th>
<th>No. of units</th>
<th>Heat Rate/ unit (MMBtu/hr)</th>
<th>No. of units</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.2</td>
<td>3</td>
<td>0.15</td>
<td>2</td>
<td>0.25</td>
<td>1</td>
</tr>
<tr>
<td>0.6</td>
<td></td>
<td>0.3</td>
<td></td>
<td>0.125</td>
<td></td>
</tr>
</tbody>
</table>

### Emission Factor

<table>
<thead>
<tr>
<th>Compound</th>
<th>CAS No.</th>
<th>Emissions Factor</th>
<th>Total Heater Emissions (lb/hr)</th>
<th>Total Heater Emissions (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Methylnaphthalene</td>
<td>91576</td>
<td>2.40E-05</td>
<td>1.44E-08</td>
<td>0.001</td>
</tr>
<tr>
<td>3-Methylchloranthrene</td>
<td>56495</td>
<td>1.80E-06</td>
<td>1.08E-09</td>
<td>0.001</td>
</tr>
<tr>
<td>Acenaphthene</td>
<td>83329</td>
<td>1.80E-06</td>
<td>1.08E-09</td>
<td>0.001</td>
</tr>
<tr>
<td>Anthracene</td>
<td>12017</td>
<td>2.40E-06</td>
<td>1.44E-09</td>
<td>0.001</td>
</tr>
<tr>
<td>Benz(a)anthracene</td>
<td>56553</td>
<td>1.80E-06</td>
<td>1.08E-09</td>
<td>0.001</td>
</tr>
<tr>
<td>Benzene</td>
<td>71432</td>
<td>2.10E-03</td>
<td>1.26E-06</td>
<td>0.001</td>
</tr>
<tr>
<td>Benzo(aj)pyrene</td>
<td>50328</td>
<td>1.20E-06</td>
<td>7.20E-10</td>
<td>0.001</td>
</tr>
<tr>
<td>Benzo(b)fluoranthene</td>
<td>205992</td>
<td>1.20E-06</td>
<td>7.20E-10</td>
<td>0.001</td>
</tr>
<tr>
<td>Benzo(g,h,i)perylene</td>
<td>191242</td>
<td>1.20E-06</td>
<td>7.20E-10</td>
<td>0.001</td>
</tr>
<tr>
<td>Benzo(k)fluoranthene</td>
<td>205823</td>
<td>1.20E-06</td>
<td>7.20E-10</td>
<td>0.001</td>
</tr>
<tr>
<td>Chrysene</td>
<td>218019</td>
<td>1.80E-06</td>
<td>1.08E-09</td>
<td>0.001</td>
</tr>
<tr>
<td>Dibenzo(a,j)anthracene</td>
<td>53703</td>
<td>1.20E-06</td>
<td>7.20E-10</td>
<td>0.001</td>
</tr>
<tr>
<td>Dichlorobenzene</td>
<td>25321226</td>
<td>1.20E-06</td>
<td>7.20E-03</td>
<td>0.001</td>
</tr>
<tr>
<td>Fluoranthened</td>
<td>206440</td>
<td>1.20E-06</td>
<td>7.20E-10</td>
<td>0.001</td>
</tr>
<tr>
<td>Fluorene</td>
<td>86737</td>
<td>2.80E-06</td>
<td>1.68E-09</td>
<td>0.001</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>50000</td>
<td>2.50E-06</td>
<td>1.50E-09</td>
<td>0.001</td>
</tr>
<tr>
<td>Hexane</td>
<td>110543</td>
<td>1.80E+00</td>
<td>1.08E-03</td>
<td>0.001</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>91203</td>
<td>6.10E-04</td>
<td>3.66E-07</td>
<td>0.001</td>
</tr>
<tr>
<td>Phenanthrene</td>
<td>85018</td>
<td>1.70E-05</td>
<td>1.02E-08</td>
<td>0.001</td>
</tr>
<tr>
<td>Pyrene</td>
<td>129000</td>
<td>5.00E-06</td>
<td>3.00E-09</td>
<td>0.001</td>
</tr>
<tr>
<td>Toluene</td>
<td>108853</td>
<td>3.40E-03</td>
<td>2.04E-06</td>
<td>0.001</td>
</tr>
</tbody>
</table>

### Total Emissions

| Total           | 0.001 | 0.005 | 0.001 | 0.002 | 0.000 | 0.001 | 0.008 |

### Methodology

\[
\text{Emissions (lb/hr)} = \text{Total Heat Rate (MMBtu/hr)} \times \text{Emission Factor (lb/MMSCF)} / 1000
\]

\[
\text{Emissions (tons/year)} = \text{Emissions (lb/hr)} \times 8760 / 2000
\]
<table>
<thead>
<tr>
<th>Volatile Organica</th>
<th>Reg. Cu (ppm)</th>
<th>Ave CO (ppm)</th>
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Additional Variables:  
- U10 = wind speed at 10 m above the liquid surface (m/s)  
- 4.26 m/s based on TMME 4.0.04 database for Indianapolis, IN  
- 3.14E+00  
- FID = Fish kill depth (m);  
- 0.314E+00  
- D/H = Depth to waste surface (m);  
- 1.10E+00  
- Keq = Equilibrium partition coefficient (L/kg);  
- 1.10E+00  
- rho = Density of water (g/L);  
- 1.00E+00  
- Da = Diffusivity of constituent in water (m²/s);  
- 1.00E+00  
- Da = Diffusivity of constituent in the liquid phase (m²/s);  
- 1.00E+00  
- Da = Diffusivity of constituent in air (m²/s);  
- 0.100E+00  
- H = Henry’s Law Constant (L/m³);  
- 1.00E+00  
- R = Universal gas constant (J/m³);  
- 4.20E+00  
- P = Partial pressure of constituent (Pa);  
- 8.20E+00  
- T = Temperature of air in degrees K (K);  
- 250 K  
- Keq = Henry’s Law constant for constituent (L/m³);  
- 1.00E+00  
- da = Diffusion area (m²);  
- 1.00E+00  
- Q = Volumetric Flow rate (m³/s);  
- 2.00E+00  

*Source: AP-42, 9th Edition, Table 4.3-4 (Part 1) AND Table C-1 of Appendix C-4.0.04 database for waste and wastewater.
## Appendix A: Emissions Calculations

### Potential to Emit - Ground Water Interception Pond

#### Company Name:
CGS Services, Inc.

#### Source Address:
2920 E US 52, Morristown, IN 46161

#### SSM No.
145-41594-00049

#### SPM No.
145-41613-00049

#### Permit Reviewer:
William Altman

### Methodology

Air Emissions (tons/yr) = Air Emissions (g/s) * 3600 / 454 * 4.38

Air Emissions (lb/year) = Air Emissions (tons/year) * 2000 / 365

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<th>Compound</th>
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<th>VOC</th>
<th>Maximum Loading (mg/L)</th>
<th>Air emissions (g/s)</th>
<th>Air emissions (lb/day)</th>
<th>Air emissions (ton/yr)</th>
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**Total VOC:** 1.59E-01 1.51E-05 2.88E-03 5.28E-04  

**Total HAPs:** 1.59E-01 1.12E-05 2.14E-03 3.91E-04
Appendix A: Emissions Calculations
Potential to Emit - Spray Paint Booth

Company Name: CGS Services, Inc.
Source Address: 2920 E US 52, Morristown, IN 46161
SSM No. 145-41594-00049
SPM No. 145-41613-00049
Permit Reviewer: William Altman

