



Missouri Department of Natural Resources
Air Pollution Control Program

PART 70

PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth herein.

Operating Permit Number: OP2014-011
Expiration Date: JUL 16 2019
Installation ID: 021-0129
Project Number: 2012-07-102

Installation Name and Address

KCP&L GMO-St. Joseph Landfill Generating Station
P.O. Box 418679
Kansas City, MO 64141
Buchanan County

Parent Company's Name and Address

Great Plains Energy Incorporated
P.O. Box 418679
Kansas City, MO 64141

Installation Description:

KCP&L GMO-St. Joseph Landfill Generating Station operates one 2,233 horsepower engine for the purpose of generating up to 1.6 megawatts of electricity through the generator. The engine is fueled exclusively by landfill gas that is received from the St. Joseph Landfill. The facility also includes a 2,200 SCFM enclosed flare. The engine is subject to 40 CFR Part 60 Subpart JJJJ and 40 CFR Part 63 Subpart ZZZZ. The facility is major for Carbon Monoxide (CO) emissions. This facility and the St. Joseph Landfill are considered one installation for permitting purposes.

JUL 17 2014

Effective Date


Director or Designee

Department of Natural Resources

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I. Installation Description and Equipment Listing

INSTALLATION DESCRIPTION

KCP&L GMO-St. Joseph Landfill Generating Station operates one 2,233 horsepower engine for the purpose of generating up to 1.6 megawatts of electricity through the generator. The engine is fueled exclusively by landfill gas that is received from the St. Joseph Landfill. The facility also includes a 2,200 SCFM enclosed flare. The engine is subject to 40 CFR Part 60 Subpart JJJJ and 40 CFR Part 63 Subpart ZZZZ. The facility is major for Carbon Monoxide (CO) emissions. This facility and the St. Joseph Landfill are considered one installation for permitting purposes.

Reported Air Pollutant Emissions, tons per year		
Pollutants	2012	2011
Particulate Matter ≤ Ten Microns (PM ₁₀)	3.90	0.47
Particulate Matter ≤ 2.5 Microns (PM _{2.5})	3.90	0.47
Sulfur Oxides (SO _x)	1.30	0.37
Nitrogen Oxides (NO _x)	5.77	1.15
Volatile Organic Compounds(VOC)	0.14	0.01
Carbon Monoxide (CO)	55.49	20.24
Hazardous Air Pollutants (HAPs)	0.01	0.01

EMISSION UNITS WITH LIMITATIONS

The following list provides a description of the equipment at this installation that emits air pollutants and that are identified as having unit-specific emission limitations.

Emission Unit #	Description of Emission Unit
EU-8	Enclosed Flare
EU-9A	Engine #1

EMISSION UNITS WITHOUT LIMITATIONS

The following list provides a description of the equipment that does not have unit specific limitations at the time of permit issuance.

Description of Emission Source
Haul Roads (fugitive)

II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

PERMIT CONDITION PW001

10 CSR 10-6.060 Construction Permits Required
Construction Permit 122010-016A, Issued January 16, 2013

Emission Limitations:

1. The permittee shall emit less than 250.0 tons of carbon monoxide (CO) in any consecutive 12-month period from the 2,200 SCFM enclosed flare (EU-8) and Engine 1 (EU-9A). [Special Condition 2.A]
2. The permittee shall emit less than 40.0 tons of nitrogen oxides (NO_x) in any consecutive 12-month period from the 2,200 SCFM enclosed flare (EU-8) and Engine 1 (EU-9A). [Special Condition 3.A]

Monitoring:

1. Attachments A and B or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to demonstrate compliance with the CO emission limitation. [Special Condition 2.B]
2. Attachments C and D or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to demonstrate compliance with the NO_x emission limitation. [Special Condition 3.B]

Recordkeeping/Reporting:

1. The permittee shall maintain all records required for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. [Special Condition 5.A]
2. The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of the month during which any record required by this permit shows an exceedance of a limitation imposed by this permit condition. [Special Condition 5.B]

III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

<p>PERMIT CONDITION 001 10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants</p>
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Enclosed Flare	
Emission Unit	Description
EU-8	2,200 SCFM Enclosed Flare; Installed September 2011

Emission Limitation:

1. The permittee shall not cause or permit emissions to be discharged into the atmosphere from any **new** source any visible emissions with an opacity greater than 20%.
2. Exception: The permittee may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any 60 minutes air contaminants with an opacity up to 60%.

Monitoring:

1. The permittee shall conduct opacity readings on this emission unit using the procedures contained in U.S. EPA Test Method 22. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. Readings are only required when the emission unit is operating and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
2. The following monitoring schedule must be maintained:
 - a. Weekly observations shall be conducted for a minimum of eight consecutive weeks after permit issuance. Should no violation of this regulation be observed during this period then-
 - b. Observations must be made once every two (2) weeks for a period of eight weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then-
 - c. Observations must be made once per month. If a violation is noted, monitoring reverts to weekly.
3. If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.

