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: OP2018-015
Expiration Date: FEB 02, 2023
Installation ID: 077-0170
Project Number: 2015-01-017

Installation Name and Address
Noble Hill Landfill Renewable Energy Center
3971 West Farm Road 34
Springfield, MO 65801
Greene County

Installation Description:
The Noble Hill Landfill Renewable Energy Center consists of two 2,235 HP engines combusting landfill gas, which power two 1.6 MW generators. The facility began operation in 2006. For permitting purposes, this facility is considered one installation with the Springfield Sanitary Landfill (ID 077-0161). Each facility is permitted separately. A Part 70 Operating Permit is required due to potential emissions of carbon monoxide greater than the major source thresholds.

Prepared by
Nicole Weidenbenner, PE
Operating Permit Unit

Director or Designee
Department of Natural Resources
FEB 02 2018
Effective Date
Table of Contents

I. INSTALLATION EQUIPMENT LISTING ................................................................. 3
   EMISSION UNITS WITH LIMITATIONS ................................................................. 3
   EMISSION UNITS WITHOUT SPECIFIC LIMITATIONS ......................................... 3

II. PLANT WIDE EMISSION LIMITATIONS ............................................................ 4

III. EMISSION UNIT SPECIFIC EMISSION LIMITATIONS ....................................... 5
   Permit Condition 001 ............................................................................................ 5
   40 CFR Part 63, Subpart A General Provisions ................................................... 5
   Permit Condition 002 ............................................................................................ 8
   10 CSR 10-6.260, Restriction of Emission of Sulfur Compounds ........................ 8

IV. CORE PERMIT REQUIREMENTS ......................................................................... 9

V. GENERAL PERMIT REQUIREMENTS .................................................................. 15

VI. ATTACHMENTS .............................................................................................. 20
   ATTACHMENT A .................................................................................................. 21
   Fugitive Emission Observations ......................................................................... 21
I. Installation Equipment Listing

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.

<table>
<thead>
<tr>
<th>Emission Unit #</th>
<th>Description of Emission Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>E101</td>
<td>Internal Combustion Engine and Electric Generator #1</td>
</tr>
<tr>
<td>E102</td>
<td>Internal Combustion Engine and Electric Generator #2</td>
</tr>
</tbody>
</table>

EMISSION UNITS WITHOUT SPECIFIC LIMITATIONS
The following list provides a description of the equipment that does not have unit specific limitations at the time of permit issuance.

<table>
<thead>
<tr>
<th>Emission Unit #</th>
<th>Description of Emission Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>E120</td>
<td>2,000 gallon tank, contains new oil</td>
</tr>
<tr>
<td>E121</td>
<td>1,500 gallon tank, contains used oil</td>
</tr>
<tr>
<td>E122</td>
<td>Metal Roof Building Vents</td>
</tr>
<tr>
<td>E123</td>
<td>Crankcase recovery used oil tank aerator vent</td>
</tr>
<tr>
<td>E124</td>
<td>2-141 gallon tanks, contains lube oil</td>
</tr>
<tr>
<td>E125</td>
<td>55 gallon drums, contains new or used oil</td>
</tr>
<tr>
<td>E126</td>
<td>2-15 gallon tanks, contains engine oil makeup fluid</td>
</tr>
<tr>
<td>E127</td>
<td>55 gallon drums, contains antifreeze</td>
</tr>
<tr>
<td>E128</td>
<td>750 gallon tank, contains non-PCB transformer oil</td>
</tr>
<tr>
<td>E129</td>
<td>Battery storage</td>
</tr>
<tr>
<td>E130</td>
<td>Methane purge vent</td>
</tr>
<tr>
<td>E131</td>
<td>Paved access road</td>
</tr>
<tr>
<td>E132</td>
<td>Parts Sandblasting unit</td>
</tr>
</tbody>
</table>
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. The plant wide conditions apply to all emission units at this installation. This section applies to regulations that apply on an entire-installation wide basis. The following general conditions apply to all units contained in this permit, unless stated otherwise.

None
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.

