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: OP2019-019
Expiration Date: MAY 3 1 2024
Installation ID: 189-0312
Project Number: 2014-09-028

Installation Name and Address
Bridgeton Landfill, LLC
13570 St. Charles Rock Road
Bridgeton, MO 63044
St. Louis County

Parent Company's Name and Address
Bridgeton Landfill, LLC
13570 St. Charles Rock Road
Bridgeton MO, 63044

Installation Description:
Bridgeton Landfill, LLC owns and operates a municipal solid waste landfill located at 13570 Saint Charles Rock Road in Bridgeton, Missouri. Bridgeton began landfilling operations in 1952 and has been closed since 2005, with a final capacity at closure of approximately 17,000,000 cubic yards. Current activities are associated with leachate and landfill gas management at the facility. Landfill gas is managed and controlled through the use of a gas collection and control system (GCCS). Additionally, the facility treats leachate onsite at a leachate pretreatment plant (LPTP). LPTP emissions are controlled by two natural gas fired thermal oxidizers, 2.75 MMBtu/hr each. The installation must obtain a Part 70 Operating Permit due to the provisions of 40 CFR part 60 Subpart WWW, Standards of Performance for Municipal Solid Waste Landfills.

Director or Designee
Department of Natural Resources

MAY 3 1 2019
Effective Date

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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.

Emission Point #	Unit Description
	Landfill with GCCS
EP-011	Flare #1: 3,500 SCFM John Zink open candlestick flare, installed 2012.
EP-012	Flare #2: 4,000 SCFM John Zink open candlestick flare, installed 2013.
EP-013	Flare #3: 4,000 SCFM John Zink open candlestick flare, installed 2013.
EP-014	Flare LFG CSU: 2,500 SCFM LFG Specialties open candlestick flare, installed 2013.
EP-016a	316,000 gallon leachate treatment tank
EP-017a	4-1 million gallon leachate treatment tanks (Tanks 1 through 4)
EP-018a	LMS RTO #1: 2.75 MMBtu/hr Cycle Therm regenerative thermal oxidizer used to control emissions from Leachate Management System (LMS) pretreatment and aeration tanks. Combusts natural gas.
EP-018b	LMS RTO #2: 2.75 MMBtu/hr Cycle Therm regenerative thermal oxidizer used to control emissions from Leachate Management System (LMS) pretreatment and aeration tanks. Combusts natural gas.
EP-019	1000 kW emergency generator, 9.87 MMBtu/hr, Caterpillar Model No. SR5, Engine Model C32 TA, 4 stroke, 32.10 Displacement, 12 cylinder. Combusts #2 fuel oil. Located in main flare yard. Constructed 4/11/13
EP-021	543 kW, 4.78 MMBtu/hr emergency generator, Perkins Model 2506C-E15TAG3. Combusts #2 fuel oil. Constructed 6/10/14.
EP-024	177 kW John Deere Model 6068HF285 emergency generator located adjacent to an auxiliary flare. 6 cyl, 6.8 L, 237 HP. Combusts #2 fuel oil. Constructed April 18, 2018
EP-I09	Storage tank, #2 fuel oil, 500 gallon capacity
EP-I10	24 leachate frac tanks, 21,000 gallon capacity each
EP-I11	LMS treated leachate tank, discharges to MSD, 97,000 gallon capacity
EP-023	Elevated Soda Ash Storage Silo with Baghouse, located at WWTP

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.

Emission Point #	Description of Emission Unit
	Haul Roads
	MSD-PS1 Carbon Absorption System

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.

Permit Condition Subpart M

10 CSR 10-6.080, Emission Standards for Hazardous Air Pollutants, and
40 CFR 61 Subpart M, National Emission Standard for Asbestos

Emission/Operational Limitations:

1. The permittee shall comply with one of the following: [§61.151(a)]
   a. Either discharge no visible emissions to the outside air from an inactive waste disposal site subject to §61.151; or [§61.151(a)(1)]
   b. Cover the asbestos-containing waste material with at least 15 centimeters (6 inches) of compacted nonasbestos-containing material, and grow and maintain a cover of vegetation on the area adequate to prevent exposure of the asbestos-containing waste material. In desert areas where vegetation would be difficult to maintain, at least 8 additional centimeters (3 inches) of well-graded, nonasbestos crushed rock may be placed on top of the final cover instead of vegetation and maintained to prevent emissions; or [§61.151(a)(2)]
   c. Cover the asbestos-containing waste material with at least 60 centimeters (2 feet) of compacted nonasbestos-containing material, and maintain it to prevent exposure of the asbestos-containing waste; or [§61.151(a)(3)]
   d. For inactive waste disposal sites for asbestos tailings, a resinous or petroleum-based dust suppression agent that effectively binds dust to control surface air emissions may be used instead of the methods in §61.151(a)(1), (2), and (3). The permittee shall use the agent in the manner and frequency recommended for the particular asbestos tailings by the manufacturer of the dust suppression agent to achieve and maintain dust control. The permittee shall obtain prior written approval of the director to use other equally effective dust suppression agents. For purposes of §61.151, any used, spent, or other waste oil is not considered a dust suppression agent. [§61.151(a)(4)]
2. Unless a natural barrier adequately deters access by the general public, the permittee shall install and maintain warning signs and fencing as follows, or comply with §61.151(a)(2) or (a)(3). [§61.151(b)]
   a. The permittee shall display warning signs at all entrances and at intervals of 100 m (328 ft) or less along the property line of the site or along the perimeter of the sections of the site where asbestos-containing waste material was deposited. The warning signs must: [§61.151(b)(1)]
      i. Be posted in such a manner and location that a person can easily read the legend; and [§61.151(b)(1)(i)]
      ii. Conform to the requirements for 51 cm × 36 cm (20″ × 14″) upright format signs specified in 29 CFR 1910.145(d)(4) and §61.151; and [§61.151(b)(1)(ii)]
      iii. Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in §61.151. Spacing between any two lines must be at least equal to the height of the upper of the two lines. [§61.151(b)(1)(iii)]

Table 1: Legend Requirements

Legend	Notation
Asbestos Waste Disposal Site	2.5 cm (1 inch) Sans Serif, Gothic or Block
Do Not Create Dust	1.9 cm (¾ inch) Sans Serif, Gothic or Block
Breathing Asbestos is Hazardous to Your Health	14 Point Gothic

   b. Fence the perimeter of the site in a manner adequate to deter access by the general public. [§61.151(b)(2)]
   c. When requesting a determination on whether a natural barrier adequately deters public access, supply information enabling the director to determine whether a fence or a natural barrier adequately deters access by the general public. [§61.151(b)(3)]
3. The permittee may use an alternative control method that has received prior approval of the Administrator rather than comply with the requirements of §61.151(a) or (b). [§61.151(c)]
4. The permittee shall notify the director in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site under §61.151, and follow the procedures specified in the notification. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the director at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice: [§61.151(d)]
   a. Scheduled starting and completion dates. [§61.151(d)(1)]
   b. Reason for disturbing the waste. [§61.151(d)(2)]
   c. Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the director may require changes in the emission control procedures to be used. [§61.151(d)(3)]
   d. Location of any temporary storage site and the final disposal site. [§61.151(d)(4)]

Recordkeeping/Reporting:

1. The permittee shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Saint Louis County Department of Health or Missouri Department of Natural Resources' personnel upon request.
2. The permittee shall report any exceedance of the emission limitation of §61.151(a)(1) no later than ten days after the end of the month during which any record shows an exceedance of the emissions limitation.
3. The permittee shall report any deviations from the operational limitations of §61.151(a)(2) through (4) and §61.151(b) through (d), recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification.
4. All reports and certifications shall be submitted to the Missouri Department of Natural Resources Air Pollution Control Program's Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov; and to the St. Louis County Department of Health Air Pollution Control Program, 6121 N. Hanley Rd, Berkeley, MO 63134.

Permit Condition 042018-005
Permit Condition 6.065

10 CSR 10-6.060, Construction Permits Required
Construction Permit 042018-005, Issued April 3, 2018
Construction Permit Amendment 042018-005A, Issued June 21, 2018
10 CSR 10-6.065, Operating Permits, Voluntary Condition

Emission Limitation:

1. Special Condition #2.A.: The permittee shall emit less than 100.0 tons of sulfur dioxide (SO_2) in any consecutive 12-month period from the entire installation.
2. Voluntary Condition: The permittee shall include emissions from the emergency generator, EP-024, in the sulfur dioxide emission limitation.[1]

Operational Limitation:

1. Special Condition #3.A.: The permittee shall combust the landfill gas collected by the gas collection system using flares (EP-011, EP-012, EP-013, and EP-014).
2. Special Condition #3.D.: For units that combust fuel oil, the permittee shall only combust fuel oil with a sulfur content of 15 ppmv or less.

Compliance Demonstrations:

1. Special Condition #3.C.: As long as the permittee is subject to 40 CFR 60 Subpart WWW or 10 CSR 10-5.490, the permittee shall demonstrate compliance with 40 CFR §60.18 and §60.754 by performing monthly sampling at the flares. The permittee shall keep records of all test results and any corrective actions taken.
2. Special Condition #4: Landfill Gas Flow Monitoring and Landfill Gas Sulfur Content Sampling
   a. Special Condition #4.A.: Landfill gas flow rates
      i. Special Condition #4.A.1): The permittee shall install and operate flow meters at each flare (EP-011, EP-012, EP-013, and EP-014) and the main blower station to quantify the gas flow rate. Each flow meter shall be measured and recorded separately. Flare flow rates shall be recorded at least every 15 minutes, consistent with 60.756(c)(2)(i).
      ii. Special Condition #4.A.2): The permittee shall operate and maintain all flow meters used for any compliance demonstrations in accordance with the manufacturer's specifications, which shall be kept on site. All flow meters used for compliance demonstrations must be directly calibrated using EPA Methods on a monthly basis.
   b. Special Condition #4.B.: Landfill gas sulfur content
      i. Special Condition #4.B.1): The permittee shall collect landfill gas samples at the main blower station using summa canisters.
      ii. Special Condition #4.B.2): The permittee shall conduct testing on the landfill gas samples to quantify sulfur compounds using ASTM D5504-12 or an alternative approved by the Air Pollution Control Program's Compliance and Enforcement Section. Testing results shall be in units of ppmv.

[1] EP-024 Emergency generator was installed after issuance of the construction permit. Special Condition #2.A. only applies to equipment that existed at the time of construction permit issuance. To maintain minor NSR status, the installation must include the sulfur dioxide emissions from EP-024 into the installation wide sulfur dioxide emissions limitation.

iii. Special Condition #4.B.3): The permittee shall conduct sampling on the frequency detailed in Table 2. The SO_2 emissions shall be calculated using Attachment 042018-005, or an equivalent.

Table 2: LFG Sulfur Content Sampling Frequency

SO_2 Emissions	Sampling shall be performed a minimum of….
For the first six months after the effective date of this permit or until 12 month rolling total emissions are less than or equal to 75 tons, whichever is later:	Twice per month, with testing being between 12 and 18 days apart
If 12 month rolling total emissions are less than 75 tons but greater than or equal to 50 tons:	Monthly.
If 12 month rolling total emissions are less than 50 tons.	Annually, to be conducted between 11 and 13 months from the previous test.

Exceedances:

1. Special Condition #7: If the records required by this permit show the permittee exceeds the SO_2 emission limitations, the permittee shall submit an application to obtain a new construction permit, which is based upon the current level of emissions, within 60 days of the date the emission limit is exceeded.