Recordkeeping:

1. The permittee shall maintain records of all observation results (see Attachment E), noting:
 - a. Whether any air emissions (except for water vapor) were visible from the emission units,
 - b. All emission units from which visible emissions occurred, and

- c. Whether the visible emissions were normal for the process.
2. The permittee shall maintain records of any equipment malfunctions. (see Attachment G)
3. The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment F)
4. Attachments E, F and G contain logs including these recordkeeping requirements. These logs, or an equivalent created by the permittee, must be used to certify compliance with this requirement.
5. These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
6. All records shall be maintained for five years.

Reporting:

1. The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined using the Method 9 test that the emission unit(s) exceeded the opacity limit.
2. Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as required by Section IV of this permit.

PERMIT CONDITION 002 10 CSR 10-6.070 New Source Performance Standards 40 CFR Part 60 Subpart JJJJ Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

Emergency Generator	
Emission Unit	Description
EU-9A	Engine #1 – 17.9 MMBtu/hr engine generator; 1.6 MW maximum power output; Fuel – landfill gas; Manufactured by Caterpillar; Installed October 2011

Emission Standards:

1. The permittee must comply with the emissions standards in Table 1 to 40 CFR Part 60 Subpart JJJJ that apply to the engines: [§60.4233(e)]
 - a. The permittee shall not emit NO_x in excess of 3.0 g/bhp-hr (220 ppmvd at 15% O₂).
 - b. The permittee shall not emit CO in excess of 5.0 g/bhp-hr (610 ppmvd at 15% O₂).
 - c. The permittee shall not emit VOC in excess of 1.0 g/bhp-hr (80 ppmvd at 15% O₂).
2. The permittee must operate and maintain the engines to achieve the emission standards over the entire life of the engines. [§60.4234]
3. The permittee shall comply with the parts of the general provisions that apply to the installation. Table 3 to Subpart JJJJ shows which parts of the General Provisions in §§60.1 through 60.19 are applicable. [§60.4246]

Compliance demonstration and testing requirements:

1. The permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engines in a manner consistent with good air pollution control practice for minimizing emissions. [§60.4234(b)(2)(ii)]
2. The permittee must demonstrate compliance with the emission standards by one of the following methods:

- a. The permittee must purchase an engine certified according to the procedures specified in Subpart JJJJ, for the same model year and demonstrating compliance according to one of the methods specified in §60.4243(a); or [§60.4243(b)(1)]
 - b. For uncertified engines, the permittee must conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or three years, whichever comes first, thereafter to demonstrate compliance. [§60.4234(b)(2)(ii)]
3. The permittee must use the applicable test methods and procedures from §60.4244 of Subpart JJJJ.

Recordkeeping and Reporting Requirements:

1. The permittee must keep records of the following information: [§60.4245(a)(1) through (4)]
 - a. All notifications submitted to comply with Subpart JJJJ and all documentation supporting any notification;
 - b. Maintenance conducted on the engines;
 - c. If the engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR Parts 90, 1048, 1054 and 1060 as applicable.
2. For a non-certified engine, the permittee must submit an initial notification as required in §60.7(a)(1). The notification must include the following information: [§60.4245(c)(1) through (5)]
 - a. Name and address of the owner or operator;
 - b. The address of the affected source;
 - c. Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
 - d. Emission control equipment; and
 - e. Fuel used.
3. If subject to performance testing, the permittee must submit a copy of each performance test as conducted within 60 days after the test has been completed. [§60.4245(d)]
4. The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined that the emission unit(s) exceeded the emission limits.
5. Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as required by Section IV of this permit.

IV. Core Permit Requirements

The installation shall comply with each of the following regulations or codes. Consult the appropriate sections in the Code of Federal Regulations (CFR), the Code of State Regulations (CSR), and local ordinances for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued. The following is only an excerpt from the regulation or code, and is provided for summary purposes only.