### Permit Condition 001

<table>
<thead>
<tr>
<th>2016 EIQ #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>E101</td>
<td>2235 HP Internal Combustion Engine, 15.1 MMBtu/hr, with 1.6 MW Electric Generator, Mfr: Caterpillar, Installed 2005, combusts landfill gas</td>
</tr>
<tr>
<td>E102</td>
<td>2235 HP Internal Combustion Engine, 15.1 MMBtu/hr, with 1.6 MW Electric Generator, Mfr: Caterpillar, Installed 2005, combusts landfill gas</td>
</tr>
</tbody>
</table>

**Emission and Operating Limitations:**
The permittee shall comply with the following requirements [§63.6603(a) and MACT ZZZZ Table 2d, Item 13.]:

1. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;
   a. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and
   b. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.
   c. The permittee has the option to utilize an oil analysis program as described in §63.6625(j) in order to extend the specified oil change requirement above.

**General Requirements:**
1. The permittee must be in compliance with the operating limitations and other requirements in this subpart that apply at all times. [§63.6605(a)]
2. At all times, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [§63.6605(b)]

**Monitoring:**
1. The permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop the permittee’s own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions [§63.6625(e)]
2. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2d to this subpart. The oil analysis must be performed at the same
frequency specified for changing the oil in Table 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the permittee is not required to change the oil. If any of the limits are exceeded, the permittee must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the permittee must change the oil within 2 business days or before commencing operation, whichever is later. The permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [§63.6625(j)]

**Continuous Compliance:**

1. The permittee must monitor and collect data according to the provisions of §63.6635. [§63.6635(a)]
2. Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, the permittee must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. [§63.6635(b)]
3. The permittee may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. The permittee must, however, use all the valid data collected during all other periods. [§63.6635(c)]
4. The permittee must demonstrate continuous compliance with each operating limitation according to the following methods. [§63.6640(a) and MACT ZZZZ Table 6, Item 9]
   a. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or
   b. Developing and following the permittee’s own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
5. The permittee must report each instance in which the permittee did not meet each operating limitation in Table 2d to this subpart that applies. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. [§63.6640(b)]

**Notifications, Reporting, and Recordkeeping:**

1. The permittee must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply by the dates specified. [§63.6645(a)]
2. For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. [§63.6650(b)(3)]
3. For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. [§63.6650(b)(4)]
4. For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A), the permittee may submit the subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in §63.6650(b)(3) and (4). [§63.6650(b)(5)]

5. For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31. [§63.6650(b)(8)]

6. For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31. [§63.6650(b)(9)]

7. The Compliance report must contain the information in §63.6650(c)(1) through (6). [§63.6650(c)]
   a. Company name and address. [§63.6650(c)(1)]
   b. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report. [§63.6650(c)(2)]
   c. Date of report and beginning and ending dates of the reporting period. [§63.6650(c)(3)]
   d. If the permittee had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by the permittee during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction. [§63.6650(c)(4)]
   e. If there are no deviations from any emission or operating limitations that apply, a statement that there were no deviations from the emission or operating limitations during the reporting period. [§63.6650(c)(5)]

8. For each deviation from an operating limitation that occurs, the Compliance report must contain the information in §63.6650(c)(1) through (4) and the information in §63.6650(d)(1) and (2). [§63.6650(d)]
   a. The total operating time of the stationary RICE at which the deviation occurred during the reporting period. [§63.6650(d)(1)]
   b. Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken. [§63.6650(d)(2)]

9. Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority. [§63.6650(f)]

10. The permittee must keep the records described in §63.6655(a)(1) through (a)(5), (b)(1) through (b)(3) and (c). [§63.6655(a)]
    a. A copy of each notification and report that the permittee submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that the permittee submitted, according to the requirement in §63.10(b)(2)(xvii). [§63.6655(a)(1)]
    b. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. [§63.6655(a)(2)]
c. Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii) 
   [§63.6655(a)(3)]

d. Records of all required maintenance performed on the air pollution control and monitoring 
   equipment. [§63.6655(a)(4)]

e. Records of actions taken during periods of malfunction to minimize emissions in accordance 
   with §63.6605(b), including corrective actions to restore malfunctioning process and air 
   pollution control and monitoring equipment to its normal or usual manner of operation. 
   [§63.6655(a)(5)]

11. The permittee must keep the records required in Table 6 of this subpart to show continuous 
    compliance with each operating limitation that applies. [§63.6655(d)]

12. The permittee must keep records of the maintenance conducted on the stationary RICE in order to 
    demonstrate that the permittee operated and maintained the stationary RICE and after-treatment 
    control device (if any) according to the permittee’s own maintenance plan. [§63.6655(e)]