Recordkeeping:

1. Special Condition #3.B.: The permittee shall maintain an operating and maintenance log for all flares (EP-011, EP-012, EP-013, and EP-014) which shall include the following. The permittee shall use Attachment Inspection/Maintenance/Repair/Malfunction Log, or an equivalent to satisfy this requirement.
   a. Special Condition #3.B.1): Dates of all incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
   b. Special Condition #3.B.2): Dates of all maintenance activities, with inspection schedule, repair actions, and replacements.
2. Special Condition #4.A.3): The permittee shall maintain an operating and maintenance log for all flow meters used for compliance demonstrations which shall include the following. The permittee shall use Attachment Inspection/Maintenance/Repair/Malfunction Log, or an equivalent to satisfy this requirement.
   a. Special Condition #4.A.3)a): Dates of all incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
   b. Special Condition #4.A.3)b): Dates of all maintenance activities, with inspection schedule, repair actions, and replacements.
3. Special Condition #6.A.: The permittee shall use Attachment 042018-005, or equivalent, to determine the monthly SO_2 emissions from the entire installation. This calculation shall be used to determine compliance with the emission limitation.

4. The permittee shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Saint Louis County Department of Health or Missouri Department of Natural Resources' personnel upon request.

Reporting:

1. The permittee shall report any exceedance of the emission limitation no later than ten days after the end of the month during which any record shows an exceedance of the emissions or operational limitation.
2. 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.
3. All reports and certifications shall be submitted to the Missouri Department of Natural Resources Air Pollution Control Program's Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov; and to the St. Louis County Department of Health Air Pollution Control Program, 6121 N. Hanley Rd, Berkeley, MO 63134.

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 WWW 10 CSR 10-6.070 New Source Performance Regulations 40 CFR Part 60, Subpart A General Provisions 40 CFR Part 60, Subpart WWW Standards of Performance for Municipal Solid Waste Landfills	
EP #	Description
	Landfill with Gas Collection and Control System
EP-011	Flare #1: 3,500 SCFM John Zink open candlestick flare, installed 2012.
EP-012	Flare #2: 4,000 SCFM John Zink open candlestick flare, installed 2013.
EP-013	Flare #3: 4,000 SCFM John Zink open candlestick flare, installed 2013.
EP-014	Flare LFG CSU: 2,500 SCFM LFG Specialties open candlestick flare, installed 2013.

Emission Limitations:

1. The permittee shall comply with the following requirements:
   a. Install a collection and control system that captures the gas generated within the landfill as required by §60.752(b)(2)(ii)(A) and (b)(2)(iii). [§60.752(b)(2)(ii)]
      i. An active collection system shall: [§60.752(b)(2)(ii)(A)]
         A. Be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment; [§60.752(b)(2)(ii)(A)(1)]
         B. Collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of: [§60.752(b)(2)(ii)(A)(2)]
            i) 5 years or more if active; or [§60.752(b)(2)(ii)(A)(2)(i)]
            ii) 2 years or more if closed or at final grade. [§60.752(b)(2)(ii)(A)(2)(ii)]
         C. Collect gas at a sufficient extraction rate; [§60.752(b)(2)(ii)(A)(3)]
         D. Be designed to minimize off-site migration of subsurface gas. [§60.752(b)(2)(ii)(A)(4)]
   b. Route all the collected gas to a control system that complies with the requirements in either §60.752(b)(2)(iii) (A) or (C). [§60.752(b)(2)(iii)]
      i. An open flare designed and operated in accordance with §60.18 except as noted in §60.754(e); [§60.752(b)(2)(iii)(A)]
   c. Operate the collection and control device installed to comply with this subpart in accordance with the provisions of §§60.753, 60.755 and 60.756. [§60.752(b)(2)(iv)]
   d. The collection and control system may be capped or removed provided that all the conditions of §60.752(b)(2)(v) (A), (B), and (C) are met: [§60.752(b)(2)(v)]
      i. The landfill shall be a closed landfill as defined in §60.751 of this subpart. A closure report shall be submitted to the director as provided in §60.757(d); [§60.752(b)(2)(v)(A)]
      ii. The collection and control system shall have been in operation a minimum of 15 years; and [§60.752(b)(2)(v)(B)]
      iii. Following the procedures specified in §60.754(b) of this subpart, the calculated NMOC gas produced by the landfill shall be less than 50 megagrams per year on three successive test

dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart. [§60.752(b)(2)(v)(C)]

2. When a MSW landfill subject to this subpart is closed, the permittee is no longer subject to the requirement to maintain an operating permit under part 70 of this chapter for the landfill if the landfill is not otherwise subject to the requirements of part 70 and if either of the following conditions are met: [§60.752(d)]
   a. The permittee meets the conditions for control system removal specified in §60.752(b)(2)(v). [§60.752(d)(2)]

Operational Standards for Collection and Control Systems:

The permittee shall comply with the following requirements:

1. Operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for: [§60.753(a)]
   a. 5 years or more if active; or [§60.753(a)(1)]
   b. 2 years or more if closed or at final grade; [§60.753(a)(2)]
2. Operate the collection system with negative pressure at each wellhead except under the following conditions: [§60.753(b)]
   a. A fire or increased well temperature. The permittee shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in §60.757(f)(1); [§60.753(b)(1)]
   b. Use of a geomembrane or synthetic cover. The permittee shall develop acceptable pressure limits in the design plan; [§60.753(b)(2)]
   c. A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the director; [§60.753(b)(3)]
3. Operate each interior wellhead in the collection system with a landfill gas temperature less than 55 °C and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The permittee may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens. [§60.753(c)]
   a. The nitrogen level shall be determined using 40 CFR part 60, Appendix A-2 Method 3C, unless an alternative test method is established as allowed by §60.752(b)(2)(i). [§60.753(c)(1)]
   b. Unless an alternative test method is established as allowed by §60.752(b)(2)(i), the oxygen shall be determined by an oxygen meter using 40 CFR part 60, Appendix A-2 Method 3A or 3C except that: [§60.753(c)(2)]
      i. The span shall be set so that the regulatory limit is between 20 and 50 percent of the span; [§60.753(c)(2)(i)]
      ii. A data recorder is not required; [§60.753(c)(2)(ii)]
      iii. Only two calibration gases are required, a zero and span, and ambient air may be used as the span; [§60.753(c)(2)(iii)]
      iv. A calibration error check is not required; [§60.753(c)(2)(iv)]
      v. The allowable sample bias, zero drift, and calibration drift are ±10 percent. [§60.753(c)(2)(v)]
4. Operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the permittee shall conduct surface testing around the perimeter of the collection area and along a pattern that

traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The permittee may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing. [§60.753(d)]

5. Operate the system such that all collected gases are vented to a control system designed and operated in compliance with §60.752(b)(2)(iii). In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour; and [§60.753(e)]
6. Operate the control or treatment system at all times when the collected gas is routed to the system. [§60.753(f)]
7. If monitoring demonstrates that the operational requirements in §60.753(b), (c), or (d) are not met, corrective action shall be taken as specified in §60.755(a)(3) through (5) or §60.755(c). If corrective actions are taken as specified in §60.755, the monitored exceedance is not a violation of the operational requirements in this section. [§60.753(g)]

Test Methods and Procedures:

1. After the installation of a collection and control system in compliance with §60.755, the permittee shall calculate the NMOC emission rate for purposes of determining when the system can be removed as provided in §60.752(b)(2)(v), using the procedures in §60.754(b).
2. When calculating emissions for PSD purposes, the permittee shall estimate the NMOC emission rate for comparison to the PSD major source and significance levels in §§51.166 or 52.21 of this chapter using AP-42 or other approved measurement procedures. [§60.754(c)]
3. For the performance test required in §60.752(b)(2)(iii)(A), the permittee shall comply with the provisions of §60.754(e).

Compliance Provisions:

1. The permittee shall use the methods specified in §60.755(a)(1) through (a)(6) to determine whether the gas collection system is in compliance with §60.752(b)(2)(ii). [§60.755(a)]
2. For purposes of compliance with §60.753(a), the permittee of a controlled landfill shall place each well or design component as specified in the approved design plan as provided in §60.752(b)(2)(i). Each well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of: [§60.755(b)]
   a. 5 years or more if active; or [§60.755(b)(1)]
   b. 2 years or more if closed or at final grade. [§60.755(b)(2)]
3. The permittee shall use the following procedures for compliance with the surface methane operational standard as provided in §60.753(d). [§60.755(c)]
   a. After installation of the collection system, the permittee shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals (or a site-specific established spacing) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in §60.755(d). [§60.755(c)(1)]
   b. The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells. [§60.755(c)(2)]

c. Surface emission monitoring shall be performed in accordance with section 4.3.1 of Method 21 of appendix A of this part, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions. [§60.755(c)(3)]
d. Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified in §60.755(c)(4)(i) through (v) shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of §60.753(d). [§60.755(c)(4)]
   i. The location of each monitored exceedance shall be marked and the location recorded. [§60.755(c)(4)(i)]
   ii. Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be re-monitored within 10 calendar days of detecting the exceedance. [§60.755(c)(4)(ii)]
   iii. If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified in §60.755(c)(4)(v) shall be taken, and no further monitoring of that location is required until the action specified in §60.755(c)(4)(v) has been taken. [§60.755(c)(4)(iii)]
   iv. Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified in §60.755(c)(4)(ii) or (iii) shall be re-monitored 1 month from the initial exceedance. If the 1-month remonitoring shows a concentration less than 500 parts per million above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month remonitoring shows an exceedance, the actions specified in §60.755(c)(4)(iii) or (v) shall be taken. [§60.755(c)(4)(iv)]
   v. For any location where monitored methane concentration equals or exceeds 500 parts per million above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the director for approval. [§60.755(c)(4)(v)]
e. The permittee shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis. [§60.755(c)(5)]

4. The permittee seeking to comply with the provisions in §60.755(c) shall comply with the following instrumentation specifications and procedures for surface emission monitoring devices. [§60.755(d)]
   a. The portable analyzer shall meet the instrument specifications provided in section 3 of Method 21 of appendix A of this part, except that "methane" shall replace all references to VOC. [§60.755(d)(1)]
   b. The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air. [§60.755(d)(2)]
   c. To meet the performance evaluation requirements in section 3.1.3 of Method 21 of appendix A of this part, the instrument evaluation procedures of section 4.4 of Method 21 of appendix A of this part shall be used. [§60.755(d)(3)]
   d. The calibration procedures provided in section 4.2 of Method 21 of appendix A of this part shall be followed immediately before commencing a surface monitoring survey. [§60.755(d)(4)]

5. The provisions of this subpart apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices. [§60.755(e)]

Monitoring:

The permittee shall comply with the following:

1. The permittee seeking to comply with §60.752(b)(2)(ii)(A) for an active gas collection system shall install a sampling port and a thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead and: [§60.756(a)]
   a. Measure the gauge pressure in the gas collection header on a monthly basis as provided in §60.755(a)(3); and [§60.756(a)(1)]
   b. Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in §60.755(a)(5); and [§60.756(a)(2)]
   c. Monitor temperature of the landfill gas on a monthly basis as provided in §60.755(a)(5). [§60.756(a)(3)]
2. The permittee seeking to comply with §60.752(b)(2)(iii) using an open flare shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment: [§60.756(c)]
   a. A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame. [§60.756(c)(1)]
   b. A device that records flow to or bypass of the flare. The permittee shall either: [§60.756(c)(2)]
      i. Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or [§60.756(c)(c)(i)]
      ii. Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line. [§60.756(c)(2)(ii)]
3. The permittee seeking to install a collection system that does not meet the specifications in §60.759 or seeking to monitor alternative parameters to those required by §60.753 through §60.756 shall provide information satisfactory to the director as provided in §60.752(b)(2)(i) (B) and (C) describing the design and operation of the collection system, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The director may specify additional appropriate monitoring procedures. [§60.756(e)]
4. The permittee seeking to demonstrate compliance with §60.755(c), shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in §60.755(d). Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring. [§60.756(f)]

Operation, Maintenance, and Malfunction Plan (OM&M Plan):

The permittee shall comply with the approved OM&M Plan. If there are differences between NSPS WWW and the OM&M Plan, the OM&M Plan controls.