10 CSR 10-6.045 Open Burning Requirements

- 1) General Provisions. The open burning of tires, petroleum-based products, asbestos containing materials, and trade waste is prohibited, except as allowed below. Nothing in this rule may be construed as to allow open burning which causes or constitutes a public health hazard, nuisance, a hazard to vehicular or air traffic, nor which violates any other rule or statute.
- 2) Refer to the regulation for a complete list of allowances. The following is a listing of exceptions to the allowances:
 - a) Burning of household or domestic refuse. Burning of household or domestic refuse is limited to open burning on a residential premises having not more than four dwelling units, provided that the refuse originates on the same premises, with the following exception:
 - i) St. Joseph area. The open burning of household refuse must take place within an area zoned for agricultural purposes and outside that portion of the metropolitan area surrounded by the corporate limits of St. Joseph.
 - b) Yard waste, with the following exception:
 - i) St. Joseph area. Within the corporate limits of St. Joseph, the open burning of trees, tree leaves, brush or any other type of vegetation grown on a residential property is allowed during the following calendar periods and time-of-day restrictions:
 - (1) A three (3)-week period within the period commencing the first day of March through April 30 and continuing for twenty-one (21) consecutive calendar days;
 - (2) A three (3)-week period within the period commencing the first day of October through November 30 and continuing for twenty-one (21) consecutive calendar days;
 - (3) The burning shall take place only between the daytime hours of 10:00 a.m. and 3:30 p.m.; and
 - (4) In each instance, the twenty-one (21)-day burning period shall be determined by the director of Public Health and Welfare of the City of St. Joseph for the region in which the City of St. Joseph is located provided, however, the burning period first shall receive the approval of the department director.
- 3) Certain types of materials may be open burned provided an open burning permit is obtained from the director. The permit will specify the conditions and provisions of all open burning. The permit may be revoked if the owner or operator fails to comply with the conditions or any provisions of the permit.
- 4) KCP&L GMO-St. Joseph Landfill Generating Station may be issued an annually renewable open burning permit for open burning provided that an air curtain destructor or incinerator is utilized and only tree trunks, tree limbs, vegetation or untreated wood waste are burned. Open burning shall occur at least two hundred (200) yards from the nearest occupied structure unless the owner or operator of the occupied structure provides a written waiver of this requirement. Any waiver shall accompany the open burning permit application. The permit may be revoked if KCP&L GMO-St. Joseph Landfill Generating Station fails to comply with the provisions or any condition of the open burning permit.

- a) In a nonattainment area, as defined in 10 CSR 10-6.020, paragraph (2)(N)5., the director shall not issue a permit under this section unless the owner or operator can demonstrate to the satisfaction of the director that the emissions from the open burning of the specified material would be less than the emissions from any other waste management or disposal method.
- 5) Reporting and Recordkeeping. New Source Performance Standard (NSPS) 40 CFR Part 60 Subpart CCCC establishes certain requirements for air curtain destructors or incinerators that burn wood trade waste. These requirements are established in 40 CFR 60.2245-60.2260. The provisions of 40 CFR Part 60 Subpart CCCC promulgated as of September 22, 2005, shall apply and are hereby incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401. To comply with NSPS 40 CFR 60.2245-60.2260, sources must conduct an annual Method 9 test. A copy of the annual Method 9 test results shall be submitted to the director.
- 6) Test Methods. The visible emissions from air pollution sources shall be evaluated as specified by 40 CFR Part 60, Appendix A–Test Methods, Method 9–Visual Determination of the Opacity of Emissions from Stationary Sources. The provisions of 40 CFR Part 60, Appendix A, Method 9 promulgated as of December 23, 1971, is incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401.

10 CSR 10-6.050 Start-up, Shutdown and Malfunction Conditions

- 1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the director within two business days, in writing, the following information:
 - a) Name and location of installation;
 - b) Name and telephone number of person responsible for the installation;
 - c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
 - d) Identity of the equipment causing the excess emissions;
 - e) Time and duration of the period of excess emissions;
 - f) Cause of the excess emissions;
 - g) Air pollutants involved;
 - h) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
 - i) Measures taken to mitigate the extent and duration of the excess emissions; and
 - j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
- 2) The permittee shall submit the paragraph 1 information list to the director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
- 3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under Section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other

pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under Section 643.080 or 643.151, RSMo.

- 4) Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under Sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
- 5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

10 CSR 10-6.060 Construction Permits Required

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.

10 CSR 10-6.065 Operating Permits

The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than eighteen months. [10 CSR 10-6.065(6)(B)1.A(V)] The permittee shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065(6)(C)1.C(II)] The permittee shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request. [10 CSR 10-6.065(6)(C)3.B]

10 CSR 10-6.110 Submission of Emission Data, Emission Fees and Process Information

- 1) The permittee shall submit full emissions report either electronically via MoEIS, which requires Form 1.0 signed by an authorized company representative, or on Emission Inventory Questionnaire (EIQ) paper forms on the frequency specified in this rule and in accordance with the requirements outlined in this rule. Alternate methods of reporting the emissions, such as spreadsheet file, can be submitted for approval by the director.
- 2) The permittee may be required by the director to file additional reports.
- 3) Public Availability of Emission Data and Process Information. Any information obtained pursuant to the rule(s) of the Missouri Air Conservation Commission that would not be entitled to confidential treatment under 10 CSR 10-6.210 shall be made available to any member of the public upon request.
- 4) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079.
- 5) The fees shall be payable to the Department of Natural Resources and shall be accompanied by the emissions report.
- 6) The permittee shall complete required reports on state supplied EIQ forms or electronically via MoEIS. Alternate methods of reporting the emissions can be submitted for approval by the director. The reports shall be submitted to the director by April 1 after the end of each reporting year. If the full emissions report is filed electronically via MoEIS, this due date is extended to May 1.
- 7) The reporting period shall end on December 31 of each calendar year. Each report shall contain the required information for each emission unit for the twelve (12)-month period immediately preceding the end of the reporting period.
- 8) The permittee shall collect, record and maintain the information necessary to complete the required forms during each year of operation of the installation.