Paint Usage Rate: 624 gal/yr
Primer Usage Rate: 260 gal/yr
Paint Density: 8.43 lb/gal
Primer Density: 10.1 lb/gal
% Solids (w/w): 29%
% Solids (w/w): 45%
Solids Content: 2.36 lbs/gal
Solids Content: 4.51 lbs/gal
Volatility: 71.45 % w/w
Volatility: 55.3 % w/w
VOC Content: 6.02 lbs/gal
VOC Content: 5.59 lbs/gal
HAPs Content: 0 lb/gal
HAPs Content: 0 lb/gal
Solids Transfer Efficiency: 45%
Solids Transfer Efficiency: 45%

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Methodology
PTE PM, PM10, PM2.5 (lbs/year) = Paint Usage Rate (gal/yr) * Solids Content (lbs/gal) * (1-solids transfer efficiency)
PTE VOC/HAP (lbs/year) = Paint Usage Rate (gal/yr) * VOC/HAPs content (lb/gal)
PTE (tons/yr) = PTE (lbs/yr) / 2000
**Appendix A: Emissions Calculations**  
**Potential to Emit - Leachate Storage Tank**

**Company Name:** CGS Services, Inc.  
**Source Address:** 2920 E US 52, Morristown, IN 46161  
**SSM No.:** 145-41594-00049  
**SPM No.:** 145-41613-00049  
**Permit Reviewer:** William Altman

<table>
<thead>
<tr>
<th>Compound</th>
<th>HAP</th>
<th>VOC</th>
<th>Maximum Loading (mg/L)</th>
<th>Air Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>(g/s)</td>
<td>(lbs/day)</td>
</tr>
<tr>
<td>2,4-Dimethylphenol</td>
<td>x</td>
<td></td>
<td>5.00E-02</td>
<td>1.65E-11</td>
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<tr>
<td>2-Methylphenol (o-Cresol)</td>
<td>x</td>
<td></td>
<td>5.00E-02</td>
<td>1.02E-10</td>
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<tr>
<td>3 &amp; 4 Methylphenol (m &amp; p cresol)</td>
<td>x</td>
<td></td>
<td>5.00E-02</td>
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<tr>
<td>Acetophenone</td>
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<td>1.37E-09</td>
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<tr>
<td>Benzyl Alcohol</td>
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<td></td>
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<tr>
<td>Isophorone</td>
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<td>4.73E-10</td>
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<tr>
<td>Naphthalene</td>
<td>x</td>
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<td>4.40E-09</td>
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<tr>
<td>Phenol</td>
<td>x</td>
<td></td>
<td>5.00E-02</td>
<td>6.07E-11</td>
</tr>
<tr>
<td>2-Butanone</td>
<td>x</td>
<td></td>
<td>1.00E-01</td>
<td>6.04E-09</td>
</tr>
<tr>
<td>2-Hexanone</td>
<td>x</td>
<td></td>
<td>1.00E-01</td>
<td>0.00E+00</td>
</tr>
<tr>
<td>Acetone</td>
<td>x</td>
<td></td>
<td>1.00E-01</td>
<td>6.88E-09</td>
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<tr>
<td>Benzene</td>
<td>x</td>
<td></td>
<td>4.20E+00</td>
<td>4.35E-07</td>
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<tr>
<td>Carbon Tetrachloride</td>
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<td></td>
<td>1.00E-02</td>
<td>9.79E-10</td>
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<tr>
<td>Chloroform</td>
<td>x</td>
<td></td>
<td>1.00E-02</td>
<td>1.03E-09</td>
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<tr>
<td>Ethylbenzene</td>
<td>x</td>
<td></td>
<td>4.02E-01</td>
<td>3.73E-08</td>
</tr>
<tr>
<td>Methylene Chloride</td>
<td>x</td>
<td></td>
<td>1.00E-02</td>
<td>1.09E-09</td>
</tr>
<tr>
<td>Tetrahydrofuran</td>
<td>x</td>
<td></td>
<td>1.80E+01</td>
<td>1.36E-06</td>
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<td>Toluene</td>
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<td>Vinyl Chloride</td>
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<td>Xylenes</td>
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<td>8.20E-02</td>
<td>8.27E-09</td>
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<td>1,1,1,2-Tetrachloroethane</td>
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<td>1,1,1-Trichloroethane</td>
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<td>9.78E-10</td>
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<tr>
<td>1,1,2,2,-Tetrachloroethane</td>
<td>x</td>
<td></td>
<td>1.01E-01</td>
<td>8.63E-09</td>
</tr>
<tr>
<td>1,1,2-Trichloroethane</td>
<td>x</td>
<td></td>
<td>1.00E-02</td>
<td>9.46E-10</td>
</tr>
<tr>
<td>1,1-Dichloroethylene</td>
<td>x</td>
<td></td>
<td>1.00E-02</td>
<td>1.05E-09</td>
</tr>
<tr>
<td>1,1-Dichloroethene</td>
<td>x</td>
<td></td>
<td>1.00E-02</td>
<td>1.05E-09</td>
</tr>
<tr>
<td>1,2-Dichlorobenzene</td>
<td>x</td>
<td></td>
<td>1.00E-02</td>
<td>9.12E-10</td>
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<tr>
<td>1,2-Dichloroethane</td>
<td>x</td>
<td></td>
<td>1.00E-02</td>
<td>1.00E-09</td>
</tr>
<tr>
<td>1,2-Dichloropropane</td>
<td>x</td>
<td></td>
<td>1.00E-02</td>
<td>9.87E-10</td>
</tr>
<tr>
<td>1,4-Dichlorobenzene</td>
<td>x</td>
<td></td>
<td>1.00E-02</td>
<td>9.25E-10</td>
</tr>
<tr>
<td>Bromomethane</td>
<td>x</td>
<td></td>
<td>1.00E-02</td>
<td>1.11E-09</td>
</tr>
<tr>
<td>Chlorobenzene</td>
<td>x</td>
<td></td>
<td>1.20E-02</td>
<td>9.65E-10</td>
</tr>
<tr>
<td>Chloroethane</td>
<td>x</td>
<td></td>
<td>1.00E-02</td>
<td>1.09E-09</td>
</tr>
<tr>
<td>Chloromethane</td>
<td>x</td>
<td></td>
<td>1.00E-02</td>
<td>8.66E-10</td>
</tr>
<tr>
<td>cis-1,2-Dichloroethene</td>
<td>x</td>
<td></td>
<td>1.00E-02</td>
<td>9.28E-10</td>
</tr>
<tr>
<td>cis-1,3-Dichloropropene</td>
<td>x</td>
<td></td>
<td>1.00E-02</td>
<td>0.00E+00</td>
</tr>
<tr>
<td>m,p-Xylene</td>
<td>x</td>
<td></td>
<td>5.70E-02</td>
<td>1.13E-08</td>
</tr>
<tr>
<td>o-Xylene</td>
<td>x</td>
<td></td>
<td>2.50E-02</td>
<td>3.07E-09</td>
</tr>
<tr>
<td>Styrene</td>
<td>x</td>
<td></td>
<td>1.00E-02</td>
<td>9.29E-10</td>
</tr>
<tr>
<td>Tetrachloroethene</td>
<td>x</td>
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<td>1.00E-02</td>
<td>9.50E-10</td>
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<tr>
<td>trans-1,2-Dichloroethene</td>
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<tr>
<td>trans-1,3-Dichloropropene</td>
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<td></td>
<td>1.00E-02</td>
<td>1.01E-09</td>
</tr>
<tr>
<td>Trichloroethene</td>
<td>x</td>
<td></td>
<td>1.00E-02</td>
<td>9.90E-10</td>
</tr>
<tr>
<td>Trichlorofluoromethane</td>
<td>x</td>
<td></td>
<td>1.00E-02</td>
<td>1.02E-09</td>
</tr>
</tbody>
</table>