Reporting:

The permittee shall comply with the following:

1. The permittee of a controlled landfill shall submit an equipment removal report to the director 30 days prior to removal or cessation of operation of the control equipment. [§60.757(e)]
   a. The equipment removal report shall contain all of the following items: [§60.757(e)(1)]
      i. A copy of the closure report submitted in accordance with §60.757(d); [§60.757(e)(1)(i)]
      ii. A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired; and [§60.757(e)(1)(ii)]
      iii. Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year. [§60.757(e)(1)(iii)]
   b. The director may request such additional information as may be necessary to verify that all of the conditions for removal in §60.752(b)(2)(v) have been met. [§60.757(e)(2)]
2. The permittee seeking to comply with §60.752(b)(2) using an active collection system designed in accordance with §60.752(b)(2)(ii) shall submit to the director annual reports of the recorded information in §60.757(f)(1) through (f)(6). For flares, reportable exceedances are defined under §60.758(c). [§60.757(f)]
   a. Value and length of time for exceedance of applicable parameters monitored under §60.756(a), (b), (c), and (d). [§60.757(f)(1)]
   b. Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under §60.756. [§60.757(f)(2)]
   c. Description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not operating. [§60.757(f)(3)]
   d. All periods when the collection system was not operating in excess of 5 days. [§60.757(f)(4)]
   e. The location of each exceedance of the 500 parts per million methane concentration as provided in §60.753(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month. [§60.757(f)(5)]
   f. The date of installation and the location of each well or collection system expansion added pursuant to §60.755(a)(3), (b), and (c)(4). [§60.757(f)(6)]
3. 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.
4. All reports and certifications shall be submitted to the Missouri Department of Natural Resources Air Pollution Control Program's Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov; and to the St. Louis County Department of Health Air Pollution Control Program, 6121 N. Hanley Rd, Berkeley, MO 63134.

Recordkeeping:

1. The permittee subject to the provisions of §60.752(b) shall keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report which triggered §60.752(b), the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable. [§60.758(a)]
2. The permittee of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in §60.758(b)(1) through (b)(4) as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring

shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal. [§60.758(b)]

a. Where the permittee subject to the provisions of this subpart seeks to demonstrate compliance with §60.752(b)(2)(ii): [§60.758(b)(1)]
   i. The maximum expected gas generation flow rate as calculated in §60.755(a)(1). The permittee may use another method to determine the maximum gas generation flow rate, if the method has been approved by the director. [§60.758(b)(1)(i)]
   ii. The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in §60.759(a)(1). [§60.758(b)(1)(ii)]
b. Where the permittee seeks to demonstrate compliance with §60.752(b)(2)(iii)(A) through use of an open flare, the flare type (i.e., steam-assisted, air-assisted, or nonassisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in §60.18; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent. [§60.758(b)(4)]

3. The permittee of a controlled landfill subject to the provisions of this subpart shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in §60.756 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded. [§60.758(c)]
   a. The permittee shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under §60.756. [§60.758(c)(2)]
   b. The permittee seeking to comply with the provisions of this subpart by use of an open flare shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under §60.756(c), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent. [§60.758(c)(4)]
4. The permittee shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector. [§60.758(d)]
   a. The permittee shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under §60.755(b). [§60.758(d)(1)]
   b. The permittee shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in §60.759(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in §60.759(a)(3)(ii). [§60.758(d)(2)]
5. The permittee shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in §60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance. [§60.758(e)]
6. The permittee shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Saint Louis County Department of Health or Missouri Department of Natural Resources' personnel upon request.

Permit Condition AAAA 10 CSR 10-6.075 Maximum Achievable Control Technology Regulations 40 CFR Part 63, Subpart A General Provisions 40 CFR Part 63, Subpart AAAA National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills	
EP #	Description
	Landfill with Gas Collection and Control System
EP-011	Flare #1: 3,500 SCFM John Zink open candlestick flare, installed 2012.
EP-012	Flare #2: 4,000 SCFM John Zink open candlestick flare, installed 2013.
EP-013	Flare #3: 4,000 SCFM John Zink open candlestick flare, installed 2013.
EP-014	Flare LFG CSU: 2,500 SCFM LFG Specialties open candlestick flare, installed 2013.

Standards

1. The permittee must comply with the requirements of 40 CFR part 60, subpart WWW. [§63.1955(a)(1)]
2. The permittee must comply with the requirements in §§63.1960 through 63.1985 and with the general provisions of this part specified in table 1 of this subpart. [§63.1955(b)]
3. For approval of collection and control systems that include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions, you must follow the procedures in 40 CFR 60.752(b)(2). If alternatives have already been approved under 40 CFR part 60 subpart WWW or the Federal plan, or EPA approved and effective State or tribal plan, these alternatives can be used to comply with this subpart, except that all affected sources must comply with the SSM requirements in Subpart A of this part as specified in Table 1 of this subpart and all affected sources must submit compliance reports every 6 months as specified in §63.1980(a) and (b), including information on all deviations that occurred during the 6-month reporting period. Deviations for continuous emission monitors or numerical continuous parameter monitors must be determined using a 3 hour monitoring block average. [§63.1955(c)]

General and Continuing Compliance Requirements

1. Compliance is determined in the same way it is determined for 40 CFR part 60, subpart WWW, including performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence. In addition, continuous parameter monitoring data, collected under 40 CFR 60.756(b)(1), (c)(1), and (d) of subpart WWW, are used to demonstrate compliance with the operating conditions for control systems. If a deviation occurs, you have failed to meet the control device operating conditions described in this subpart and have deviated from the requirements of this subpart. Finally, you must develop a written SSM plan according to the provisions in 40 CFR 63.6(e)(3). A copy of the SSM plan must be maintained on site. Failure to write or maintain a copy of the SSM plan is a deviation from the requirements of this subpart. [§63.1960]

Deviations

1. A deviation is defined in §63.1990. For the purposes of the landfill monitoring and SSM plan requirements, deviations include the items in §63.1965(a) through (c).
   a. A deviation occurs when the control device operating parameter boundaries described in 40 CFR 60.758(c)(1) of subpart WWW are exceeded. [§63.1965(a)]

b. A deviation occurs when 1 hour or more of the hours during the 3-hour block averaging period does not constitute a valid hour of data. A valid hour of data must have measured values for at least three 15-minute monitoring periods within the hour. [§63.1965(b)]
c. A deviation occurs when a SSM plan is not developed or maintained on site. [§63.1965(c)]

Three hour block average calculations:

1. Averages are calculated in the same way as they are calculated in 40 CFR part 60, subpart WWW, except that the data collected during the events listed in §63.1975(a), (b), (c), and (d) are not to be included in any average computed under this subpart:
   a. Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments. [§63.1975(a)]
   b. Startups. [§63.1975(b)]
   c. Shutdowns. [§63.1975(c)]
   d. Malfunctions. [§63.1975(d)]

Operation, Maintenance, and Malfunction Plan (OM&M Plan):

1. The permittee shall comply with the approved OM&M Plan. If there are differences between MACT AAAA and the OM&M Plan, the OM&M Plan controls.

Notifications, Records, and Reports

1. The permittee shall keep records and reports as specified in 40 CFR part 60, subpart WWW, with one exception: The permittee must submit the annual report described in 40 CFR 60.757(f) every 6 months. [§63.1980(a)]
2. The permittee must also keep records and reports as specified in the general provisions of 40 CFR part 60 and this part as shown in Table 1 of this subpart. Applicable records in the general provisions include items such as SSM plans and the SSM plan reports. [§63.1980(b)]
3. The permittee shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Saint Louis County Department of Health or Missouri Department of Natural Resources' personnel upon request.
4. 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.
5. All reports and certifications shall be submitted to the Missouri Department of Natural Resources Air Pollution Control Program's Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov; and to the St. Louis County Department of Health Air Pollution Control Program, 6121 N. Hanley Rd, Berkeley, MO 63134.

Permit Condition IIII 10 CSR 10-6.070, New Source Performance Standards 40 CFR part 60 Subpart A, General Provisions; and 40 CFR part 60 Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines 10 CSR 10-6.075 Maximum Achievable Control Technology Regulations 40 CFR part 63 Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	
EP #	Description
EP-019	1000 kW emergency generator, 9.87 MMBtu/hr, Caterpillar Model No. SR5, Engine Model C32 TA, 4 stroke, 32.10 Displacement, 12 cylinder. Combusts #2 fuel oil. Located in main flare yard. Constructed 4/11/13
EP-021	543 kW, 4.78 MMBtu/hr emergency generator, Perkins Model 2506C-E15TAG3. Combusts #2 fuel oil. Constructed 6/10/14.
EP-024	177 kW John Deere Model 6068HF285 emergency generator located adjacent to an auxiliary flare. 6 cyl, 6.8 L, 237 HP. Combusts #2 fuel oil. Constructed April 18, 2018

Applicability and Emission Limitations:

1. The permittee shall comply with the requirements of 40 CFR part 63 Subpart ZZZZ by meeting the requirements of 40 CFR part 60 Subpart IIII. [§63.6590(c)]
2. The permittee shall comply with the following emissions limitations.