10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential

This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or emergency (maroon) and the associated procedures and emission reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

10 CSR 10-6.150 Circumvention

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

10 CSR 10-6.170

Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin

Emission Limitation:

- 1) The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director.
- 2) The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.
- 3) Should it be determined that noncompliance has occurred, the director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
 - a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
 - b) Paving or frequent cleaning of roads, driveways and parking lots;
 - c) Application of dust-free surfaces;
 - d) Application of water; and
 - e) Planting and maintenance of vegetative ground cover.

10 CSR 10-6.180 Measurement of Emissions of Air Contaminants

- 1) The director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The director may specify testing methods to be used in accordance with good professional practice. The director may observe the testing. All tests shall be performed by qualified personnel.
- 2) The director may conduct tests of emissions of air contaminants from any source. Upon request of the director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.
- 3) The director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

10 CSR 10-6.165 Restriction of Emission of Odors

This requirement is not federally enforceable.

No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour. This odor evaluation shall be taken at a location outside of the installation's property boundary.

Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone

- 1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
 - b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
 - c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
 - d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
- 2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
 - a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
 - b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
 - c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
 - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
 - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
 - f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- 3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.
- 4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.

- 5) The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR Part 82*

10 CSR 10-6.280 Compliance Monitoring Usage
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| <p>1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:</p> <ul style="list-style-type: none">a) Monitoring methods outlined in 40 CFR Part 64;b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; andc) Any other monitoring methods approved by the director. <p>2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:</p> <ul style="list-style-type: none">a) Monitoring methods outlined in 40 CFR Part 64;b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; andc) Compliance test methods specified in the rule cited as the authority for the emission limitations. <p>3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:</p> <ul style="list-style-type: none">a) Applicable monitoring or testing methods, cited in:<ul style="list-style-type: none">i) 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";ii) 10 CSR 10-6.040, "Reference Methods";iii) 10 CSR 10-6.070, "New Source Performance Standards";iv) 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; orb) Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above. |
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V. General Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued,

10 CSR 10-6.065(6)(C)1.B Permit Duration

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed.

10 CSR 10-6.065(6)(C)1.C General Recordkeeping and Reporting Requirements

- 1) Recordkeeping
 - a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
 - b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.
- 2) Reporting
 - a) All reports shall be submitted to the Air Pollution Control Program's Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
 - b) The permittee shall submit a report of all required monitoring by:
 - i) October 1st for monitoring which covers the January through June time period, and
 - ii) April 1st for monitoring which covers the July through December time period.
 - iii) Exception. Monitoring requirements which require reporting more frequently than semi-annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
 - c) Each report shall identify any deviations from emission limitations, monitoring, recordkeeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances.
 - d) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
 - i) Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7.A of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.

- ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.
- iii) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semi-annual report shall be reported on the schedule specified in this permit, and no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.
- e) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.
- f) The permittee may request confidential treatment of information submitted in any report of deviation.

10 CSR 10-6.065(6)(C)1.D Risk Management Plan Under Section 112(r)

The permittee shall comply with the requirements of 40 CFR Part 68, Accidental Release Prevention Requirements. If the permittee has more than a threshold quantity of a regulated substance in process, as determined by 40 CFR Section 68.115, the permittee shall submit a Risk Management Plan in accordance with 40 CFR Part 68 no later than the latest of the following dates:

- 1) June 21, 1999;
- 2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or
- 3) The date on which a regulated substance is first present above a threshold quantity in a process.

10 CSR 10-6.065(6)(C)1.F Severability Clause

In the event of a successful challenge to any part of this permit, all uncontested permit conditions shall continue to be in force. All terms and conditions of this permit remain in effect pending any administrative or judicial challenge to any portion of the permit. If any provision of this permit is invalidated, the permittee shall comply with all other provisions of the permit.

10 CSR 10-6.065(6)(C)1.G General Requirements

- 1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
- 2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit
- 3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- 4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
- 5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to

the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 10 CSR 10-6.065(6)(C)1.

10 CSR 10-6.065(6)(C)1.H Incentive Programs Not Requiring Permit Revisions

No permit revision will be required for any installation changes made under any approved economic incentive, marketable permit, emissions trading, or other similar programs or processes provided for in this permit.

10 CSR 10-6.065(6)(C)1.I Reasonably Anticipated Operating Scenarios

None.