**Total VOC:** 2.38E+01  
**Total HAPs:** 5.44E+00

**Methodology**

Air Emissions (tons/yr) = Air Emissions (g/s) * 3600 / 454 * 4.38  
Air Emissions (lb/year) = Air Emissions (tons/year) * 2000 / 365
Appendix A: Emissions Calculations
Potential to Emit - Waste Handling

Company Name: CGS Services, Inc.
Source Address: 2920 E US 52, Morristown, IN 46161
SSM No. 145-41594-00049
SPM No. 145-41613-00049
Permit Reviewer: William Altman

Assumptions
1. 95% of incoming waste is recycled; the remainder is hauled out as waste.
2. It is assumed that the facility handles approximately 18,000 tons per year, 50 tons per day.

| Waste into MRRF | 18,000 tons | operating days/year | 365 days |
| Waste Out if MRRF | 900 tons | operating hours/day | 24 hours |
| Commodities out | 17,100 tons |
| Operation Rates | 18,250 tons/yr |
| | 50 tons/day |
| | 2 tons/hr |

Unloading and transferring of waste and recyclables
For the unloading of the waste from trucks to the tipping floor and the transfer of waste to the conveyor belts, the emissions factor from country elevators (unloading of grain) was used. This factor can be found in AP-42 Table 9.9.1-1

Furthermore, it is assumed that the sweepings and wood in municipal solid waste represent the percentage of grain-like particles present that could contribute to emissions. This fraction is conservatively assumed to be 10%. According to the Standard Handbook of Environmental Engineering (Roger A. Corbitt, 1989, Page 8.19 Table 8.4), that number is likely in the range of 3 to 4%.

<table>
<thead>
<tr>
<th>PM</th>
<th>PM10</th>
<th>PM2.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Factor</td>
<td>0.18</td>
<td>0.059</td>
</tr>
<tr>
<td>Emissions</td>
<td>0.16425</td>
<td>0.053838</td>
</tr>
</tbody>
</table>

Moving of waste and recyclables via conveyor belts or dozers
The emission factor utilized is the removal of grain from bins using a tunnel belt (from AP-42 Table 9.9.1-1)

<table>
<thead>
<tr>
<th>PM</th>
<th>PM10</th>
<th>PM2.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Factor</td>
<td>0.061</td>
<td>0.034</td>
</tr>
<tr>
<td>Emissions</td>
<td>0.055663</td>
<td>0.031025</td>
</tr>
</tbody>
</table>

Sorting and separating of Waste and Recyclables
The emission factor utilized is "Harvest of Grain" from AP-42 Table 9.3.2

<table>
<thead>
<tr>
<th>PM</th>
<th>PM10</th>
<th>PM2.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Factor</td>
<td>0.027</td>
<td>0.027</td>
</tr>
<tr>
<td>Emissions</td>
<td>0.024638</td>
<td>0.024638</td>
</tr>
</tbody>
</table>

Loading of End Waste and Recyclables onto trucks
The emission factor utilized is "Grain Loading/Shipping" from AP-42 Table 9.9.1-1

<table>
<thead>
<tr>
<th>PM</th>
<th>PM10</th>
<th>PM2.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Factor</td>
<td>0.086</td>
<td>0.029</td>
</tr>
<tr>
<td>Emissions</td>
<td>0.078475</td>
<td>0.026463</td>
</tr>
</tbody>
</table>

Total MRRF Indoor Activities Emissions

<table>
<thead>
<tr>
<th>Unloading and transferring of waste and recyclables</th>
<th>PM</th>
<th>PM10</th>
<th>PM2.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unloading</td>
<td>0.16</td>
<td>0.05</td>
<td>0.01</td>
</tr>
<tr>
<td>Moving</td>
<td>0.06</td>
<td>0.03</td>
<td>0.01</td>
</tr>
<tr>
<td>Sorting</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>Loading</td>
<td>0.08</td>
<td>0.03</td>
<td>0.00</td>
</tr>
<tr>
<td>Uncontrolled total</td>
<td>0.32</td>
<td>0.14</td>
<td>0.04</td>
</tr>
<tr>
<td>Controlled total</td>
<td>0.16</td>
<td>0.07</td>
<td>0.02</td>
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</table>

Control efficiency 50%
### Input Parameters

**Open Landfill - Working Face**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature</td>
<td>11.24°C</td>
<td>Average annual outdoor temperature for Indianapolis, IN from Model database</td>
</tr>
<tr>
<td>Waste liquid (before fixation)</td>
<td>500 ppm</td>
<td>Single phase; no significant oil-phase in waste.</td>
</tr>
<tr>
<td>Average time waste is exposed to atmosphere</td>
<td>24 hours</td>
<td>Waste is typically covered within 24 hours of being disposed of in the landfill</td>
</tr>
</tbody>
</table>

### Waste Composition

<table>
<thead>
<tr>
<th>VOC (1)</th>
<th>HAP (2)</th>
<th>Compound</th>
<th>CAS No.</th>
<th>Ci, ppm</th>
<th>Dei</th>
<th>Keq</th>
<th>Kvt</th>
<th>Moi</th>
<th>Scg</th>
<th>Kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene</td>
<td>71-43-2</td>
<td>5</td>
<td>4.64E-03</td>
<td>1.16E-01</td>
<td>2.01E-01</td>
<td>3.98E+02</td>
<td>1.29E+00</td>
<td>8.87E-03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethyl Benzene</td>
<td>100-41-4</td>
<td>5</td>
<td>3.03E-03</td>
<td>1.69E-01</td>
<td>1.90E-01</td>
<td>3.98E+02</td>
<td>1.97E+00</td>
<td>6.66E-03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>5</td>
<td>3.67E-03</td>
<td>1.72E-01</td>
<td>2.34E-01</td>
<td>3.98E+02</td>
<td>1.63E+00</td>
<td>7.58E-03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Xylene</td>
<td>1330-20-7</td>
<td>5</td>
<td>2.82E-03</td>
<td>2.38E-01</td>
<td>2.50E-01</td>
<td>3.98E+02</td>
<td>2.11E+00</td>
<td>6.36E-03</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Calculations

**VOC (1) | HAP (2) | Compound | CAS No. | Ci, ppm | Dei | Keq | Kvt | Moi | Scg | Kg |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene</td>
<td>71-43-2</td>
<td>5</td>
<td>4.64E-03</td>
<td>1.16E-01</td>
<td>2.01E-01</td>
<td>3.98E+02</td>
<td>1.29E+00</td>
<td>8.87E-03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethyl Benzene</td>
<td>100-41-4</td>
<td>5</td>
<td>3.03E-03</td>
<td>1.69E-01</td>
<td>1.90E-01</td>
<td>3.98E+02</td>
<td>1.97E+00</td>
<td>6.66E-03</td>
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<td></td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>5</td>
<td>3.67E-03</td>
<td>1.72E-01</td>
<td>2.34E-01</td>
<td>3.98E+02</td>
<td>1.63E+00</td>
<td>7.58E-03</td>
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<td></td>
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<tr>
<td>Xylene</td>
<td>1330-20-7</td>
<td>5</td>
<td>2.82E-03</td>
<td>2.38E-01</td>
<td>2.50E-01</td>
<td>3.98E+02</td>
<td>2.11E+00</td>
<td>6.36E-03</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Emissions Calculations