13. If the permittee chooses to extended the specified oil change requirements for each engine using the 
    provisions of §63.6625(j), then the permittee must keep records of the parameters that are analyzed 
    as part of the program, the results of the analysis, and the oil changes for the engine. These records 
    must be kept as part of the maintenance plan for the engine. [§63.6625(j)]

14. The permittee’s records must be in a form suitable and readily available for expeditious review 
    according to §63.10(b)(1). [§63.6660(a)]

15. As specified in §63.10(b)(1), the permittee must keep each record for 5 years following the date of 
    each occurrence, measurement, maintenance, corrective action, report, or record. [§63.6660(b)]

16. The permittee must keep each record readily accessible in hard copy or electronic form for at least 5 
    years after the date of each occurrence, measurement, maintenance, corrective action, report, or 
    record, according to §63.10(b)(1). [§63.6660(c)]

17. The permittee shall report any deviations from the monitoring, recordkeeping, and reporting 
    requirements of this permit condition in the semi-annual monitoring report and annual compliance 
    certification.

<table>
<thead>
<tr>
<th>Permit Condition 002</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 CSR 10-6.260, Restriction of Emission of Sulfur Compounds</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2016 EIQ #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>E101</td>
<td>2235 HP Internal Combustion Engine with 1.6 MW Electric Generator, Mfr: Caterpillar, Installed 2005</td>
</tr>
<tr>
<td>E102</td>
<td>2235 HP Internal Combustion Engine with 1.6 MW Electric Generator, Mfr: Caterpillar, Installed 2005</td>
</tr>
</tbody>
</table>

Note: This regulation was rescinded from the code of state regulations (CSR). However, this regulation 
still contained in Missouri’s State Implementation Plan (SIP). This regulation is a federally 
enforceable requirement until it is removed from the SIP.

**Emission Limitation:**
The permittee shall not cause or permit the emission into the atmosphere gases containing more than 
five hundred parts per million by volume (500 ppmv) of sulfur dioxide of more than thirty-five 
milligrams per cubic meter (35 mg/m³) of sulfuric acid or sulfur trioxide or any combination of those 
gases averaged on any consecutive three hour time period.

**Monitoring/Recordkeeping:**
None, See Statement of Basis
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 are only excerpts from the regulation or code, and are 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) 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.

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) 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 to the director in writing at least ten days prior to any maintenance, start-up or shutdown activity 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, notice shall be given as soon as practicable prior to the activity.

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. The permittee shall retain the most current operating permit issued to this installation on-site. The permittee shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request.


The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation which would be subject to provisions for 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos.

10 CSR 10-6.100 Alternate Emission Limits

Proposals for alternate emission limitations shall be submitted on Alternate Emission Limits Permit forms provided by the department. An installation owner or operator must obtain an Alternate Emission Limits Permit in accordance with 10 CSR 10-6.100 before alternate emission limits may become effective.

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

1) The permittee shall submit a 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 a spreadsheet file, can be submitted for approval by the director.

2) 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.

3) 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.

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 10-6.165 Restriction of Emission of Odors**
This requirement is a State Only permit requirement.
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.

**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.

*Monitoring:*
The permittee shall conduct inspections of its facilities sufficient to determine compliance with this regulation. If the permittee discovers a violation, the permittee shall undertake corrective action to eliminate the violation.
The permittee shall maintain the following monitoring schedule. Issuance of a renewal operating permit does not restart the schedule.
1) The permittee shall conduct weekly observations for a minimum of eight (8) consecutive weeks after permit issuance.
2) Should no violation of this regulation be observed during this period then-
   a) The permittee may observe once every two (2) weeks for a period of eight (8) weeks.
   b) If a violation is noted, monitoring reverts to weekly.
c) Should no violation of this regulation be observed during this period then-
   i) The permittee may observe once per month.
   ii) If a violation is noted, monitoring reverts to weekly.
3) If the permittee reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner to the initial monitoring frequency.

Recordkeeping:
The permittee shall document all readings on Attachment A, or its equivalent, noting the following:
1) Whether air emissions (except water vapor) remain visible in the ambient air beyond the property line of origin.
2) Whether equipment malfunctions contributed to an exceedance.
3) Any violations and any corrective actions undertaken to correct the violation.

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 10-6.250 Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements
This requirement is a State Only permit requirement.
The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to allow the department to monitor training provided to employees.

10 CSR 10-6.280 Compliance Monitoring Usage
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:
   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; and
   c) Any other monitoring methods approved by the director.
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 at an installation:

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; and

c) Compliance test methods specified in the rule cited as the authority for the emission limitations.