10 CSR 10-6.065(6)(C)3 Compliance Requirements

- 1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
- 2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
 - a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
 - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
- 3) All progress reports required under an applicable schedule of compliance shall be submitted semi-annually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
 - a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
 - b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
- 4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, as well as the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and Part 64 exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:
 - a) The identification of each term or condition of the permit that is the basis of the certification;
 - b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;

- c) Whether compliance was continuous or intermittent;
- d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
- e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

10 CSR 10-6.065(6)(C)6 Permit Shield

- 1) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:
 - a) The applicable requirements are included and specifically identified in this permit, or
 - b) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation, and this permit expressly includes that determination or a concise summary of it.
- 2) Be aware that there are exceptions to this permit protection. The permit shield does not affect the following:
 - a) The provisions of Section 303 of the Act or Section 643.090, RSMo concerning emergency orders,
 - b) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,
 - c) The applicable requirements of the acid rain program,
 - d) The authority of the Environmental Protection Agency and the Air Pollution Control Program of the Missouri Department of Natural Resources to obtain information, or
 - e) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.

10 CSR 10-6.065(6)(C)7 Emergency Provisions

- 1) An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7.A shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
 - a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
 - b) That the installation was being operated properly,
 - c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
 - d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- 2) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

10 CSR 10-6.065(6)(C)8 Operational Flexibility

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable

under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, at least seven days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

- 1) Section 502(b)(10) changes. Changes that, under Section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), recordkeeping, reporting or compliance requirements of the permit.
 - a) Before making a change under this provision, The permittee shall provide advance written notice to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and the Air Pollution Control Program shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the Air Pollution Control Program as above at least seven days before the change is to be made. If less than seven days' notice is provided because of a need to respond more quickly to these unanticipated conditions, the permittee shall provide notice to the EPA and the Air Pollution Control Program as soon as possible after learning of the need to make the change.
 - b) The permit shield shall not apply to these changes.

10 CSR 10-6.065(6)(C)9 Off-Permit Changes

- 1) Except as noted below, the permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:
 - a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is subject to any requirements under Title IV of the Act or is a Title I modification;
 - b) The permittee must provide written notice of the change to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, no later than the next annual emissions report. This notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(6)(B)3. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.
 - c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and
 - d) The permit shield shall not apply to these changes.

10 CSR 10-6.020(2)(R)39 Responsible Official

The application utilized in the preparation of this permit was signed by Mark Howell, Plant Manager. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

10 CSR 10-6.065(6)(E)6 Reopening-Permit for Cause

This permit may be reopened for cause if:

- 1) The Missouri Department of Natural Resources (MDNR) receives notice from the Environmental Protection Agency (EPA) that a petition for disapproval of a permit pursuant to 40 CFR § 70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination,
- 2) The Missouri Department of Natural Resources or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
- 3) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
 - a) The permit has a remaining term of less than three years;
 - b) The effective date of the requirement is later than the date on which the permit is due to expire;or
 - c) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
- 4) The installation is an affected source under the acid rain program and additional requirements (including excess emissions requirements), become applicable to that source, provided that, upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit; or
- 5) The Missouri Department of Natural Resources or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

10 CSR 10-6.065(6)(E)1.C Statement of Basis

This permit is accompanied by a statement setting forth the legal and factual basis for the permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

VI. Attachments

Attachments follow.

Attachment A
CO Compliance Worksheet

This sheet covers the period from _____ to _____. (Copy this sheet as needed.)
 (month, year) (month, year)

A	B	C	D	E
Month, Year	Emission Unit, Description	Operation (hours/month)	Emission Factor (lb CO/hour)	CO Emissions (lbs)
<i>example</i>	EP-9A Engine 1	600	10.60	6,360.00
		Methane Flow Rate (MMscf / month)	Emission Factor (lb CO / MMscf methane)	
	EP-8 Enclosed Flare	2.06	750	1,545.00
			SUM	<i>Example 7,905.00</i>
	EP-9A Engine 1			
	EP-8 Enclosed Flare		750	
			SUM	
	EP-9A Engine 1			
	EP-8 Enclosed Flare		750	
			SUM	
	EP-9A Engine 1			
	EP-8 Enclosed Flare		750	
			SUM	
	EP-9A Engine 1			
	EP-8 Enclosed Flare		750	
			SUM	

- A. Record the current month and year.
 - B. Emission unit and description.
 - C. Record each unit's hours of operation or methane flow rate for the current month, respectively.
 - D. CO emission factors: From performance testing conducted on Engine #1 on May 8, 2012 as required by Construction Permit 122010-016. For flare, emission factor from WebFIRE for SCC code 50300601.
- Calculate each unit's CO emissions. E = C x D. Sum the individual CO emissions for the current month, for use in Attachment B.