#### Potential to Emit - Soil Cover

**Company Name:** CGS Services, Inc.  
**Source Address:** 2920 E US 52, Morristown, IN 46161  
**SSM No.:** 145-41594-00049  
**SPM No.:** 145-41613-00049  
**Permit Reviewer:** William Altman

<table>
<thead>
<tr>
<th>VOC</th>
<th>HAP</th>
<th>Compound</th>
<th>CAS No.</th>
<th>VOCs (g/s)</th>
<th>HAPs (t/tpy)</th>
<th>VOC/HAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene</td>
<td>71-43-2</td>
<td>1.15E-03</td>
<td>4.01E-02</td>
<td>1.15E-03</td>
<td>0.15E-03</td>
<td>0.040</td>
</tr>
<tr>
<td>Ethyl Benzene</td>
<td>100-41-4</td>
<td>1.12E-03</td>
<td>3.90E-02</td>
<td>1.12E-03</td>
<td>0.12E-03</td>
<td>0.039</td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>1.21E-03</td>
<td>4.21E-02</td>
<td>1.21E-03</td>
<td>0.12E-03</td>
<td>0.042</td>
</tr>
<tr>
<td>Xylene</td>
<td>1330-20-7</td>
<td>1.24E-03</td>
<td>4.32E-02</td>
<td>1.24E-03</td>
<td>0.12E-03</td>
<td>0.043</td>
</tr>
<tr>
<td>Other VOC Compounds</td>
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<td>1.21E-01</td>
<td>4.21E+00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total:** 1.26E-01 g/s, 4.37E+00 t/tpy
### Potential to Emit - Gasoline Storage Tank

**Company Name:** CGS Services, Inc.  
**Source Address:** 2920 E US 52, Morristown, IN 46161  
**SSM No.:** 145-41594-00049  
**SPM No.:** 145-41613-00049  
**Permit Reviewer:** William Altman

#### Tank Indentification and Physical Characteristics

<table>
<thead>
<tr>
<th>User Identification</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>Morristown</td>
</tr>
<tr>
<td>State</td>
<td>Indiana</td>
</tr>
<tr>
<td>Company</td>
<td>CGS Services, Inc.</td>
</tr>
<tr>
<td>Type of Tank</td>
<td>Horizontal Tank</td>
</tr>
<tr>
<td>Description</td>
<td>500 gallon gasoline storage tank</td>
</tr>
<tr>
<td>Shell Length (ft)</td>
<td>5</td>
</tr>
<tr>
<td>Diameter (ft)</td>
<td>4</td>
</tr>
<tr>
<td>Volume (gallons)</td>
<td>500</td>
</tr>
<tr>
<td>Turnovers</td>
<td>24</td>
</tr>
<tr>
<td>Net Throughput (gal/yr)</td>
<td>12,000.00</td>
</tr>
<tr>
<td>Is Tank Heated</td>
<td>N</td>
</tr>
<tr>
<td>Is Tank Underground</td>
<td>N</td>
</tr>
<tr>
<td>Shell Color/Shade</td>
<td>Red/Primer</td>
</tr>
<tr>
<td>Shell Condition</td>
<td>Poor</td>
</tr>
<tr>
<td>Vacuum Settings (psig)</td>
<td>-0.03</td>
</tr>
<tr>
<td>Pressure Settings (psig)</td>
<td>0.03</td>
</tr>
</tbody>
</table>

#### Tank Details

- **User Identification:** 1
- **City:** Morristown
- **State:** Indiana
- **Company:** CGS Services, Inc.
- **Type of Tank:** Horizontal Tank
- **Description:** 500 gallon gasoline storage tank
- **Shell Length (ft):** 5
- **Diameter (ft):** 4
- **Volume (gallons):** 500
- **Turnovers:** 24
- **Net Throughput (gal/yr):** 12,000.00
- **Is Tank Heated (y/n):** N
- **Is Tank Underground (y/n):** N
- **Shell Color/Shade:** Red/Primer
- **Shell Condition:** Poor
- **Vacuum Settings (psig):** -0.03
- **Pressure Settings (psig):** 0.03

#### Meteorological Data Used in Emissions Calculations

Indianapolis, Indiana (Avg Atmospheric Pressure = 14.33 psia)

#### Individual Tank Emission Totals

<table>
<thead>
<tr>
<th>Component</th>
<th>Working Loss</th>
<th>Breathing Loss</th>
<th>Total Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasoline (RVP 13)</td>
<td>132.75 lb</td>
<td>376.86 lb</td>
<td>509.60 lb</td>
</tr>
</tbody>
</table>

#### Basis for Vapor Pressure Losses (lbs)

- **Vapor Pressure (psia) Mol.**
- **Daily Liquid Surf. Temperature (deg F)**
- **Breather Vent Pressure (psia) Range**
- **Vented Vapor Saturation Factor**
- **Vapor Pressure at Daily Average Liquid Surface Temperature (psia):** 7.4937
- **Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):** 5.9995
- **Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):** 9.2687

#### Annual Emission Calculations

- **Standing Losses:** 376.8581 lb
- **Vapor Space Volume:** 40.0203 cu ft
- **Vapor Density (lb/cu ft):** 0.0827
- **Vapor Space Expansion Factor:** 0.56
- **Vented Vapor Saturation Factor:** 0.5573
- **Tank Vapor Space Volume:** 40.0203 cu ft
- **Tank Diameter (ft):** 4
- **Effective Diameter (ft):** 5.0475
- **Vapor Space Outage (ft):** 2
- **Tank Shell Length (ft):** 5
- **Vapor Density:** 0.0827
- **Vapor Molecular Weight (lb/lb-mole):** 62
- **Vapor Pressure at Daily Average Liquid Surface Temperature (psia):** 7.4937
- **Daily Avg. Liquid Surface Temp. (deg R):** 523.7569
- **Daily Average Ambient Temp. (deg F):** 52.2583
- **Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):** 10.731
- **Liquid Bulk Temperature (deg R):** 516.3883
- **Tank Paint Solar Absorptance (Shell):** 0.91
- **Daily Total Solar Insulation Factor (Btu/sqft day):** 1,297.95
- **Vapor Space Expansion Factor:** 0.56
- **Daily Vapor Temperature Range (deg R):** 47.2918
- **Daily Vapor Pressure Range (psia):** 3.2692
- **Breather Vent Pressure Setting Range (psia):** 0.06
## Potential to Emit - Pressure Washer

**Company Name:** CGS Services, Inc.  
**Source Address:** 2920 E US 52, Morristown, IN 46161  
**SSM No.:** 145-41594-00049  
**SPM No.:** 145-41613-00049  
**Permit Reviewer:** William Altman

### Hours of Operation

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Factor (lb/MMBtu)</th>
<th>Emissions (lb/hr)</th>
<th>Emissions (tons/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td>0.005</td>
<td>0.005</td>
<td>0.001</td>
</tr>
<tr>
<td>NOx</td>
<td>0.015</td>
<td>0.015</td>
<td>0.001</td>
</tr>
<tr>
<td>SO2</td>
<td>0.039</td>
<td>0.039</td>
<td>0.018</td>
</tr>
<tr>
<td>VOC</td>
<td>0.005</td>
<td>0.005</td>
<td>0.000</td>
</tr>
</tbody>
</table>

### Notes

1. EMISSIONS FACTORS FROM AP-42 CHAPTER 1.4, TABLES 1.4-1 & 1.4-2; 7/98
2. PER AP-42, TO CONVERT FROM LBS/10^6 SCF TO LBS/MMBTU, DIVIDE BY 1020