3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:

a) Applicable monitoring or testing methods, cited in:
   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”; or

b) Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above.

40 CFR Part 82 Protection of Stratospheric Ozone (Title VI)

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 40 CFR §82.106.

b) The placement of the required warning statement must comply with the requirements of 40 CFR §82.108.

c) The form of the label bearing the required warning statement must comply with the requirements of 40 CFR §82.110.

d) No person may modify, remove, or interfere with the required warning statement except as described in 40 CFR §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 of 40 CFR Part 82:

a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices described in 40 CFR §82.156.

b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment described in 40 CFR §82.158.

c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR §82.161.

d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with the record keeping requirements of 40 CFR §82.166. ("MVAC-like" appliance as defined at 40 CFR §82.152).

e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to 40 CFR §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 40 CFR §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 contained 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.*
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** |
| 10 CSR 10-6.065(6)(E)3.C Extension of Expired Permits |

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. If a timely and complete application for a permit renewal is submitted, but the Air Pollution Control Program fails to take final action to issue or deny the renewal permit before the end of the term of this permit, this permit shall not expire until the renewal permit is issued or denied.

| **10 CSR 10-6.065(6)(C)1.C General Record Keeping and Reporting Requirements** |

1) **Record Keeping**
   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, Compliance and Enforcement Section, P. O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov.
   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.
   c) Each report shall identify any deviations from emission limitations, monitoring, record keeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances.
   d) Submit supplemental reports as required or as needed. 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 semiannual report shall be reported on the schedule specified in this permit.

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)**

If the installation is required to develop and register a risk management plan pursuant to Section 112(R) of the Act, the permittee will verify that it has complied with the requirement to register the plan.

**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)1.1 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 semiannually (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, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov. 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, Compliance and 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), record keeping, 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, Compliance and 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 APCP shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the APCP 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 APCP 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 permit, 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 contemporaneous written notice of the change to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219. This notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(6)(B)3 of this rule. 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)34 Responsible Official

The application utilized in the preparation of this permit was signed by David M. Fraley, Ph.D., Director-Environmental Affairs. On March 30, 2015, the Air Pollution Control Program was informed that Daniel S. Hedrick, Director-Environmental Affairs is now the responsible official. 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 shall be reopened for cause if:

1) The Missouri Department of Natural Resources (MoDNR) 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) MoDNR 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) MoDNR 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

**Fugitive Emission Observations**

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Visible Emissions</th>
<th>If visible emissions are present</th>
<th>Cause</th>
<th>Corrective Action</th>
<th>Initial</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Beyond Boundary</td>
<td>No</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1If there are visible emissions, the permittee shall conduct a Method 9 opacity observation.
STATEMENT OF BASIS

INSTALLATION DESCRIPTION

The Noble Hill Landfill Renewable Energy Center consists of two 2,235 HP engines combusting landfill gas, which power two 1.6 MW generators. The facility began operation in 2006. For permitting purposes, this facility is considered one installation with the Springfield Sanitary Landfill (ID 077-0161). Each facility is permitted separately. A Part 70 Operating Permit is required due to potential emissions of carbon monoxide greater than the major source thresholds; and the permitting requirements of 40 CFR part 60 Subpart WWW to the landfill.

The reported emissions for the last five years and the facility’s potential emissions appear in the table below. These values represent emissions from the Energy Center only. Potential emissions were calculated for the two engines using emission factors derived from performance testing for CO, NOx, and VOC, and emission factors for PM10, PM2.5 and SOx, and HAPs sourced from AP42 Section 2.4, Municipal Solid Waste Landfills.

<table>
<thead>
<tr>
<th>Pollutants</th>
<th>Reported Emissions</th>
<th>Potential Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particulate Matter ≤ Ten Microns (PM10)</td>
<td>6.08</td>
<td>4.10</td>
</tr>
<tr>
<td>Particulate Matter ≤ 2.5 Microns (PM2.5)</td>
<td>6.08</td>
<td>4.10</td>
</tr>
<tr>
<td>Sulfur Oxides (SOx)</td>
<td>2.38</td>
<td>1.61</td>
</tr>
<tr>
<td>Nitrogen Oxides (NOx)</td>
<td>23.37</td>
<td>15.77</td>
</tr>
<tr>
<td>Volatile Organic Compounds (VOC)</td>
<td>Annual emissions are reported as zero; less than 1 ton.</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Carbon Monoxide (CO)</td>
<td>107.51</td>
<td>72.55</td>
</tr>
<tr>
<td>Hazardous Air Pollutants (HAPs)</td>
<td>0.09</td>
<td>0.06</td>
</tr>
</tbody>
</table>

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 January 12, 2015;
2) 2016 Emissions Inventory Questionnaire, received March 23, 2017;
4) WebFIRE; and
5) All documents listed in Construction Permit History
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.