Attachment C
NO_x Compliance Worksheet

This sheet covers the period from _____ to _____. (Copy this sheet as needed.)
(month, year) (month, year)

A	B	C	D	E
Month, Year	Emission Unit, Description	Operation (hours/month)	Emission Factor (lb NO _x /hour)	NO _x Emissions (lbs)
<i>example</i>	EP-9A Engine 1	600	2.82	1692.00
		Methane Flow Rate (MMscf / month)	Emission Factor (lb NO _x / MMscf methane)	
	EP-8 Enclosed Flare	2.06	40	82.40
	SUM			<i>Example 1,774.40</i>
	EP-9A Engine 1			
	EP-8 Enclosed Flare		40	
SUM				
	EP-9A Engine 1			
	EP-8 Enclosed Flare		40	
SUM				
	EP-9A Engine 1			
	EP-8 Enclosed Flare		40	
SUM				
	EP-9A Engine 1			
	EP-8 Enclosed Flare		40	
SUM				

- A. Record the current month and year.
- B. Emission unit and description.
- C. Record each unit's hours of operation or methane flow rate for the current month, respectively.
- E. NO_x emission factors. From performance testing conducted on Engine #1 on May 8, 2012 as required by Construction Permit 122010-016. For flare, emission factor from WebFIRE for SCC code 50300601.
- D. Calculate each unit's NO_x emissions. E = C x D. Sum the individual NO_x emissions for the current month, for use in Attachment D.

Attachment F

Method 9 Opacity Emissions Observations								
Company				Observer				
Location				Observer Certification Date				
Date				Emission Unit				
Time				Control Device				
Hour	Minute	Seconds				Steam Plume (check if applicable)		Comments
		0	15	30	45	Attached	Detached	
	0							
	1							
	2							
	3							
	4							
	5							
	6							
	7							
	8							
	9							
	10							
	11							
	12							
	13							
	14							
	15							
	16							
	17							
	18							
SUMMARY OF AVERAGE OPACITY								
Set Number	Time				Opacity			
	Start	End	Sum	Average				

Readings ranged from _____ to _____ % opacity.

Was the emission unit in compliance at the time of evaluation? _____
 YES NO Signature of Observer

STATEMENT OF BASIS

Permit Reference Documents

These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

- 1) Part 70 Operating Permit Application, received July 9, 2012;
- 2) 2012 Emissions Inventory Questionnaire, received April 30, 2013; and
- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition;
- 4) webFIRE;
- 5) Construction Permit 122010-016, Issued December 30, 2010; and
- 6) Amendment to Construction Permit 122010-016, Issued January 16, 2013.

Applicable Requirements Included in the Operating Permit but Not in the Application or Previous Operating Permits

In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*

The installation indicated this regulation does not apply in the application. However, since the flare is not required by 40 CFR Part 60 Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills, then the unit does not meet the exemption in 6.220(1)(H), as it is not regulated by 40 CFR Part 60, including the flare requirements of §60.18. Since the exemption is not met, this regulation does apply and has been included in the permit.

Other Air Regulations Determined Not to Apply to the Operating Permit

The Air Pollution Control Program (APCP) has determined the following requirements to not be applicable to this installation at this time for the reasons stated.

10 CSR 10-6.100, *Alternate Emission Limits*

This rule is not applicable because the installation is in an ozone attainment area.

Construction Permit History

The following construction permits have been issued for this installation:

Construction Permit 122010-016, Issued December 30, 2010

This construction permit authorized the installation of the two Caterpillar engines and enclosed flare. Special Conditions 1 through 2 of this permit were superseded by the permit amendment therefore they were not included in this operating permit. Special Conditions 4.A through 4.F were not included in the operating permit because they require performance testing that has been completed. The results of the performance tests prompted issuance of the construction permit amendment.

Construction Permit 122010-016A, Issued January 16, 2013

This construction permit was issued to account for changes between permitted and as-built carbon monoxide (CO) release parameters for the project emission units. Special Conditions 2 and 3 of this amendment supersede Special Conditions 1 and 2 of the original construction permit and thus were included in the Plantwide Permit Conditions section of this operating permit. Special Condition 4 required the removal of the existing 650 SCFM open flare from the landfill which has been completed therefore Condition 4 was not included in the operating permit. Engine #2 (EP-9B) was not installed and therefore was not included in the operating permit as an emission unit. All references to the engine in the construction permit special conditions and recordkeeping attachments have been removed.

The performance testing was completed on Engine #1 on May 8, 2012, and the resulting emission factors for CO and NO_x are used in Attachments A and C to demonstrate compliance with the plantwide NO_x and CO emission limits. The testing results are as follows:

Table 1: ¹Emission Rates (pounds per hour) from Performance Testing Engine 1 (EP-9A)

Pollutant	100% load	75% load	50% load
CO	10.60	7.32	5.11
NO _x	2.82	2.38	2.23
² VOC	0	0	0

¹Emission rates represent the worst case considering the two test dates.

²VOC emission rates are zero because the second test sampled total organic compounds which found only methane and ethane, which are not VOCs.

New Source Performance Standards (NSPS) Applicability

40 CFR Part 60 Subpart JJJJ, *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines*

Engine #1 (EP-9A) and Engine #2 (EP-9B) are subject to this regulation.

40 CFR Part 60 Subpart WWW, *Standards of Performance for Municipal Solid Waste Landfills*

This subpart applies to the St. Joseph Landfill, the source of the landfill gas that is used by KCP&L GMO St. Joseph Landfill Generating Station. At this time the annual NMOC emission rate is less than 50 megagrams, therefore the flare and engines are not subject to the control device requirements of Subpart WWW at this time and the provisions of Subpart WWW are not included in this operating permit.