### Methodology

Emissions (tons/yr) = Emissions (lb/hr) * 8760 (hr/year) * 1/2000 (ton/lbs)

### HAPs

<table>
<thead>
<tr>
<th>Compound</th>
<th>Emission Factor (lb/10^6 scf)</th>
<th>Emissions (lb/hr)</th>
<th>Emissions (tons/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td>2.40E-05</td>
<td>9.12E-09</td>
<td>3.9946E-08</td>
</tr>
<tr>
<td>NOx</td>
<td>1.80E-06</td>
<td>6.84E-10</td>
<td>2.9959E-08</td>
</tr>
<tr>
<td>SO2</td>
<td>2.11E-03</td>
<td>7.98E-07</td>
<td>3.4952E-08</td>
</tr>
<tr>
<td>VOC</td>
<td>1.20E-06</td>
<td>4.56E-10</td>
<td>2.9959E-08</td>
</tr>
<tr>
<td>4-Methylpyridine</td>
<td>2.18E-06</td>
<td>8.04E-10</td>
<td>3.6259E-08</td>
</tr>
<tr>
<td>2-Methyltetrahydroquinoline</td>
<td>1.80E-06</td>
<td>6.84E-10</td>
<td>2.9959E-08</td>
</tr>
<tr>
<td>Acenaphthene</td>
<td>1.80E-06</td>
<td>6.84E-10</td>
<td>2.9959E-08</td>
</tr>
<tr>
<td>Benzo[a]anthracene</td>
<td>1.80E-06</td>
<td>6.84E-10</td>
<td>2.9959E-08</td>
</tr>
<tr>
<td>Benzo[a]pyrene</td>
<td>1.80E-06</td>
<td>6.84E-10</td>
<td>2.9959E-08</td>
</tr>
<tr>
<td>Benzo[b]fluoranthene</td>
<td>1.20E-06</td>
<td>4.56E-10</td>
<td>2.9959E-08</td>
</tr>
<tr>
<td>Benzo[ghi]perylene</td>
<td>1.20E-06</td>
<td>4.56E-10</td>
<td>2.9959E-08</td>
</tr>
<tr>
<td>Benzo[k]fluoranthene</td>
<td>1.80E-06</td>
<td>6.84E-10</td>
<td>2.9959E-08</td>
</tr>
<tr>
<td>Benz[a]anthracene</td>
<td>1.80E-06</td>
<td>6.84E-10</td>
<td>2.9959E-08</td>
</tr>
<tr>
<td>Benz[a]pyrene</td>
<td>1.80E-06</td>
<td>6.84E-10</td>
<td>2.9959E-08</td>
</tr>
<tr>
<td>Benzene</td>
<td>2.11E-03</td>
<td>7.98E-07</td>
<td>3.4952E-08</td>
</tr>
<tr>
<td>Benzo[b] fluoranthene</td>
<td>1.80E-06</td>
<td>6.84E-10</td>
<td>2.9959E-08</td>
</tr>
<tr>
<td>Benzo[k] fluoranthene</td>
<td>1.80E-06</td>
<td>6.84E-10</td>
<td>2.9959E-08</td>
</tr>
<tr>
<td>Chrysene</td>
<td>1.80E-06</td>
<td>6.84E-10</td>
<td>2.9959E-08</td>
</tr>
<tr>
<td>Dibenzo[a, h]anthracene</td>
<td>1.20E-06</td>
<td>4.56E-10</td>
<td>2.9959E-08</td>
</tr>
<tr>
<td>Dibenz[J]anthracene</td>
<td>1.20E-06</td>
<td>4.56E-10</td>
<td>2.9959E-08</td>
</tr>
<tr>
<td>Dibenz[fluoranthene]</td>
<td>2.40E-06</td>
<td>9.12E-09</td>
<td>3.9946E-08</td>
</tr>
<tr>
<td>Dibenz[ghi]perylene</td>
<td>1.20E-06</td>
<td>4.56E-10</td>
<td>2.9959E-08</td>
</tr>
<tr>
<td>Dibenz[k]fluoranthene</td>
<td>1.80E-06</td>
<td>6.84E-10</td>
<td>2.9959E-08</td>
</tr>
<tr>
<td>Dibenz[fluoranthene]</td>
<td>1.80E-06</td>
<td>6.84E-10</td>
<td>2.9959E-08</td>
</tr>
<tr>
<td>Fluoranthene</td>
<td>2.40E-06</td>
<td>9.12E-09</td>
<td>3.9946E-08</td>
</tr>
<tr>
<td>Fluorene</td>
<td>2.80E-06</td>
<td>1.064E-09</td>
<td>4.6863E-08</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>7.50E-02</td>
<td>0.0000283</td>
<td>0.00012483</td>
</tr>
<tr>
<td>Hexane</td>
<td>1.80E-06</td>
<td>6.84E-10</td>
<td>2.9959E-08</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>1.70E-05</td>
<td>6.46E-09</td>
<td>2.8295E-08</td>
</tr>
<tr>
<td>Pyrene</td>
<td>5.00E-06</td>
<td>1.98E-09</td>
<td>8.325E-08</td>
</tr>
<tr>
<td>Vitalene</td>
<td>3.80E-05</td>
<td>1.592E-09</td>
<td>6.908E-08</td>
</tr>
<tr>
<td>Total</td>
<td>0.007153</td>
<td>0.00313303</td>
<td></td>
</tr>
</tbody>
</table>

### Notes

1. Source: AP-42 Chapter 1.4, External Combustion Sources, Natural Gas Combustion, Table 1.4-3, 7/98
2. Calculate maximum gas flow rate (based on design throughput and 8760 hours/year operation):

\[
\text{Emissions (lbs/hr) per MMBtu/hr) * Emission Factor (lb/MMBtu)}
\]

\[
\text{Emissions (tons/yr) = Emissions (lb/hr) * 8760 (hr/year) * 1/2000 (ton/lbs)}
\]
Degreasing Solvent Properties

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC content</td>
<td>100%</td>
</tr>
<tr>
<td>Density</td>
<td>6.7 lb/gal</td>
</tr>
<tr>
<td>annual usage</td>
<td>144 gal/yr</td>
</tr>
</tbody>
</table>

### Potential To Emit

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>PTE (TPY)</th>
<th>Control Efficiency</th>
<th>Controlled Emissions (TPY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC</td>
<td>0.4824</td>
<td>0%</td>
<td>0.4824</td>
</tr>
</tbody>
</table>

Methodology

Potential to Emit (TPY) = Annual Usage (gallons/yr) x Density (lb/gallon) x 1 ton /2,000 lb x Mass%

Controlled Emissions (TPY) = PTE (TPY) x (1 - Control Efficiency)
### Natural Gas Combustion Only

**MM BTU/HR <100**

**Company Name:** CGS Services, Inc.  
**Source Address:** 2920 E US 52, Morristown, IN 46161  
**SSM No.:** 145-41594-00049  
**SPM No.:** 145-41613-00049  
**Permit Reviewer:** William Altman

#### Natural gas-fired combustion sources with heat input less than or equal to ten million (10,000,000) British thermal units per hour