Table 3: Emission Limitations

Engine EP#	Emission Limits (g/kW-hr)			Regulatory Citation
	NMHC + NOx	CO	PM	
EP-019	6.4	3.5	0.20	§60.4205(b), §60.4202(a)(2); 40 CFR 89.112, Units>560 kW, Tier 2
EP-021	4.0	3.5	0.20	§60.4205(b), §60.4202(a)(2); 40 CFR 89.112, Units between 450 and 560 kW, Tier 3
EP-024	4.0	3.5	0.20	§60.4205(b), §60.4202(a)(2); 40 CFR 89.112, Units between 130 and 225 kW, Tier 3

3. The permittee shall comply with the following exhaust opacity limitations:

Table 4: Opacity Limitations

Engine EP#	Exhaust Opacity Limits (% Opacity)			Regulatory Citation
	During acceleration mode	During lugging mode	During peaks in either acceleration or lugging mode	
EP-019	20	15	50	§60.4205(b), §60.4202(a)(2); 40 CFR 89.113
EP-021	20	15	50	§60.4205(b), §60.4202(a)(2); 40 CFR 89.113
EP-024	20	15	50	§60.4205(b), §60.4202(a)(2); 40 CFR 89.113

4. The permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in §60.4205 according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the engine manufacturer, over the entire life of the engine. [§60.4206]
5. Beginning October 1, 2010, the permittee must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel. [§60.4207(b)]
   a. Sulfur content of 15 ppm per gallon [§80.510(b)(1)]
   b. Cetane index minimum of 40 or aromatic index maximum of 35% by volume. [§80.510(b)(2)]

Monitoring:

1. The permittee must install a non-resettable hour meter prior to startup of the engine. [§60.4209(a)]
2. The permittee must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the engine manufacturer. In addition, permittee may only change those settings that are permitted by the manufacturer. The permittee must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they applicable. [§60.4211(a)]
3. The permittee must comply with §60.4205(b) by purchasing an engine certified to the emission standards in §60.4205(b) for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications. [§60.4211(c)]
4. The permittee must operate the emergency stationary ICE according to the requirements in §60.4211(f)(1) through (3). In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in §60.4211(f)(1) through (3), is prohibited. If you do not operate the engine according to the requirements in §60.4211(f)(1) through (3), the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines. [§60.4211(f)]
   a. There is no time limit on the use of emergency stationary ICE in emergency situations. [§60.4211(f)(1)]

b. You may operate your emergency stationary ICE for any combination of the purposes specified in §60.4211(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by §60.4211(f)(3) counts as part of the 100 hours per calendar year allowed by §60.4211(f)(2). [§60.4211(f)(2)]
   i. Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. [§60.4211(f)(2)(i)]

c. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in §60.4211(f)(2). The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid. [§60.4211(f)(3)]
   i. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met: [§60.4211(f)(3)(i)]
      A. The engine is dispatched by the local balancing authority or local transmission and distribution system operator; [§60.4211(f)(3)(i)(A)]
      B. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region. [§60.4211(f)(3)(i)(B)]
      C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines. [§60.4211(f)(3)(i)(C)]
      D. The power is provided only to the facility itself or to support the local transmission and distribution system. [§60.4211(f)(3)(i)(D)]
      E. The permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the permittee. [§60.4211(f)(3)(i)(E)]

d. If the permittee does not install, configure, operate, and maintain the engine according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance as described in §60.4211(g).

Notifications, Reports, and Records:

1. The permittee is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the permittee must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter.

The permittee must record the time of operation of the engine and the reason the engine was in operation during that time. [§60.4214(b) and Table 5 to Subpart IIII]

Table 5: Subpart IIII, Table 5

Engine Power	Starting model year
KW≥130 (HP≥175)	2011

2. If the permittee owns or operates an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates for the purposes specified in §60.4211(f)(3)(i), the permittee must submit an annual report according to the requirements in §60.4214(d)(1) through (3). [§60.4214(d)]
   a. The report must contain the following information: [§60.4214(d)(1)]
      i. Company name and address where the engine is located. [§60.4214(d)(1)(i)]
      ii. Date of the report and beginning and ending dates of the reporting period. [§60.4214(d)(1)(ii)]
      iii. Engine site rating and model year. [§60.4214(d)(1)(iii)]
      iv. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place. [§60.4214(d)(1)(iv)]
      v. Hours spent for operation for the purposes specified in §60.4211(f)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in §60.4211(f)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine. [§60.4214(d)(1)(vi)]
   b. Annual reports for each calendar year must be submitted no later than March 31 of the following calendar year. [§60.4214(d)(2)]
   c. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §60.4. [§60.4214(d)(3)]
3. The permittee shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Saint Louis County Department of Health or Missouri Department of Natural Resources' personnel upon request.
4. 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.
5. All reports and certifications shall be submitted to the Missouri Department of Natural Resources Air Pollution Control Program's Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov; and to the St. Louis County Department of Health Air Pollution Control Program, 6121 N. Hanley Rd, Berkeley, MO 63134.

Permit Condition 7864 and 7865 10 CSR 10-6.060, Construction Permits Required Construction Permits #7864 and #7865, Issued August 25, 2014 by St. Louis County Department of Health Air Pollution Control Program	
EP#	Description
EP-016a	316,000 gallon leachate treatment tank
EP-017a	4-1 million gallon leachate treatment tanks (Tanks 1 through 4)
EP-018a	LMS RTO #1: 2.75 MMBtu/hr Cycle Therm regenerative thermal oxidizer used to control emissions from Leachate Management System (LMS) pretreatment and aeration tanks.
EP-018b	LMS RTO #2: 2.75 MMBtu/hr Cycle Therm regenerative thermal oxidizer used to control emissions from Leachate Management System (LMS) pretreatment and aeration tanks.

Operational Limitation:

1. Special Condition #2.A.: The permittee shall control emissions from the following Leachate Management System equipment using the thermal oxidizers.
   a. Four-1 Million gallon leachate treatment tanks
   b. 1-316,000 gallon leachate treatment tank
2. Special Condition #2.B.: The permittee shall operate, maintain, and calibrate the thermal oxidizer control devices in accordance with the manufacturer's specifications. The operating temperature of the thermal oxidizers shall be no less than 1450 degrees Fahrenheit, based upon a three hour rolling average.

Monitoring/Recordkeeping:

1. Special Condition #2.C.: The permittee shall equip the thermal oxidizers with a monitoring device that continuously indicates and records the combustion temperature of the thermal oxidizers.
2. Special Condition #2.D.: The permittee shall maintain an operating and maintenance log for the thermal oxidizers which shall include the following:
   a. Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
   b. All operating temperature readings with calculated three hour rolling averages; and
   c. Maintenance activities, with inspection schedule, repair actions, and replacements, etc.
3. Special Condition #3.A.: The permittee shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Saint Louis County Department of Health or Missouri Department of Natural Resources' personnel upon request.

Reporting:

1. The permittee shall report any exceedance of the emission limitation no later than ten days after the end of the month during which any record shows an exceedance of the operational limitation.
2. 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.
3. All reports and certifications shall be submitted to the Missouri Department of Natural Resources Air Pollution Control Program's Compliance and Enforcement Section, P.O. Box 176, Jefferson

City, MO 65102 or AirComplianceReporting@dnr.mo.gov; and to the St. Louis County Department of Health Air Pollution Control Program, 6121 N. Hanley Rd, Berkeley, MO 63134.

Permit Condition 6.260 10 CSR 10-6.260, Restriction of Emission of Sulfur Compounds	
EP#	Description
EP-011	Flare #1: 3,500 SCFM John Zink open candlestick flare, installed 2012.
EP-012	Flare #2: 4,000 SCFM John Zink open candlestick flare, installed 2013.
EP-013	Flare #3: 4,000 SCFM John Zink open candlestick flare, installed 2013.
EP-014	Flare LFG CSU: 2,500 SCFM LFG Specialties open candlestick flare, installed 2013.
EP-019	1000 kW, 1341.02 hp emergency generator, 9.87 MMBtu/hr, Caterpillar Model No. SR5, Engine Model C32 TA, 4 stroke, 32.10 Displacement, 12 cylinder. Combusts #2 fuel oil. Located in main flare yard. Constructed 4/11/13
EP-021	543 kW, 728.2 hp, 4.78 MMBtu/hr emergency generator, Perkins Model 2506C-E15TAG3. Combusts #2 fuel oil. Constructed 6/10/14.
EP-024	177 kW John Deere Model 6068HF285 emergency generator located adjacent to an auxiliary flare. 6 cyl, 6.8 L, 237 HP. Combusts #2 fuel oil. Constructed April 18, 2018

Emission Limitation:

1. 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/m^3) of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three hour time period.

Operational Limitations:

1. Emergency generators: The permittee shall comply with the sulfur fuel requirements of 40 CFR part 60 Subpart IIII.

Monitoring/Recordkeeping:

1. Emergency Generators: The permittee shall comply with the monitoring and recordkeeping provisions of Permit Condition IIII to demonstrate compliance with this regulation.
2. Flares: The permittee shall use the monitoring provisions of Permit Condition 042018-005 to obtain the sulfur content of the landfill gas. The permittee shall use this data, the flow rate of each flare, and standard conversion factors to calculate the flare emissions of sulfur dioxide in units of ppmv and sulfuric acid and sulfur trioxide in units of mg/m^3. The permit shall keep all calculations and supporting documentation on site.
3. The permittee shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Saint Louis County Department of Health or Missouri Department of Natural Resources' personnel upon request.

Reporting:

1. The permittee shall report any exceedance of the emission or operational limitations no later than ten days after the end of the month during which the records indicate an exceedance. The permittee shall submit these reports to EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219.
2. 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. The permittee shall submit these deviation reports to both the EPA Region VII, the Air Pollution Control Program's Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov, and to the St. Louis County Department of Health Air Pollution Control Program, 6121 N. Hanley Rd, Berkeley, MO 63134.

Permit Condition 7980 10 CSR 10-6.060, Construction Permits Required Construction Permits #7980, Issued July 9, 2018 by St. Louis County Department of Health Air Pollution Control Program	
EP#	Description
EP-023	Elevated Soda Ash Storage Silo located at WWTP, emissions controlled by baghouse, Capacity 49 tons, MHDR= 25 tons/hr

Operational Limitations:

1. The permittee shall control emissions from the Elevated Soda Ash Storage Silo using a baghouse. [Special Condition #1.A.]
2. The permittee shall operate and maintain the baghouse in accordance with the manufacturer's specifications. [Special Condition # 1.B.]
3. The permittee shall keep replacement filters for the baghouse on hand at all times. The filters shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance). [Special Condition # 1.C.]

Monitoring/Recordkeeping:

1. The permittee shall conduct a visible emissions observation on the baghouse once per month using the procedures contained in U.S. EPA Test Method 22. These observations shall be conducted while the silo is being filled. Each Method 22 observation shall be conducted for a minimum of six minutes. Records of all observation results along with probable cause and corrective action of visible emissions shall be identified and recorded in an operating and maintenance log for the baghouse. [Special Condition #1.D.]
2. The permittee shall maintain an operating and maintenance log for the baghouse which shall include the following: [Special Condition # 1.E.]
    a. Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
    b. Maintenance activities, with inspection schedule, repair actions, and replacements, etc.
3. The permittee shall keep copies of the manufacturer's specifications on site at all times.
4. The permittee shall use Attachments Inspection Log and Method 22, or equivalents, to demonstrate compliance.
5. The permittee shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Saint Louis County Department of Health or Missouri Department of Natural Resources' personnel upon request.

Reporting:

1. The permittee shall report any exceedance of the operational limitation no later than ten days after the exceedance.

2. 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.
3. All reports and certifications shall be submitted to the Missouri Department of Natural Resources Air Pollution Control Program's Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov; and to the St. Louis County Department of Health Air Pollution Control Program, 6121 N. Hanley Rd, Berkeley, MO 63134.

Permit Condition 6.220 10 CSR 10-6.220, Restriction of Emission of Visible Air Contaminants	
EP#	Description
EP-023	Elevated Soda Ash Storage Silo located at WWTP, emissions controlled by baghouse, Capacity 49 tons, MHDR= 25 tons/hr

Emissions Limitation:

1. The permittee shall not cause or permit to be discharged into the atmosphere from any emission unit any visible emissions greater than 20% for any continuous six minute period. [6.220(3)(A)1.]
2. Exceptions allowed in one continuous six minute period: The permittee may emit 40% opacity for one continuous six-minute period in any sixty minutes. [6.220(3)(A)2.]
3. Failure to demonstrate compliance with 10 CSR 10-6.220(3)(A) solely because of the presences of uncombined water shall not be a violation. [6.220(3)(B)]

Monitoring:

1. The permittee shall conduct monthly visible emissions observations using U.S. EPA Test Method 22 as specified in Permit Condition 7980.
2. If no visible emissions are observed from the emission unit using Method 22, then no Method 9 is required for the emission unit.
3. For emission units with visible emissions, the permittee shall have a certified Method 9 observer conduct a U.S. EPA Test Method 9 opacity observation. The permittee may choose to forego Method 22 observations and instead begin with a Method 9 opacity observation. The certified Method 9 observer shall conduct each Method 9 opacity observation for a minimum of 30-minutes.