Maximum Achievable Control Technology (MACT) Applicability

40 CFR Part 63 Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*

Engine #1 (EP-9A) and Engine #2 (EP-9B) are subject to this regulation, however these units meet the requirements of Subpart ZZZZ by complying with the requirements of 40 CFR Part 60 Subpart JJJJ. Therefore this regulation is not included in the operating permit.

40 CFR Part 63 Subpart AAAA, *National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills*

This regulation does not currently apply to the St. Joseph Landfill nor KCP&L GMO – St. Joseph Landfill Generating Station, however it will apply if the NMOC emission rates exceed 50 Mg/year and the landfill is required to use a control device (in this case, the flare or engines). This is not expected to occur during the life of this operating permit, therefore the provisions of this subpart have not been included in this permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

In the permit application and according to Air Pollution Control Program records, there was no indication that any Missouri Air Conservation Law, Asbestos Abatement, 643.225 through 643.250; 10 CSR 10-6.080, Emission Standards for Hazardous Air Pollutants, Subpart M, National Standards for Asbestos; and 10 CSR 10-6.250, Asbestos Abatement Projects - Certification, Accreditation, and Business Exemption Requirements apply to this installation. The installation is subject to these regulations if they undertake any projects that deal with or involve any asbestos containing materials. None of the installation's operating projects underway at the time of this review deal with or involve asbestos containing material. Therefore, the above regulations were not cited in the operating permit. If the installation should undertake any construction or demolition projects in the future that deal with or involve any asbestos containing materials, the installation must follow all of the applicable requirements of the above rules related to that specific project.

Compliance Assurance Monitoring (CAM) Applicability

40 CFR Part 64, *Compliance Assurance Monitoring (CAM)*

The CAM rule applies to each pollutant specific emission unit that:

- Is subject to an emission limitation or standard, and
- Uses a control device to achieve compliance, and
- Has pre-control emissions that exceed or are equivalent to the major source threshold.

40 CFR Part 64 is not applicable because none of the pollutant-specific emission units uses a control device to achieve compliance with a relevant standard.

Updated Potential to Emit for the Installation¹

Pollutant	De Minimis Level	Potential to Emit (tons/yr) ²
PM	25.0	1.38
PM ₁₀	15.0	9.0
PM _{2.5}	10.0	9.0
SO _x	40.0	5.48
NO _x	40.0	< 40.0
VOC	40.0	21.72
CO	100.0	< 250.0
HAPs	10.0/25.0	18.50
NMOC	50.0	0.33
CO ₂	N/A	0 ³
CH ₄	N/A	2.80
N ₂ O	N/A	0.66
GHG (mass)	0/100/250	4.00
GHG (CO ₂ e)	75,000/100,000	274.03

¹KCP&L GMO – St. Joseph Landfill Generating Station (facility 021-0129) and St. Joseph Landfill (facility 021-0105) are considered one installation for permitting purposes, thus the potential to emit for Part 70 applicability includes the emissions of both facilities. Fugitive emissions are not included.

²The PTE was calculated using the emission summary table in Construction Permit 122010-016A. Because Engine 2 (EP-9B) was not installed, the potential to emit of that engine was subtracted from the plant-wide PTE from the construction permit. The emissions of CO and NO_x reflect the plant wide emission limitations included in this operating permit.

³The CO_{2e} portion of the LFG combustion is not counted due to a 3 year deferral by EPA for biogenic sources. If deferral ends on July 20, 2014 PTE for GHG (mass) will be 117,464 tons/year and PTE for GHG CO_{2e} will be 232,705 tons/year.

Other Regulatory Determinations

10 CSR 10-6.260, Restriction of Emission of Sulfur Compounds

The flare (EU-8) and Engine #1 (EP-9A) burn landfill gas, which has a sulfur concentration less than 500 ppmv. Since these units are assumed to always be in compliance, this rule was not included in the operating permit.

Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis

Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one or more of the following reasons:

1. The specific pollutant regulated by that rule is not emitted by the installation;
2. The installation is not in the source category regulated by that rule;
3. The installation is not in the county or specific area that is regulated under the authority of that rule;
4. The installation does not contain the type of emission unit which is regulated by that rule;
5. The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the Air Pollution Control Program 's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the Air Pollution Control Program a schedule for achieving compliance for that regulation(s).

Prepared by:

Jill Wade, P.E.
Environmental Engineer

MEMORANDUM

DATE: May 29, 2014
TO: Steve Courtney – KCP&L GMO – St. Joseph Landfill Generating Station
FROM: Jill Wade, PE – MO Department of Natural Resources, APCP
SUBJECT: Response to Public Comments

The draft Part 70 Operating Permit for KCP&L – St. Joseph Landfill Generating Station (021-0129) was placed on public notice as of April 29, 2014 for a 30-day comment period. The public notice was published on the Department of Natural Resources’ Air Pollution Control Program’s web page at: <http://www.dnr.mo.gov/env/apcp/PermitPublicNotices.htm>. On May 2, 2014 the Air Pollution Control Program received comments via e-mail from Bob Cheever, EPA Region 7. The comments are addressed below in the order in which they appear within the e-mail.