See Other Regulatory Determinations

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.

See Other Regulatory Determinations

Construction Permit History
The following construction permits were issued to this installation:
Construction Permit 072005-030
This permit was issued July 14, 2005 to authorize installation of the 2 internal combustion engines and the generators; as well as a gas cleanup system. The gas cleanup system was never installed. The special conditions require performance testing and updated modeling. These one time requirements were satisfied in 2006 and are not carried forward into this operating permit.

New Source Performance Standards (NSPS) Applicability
40 CFR part 60 Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984

These regulations apply to storage vessels with the following parameters:

<table>
<thead>
<tr>
<th>Rule</th>
<th>Constructed/modified/reconstructed …</th>
<th>With contents and capacities…..</th>
</tr>
</thead>
<tbody>
<tr>
<td>K</td>
<td>Between June 11, 1973 and May 19, 1978</td>
<td>Petroleum liquids, (&gt;40,000) gallons</td>
</tr>
<tr>
<td>Ka</td>
<td>Between May 18, 1978 and July 23, 1984</td>
<td>Petroleum liquids, (&gt;40,000) gallons</td>
</tr>
<tr>
<td>Kb</td>
<td>After July 23, 1984</td>
<td>Volatile organic liquids, (&gt;19,813) gallons</td>
</tr>
</tbody>
</table>

The storage vessels at this installation are less than the capacities in the applicability, therefore these regulations do not apply.

40 CFR part 60 Subpart WWW, Standards of Performance for Municipal Solid Waste Landfills
This subpart applies to each municipal solid waste landfill that commenced construction, reconstruction, or modification on or after May 30, 1991. The standards of this regulation classify landfills, with design
capacities greater than 2.5 million megagrams and 2.5 million cubic meters, into two categories: those that are required to install control devices and those that are not required to install control devices.

Currently the landfill’s NMOC emissions are less than the 50 Mg per year applicability threshold for the requirement to install controls. Once emissions reach this threshold, the engines would be considered control devices and this regulation would apply. It is unlikely that the landfill emissions will reach this threshold during the term of this operating permit, therefore this rule has not been included. If, at any point during the lifetime of this operating permit, the landfill emissions exceed this threshold, the permittee must submit an application for a permit modification.

40 CFR part 60 Subpart XXX, Standards of Performance for Municipal Solid Waste Landfills That Commenced Construction, Reconstruction, or Modification After July 17, 2014
The provisions of this subpart apply to each municipal solid waste landfill that commenced construction, reconstruction, or modification after July 17, 2014. Physical or operational changes made to an MSW landfill solely to comply with subparts Cc, Cf, or WWW of this part are not considered construction, reconstruction, or modification for the purposes of this section. On May 31, 2017, EPA published in the Federal Register a stay and reconsideration of this regulation. Therefore, this regulation does not appear in the operating permit.

40 CFR part 60 Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
This regulation applies to compression ignition engines. The engines at this installation are spark ignition engines, therefore this regulation does not apply.

40 CFR part 60 Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
This regulation applies to spark ignition engines installed after various dates, as detailed in the applicability section of the rule. For engines greater than 500 HP, all dates are after 2006. These engines were installed in 2005, therefore this regulation does not apply. The engines are subject to MACT ZZZZ.

Maximum Achievable Control Technology (MACT) Applicability
40 CFR part 63 Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
Both of these engines are greater than 500 HP, spark ignition, landfill gas fired units located at an area source of HAPs. The units were installed prior to June 12, 2006, and therefore meet the definition of existing in §63.6590(1)(iii). The applicable provisions of this regulation have been included in the operating permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability
40 CFR Part 63 Subpart AAAA, National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills
This subpart requires all landfills described in §63.1935 to meet the requirements of 40 CFR Part 60, Subpart Cc or WWW and requires timely control of bioreactors. This subpart also requires such landfills to meet the startup, shutdown, and malfunction (SSM) requirements of the general provisions of this part and provides that compliance with the operating conditions shall be demonstrated by parameter monitoring results that are within the specified ranges. It also includes additional reporting requirements.
This subpart does not apply to this installation. The installation is not required to install control equipment to comply with 40 CFR part 60 Subpart WWW at the time of permit issuance. When the landfill becomes subject to the control requirements of Subpart WWW, then the installation will also be subject to this subpart.