Recordkeeping:

1. The permittee shall maintain records of all observation results for each emission unit using Attachments Method 22 and Method 9 or equivalent forms.
2. The permittee shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Saint Louis County Department of Health or Missouri Department of Natural Resources' personnel upon request.

Reporting:

1. The permittee shall report any exceedance of the emission limitation no later than ten days after the exceedance.
2. 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.

3. All reports and certifications shall be submitted to the Missouri Department of Natural Resources Air Pollution Control Program's Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov; and to the St. Louis County Department of Health Air Pollution Control Program, 6121 N. Hanley Rd, Berkeley, MO 63134.

Permit Condition 5.500 10 CSR 10-5.500 Control of Emissions From Volatile Organic Liquid Storage	
EP #	Description
EP-016a	316,000 gallon leachate treatment tank
EP-017a	4-1 million gallon leachate treatment tanks (Tanks 1 through 4)
EP-I09	Storage tank, #2 fuel oil, 500 gallon capacity
EP-I10	24 leachate frac tanks, 21,000 gallon capacity each
EP-I11	LMS treated leachate tank, discharges to MSD, 97,000 gallon capacity

Recordkeeping:

1. The permittee shall maintain readily accessible records of the dimensions of the storage vessel and analysis of the capacity of the storage vessel. [5.500(4)(F)]
2. The permittee shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Saint Louis County Department of Health or Missouri Department of Natural Resources' personnel upon request.

Reporting:

1. 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.
2. All reports and certifications shall be submitted to the Missouri Department of Natural Resources Air Pollution Control Program's Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov; and to the St. Louis County Department of Health Air Pollution Control Program, 6121 N. Hanley Rd, Berkeley, MO 63134.

Permit Condition 5.490[2] 10 CSR 10-5.490, Municipal Solid Waste Landfills	
EP #	Description
	Landfill with Gas Collection and Control System
EP-011	Flare #1: 3,500 SCFM John Zink open candlestick flare, installed 2012.
EP-012	Flare #2: 4,000 SCFM John Zink open candlestick flare, installed 2013.
EP-013	Flare #3: 4,000 SCFM John Zink open candlestick flare, installed 2013.
EP-014	Flare LFG CSU: 2,500 SCFM LFG Specialties open candlestick flare, installed 2013.

Operational Limitation:

1. The permittee may cap or remove the collection and control system provided the following conditions are met: [5.490(3)(B)2.E.(I) through (III)]

[2] Compliance with the provisions of NSPS WWW demonstrates compliance with the provisions of this regulation, with the exception of the Operational Limitation.

a. The landfill shall be no longer accepting solid waste and be permanently closed under the requirements of 40 CFR 258.60. A closure report shall be submitted to the director;
b. The collection and control system has been in operation a minimum of fifteen years; and
c. The calculated NMOC gas produced by the landfill is less than 25 megagrams per year on three successive test dates. The test dates shall be no less than 90 days apart and no more than 180 days apart.

2. The NMOC emission rate shall be determined according to the provisions of 5.490(5)(B).

Recordkeeping:

1. The permittee shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Saint Louis County Department of Health or Missouri Department of Natural Resources' personnel upon request.

Reporting:

1. 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.
2. All reports and certifications shall be submitted to the Missouri Department of Natural Resources Air Pollution Control Program's Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov; and to the St. Louis County Department of Health Air Pollution Control Program, 6121 N. Hanley Rd, Berkeley, MO 63134.

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 make such permit available within a reasonable period of time to any Missouri Department of Natural Resources personnel upon request.

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 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 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.

Measurements shall be made with a Nasal Ranger as manufactured by St. Croix Sensory, Inc. or by a similar instrument or technique that will give substantially similar results, or as approved by the department.

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:

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.
4) Issuance of a new, amended, or modified operating permit does not restart the monitoring schedule.

Recordkeeping:
The permittee shall document all readings on Attachment 6.170, 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 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.

10 CSR 10-5.040 Use of Fuel in Hand-Fired Equipment Prohibited

No owner or operator shall operate applicable hand-fired fuel burning equipment unless the owner or operator meets the conditions set forth in 10 CSR 10-5.040. This regulation shall apply to all hand-fired fuel-burning equipment at commercial facilities including, but not limited to, furnaces, heating and cooking stoves and hot water furnaces. It shall not apply to wood-burning fireplaces and wood-burning stoves in dwellings, nor to fires used for recreational purpose, nor to fires used solely for the preparation of food by barbecuing or to other equipment exempted under 10 CSR 10-5.040. Hand-fired fuel-burning equipment is any stove, furnace, or other fuel-burning device in which fuel is manually introduced directly into the combustion chamber.

10 CSR 10-5.060 Refuse Not to be Burned in Fuel Burning Installations

(Rescinded on February 11, 1979, Contained in State Implementation Plan)
No person shall burn or cause or permit the burning of refuse in any installation which is designed for the primary purpose of burning fuel.

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

Permit Duration
10 CSR 10-6.065(5)(C)1.B, 10 CSR 10-6.065(5)(E)3.C
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.

General Record Keeping and Reporting Requirements
10 CSR 10-6.065(5)(C)1.C
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 available within a reasonable period of time 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 (5)(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.

Risk Management Plan Under Section 112(r)
10 CSR 10-6.065(5)(C)1.D

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.

Severability Clause
10 CSR 10-6.065(5)(C)1.F

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.

General Requirements
10 CSR 10-6.065(5)(C)1.G

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(5)(C)1.

Incentive Programs Not Requiring Permit Revisions
10 CSR 10-6.065(5)(C)1.H
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.

Reasonably Anticipated Operating Scenarios
10 CSR 10-6.065(5)(C)1.I
The permittee maintains an Operation, Maintenance, and Monitoring Plan (OM&M Plan) for the installation. The plan covers general requirements and the cap system; gas and subsurface control systems; and leachate management systems, which requires review and coordination of various programs in the Missouri Department of Natural Resources. Aspects of the OM&M Plan are currently under review at the Department and are not finalized.

It is anticipated that aspects of the plan will change during the lifetime of this operating permit. The permittee shall comply with all aspects of the approved plans, including monitoring, reporting, and recordkeeping provisions. The permittee shall update plans as required.

Compliance Requirements
10 CSR 10-6.065(5)(C)3
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.

Permit Shield
10 CSR 10-6.065(5)(C)6

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.

Emergency Provisions
10 CSR 10-6.065(5)(C)7

1) An emergency or upset as defined in 10 CSR 10-6.065(5)(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.

Operational Flexibility
10 CSR 10-6.065(5)(C)8

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 or AirComplianceReporting@dnr.mo.gov, 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 or AirComplianceReporting@dnr.mo.gov, 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.

Off-Permit Changes
10 CSR 10-6.065(5)(C)9

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 or AirComplianceReporting@dnr.mo.gov, 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(5)(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.

Responsible Official
10 CSR 10-6.020(2)(R)34

The application utilized in the preparation of this permit was signed by Tim Trost, Area President. On December 28, 2017, the Air Pollution Control Program was notified that Erin Fanning, Division Manager is the current 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.

Reopening-Permit for Cause
10 CSR 10-6.065(5)(E)6
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.

Statement of Basis
10 CSR 10-6.065(5)(E)1.C
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 6.170
Fugitive Emission Observations

Date	Time	Visible Emissions		If visible emissions are present		Initial
		Beyond Boundary		Cause	Corrective Action	
		No	Yes			

Attachment Inspection Log
Inspection/Maintenance/Repair/Malfunction Log

Emission Unit # _____

Date/Time	Inspection/ Maintenance Activities	Malfunction Activities					
		Malfunction	Impact	Duration	Cause	Action	Initials

Attachment Method 22
Visible Emission Observations

Method 22 Visible Emissions Observations	
Installation Name	Observer Name
Location	Date
Sky Conditions	Wind Direction
Precipitation	Wind Speed
Time	Emission unit
Sketch emission unit: indicate observer position relative to emission unit; indicate potential emission points and/or actual emission points.	

Minute	Seconds				Comments
	0	15	30	45	
	Visible Emissions Yes (Y) or No (N)				
0					
1					
2					
3					
4					
5					
6					

If visible emissions are observed, the installation is not required to complete the entire six-minute observation. The installation shall note when the visible emissions were observed and shall conduct a Method 9 opacity observation.

Attachment Method 9
Opacity Observations

Method 9 Opacity Observations		
Installation Name:	Sketch of the observer's position relative to the emission unit	
Emission Point:		
Emission Unit:		
Observer Name and Affiliation:		
Observer Certification Date:		
Method 9 Observation Date:		
Height of Emission Point:		
Time:	Start of observations	End of observations
Distance of Observer from Emission Point:		
Observer Direction from Emission Point:		
Approximate Wind Direction:		
Estimated Wind Speed:		
Ambient Temperature:		
Description of Sky Conditions (Presence and color of clouds):		
Plume Color:		
Approximate Distance Plume is Visible from Emission Point:		

Minute	Seconds				1-minute Avg. % Opacity[3]	6-minute Avg. % Opacity[4]	Steam Plume (check if applicable)		Comments
	0	15	30	45			Attached	Detached	
	Opacity Readings (% Opacity)[5]								
0						N/A			
1						N/A			
2						N/A			
3						N/A			
4						N/A			
5									
6									
7									
8									
9									
10									
11									

[3] 1-minute avg. % opacity is the average of the four 15 second opacity readings during the minute.
[4] 6-minute avg. % opacity is the average of the six most recent 1-minute avg. % opacities.
[5] Each 15 second opacity reading shall be recorded to the nearest 5% opacity as stated within Method 9.

12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
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23									
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28									
29									
30									

The emission unit is in compliance if each six-minute average opacity is less than or equal to 20%. Exception: The emission unit is in compliance if one six-minute average opacity is greater than 20%, but less than 40%.

Was the emission unit in compliance at the time of evaluation (yes or no)? _____

_____
Signature of Observer

Attachment 042018-005
Plant Wide SO_2 Emissions

The permittee shall use this attachment, or an equivalent, to calculate the actual plant wide SO_2 emissions. This attachment, or an equivalent, shall be used to demonstrate compliance with the plant wide emission limitations in Permit Condition 042018-005.

Calculation Methodology:

1. The specified time period for all sampling is defined in Table 2.
2. The permittee shall use Equation 1 to quantify the sulfur dioxide emissions from the combustion of all flares (EP-011, EP-012, EP-013, and EP-014), based on the sample results and the time period associated with the sample.
3. The permittee shall use Equation 2 to quantify the sulfur dioxide emissions from all other emission sources.
4. The permittee shall use Equation 3 to sum the values from Equations 1 and 2.

Equation 1: Sulfur dioxide emissions from the combustion of landfill gas

$$SO_{2-EQ1} = \frac{Q_{LFG} * \left(\frac{C_{sulfur,ppmv}}{10^6}\right) * \left(\frac{0.02832\ m^3}{ft^3}\right) * (MW_{sulfur}) * \left(\frac{0.00220462\ lb}{g}\right) * (P) * \left(\frac{1\ ton}{2{,}000\ lb}\right) * (2)}{(R * (273.15 + T))}$$

Where:

SO_{2-EQ1} = SO_2 Emissions from the combustion of landfill gas in all flares (EP-011, 012, 013, and 014).