<table>
<thead>
<tr>
<th>Unit ID</th>
<th>MM BTU/hr</th>
<th># of Units</th>
<th>MM BTU/hr Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale house furnace</td>
<td>0.07</td>
<td>1</td>
<td>0.07</td>
</tr>
<tr>
<td>Office furnace N, E, &amp; W</td>
<td>0.06</td>
<td>3</td>
<td>0.27</td>
</tr>
<tr>
<td>Office furnace basement</td>
<td>0.045</td>
<td>1</td>
<td>0.045</td>
</tr>
<tr>
<td>Hot water heater</td>
<td>0.04</td>
<td>1</td>
<td>0.04</td>
</tr>
<tr>
<td>S1CH1 through S1CH4</td>
<td>0.15</td>
<td>4</td>
<td>0.6</td>
</tr>
<tr>
<td>Truck</td>
<td>0.15</td>
<td>1</td>
<td>0.15</td>
</tr>
<tr>
<td>Truck 2 through Truck 4</td>
<td>0.2</td>
<td>3</td>
<td>0.6</td>
</tr>
<tr>
<td>Tire center ceiling heater</td>
<td>0.125</td>
<td>1</td>
<td>0.125</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>1.900</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Heat Input Capacity

<table>
<thead>
<tr>
<th>Unit ID</th>
<th>MM BTU/hr</th>
<th>HHV</th>
<th>Potential Throughput MM CF/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.9</td>
<td>1020</td>
<td>16.3</td>
</tr>
</tbody>
</table>

#### Pollutant Emission Factors

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Factor in lb/MMCF</th>
<th>Potential Emission in tons/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM*</td>
<td>1.9</td>
<td>0.02</td>
</tr>
<tr>
<td>PM10*</td>
<td>7.6</td>
<td>0.06</td>
</tr>
<tr>
<td>direct PM2.5*</td>
<td>7.6</td>
<td>0.06</td>
</tr>
<tr>
<td>SO2</td>
<td>0.6</td>
<td>0.00</td>
</tr>
<tr>
<td>NOx</td>
<td>100</td>
<td>0.82</td>
</tr>
<tr>
<td>VOC</td>
<td>5.5</td>
<td>0.04</td>
</tr>
<tr>
<td>CO</td>
<td>64</td>
<td>0.69</td>
</tr>
</tbody>
</table>

#### Additional Data

- **PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.**
- **PM2.5 emission factor is filterable and condensable PM2.5 combined.**

#### Methodology

- **All emission factors are based on normal firing.**
- **MM BTU = 1,000,000 Btu**
- **MM CF = 1,000,000 Cubic Feet of Gas**
- **Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.**
- **Potential Throughput (MM CF) = Heat Input Capacity (MM BTU/hr) x 8,760 hrs/yr x 1 MM CF/1,020 MMBTU**
- **Emission (tons/yr) = Throughput (MM CF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton**

#### Greenhouse Gas Emissions

<table>
<thead>
<tr>
<th>Greenhouse Gas</th>
<th>Emission Factor in lb/MMCF</th>
<th>Potential Emission in tons/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO2</td>
<td>120,000</td>
<td>2.3</td>
</tr>
<tr>
<td>CH4</td>
<td>979</td>
<td>2.2</td>
</tr>
<tr>
<td>N2O</td>
<td>979</td>
<td>0.9</td>
</tr>
</tbody>
</table>

**Summed Potential Emissions in tons/yr:** 979

**CO2e Total in tons/yr:** 985

**Methodology**

- **The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.**
- **Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.**
- **Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.**
- **Global Warming Potential CO2 = 1.**
- **CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).**
Four (4) kerosene-fired portable shop heaters (SH1 through SH4) with a maximum capacity of 0.215 MMBtu per hour each.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Factor in lb/kgal</th>
<th>Potential Emission in tons/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM*</td>
<td>0.2</td>
<td>0.01</td>
</tr>
<tr>
<td>PM10*</td>
<td>0.7</td>
<td>0.03</td>
</tr>
<tr>
<td>direct PM2.5**</td>
<td>(0.10S)</td>
<td>0.002</td>
</tr>
<tr>
<td>SO2</td>
<td>0.1</td>
<td>0.52</td>
</tr>
<tr>
<td>NOx</td>
<td>13.0</td>
<td></td>
</tr>
<tr>
<td>VOC</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>CO</td>
<td>7.5</td>
<td></td>
</tr>
</tbody>
</table>

*PM emission factor is filterable PM only. PM emissions are stated to be all less than 10 microns in aerodynamic equivalent
** No direct PM2.5 emission factor was given. Direct PM2.5 is a subset of PM10. If one assumes all PM10 to be all direct PM2.5, then a worst case assumption of direct PM2.5 can be made.

**The VOC value given is TOC. The methane emission factor is 0.2 lb/kgal.

**Methodology**

1 gallon of LPG has a heating value of 94,000 Btu
1 gallon of propane has a heating value of 91,500 Btu (use this to convert emission factors to an energy basis for propane)
(Source - AP-42 (Supplement B 10/96) page 1.5-1)

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.0915 MMBtu

Emission Factors are from AP 42 (7/08), Table 1.5-1 (SCC #1-02-010-02)
Propane Emission Factors shown. Please see AP-42 for butane.

Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal) / 2,000 lb/ton

<table>
<thead>
<tr>
<th>Greenhouse Gas</th>
<th>CO2</th>
<th>CH4</th>
<th>N2O</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Factor in lb/kgal</td>
<td>12,500</td>
<td>0.2</td>
<td>0.9</td>
</tr>
<tr>
<td>Potential Emission in tons/yr</td>
<td>501</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

CO2e Total in tons/yr = 512

**Methodology**

The CO2 Emission Factor for Propane is 12500. The CO2 Emission Factor for Butane is 14300.

Emission Factors are from AP 42 (7/08), Table 1.5-1 (SCC #1-02-010-02)
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

CO2e (tons/yr) = CO2 Potential Emission tons/yr x CO2 GWP (1) + CH4 Potential Emission
Appendix A: Emission Calculations

Reciprocating Internal Combustion Engines - Diesel Fuel
Output Rating (<=600 HP)
Maximum Input Rate (<=4.2 MMBtu/hr)

Diesel-Fired Emergency Generator-Leachate

Company Name: CGS Services, Inc.
Source Address: 2920 E US 52, Morristown, IN 46161
SSM No. 145-41594-00049
SPM No. 145-41613-00049
Permit Reviewer: William Altman

Output Horsepower Rating (hp) 22.8
Maximum Hours Operated per Year 500 (emergency)
Potential Throughput (hp-hr/yr) 11,400

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>PM*</th>
<th>PM10*</th>
<th>direct PM2.5*</th>
<th>SO2</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Factor in lb/hp-hr</td>
<td>0.0022</td>
<td>0.0022</td>
<td>0.0022</td>
<td>0.0021</td>
<td>0.0310</td>
<td>0.0025</td>
<td>0.0067</td>
</tr>
<tr>
<td>Potential Emission in tons/yr</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.18</td>
<td>0.01</td>
<td>0.04</td>
</tr>
</tbody>
</table>

*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.