Acid Raid Program Applicability
The units at this installation hold new unit exemptions under §72.7. Per §72.7(b)(1), these units are exempt from the Acid Rain Program, except for the provisions of §72.7, §§72.2 through 72.6, and §§72.10 through 72.13. These sections address administrative items such as definitions, authorities, data retention, etc., and are therefore not cited in the permit as an applicable requirement.

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.

Greenhouse Gas Emissions
Note that this source currently is not subject to the Greenhouse Gas Reporting Rule since the facility is considered a separate source for greenhouse gas reporting purposes and the facility does not emit 25,000 metric tons of CO\textsubscript{2}e or more per year. Landfill gas is treated as a biomass-derived gaseous fuel and therefore do not contribute to increase emissions of greenhouse gases at the facility. However, the preamble of the GHG Reporting Rule clarifies that Part 98 requirements do not have to be incorporated in Part 70 permits operating permits at this time. In addition, Missouri regulations do not require the installation to report CO\textsubscript{2} emissions in their Missouri Emissions Inventory Questionnaire; therefore, the installation’s CO\textsubscript{2} emissions were not included within this permit. If required to report, the applicant is required to report the data directly to EPA. The public may obtain CO\textsubscript{2} emissions data by visiting http://epa.gov/ghgreporting/ghgdata/reportingdatasets.html.

Other Regulatory Determinations
10 CSR 10-6.220, Restriction of Emission of Visible Air Contaminants
This regulation applies to all sources of visible emissions, unless the emission unit meets an exemption. The internal combustion engines meet exemption (1)(A), the sandblaster emits into a room and meets exemption (1)(O), all other sources are fugitive and meet exemption (1)(K). Therefore this regulation does not apply.

10 CSR 10-6.260, Restriction of Emission of Sulfur Compounds
This regulation was rescinded from the code of state regulations (CSR). However, this regulation is still contained in Missouri’s State Implementation Plan (SIP). This regulation is a federally enforceable requirement until it is removed from the SIP, therefore it must appear in this Operating Permit.
This regulation applies to the engines and appears as a permit condition. According to both the draft and final versions of AP42, Section 2.4, Municipal Solid Waste Landfills, the sulfur content of landfill gas can be estimated at approximately 47 ppmv. This much less than the limit imposed by this regulation, therefore no monitoring or recordkeeping is required in this permit.

10 CSR 10-6.261, *Control of Sulfur Dioxide Emissions*
This regulation applies to all sources of sulfur dioxide. There are no provisions in the regulation for combustion of landfill gas, therefore the engines are not subject to this regulation.

10 CSR 10-6.400, *Restriction of Emission of Particulate Matter From Industrial Processes*
The particulate emissions from the engines are caused by the combustion of gaseous fuels, which do not meet the definition of process weight. The particulate emissions from the other emission units are considered fugitive and meet exemption (1)(B)7. The sandblast unit has an inherent baghouse and has controlled emissions less than 0.5 lb/hr. Therefore this regulation does not apply.

**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 APCP'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 APCP a schedule for achieving compliance for that regulation(s).
Response to Public Comments

The draft Part 70 Operating Permit for Noble Hill Landfill Renewable Energy Center was placed on public notice November 3, 2017 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. Public comments were received from Ms. Leslye Werner, EPA Region 7. The comments are addressed in the order in which they appear within the letter.