Q_{LFG} = Total flow of all collected landfill gas, in units of dry standard cubic feet (DSCF) from the previous sampling date to the current sampling date

$C_{sulfur,ppmv}$ = sampling results from ASTM D5504-12 for the current sampling date, in units of parts per million by volume.

MW_{sulfur} = 32.06 $\frac{g}{g-mol}$.

P = 1 atm, standard atmospheric pressure.

2 = molecular ratio of sulfur to SO_2.

R = ideal gas law constant, $\frac{8.205\ x\ 10^{-5} m^3 * atm}{K * g-mol}$.

T = 25°C or site specific LFG temperature

Equation 2: Sulfur dioxide emissions from all other sources

$$SO_{2-EQ2} = SO_{2-NG} + SO_{2-EmGen} + SO_{2-LMS}$$

Where:

SO_{2-EQ2} = SO_2 emissions from all sources not included in Equation 1.

SO_{2-NG} = SO_2 emissions from the combustion of natural gas. Calculated by multiplying the plant wide natural gas usage from all sources (in MMSCF) for the specified time period by 0.6 lb SO_2/MMSCF (AP42, Table 1.4-2), then dividing by 2000 lb/ton. Sources must include the following emission

Attachment 042018-005
Plant Wide SO2 Emissions

points: all flares using natural gas assist and all other emission units that combust natural gas except the leachate management system thermal oxidizer units. Emissions from the thermal oxidizers (EP-RTO#1 and RTO#2 are not included here, as they are included in the calculation of SO_{2-LMS}.

$SO_{2-EmGen}$ = SO_2 emissions from the combustion of #2 fuel oil in the emergency generators, and any other sources that combust #2 fuel oil. For the emergency generators, emissions shall be calculated by using the following emission factors, and multiplying by the number of hours each engine is used in the specified time period. These emission factors are based a fuel oil sulfur content of 15 ppmv, and the rated horsepower of each engine.

Table 6: Emergency Generator Emission Factors

Emergency Generator	Emission factor (ton SO_2/hour)	Ef Source
EP-019	7.97×10^{-6}	AP42, Table 3.4-1
EP-021	2.55×10^{-4}	AP42, Table 3.4-1
EP-024[6]	2.43×10^{-4}	AP42, Table 3.3-1

SO_{2-LMS} = SO_2 emissions from the leachate management system process. Includes natural gas combustion and volatized sulfur in leachate tanks. Volatized sulfur emissions are estimated based on testing data which indicates 99 tons per year of sulfur passes through the leachate system, of which 1.7% volatizes. Each ton of volatized sulfur creates two tons of SO_2 when combusted. Potential SO_2 emissions from volatized sulfur are estimated at 3.37 tons/year (0.28 tons/month). Natural gas combustion emissions are estimated using the natural gas throughput in MMSCF/month and the emission factor 0.6 lb SO_2/MMSCF from AP 42 Table 1.4-2. In lieu of calculating actual emissions, the permittee may use the potential emissions of 3.38 tons/year (0.28 tons/month).

Equation 3:

$$SO_{2\,total} = SO_{2-EQ1} + SO_{2-EQ2}$$

Where:

$SO_{2\,total}$ = total plant wide emissions of SO_2 from all sources

The permittee shall record a monthly and 12 month rolling sum of $SO_{2-total}$ as shown in the following table. For the first twelve months after issuance of this permit, the permittee shall conduct this calculation twice per month, as detailed in Table 2. After this initial twelve month period, the testing schedule is dependent upon the 12 month rolling total emissions, as outlined in Table 2.

[6] The emissions from EP-024 must be included in the plant wide emission limitation to maintain minor NSR status. See footnote to Permit Condition Voluntary.

Attachment 042018-005
Plant Wide SO2 Emissions

Calculation of 12 month rolling total for month/year:_____

Table 7: Calculation of Emissions

Sampling dates	$SO_{2\ total}$
First sample of this month, Equation 3:	
Second sample of this month, Equation 3:	
[A] Sum of the items above for the current month:	
Calculation of Rolling 12 month sum	
(1) Total Emissions for this month [A]:	
(2) Previous consecutive 11 month emissions total from previous month's worksheets:	
(3) Current consecutive 12 month sum [(1) + (2)]	

*SSM emissions are required to be reported to the Air Pollution Control Program's Compliance/Enforcement Section according to the provisions of 10 CSR 10-6.050. However, worst case SO_2 emissions occur when flares are operational 100% of the time. SSM of the flares is anticipated to decrease SO_2 emissions. As a conservative SO_2 emissions estimation method, there is no separate line item to account for SSM flare emissions.

Compliance with the Emission Limitation of Special Condition 2 is demonstrated when the current rolling 12 month sum (4) is less than 100.0 tons.

STATEMENT OF BASIS

INSTALLATION DESCRIPTION

Bridgeton Landfill, LLC owns and operates a municipal solid waste landfill located at 13570 Saint Charles Rock Road in Bridgeton, Missouri. Bridgeton began landfilling operations in 1952 and has been closed since 2005, with a final capacity at closure of approximately 17,000,000 cubic yards distributed between the North and South Quarries. Current activities are associated with leachate and landfill gas management at the facility. Landfill gas is managed and controlled through the use of a gas collection and control system (GCCS). Additionally, the facility treats leachate onsite at a leachate pretreatment plant (LPTP).

The leachate management system begins with leachate pumped from the closed landfill into a 316,000 gallon leachate treatment tank for aeration and equalization. The leachate is then conveyed to the leachate pretreatment building to prepare the raw leachate for biological aerobic treatment. Preparation of leachate for biological treatment includes pH adjustment and metals removal. After pretreatment the leachate is conveyed to four-1 million gallon leachate treatment tanks where it undergoes aeration and biological treatment. Once the leachate leaves the four-1 million gallon leachate treatment tanks it is returned to the pretreatment building for filtration, sludge thickening, and dewatering. Sludge is transports to a landfill for disposal. Treated leachate effluent is discharged to a municipal sewage treatment plant via underground sewer lines. The entire leachate management system is a closed system. All leachate management system pretreatment equipment and aeration tanks are routed to two-2.75 MMBtu/hr natural gas fired regenerative thermal oxidizers.

Due to undergoing a vertical expansion in 1998, Bridgeton Landfill is subject to NSPS WWW. The installation is required to obtain a Part 70 Operating Permit due to the requirements of NSPS WWW and 10 CSR 10-5.490.

The installation has portable diesel generator sets that are moved to various locations at the site. These portable engines are sources of pollutants for which the installation has taken voluntary limitations in order to obtain the Section 6 construction permit 042018-005. However, the emissions from these portable engines are not included in the compliance demonstrations for these voluntary limits, nor in the potential to emit calculation.

Starting with the definition in Clean Air Act (CAA) section 302(z), of a “stationary source” and following references and definitions through CAA section 216, CAA section 111, 40 CFR part 60 Subpart IIII, and 40 CFR part 1068.30; it is concluded that as long as these engines meet the definition of non-road engine in 1068.30, they are categorically excluded from the stationary source definition. To paraphrase, the applicable parts of 1068.30 that must be satisfied are that the engines must be portable/transportable (1068.30(1)(iii)) and must not remain on site for more than 12 consecutive months (1068.30(2)(iii)).

CAA section 302(j) and 40 CFR part 70.2 define a ‘major stationary source’ as a stationary facility or source which has the potential to emit 100 tons/year of any pollutant. To obtain the Section 6 construction permit 042018-005, the installation accepted federally enforceable limits on the potential to emit. 40 CFR Part 70.2 defines “potential to emit” as the maximum capacity of the stationary source to emit air pollutants.

Since the non-road engines are excluded from the definition of stationary sources, their emissions are not included in the definition of potential to emit. Therefore, these emissions would also not be included in the compliance demonstrations for the federally enforceable limits which constrain the potential to emit.

The last five years of reported emissions and the installation's potential to emit appears in Table 8 below. The potential emissions do not include emissions from storage tanks, two emergency generators, haul roads, or landfill cover activities. The table reflects potential emissions calculated in Construction Permits #7864, 7865, and 042018-005. The fluctuations in the reported emissions from 2012 through 2016 are due to various operating scenarios and testing that has occurred at the installation throughout the time period. The potential emissions have not been scaled to the plant wide SO_2 limitation, as the relationship between the pollutants is not linear.

Potential emissions for the leachate pretreatment process, the associated thermal oxidizers, and the Perkins emergency generator were taken from Permits #7864 and 7865. The permit assumed 500 hours per year of operation for the emergency generator and used Tier 2 emission standards. The permit calculated the potential emissions from the tanks using sampling data from two samples of raw leachate collected on July 22, 2013; and an anticipated leachate throughput of 300,000 gallons per day and blower capacity of 4,820 SCFM per tank. The thermal oxidizers were assumed to have 100% capture efficiency and 98% control efficiency for VOC and HAPs from the leachate pretreatment processes.

Potential emissions for the flares were taken from Construction Permit #042018-005 and were based on historical site specific data from 2016; including a landfill gas flow rate of 3,100 SCFM. This construction permit establishes a plant wide SO_2 emission limitation which has been carried forward into this operating permit. This permit re-evaluates the carbon monoxide emissions from the flares using an emission factor of 62.4 lb CO/MMSCF methane, which is derived from the AP42 draft Section 2.4 background document. Reported flare emissions, and previously issued construction permits, use an emission factor of 750 lb CO/MMSCF of methane based on the final AP42 Section 2.4

Table 8: Emissions Profile, tons per year

Pollutants	Reported Emissions					Potential Emissions
	2014	2015	2016	2017	2018	
Particulate Matter ≤ Ten Microns (PM_{10})	5.06	2.66	1.67	1.25	1.12	2.05
Particulate Matter ≤ 2.5 Microns ($PM_{2.5}$)	5.06	2.66	1.67	1.25	1.12	2.05
Sulfur Oxides (SO_x)	30.77	241.53	148.33	95.61	74.91	<100
Nitrogen Oxides (NO_x)	21.46	9.47	7.88	7.38	7.26	8.54
Volatile Organic Compounds (VOC)	4.01	12.28	5.15	2.76	2.69	13.65
Carbon Monoxide (CO)	108.89	51.48	42.77	31.22	32.31	9.69
Hazardous Air Pollutants (HAPs)	6.97	7.31	7.17	2.08	1.55	4.02

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 September 16, 2014;
2. 2018 Emissions Inventory Questionnaire, received April 25, 2019;
3. U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition;
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 Requirements

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 Requirements

Construction Permit History
The following New Source Review permits were issued to the installation. Permits #1496 through #7865 were issued by the St. Louis County Department of Health, under delegated authority from the Air Pollution Control Program. Construction Permit #042018-005 was issued by the Air Pollution Control Program. St. Louis County Department of Health has issued various other permits to the installation under the authority of their local ordinances. Since these permits are not state or federally enforceable, they do not appear in this list.

1. Permit #1496
   This permit authorized construction of a 2,500 SCFM ground flare. This permit was voided in 1993. Therefore, this construction permit does not appear in this operating permit.
2. Permit #5454
   This permit authorized construction of a 3,500 SCFM enclosed flare. This unit was installed in 2003 and removed in 2008. Therefore, this construction permit does not appear in this operating permit.
3. Permit #5924
   This permit authorized construction of a 3,500 SCFM John Zink ZTOF enclosed flare. This unit was decommissioned September 24, 2013. Therefore, this construction permit does not appear in this operating permit.
4. Permit #7734 (MNDR Project #2012-07-011)
   This temporary use permit authorized construction of a 2,500 SCFM LFG CSU utility open flare. The unit was installed July 2012 and decommissioned October 2013. Therefore, this construction permit does not appear in this operating permit.