Hazardous Air Pollutants (HAPs)

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Benzene</th>
<th>Toluene</th>
<th>Xylene</th>
<th>1,3-Butadiene</th>
<th>Formaldehyde</th>
<th>Acetaldehyde</th>
<th>Acrolein</th>
<th>Total PAH HAPs***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Factor in lb/hp-hr****</td>
<td>6.53E-06</td>
<td>2.86E-06</td>
<td>2.05E-06</td>
<td>2.74E-07</td>
<td>8.26E-06</td>
<td>5.37E-06</td>
<td>6.48E-07</td>
<td>1.18E-06</td>
</tr>
<tr>
<td>Potential Emission in tons/yr</td>
<td>3.7E-05</td>
<td>1.6E-05</td>
<td>1.1E-05</td>
<td>1.6E-06</td>
<td>4.7E-05</td>
<td>3.1E-05</td>
<td>3.7E-06</td>
<td>6.7E-06</td>
</tr>
</tbody>
</table>

****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).

Methodology

Emission Factors are from AP 42 (Supplement B 10/96) Tables 3.4-1, 3.4-2, 3.4-3, and 3.4-4.
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]

Green House Gas Emissions (GHG)

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>CO2</th>
<th>CH4</th>
<th>N2O</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Factor in lb/hp-hr</td>
<td>1.15E+00</td>
<td>4.63E-05</td>
<td>9.26E-06</td>
</tr>
<tr>
<td>Potential Emission in tons/yr</td>
<td>6.56E+00</td>
<td>2.64E-04</td>
<td>5.28E-05</td>
</tr>
</tbody>
</table>

Methodology

Emission Factors are from AP42 (Supplement B 10/96), Tables 3.3-1 and 3.3-2
CH4 and N2O Emission Factor from 40 CFR 98 Subpart C Table C-2.
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
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]
CO2e ( tons/yr) = CO2 Potential Emission tons/yr x CO2 GWP (1) + CH4 Potential Emission tons/yr x CH4 GWP (25) + N2O Potential Emission tons/yr x N2O GWP (298).
### Emission Calculations

**Company Name:** CGS Services, Inc.  
**Source Address:** 2920 E US 52, Morristown, IN 46161  
**SSM No.:** 145-41594-00049  
**SPM No.:** 145-41613-00049  
**Permit Reviewer:** William Altman

- **Reciprocating Internal Combustion Engines - Natural Gas**
- **2-Stroke Lean-Burn (2SLB) Engines**

#### Natural Gas-Fired Emergency Generator

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>PM*</th>
<th>PM10*</th>
<th>PM2.5*</th>
<th>SO2</th>
<th>NOX</th>
<th>VOC</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Factor (lb/MMBtu)</td>
<td>3.84E-02</td>
<td>4.83E-02</td>
<td>4.83E-02</td>
<td>5.88E-04</td>
<td>3.17E+00</td>
<td>1.20E-01</td>
<td>3.86E-01</td>
</tr>
<tr>
<td>Potential Emissions (tons/yr)</td>
<td>0.001</td>
<td>0.002</td>
<td>0.002</td>
<td>2.22E-05</td>
<td>0.12</td>
<td>0.005</td>
<td>0.01</td>
</tr>
</tbody>
</table>

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

#### Potential Fuel Usage

- **Potential Fuel Usage (MMBtu/yr):** 75  
- **Potential Fuel Usage (MMcf/yr):** 0.07

#### Criteria Pollutants

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>PM10*</th>
<th>PM2.5*</th>
<th>SO2</th>
<th>NOX</th>
<th>VOC</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Factor (lb/MMBtu)</td>
<td>3.84E-02</td>
<td>4.83E-02</td>
<td>4.83E-02</td>
<td>5.88E-04</td>
<td>3.17E+00</td>
<td>1.20E-01</td>
</tr>
<tr>
<td>Potential Emissions (tons/yr)</td>
<td>0.001</td>
<td>0.002</td>
<td>0.002</td>
<td>2.22E-05</td>
<td>0.12</td>
<td>0.005</td>
</tr>
</tbody>
</table>

#### Hazardous Air Pollutants (HAPs)

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Factor (lb/MMBtu)</th>
<th>Potential Emissions (tons/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetaldehyde</td>
<td>7.78E-03</td>
<td>2.9E-04</td>
</tr>
<tr>
<td>Benzene</td>
<td>1.94E-03</td>
<td>7.3E-05</td>
</tr>
<tr>
<td>1,3-Butadiene</td>
<td>8.36E-04</td>
<td>3.1E-05</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>1.08E-04</td>
<td>4.2E-06</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>5.52E-03</td>
<td>2.1E-03</td>
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<tr>
<td>Methylene Chloride</td>
<td>4.45E-04</td>
<td>1.7E-05</td>
</tr>
<tr>
<td>Toluene</td>
<td>9.63E-04</td>
<td>3.6E-05</td>
</tr>
<tr>
<td>2,2,4-Trimethylpentane</td>
<td>8.46E-04</td>
<td>3.3E-05</td>
</tr>
<tr>
<td>Total PAH**</td>
<td>1.34E-04</td>
<td>5.1E-06</td>
</tr>
<tr>
<td>Total</td>
<td>9.99E-03</td>
<td>3.6E-05</td>
</tr>
</tbody>
</table>

HAP pollutants consist of the twelve highest HAPs included in AP-42 Table 3.2-1.  
**PAH = Polyaromatic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter)

#### Methodology

Emission Factors are from AP-42 (Supplement F, July 2000), Table 3.2-1

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

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

#### Abbreviations

- PM = Particulate Matter  
- NOx = Nitrous Oxides  
- CO2 = Carbon Dioxide  
- PM10 = Particulate Matter (<10 um)  
- VOC = Volatile Organic Compounds  
- CH4 = Methane  
- SO2 = Sulfur Dioxide  
- CO = Carbon Monoxide  
- N2O = Nitrous Oxide  
- CO2e = CO2 equivalent emissions
Unpaved Roads at Industrial Site

The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (11/2006).

Vehicle Information (provided by source)

<table>
<thead>
<tr>
<th>Type</th>
<th>Maximum number of vehicles</th>
<th>Number of one-way trips per day per vehicle</th>
<th>Maximum trips per day (trips/day)</th>
<th>Maximum Weight Loaded (tons/trip)</th>
<th>Total Weight driven per day (tons/day)</th>
<th>Maximum one-way distance (feet/mile) **</th>
<th>Maximum one-way distance (miles/mile)</th>
<th>Maximum one-way miles (miles/day)</th>
<th>Maximum one-way miles (miles/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle leaving plant (one-way trip)*</td>
<td>50.00</td>
<td>1.0</td>
<td>50.0</td>
<td>18.5</td>
<td>825.0</td>
<td>6750</td>
<td>1.278</td>
<td>63.9</td>
<td>2333.0</td>
</tr>
<tr>
<td>Vehicle entering plant (one-way trip)*</td>
<td>19.75</td>
<td>1.0</td>
<td>19.8</td>
<td>12.5</td>
<td>234.4</td>
<td>2000</td>
<td>0.379</td>
<td>7.1</td>
<td>2982.3</td>
</tr>
<tr>
<td>Vehicle leaving plant (one-way trip)**</td>
<td>10.71</td>
<td>1.0</td>
<td>10.7</td>
<td>12.9</td>
<td>253.1</td>
<td>2000</td>
<td>0.379</td>
<td>7.1</td>
<td>2982.3</td>
</tr>
<tr>
<td>Vehicle entering plant (one-way trip)**</td>
<td>56.25</td>
<td>1.0</td>
<td>56.3</td>
<td>16.0</td>
<td>900.0</td>
<td>2000</td>
<td>0.379</td>
<td>21.3</td>
<td>7777.0</td>
</tr>
<tr>
<td>Vehicle leaving plant (one-way trip)**</td>
<td>56.25</td>
<td>1.0</td>
<td>56.3</td>
<td>27.0</td>
<td>1518.4</td>
<td>2000</td>
<td>0.379</td>
<td>21.3</td>
<td>7777.0</td>
</tr>
</tbody>
</table>

Totals 250.0 5006.3 184.7 67400.6

Notes:
- *Distance from entrance to cell
- *Distance from borrow area to cell

Vehicle Information:

- Average Vehicle Weight Per Trip = 2093 lb/trip
- Average Miles Per Trip = 0.99 mile/trip

Unmitigated Emission Factor, $E_f =$ \( \sqrt{10^2/12b^2} \) [W/2P] (Equation 1a from AP-42 13.2.2)

where $k = \frac{\text{PM}}{\text{PM10}}$ = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads)

- a = 6.5
- b = 0.7
- W = 20.0

Mitigated Emission Factor, $E_{ext} = E_f * (1 - \text{Dust Control Efficiency})$

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, $E_{ext} = E_f * \left( \frac{365 - P}{365} \right)$ (Equation 2 from AP-42 13.2.2)

- \( E \) = average vehicle weight (provided by source)
- \( P \) = days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

Mitigated Emission Factor, $E_{ext} = E_f * \left( \frac{365 - P}{365} \right)$ (Equation 2 from AP-42 13.2.2)

where $k = \frac{\text{PM}}{\text{PM10}}$ = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads)

- a = 6.5
- b = 0.7
- W = 20.0

Unmitigated Emission Factor, \( E_f = k^2 \left[ (s/12)^a \right] \left[ (W/3)^b \right] \) (Equation 1a from AP-42 13.2.2)

where $k = \frac{\text{PM}}{\text{PM10}}$ = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads)

- a = 6.5
- b = 0.7
- W = 20.0

Mitigated Emission Factor, \( E_{ext} = E_f * \left( \frac{365 - P}{365} \right) \) (Equation 2 from AP-42 13.2.2)

Unmitigated Emission Factor, $E_f =$ \( k^2 \left[ (s/12)^a \right] \left[ (W/3)^b \right] \) (Equation 1a from AP-42 13.2.2)

where $k = \frac{\text{PM}}{\text{PM10}}$ = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads)

- a = 6.5
- b = 0.7
- W = 20.0

Mitigated Emission Factor, $E_{ext} = E_f * \left( \frac{365 - P}{365} \right)$ (Equation 2 from AP-42 13.2.2)

Where:
- $P$ = days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)
- $E_f$ = unmitigated emission factor
- $E_{ext}$ = mitigated emission factor
- $k$ = particle size multiplier
- $a$, $b$ = constants
- $W$ = average vehicle weight
- $s$ = average miles per trip

Unmitigated Emission Factor, $E_f =$ \( k^2 \left[ (s/12)^a \right] \left[ (W/3)^b \right] \) (Equation 1a from AP-42 13.2.2)

where $k = \frac{\text{PM}}{\text{PM10}}$ = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads)

- a = 6.5
- b = 0.7
- W = 20.0

Mitigated Emission Factor, $E_{ext} = E_f * \left( \frac{365 - P}{365} \right)$ (Equation 2 from AP-42 13.2.2)

Where:
- $P$ = days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)
- $E_f$ = unmitigated emission factor
- $E_{ext}$ = mitigated emission factor
- $k$ = particle size multiplier
- $a$, $b$ = constants
- $W$ = average vehicle weight
- $s$ = average miles per trip

Calculation Example:

Let's assume:
- $E_f = 0.5$
- $k = 1.25$
- $a = 1.5$
- $b = 0.5$
- $W = 20$
- $P = 30$
- $s = 10$
- $m = 10$

Then:
- $E_{ext} = 0.5 * \left( \frac{365 - 30}{365} \right) = 0.45$

Methodology:

- Total Weight driven per day (ton/day) = Maximum Weight Loaded (tons/trip) * Maximum trips per day (trips/day)
- Maximum one-way distance (feet/mile) ** = Maximum one-way distance (miles/mile) / 5280
- Maximum one-way miles (miles/yr) = Maximum one-way miles (miles/day) * Maximum trips per year (trip/day)

Abbreviations:
- PM = Particulate Matter
- PM10 = Particulate Matter (10 um)
- PM2.5 = Particulate Matter (<2.5 um)
- PM10 = Particulate Matter (<10 um)
- PTE = Potential to Emit
- PTE of PM = Potential to Emit of PM
- PTE of PM10 = Potential to Emit of PM10
- PTE of PM2.5 = Potential to Emit of PM2.5
- PTE of PM10 = Potential to Emit of PM10
- PTE of PM2.5 = Potential to Emit of PM2.5
- PTE = Potential to Emit
October 9, 2019

Dave Klene  
CGS Services Inc  
PO Box 212  
Morristown, IN  46161

Re: Public Notice  
CGS Services Inc  
Permit Level:  Title V Significant Source Mod. (Minor PSD/EO) (120) & Title V Significant Permit Modification  
Permit Number: 145-41594-00049 & 145-41613-00049

Dear Dave Klene:

Enclosed is a copy of your draft Title V Significant Source Mod. (Minor PSD/EO) (120) & Title V Significant Permit Modification, Technical Support Document, emission calculations, and the Public Notice.

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 Shelbyville Shelby County Public Library 57 W Broadway Shelbyville IN 46176-1294. 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 enclosed 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 William Altman, 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 3-9664 or dial (317) 233-9664.

Sincerely,

L. Pogost

L. Pogost  
Permits Branch  
Office of Air Quality

Enclosures  
PN Applicant Cover Letter 4/12/19
October 9, 2019

To: Shelbyville Shelby County Public Library 57 W Broadway Shelbyville IN 46176-1294 (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: CGS Services Inc
Permit Number: 145-41594-00049 & 145-41613-00049

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 Smiddle-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
Notice of Public Comment

October 9, 2019
CGS Services Inc
145-41594-00049 & 145-41613-00049

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 Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@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 4/12/2019
AFFECTED STATE NOTIFICATION OF PUBLIC COMMENT PERIOD
DRAFT INDIANA AIR PERMIT

October 9, 2019

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

**Permit Number:** 145-41594-00049 & 145-41613-00049
**Applicant Name:** CGS Services Inc
**Location:** Morristown, Shelby 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/](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

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<td></td>
<td>Dave Klene CGS Services Inc PO Box 212 Morristown IN 461610212 (Source CAATS)</td>
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<td>2</td>
<td></td>
<td>W Todd Whittle Operations Manager CGS Services Inc 128 S Tryon St Ste 820 Charlotte NC 28202 (RO CAATS)</td>
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<tr>
<td>3</td>
<td></td>
<td>Mr. Hugh Garner 10203 S Degelow Road Milroy IN 46156 (Affected Party)</td>
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<td>4</td>
<td></td>
<td>Morristown Town Council and Town Manager P.O. Box 389 Morristown IN 46161 (Local Official)</td>
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<td>5</td>
<td></td>
<td>Shelbyville City Council and Mayors Office 44 West Washington Shelbyville IN 46176 (Local Official)</td>
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<td>Shelby County Commissioners 25 West Polk Shelbyville IN 46176 (Local Official)</td>
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<td>Shelbyville Shelby County Public Library 57 W Broadway Shelbyville IN 46176-1294 (Library)</td>
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<td>8</td>
<td></td>
<td>Shelby County Health Department 1600 E. SR 44B Shelbyville IN 46176 (Health Department)</td>
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<td>9</td>
<td></td>
<td>Shelby County Council 25 W. Polk Street Shelbyville In 46176 (Affected Party)</td>
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**Total number of pieces Listed by Sender**: 

**Total number of Pieces Received at Post Office**: 

**Postmaster, Per (Name of Receiving employee)**: 

The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50,000 per occurrence. The maximum indemnity payable on Express mail merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See *Domestic Mail Manual* R900, S913, and S921 for limitations of coverage on insured and COD mail. See *International Mail Manual* for limitations of coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.