Comment #1: Permit Condition 001 is included in the draft operating permit to incorporate the applicable requirements from 40 CFR Part 63, Subpart ZZZZ-National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. It appears that MDNR is attempting to incorporate the applicable requirements by reference (IBR) from the Maximum Achievable Control Technology (MACT) regulations. One of the goals of the Title V (Part 70) operating permit program is that both the source and the permitting authority gain a better understanding of the specific requirements applicable to the source which in turn would lead to improved compliance. There is value to be gained by a source and the permit writer by studying the specific requirements of specific standards, culling out those requirements that apply to a source and translating them in a logical fashion as operating permit conditions. Through this exercise, the source, the permit writer, the public, and EPA gain a better understanding of the requirements in general, as well as how the standard(s) specifically affect the permitted source. Therefore, the use of incorporation by reference (IBR) must balance "simplicity" of IBR with "precision"; the need to create unambiguous, comprehensive operating permits tailored to the specific source. It is EPA's guidance, to permitting authorities, that all emission limits, standards, monitoring, record keeping, and reporting and general and continuing compliance determination methods, applicable to the specific emission unit(s), be clearly incorporated into the permit. Additionally, Permit Condition 001 includes several references to "in this subpart;" "of this subpart;" and "with this subpart" and operating permits do not normally contain "subparts." Therefore, EPA encourages MDNR consider clearly incorporating standards; general and continuing compliance requirements; and deviations in Permit Condition 001, with appropriate regulatory citation.

Also, Permit Condition 001 allows the permittee the option of utilizing an oil analysis program in order to extend the specified oil change requirements. This oil analysis program requires the permittee to monitor and compare Total Acid Number, viscosity, and percent water content against condemning limits. However, Permit Condition 001 does not appear to include a requirement for the permittee to maintain any oil analysis program compliance verification records. Therefore, the oil analysis program, if used by the permittee, may not be practically enforceable. EPA recommends MDNR consider including oil program analysis record keeping requirements in Permit Condition 001 to ensure the collection of verifiable compliance information.

Response to Comment #1: Permit Condition 001 does not utilize incorporation by reference (IBR). The language in the permit condition has been culled and tailored to the installation, with citations following all requirements, as described in the comment. The permit condition contains the requirements of §63.6625(j), which require the permittee to maintain compliance records for the oil
analysis program. To add clarity, the recordkeeping requirements of §63.6625(j) have been added as a new Recordkeeping #13, with the remaining requirements renumbered accordingly.

Comment #2: Permit Condition 002 includes a footnote which states:
"This regulation was rescinded from the code of state regulations (CSR). However, this regulation is still contained in Missouri's State Implementation Plan (SIP). This regulation is a *federally enforceable requirement* (emphasis added) until it is removed from the SIP."

The requirements incorporated into the Missouri SIP are applicable to appropriate Missouri facilities and therefore, EPA encourages MDNR consider revising this footnote to improve its accuracy by removing the "This regulation is a *federally enforceable requirement until it is removed from the SIP* (emphasis added)" language.

Response to Comment #2: As noted in the comment, the notation indicating this requirement is federally enforceable is correct. Therefore no changes have been made.

Comment #3: The Installation Description indicates that 40 CPR part 60, Subpart WWW is applicable to Noble Hill Landfill Renewable Energy Center. Additionally, the Statement of Basis indicates that it is unlikely that the landfill emissions will reach the applicability threshold for the requirement to install controls.

The Statement of Basis also states that if at any point during the lifetime of this operating permit, the landfill emissions exceed the threshold, the permittee must submit an application for a permit modification. However, if 40 CPR part 60, Subpart WWW applies, then it appears to EPA that the requirements of §60.752(b)(1)(ii) are applicable to Noble Hill Landfill Renewable Energy Center and MDNR should consider including them in this operating permit.

Response to Comment #3: The Noble Hill Landfill Renewable Energy Center and the City of Springfield Sanitary Landfill are considered one installation for permitting purposes, however each entity has obtained a separate Part 70 Operating Permit. The City of Springfield Sanitary Landfill currently holds Operating Permit OP2015-050, which does contain the applicable language from §60.752(b)(1)(ii). The reference to Subpart WWW has been removed from the installation description.
FEB 02 2018

Mr. Daniel S. Hedrick  
Noble Hill Landfill Renewable Energy Center  
P.O. Box 551  
Springfield, MO 65801

Re: Part 70 Operating Permit Renewal  
Installation ID: 077-0170, Permit Number: OP2018-015

Dear Mr. Hedrick:

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.

This permit may include requirements with which you may not be familiar. If you would like the department to meet with you to discuss how to understand and satisfy the requirements contained in this permit, an appointment referred to as a Compliance Assistance Visit (CAV) can be set up with you. To request a CAV, please contact your local regional office or fill out an online request. The regional office contact information can be found at http://dnr.mo.gov/regions/. The online CAV request can be found at http://dnr.mo.gov/cav/compliance.htm.

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 contact the Air Pollution Control Program (APCP) at (573) 751-4817, or you may write to the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

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

MJS:nwj

Enclosures

c: PAMS File: 2015-01-017