5. Permit #7735 and 7736 (MDNR Project 2012-08-034)
   This permit authorized construction of two flares. Permit #7735 is for a 3,500 SCFM Callidus Model G-7A60 enclosed flare. This unit started up on October 3, 2012 and was decommissioned September 24, 2013. Permit #7736 is for a 3,500 SCFM John Zink utility backup flare. This unit started up on January 30, 2013 and the permit was modified in August 2013. Therefore, this construction permit does not appear in this operating permit.
6. Permits #7787, #7788 and #7790 and Modification to County Operating Permit #7736 (MDNR Project #2013-05-026)
   These permits were issued August 7, 2013 to authorize construction of three flares and modification to Permit #7736. Permit #7787 is for a 4,000 SCFM John Zink Candlestick Open Flare, with a startup date of September 24, 2013. Permit #7788 is for a 4,000 SCFM John Zink Candlestick Open Flare, with a startup date of September 20, 2013. Permit #7790 is for a 2,500 SCFM LFG Specialties Candlestick Open Flare, with a start up date of October 1, 2013. The modification to Permit #7736 was to increase the flow rate to the 3,500 SCFM John Zink utility backup flare, with a start up date of October 1, 2013. The conditions of this permit supersedes Permits #7735, 7736, 7734, and 5924. Construction Permit 042018-005 supersedes all state and federally enforceable provisions from this construction permit. Therefore, this construction permit does not appear in this operating permit.
7. Permit #7784
   This permit was issued April 11, 2013 for a 1000 kW, #2 Fuel Oil, Caterpillar Model No. SR5, Engine Model C32 TA, 4 Stroke, 32.10 L Displacement, 12 Cylinder Emergency Generator. This unit appears in the Operating Permit as EP-019. Construction Permit 042018-005 supersedes all state and federally enforceable provisions from this construction permit. Therefore, this construction permit does not appear in this operating permit.
8. Permit #7839 and 7840 (MDNR Project #2014-05-068)
   These permits were issued June 19, 2014 for construction of one flare and one emergency generator. Permit #7839 is for a 3,500 SCFM John Zink ZTOF enclosed flare that was decommissioned in 2015. Permit #7840 is for a Caterpillar CAT C6.6 ACERT diesel fired emergency generator. The conditions of this permit supersedes Special Conditions #2 and 5 of Permits #7787, 7788, 7790, and the modified 7736. Since issuance of this construction permit, Bridgeton has reclassified the CAT C6.6 ACERT engine as a non-road, non-emergency unit. St. Louis County issued a county ordinance permit (Permit #7899) to reclassify the engine. As detailed in the Installation Description of this Statement of Basis, non-road (portable) units are not included in Title V permitting, therefore this unit does not appear in this Operating Permit. This unit is referred to as EP-020 in various permitting actions prior to the reclassification. Therefore, this construction permit does not appear in this operating permit.
9. Permit #7864 and 7865 (MDNR Project #2014-08-002)
   These permits were issued August 25, 2014 for two identical regenerative thermal oxidizers and the Perkins emergency generator. Both thermal oxidizers are used to control emissions from the leachate management system pretreatment and aeration tanks. Each thermal oxidizer is rated at 2.75 MMBtu/hr and combusts natural gas. The special conditions of this permit supersedes all special conditions in Permits #7737, 7838, 7804, and 7803. All of these superseded permits were issued by the county under the authority of county ordinances and were not state or federally enforceable. The special conditions of this construction permit appear in this operating permit as Permit Condition 7864 and 7865.

10. Construction Permit #042018-005
    This permit was issued April 3, 2018 for the installation of flares to control landfill gas. Due to the complicated flare permitting history, this permit supersedes all state and federally enforceable provisions from all previous construction permits except Project #2014-08-002 (County permits #7864 and #7865) which authorized construction of the two 2.75 MMBtu/hr natural gas fired thermal oxidizers for the leachate pretreatment plant (LPTP). Special Condition #1 contains the superseding language and has not been included in this Operating Permit and Special Condition #5 requires one time testing that has been completed; all other special conditions are included. Special Condition #5 requires a one time test to qualify the volatilized sulfur in the leachate tanks. Testing was conducted on June 19, 2018, with results indicating the volatilized sulfur is 0.00092%.
11. Construction Permit Amendment #042018-005A
    This amendment was issued June 12, 2018 to clarify the testing requirement timeline for the landfill gas and to remove EP-020 from the permit as it is a non-road engine. The revised special conditions in this amendment appear in this operating permit under Permit Condition 042018-005.
12. Permit 7980 (MDNR Project #2018-06-038)
    This permit was issued July 9, 2018 for the installation of an elevated storage silo with baghouse that is used to store soda ash, which is used in the leachate treatment process. The special conditions in this construction permit appear in this operating permit under Permit Condition 7980.

New Source Performance Standards (NSPS) Applicability

40 CFR Part 60 Subpart Cc-Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills

This regulation applies to each existing MSW landfill for which construction, reconstruction or modification was commenced before May 30, 1991. This landfill was modified after May 30, 1991, therefore this rule does not apply.

40 CFR part 60 Subpart K, Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978

40 CFR part 60 Subpart Ka, Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984

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 9: Subparts K, Ka, and Kb Applicability

Rule	Constructed/modified/reconstructed ….	With contents and capacities…..
K	Between June 11, 1973 and May 19, 1978	Petroleum liquids, >40,000 gallons
Ka	Between May 18, 1978 and July 23, 1984	Petroleum liquids, >40,000 gallons
Kb	After July 23, 1984	Volatile organic liquids, >19,813 gallons

The #2 fuel oil storage tank has a capacity less than 19,813 gallons, and therefore is not subject to these subparts. The leachate frac tanks all have capacities greater than 19,813 gallons. However,

Subpart Kb, §60.110b(b) states this regulation does not apply to tanks with capacities greater than 151 m3 (39,890 gallons) storing a liquid with a maximum true vapor pressure less than 3.5 kPa; or to tanks with a capacity between 19,813 and 39,890 gallons storing a liquid with a maximum true vapor pressure less than 15.0 kPa. The maximum true vapor pressure of the leachate is less than these thresholds, therefore this regulation does 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.

Bridgeton Landfill underwent a vertical expansion in 1998, thereby meeting the applicability of this regulation. The installation meets the requirements to install a gas collection and control system and uses flares to control the landfill gas as required in this regulation. The applicable provisions for the gas collection system and flares appear as a permit condition in this operating permit.

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.

At the time of permit issuance, the installation has not undergone construction, reconstruction, or modification after July 17, 2014. Therefore this regulation does not apply. Any modifications to Bridgeton Landfill have been undertaken to solely comply with subpart WWW, therefore this regulation does not apply.

40 CFR Part 60 Subpart IIII, Stationary Compression Ignition Internal Combustion Engines
This regulation applies to stationary compression ignition engines. All of the emergency generators on site are CI engines and this regulation appears as a permit condition in this operating permit.

40 CFR Part 60 Subpart JJJJ, Stationary Spark Ignition Internal Combustion Engines
This regulation applies to stationary spark ignition engines. All engines at this installation are compression ignition, therefore this regulation does not apply.

Maximum Achievable Control Technology (MACT) 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 regulation applies and appears as a permit condition in this operating permit.

40 CFR Part 63 Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
The stationary engines meet the requirements of this part by complying with the requirements of NSPS IIII, as specified in §63.6590(c).

40 CFR Part 63, Subpart CCCCCC, National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities
This regulation applies to gasoline storage tanks at area sources of HAPs. There are no gasoline storage tanks at this installation, therefore this regulation does not apply.

National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability
40 CFR part 61, Subpart M, National Emission Standards for Asbestos
The landfill accepted asbestos containing waste. The applicable requirements of this regulation for closed landfills appear in the operating permit.

Compliance Assurance Monitoring (CAM) Applicability
40 CFR Part 64, *Compliance Assurance Monitoring (CAM)*
Units that are subject to emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the Act are exempt from CAM, see §64.2(b)(1)(i). The flares at this installation are subject to emission limitations in NSPS subpart WWW, which was proposed on May 30, 1991. Therefore, the flares meet the exemption and CAM does not apply.

The thermal oxidizers are used as control devices for the leachate management system. Control devices for which the Part 70 Operating Permit specifies a continuous compliance determination are exempt from CAM, see §64.2(b)(1)(vi). This permit contains a continuous compliance demonstration, therefore the thermal oxidizers meet the exemption and CAM does not apply.

Greenhouse Gas Emissions
Note that this source may be subject to the Greenhouse Gas Reporting Rule. 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_2 emissions in their Missouri Emissions Inventory Questionnaire; therefore, the installation's CO_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_2 emissions data by visiting http://epa.gov/ghgreporting/ghgdata/reportingdatasets.html.

Other Regulatory Determinations
10 CSR 10-5.120, Information on Sales of Fuels to be Provided and Maintained
This regulation requires information to be kept for every delivery of coal or residual fuel oil. This installation does not accept or provide delivery of these materials, therefore this regulation does not apply.

10 CSR 10-5.130, Certain Coals to be Washed
This regulation provides that specified coals shall be cleaned by washing prior to sale or use. This installation does not sell or use coal, therefore this regulation does not apply.

10 CSR 10-5.490, Municipal Solid Waste Landfills
This regulation applies to landfills located within the St. Louis ozone non-attainment area (Jefferson, Franklin, St. Charles, St. Louis Counties, and St. Louis City) that have accepted waste any time since November 8, 1987, or have additional capacity for waste deposition.

This landfill has a capacity greater than 2.5 million megagrams and 2.5 million cubic meters as well as NMOC emissions greater than 50 megagrams per year, therefore a collection and control system is required under NSPS WWW and this regulation. Since the requirements for installation and operation of the collection and control system are identical, the permit condition contains the NSPS WWW conditions only. However, this regulation does differ from NSPS WWW for the collection and control system removal criteria. This portion of the regulation appears as a permit condition in this operating permit.

10 CSR 10-5.500 Control of Emissions From Volatile Organic Liquid Storage
This regulation applies to all volatile organic liquid storage tanks located with the City of St. Louis and St. Charles, St. Louis, Jefferson, and Franklin counties. This regulation requires controls for tanks with capacities greater than 40,000 gallons containing liquids with maximum true vapor pressures of greater than 0.5 psia. The tanks at this installation contain leachate and fuel oil #2, both of which meet the definition of volatile organic liquids. Both of these liquids have maximum true vapor pressures less than 0.5 psia, therefore the only applicable requirement is recordkeeping as specified in 5.500(4)(F).

10 CSR 10-5.510 Control of Emissions of Nitrogen Oxides
This regulation applies to installations with the potential to emit 100 tons or greater of nitrogen oxides. The installation does not have potential NOx emissions greater than 100 tons, therefore this regulation does not apply.

10 CSR 10-5.520 Control of Volatile Organic Compound Emissions From Existing Major Sources
This regulation applies to installations that have the potential to emit greater than 100 tons per year of volatile organic compounds. Based on a review of permitting records, the installation did not have the potential to emit more than 100 tons per year of VOCs since the promulgation date of this regulation. Therefore, this regulation does not apply.

10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*
The applicability of this regulation to emission units at this installation is detailed in the following table.