Comment #1: The emission limitations in permit condition 001 indicate the responsibility for compliance lies with the owner or other person, which is the language used within 10 CSR 10-6.220. However, this is now a specific requirement for KCP&L GMO St. Joseph Landfill Generating Station (permittee) to satisfy and I would recommend a wording change to show “permittee” in place of “owner” or “other person.”

Response to Comment: References to “the owner” or “other person” have been changed to “the permittee” within the permit language for permit condition 001.

Comment #2: The open burning requirements within the Section IV Core Permit Requirements include requirements for the Kansas City metropolitan area, Springfield-Green County area, and St. Louis metropolitan area all of which would appear to not be applicable requirements for a facility in St. Joseph, MO. Operating permits should include applicable requirements only.

Response to Comment: The standard language in the Core Permit Requirements section was written with the purpose of being as inclusive as possible in order to streamline the permit writing process. As a result, some localized regulations and/or exemptions to regulations are included even though they may not be applicable to every facility in the state. That being said, it is an easy change to make to remove the references to Kansas City, Springfield-Green and St. Louis metropolitan area, so the change has been made as requested.

Comment #3: The footnotes on Attachments A and C suggest the CO and NO_x emission factors for the engines are determined during the most recent performance testing. Is this the performance testing required by permit condition 002? If so, a reference to permit condition 002 would help clarify.

Additionally, it is recommended that a reference to the source of the flare emission factors for both CO and NO_x be included as footnotes to Attachments A and C.

Response to Comment: The footnotes to Attachments A and C have been updated to explain that the emission factors for NO_x and CO are a result of performance testing that was conducted on May 8, 2012, as required by Construction Permit 122010-016. It is also now explained in the footnote that the emission factors for the flare were taken from WebFIRE for SCC code 50300601.

Comment #4: Regarding the updated potential to emit table in the statement of basis:

- a) The biogenic deferral end date of July 20, 2014 is likely to pass before this operating permit is issued and therefore it may be appropriate to update the GHG PTE to reflect the higher values.
- b) Not all landfill gas emissions (LFG) from municipal solid waste (MSW) landfills are fugitive. In 40 CFR Part 70, EPA defines fugitive emissions “as those emission which could reasonably pass through a stack, chimney, vent or other functionally-equivalent opening.” The design standard used to determine the amount of LFG which is captured by a LFG capture and control system is 75% of the total estimated gas generated by the decomposition. Therefore, 75% of the total LFG can be captured into a piping system and therefore would not be considered fugitive. This leaves 25% of the total LFG as escaping through the cover and thereby might be better considered fugitive.
- c) When determining the LFG contents being treated by the gas collection and control system (GCCS) the CO₂ portion captured by the GCCS will pass through the system untreated and the combustion products of CH₄ obviously include CO₂. The permit record should include a calculation as to how the PTE for GHG is determined.

Response to Comment:

- a) Footnote 3 states the following: The CO_{2e} portion of the LFG combustion is not counted due to a three year deferral by EPA for biogenic sources. If deferral ends on July 20, 2014, PTE for GHG (mass) will be 117,464 tons/year and PTE for GHG CO_{2e} will be 232,705 tons/year.
- b) A collection system capture efficiency of 75% was taken into account when calculating fugitive vs. non fugitive-emissions.
- c) Detailed calculations for PTE are not included in the operating permit, only the results of those calculations are included for informational purposes only. The detailed calculations can be found in the project file for Construction Permit 122010-016A and the project file for this operating permit. Requests can be made by the public to view these files.

Mr. Mark Howell
KCP&L GMO-St. Joseph Landfill Generating Station
P.O. Box 418679
Kansas City, MO 64141

Re: KCP&L GMO-St. Joseph Landfill Generating Station, 021-0129
Permit Number: **OP2014-011**

Dear Mr. Howell:

Enclosed with this letter is your Part 70 operating permit. Please review this document carefully. Operation of your installation in accordance with the rules and regulations cited in this document is necessary for continued compliance. It is very important that you read and understand the requirements contained in your permit.

You may appeal this permit to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.078.16 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you have any questions or need additional information regarding this permit, please do not hesitate to contact Jill Wade at the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, or by telephone at (573) 751-4817. Thank you for your time and attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Michael J. Stansfield, P.E.
Operating Permit Unit Chief

MJS:jwk

Enclosures

c: Kansas City Regional Office
PAMS File: 2012-07-102

MEMORANDUM

DATE: May 29, 2014

TO: Steve Courtney – KCP&L GMO – St. Joseph Landfill Generating Station

FROM: Jill Wade, PE – MO Department of Natural Resources, APCP

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