Table 10: 10 CSR 10-6.220 Applicability

EP #	Unit Description	Exemption
EP-011	Flare #1: 3,500 SCFM John Zink open candlestick flare, installed 2012.	Combusts landfill gas, exemption (1)(L)
EP-012	Flare #2: 4,000 SCFM John Zink open candlestick flare, installed 2013.	Combusts landfill gas, exemption (1)(L)
EP-013	Flare #3: 4,000 SCFM John Zink	Combusts landfill gas, exemption (1)(L)

EP #	Unit Description	Exemption
	open candlestick flare, installed 2013.	
EP-014	Flare LFG CSU: 2,500 SCFM LFG Specialties open candlestick flare, installed 2013.	Combusts landfill gas, exemption (1)(L)
EP-016a	316,000 gallon leachate treatment tank	Not expected to emit visible emissions
EP-017a	4-1 million gallon leachate treatment tanks (Tanks 1 through 4)	Not expected to emit visible emissions
EP-018a	LMS RTO #1: 2.75 MMBtu/hr Cycle Therm regenerative thermal oxidizer used to control emissions from Leachate Management System (LMS) pretreatment and aeration tanks.	Combusts landfill gas, exemption (1)(L)
EP-018b	LMS RTO #2: 2.75 MMBtu/hr Cycle Therm regenerative thermal oxidizer used to control emissions from Leachate Management System (LMS) pretreatment and aeration tanks.	Combusts landfill gas, exemption (1)(L)
EP-019	1000 kW emergency generator, 9.87 MMBtu/hr, Caterpillar Model No. SR5, Engine Model C32 TA, 4 stroke, 32.10 Displacement, 12 cylinder. Combusts #2 fuel oil. Located in main flare yard. Constructed 4/11/13	Internal combustion engine, exemption (1)(A)
EP-021	543 kW, 4.78 MMBtu/hr emergency generator, Perkins Model 2506C-E15TAG3. Combusts #2 fuel oil. Constructed 6/10/14.	Internal combustion engine, exemption (1)(A)
EP-024	177 kW John Deere Model 6068HF285 emergency generator located adjacent to an auxiliary flare. 6 cyl, 6.8 L, 237 HP. Combusts #2 fuel oil.	Internal combustion engine, exemption (1)(A)
EP-I09	Storage tank, #2 fuel oil, 500 gallon capacity	Not expected to emit visible emissions
EP-I10	24 leachate frac tanks	Not expected to emit visible emissions
EP-I11	LMS treated leachate tank, discharges to MSD, 97,000 gallon capacity	Not expected to emit visible emissions
EP-023	Elevated Soda Ash Storage Silo with Baghouse, located at WWTP	This unit is subject to the regulation

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. The emission units, applicability, and compliance are detailed in the following table.

Table 11: 10 CSR 10-6.260 Applicability

EP #	Unit Description	Applicability/Compliance
EP-011	Flare #1: 3,500 SCFM John Zink open candlestick flare, installed 2012.	As stated in Permit Condition 6.260
EP-012	Flare #2: 4,000 SCFM John Zink open candlestick flare, installed 2013.	As stated in Permit Condition 6.260
EP-013	Flare #3: 4,000 SCFM John Zink open candlestick flare, installed 2013.	As stated in Permit Condition 6.260
EP-014	Flare LFG CSU: 2,500 SCFM LFG Specialties open candlestick flare, installed 2013.	As stated in Permit Condition 6.260
EP-016a	316,000 gallon leachate treatment tank	Not expected to emit sulfur compounds, closed system
EP-017a	4-1 million gallon leachate treatment tanks (Tanks 1 through 4)	Not expected to emit sulfur compounds, closed system
EP-018a	LMS RTO #1: 2.75 MMBtu/hr Cycle Therm regenerative thermal oxidizer used to control emissions from Leachate Management System (LMS) pretreatment and aeration tanks.	Combusts natural, exemption (1)(A)2.
EP-018b	LMS RTO #2: 2.75 MMBtu/hr Cycle Therm regenerative thermal oxidizer used to control emissions from Leachate Management System (LMS) pretreatment and aeration tanks.	Combusts natural, exemption (1)(A)2.
EP-019	1000 kW emergency generator, 9.87 MMBtu/hr, Caterpillar Model No. SR5, Engine Model C32 TA, 4 stroke, 32.10 Displacement, 12 cylinder. Combusts #2 fuel oil. Located in main flare yard. Constructed 4/11/13	Demonstrates compliance with 6.260 by complying with the applicable fuel sulfur requirement of 15 ppm in NSPS IIII (See calculations)
EP-021	543 kW, 4.78 MMBtu/hr emergency generator, Perkins Model 2506C-E15TAG3. Combusts #2 fuel oil. Constructed 6/10/14.	Demonstrates compliance with 6.260 by complying with the applicable fuel sulfur requirement of 15 ppm in NSPS IIII (See calculations)
EP-024	177 kW John Deere Model 6068HF285 emergency generator located adjacent to an auxiliary flare. 6 cyl, 6.8 L, 237 HP. Combusts #2 fuel oil.	Demonstrates compliance with 6.260 by complying with the applicable fuel sulfur requirement of 15 ppm in NSPS IIII (See calculations)
EP-I09	Storage tank, #2 fuel oil, 500 gallon capacity	Not expected to emit sulfur compounds
EP-I10	24 leachate frac tanks	Not expected to emit sulfur compounds
EP-I11	LMS treated leachate tank, discharges to MSD, 97,000 gallon capacity	Not expected to emit sulfur compounds

All of the emergency generators demonstrate compliance with 6.260 by complying with the applicable fuel sulfur requirement of 15 ppm in NSPS IIII and Construction Permit 042018-005. Calculations that demonstrate compliance using 0.0015% sulfur (15 ppm) are below :

$$Distillate\ Oil\ SO_2\ emission\ factor\ \ (lbs/MMBtu) = \frac{142(0.0015)\ \text{lbs}/10^3\ \text{gal}}{140\ MMBtu/10^3\ \text{gal}} = 0.0015\ \text{lb/MMBtu}$$

(AP - 42 Table 1.3 - 1(9/98))

$$ppmv\ SO_2 = \left(\frac{0.0015\,lb}{MMBtu}\right) \times \left(\frac{MMBtu}{10{,}320\,wscf}\right) \times \left(\frac{ppmw}{1.660E^{-7}\,lb/scf}\right) \times \left(\frac{0.45\,ppmv}{ppmw}\right) = 0.4\ ppmv$$

(*Appendix A – 7 to Part* 60)

SO_3

$$Distillate\ Oil\ SO_3\ emission\ factor\ \ (lbs/MMBtu) = \frac{2(0.0015)\ \text{lbs}/10^3\ \text{gal}}{140\ MMBtu/10^3\ \text{gal}} = 0.00002\ \text{lb/MMBtu}$$

(AP - 42 Table 1.3 - 1(9/98))

$$ppmv\ SO_3 = \left(\frac{0.00002\,lb}{MMBtu}\right) \times \left(\frac{MMBtu}{10{,}320\,wscf}\right) x \left(\frac{1.602\ x\ 10^7\ mg\ \ ft^3}{lb\ m^3}\right) = 0.03\ \frac{mg}{m^3}$$

(*Appendix A – 7 to Part* 60)

10 CSR 10-6.261, Control of Sulfur Dioxide Emissions
This regulation applies to all sources of sulfur dioxide. The applicability of this regulation is detailed in the following table.

Table 12: 10 CSR 10-6.261 Applicability

EP #	Unit Description	Applicability
EP-011	Flare #1: 3,500 SCFM John Zink open candlestick flare, installed 2012.	No provisions for landfill gas combustion
EP-012	Flare #2: 4,000 SCFM John Zink open candlestick flare, installed 2013.	No provisions for landfill gas combustion
EP-013	Flare #3: 4,000 SCFM John Zink open candlestick flare, installed 2013.	No provisions for landfill gas combustion
EP-014	Flare LFG CSU: 2,500 SCFM LFG Specialties open candlestick flare, installed 2013.	No provisions for landfill gas combustion
EP-016a	316,000 gallon leachate treatment tank	No provisions for non-combustion units
EP-017a	4-1 million gallon leachate treatment tanks (Tanks 1 through 4)	No provisions for non-combustion units

EP #	Unit Description	Applicability
EP-018a	LMS RTO #1: 2.75 MMBtu/hr Cycle Therm regenerative thermal oxidizer used to control emissions from Leachate Management System (LMS) pretreatment and aeration tanks.	Combusts natural, exemption (1)(A)
EP-018b	LMS RTO #2: 2.75 MMBtu/hr Cycle Therm regenerative thermal oxidizer used to control emissions from Leachate Management System (LMS) pretreatment and aeration tanks.	Combusts natural, exemption (1)(A)
EP-019	1000 kW emergency generator, 9.87 MMBtu/hr, Caterpillar Model No. SR5, Engine Model C32 TA, 4 stroke, 32.10 Displacement, 12 cylinder. Combusts #2 fuel oil. Located in main flare yard. Constructed 4/11/13	Subject to more stringent limitation in NSPS IIII, meets exemption (1)(C)2.
EP-021	543 kW, 4.78 MMBtu/hr emergency generator, Perkins Model 2506C-E15TAG3. Combusts #2 fuel oil. Constructed 6/10/14.	Subject to more stringent limitation in NSPS IIII, meets exemption (1)(C)2.
EP-024	177 kW John Deere Model 6068HF285 emergency generator located adjacent to an auxiliary flare. 6 cyl, 6.8 L, 237 HP. Combusts #2 fuel oil.	Subject to more stringent limitation in NSPS IIII, meets exemption (1)(C)2.
EP-I09	Storage tank, #2 fuel oil, 500 gallon capacity	No provisions for non-combustion units
EP-I10	24 leachate frac tanks	No provisions for non-combustion units
EP-I11	LMS treated leachate tank, discharges to MSD, 97,000 gallon capacity	No provisions for non-combustion units

10 CSR 10-6.310, Restriction of Emissions From Municipal Solid Waste Landfills
This regulation applies to each MSW landfill for which construction, reconstruction, or modification was commenced before May 30, 1991, and has accepted waste since November 8, 1987, or has additional design capacity available for future waste deposition. This landfill underwent a vertical expansion in 1998, therefore this regulation does not apply. The landfill is subject to NSPS Subpart WWW.

10 CSR 10-6.390, Control of NOx Emissions From Large Stationary Internal Combustion Engines
This regulation applies to internal combustion engines rated greater than 1,300 HP, which are located within specific counties of the state, including St. Louis County. All emergency generators are exempted from this regulation in 6.390(1)(C), as long as they meet the following definition: Emergency standby engines are used only when normal electrical power or natural gas service is interrupted or for the emergency pumping of water for either fire protection or flood relief. An emergency standby engine may not be operated to supplement a primary power source when the load capacity or rating of the primary power source has been either reached or exceeded.

10 CSR 10-6.400, Restriction of Emission of Particulate Matter From Industrial Processes
This regulation does not apply to any emission units at the installation. The combustion units emit particulate due to combustion of liquid or gaseous fuels, which do not meet the definition of process

weight. Other particulate matter emitting emission units are fugitive and meet exemption 6.400(1)(B)7. The tanks are not expected to emit particulate matter. The Soda Ash Silo meets exemption 6.400(1)(B)15 as a unit with a federally enforceable requirement to install, operate, and maintain a particulate matter control device system that controls at least 90% of particulate matter emissions.

10 CSR 10-6.045, Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used for Indirect Heating
There are no indirect heating units on site, therefore this regulation does not apply to installation.

Equipment Changes:
The following equipment appears in previous permitting actions or permit applications and is not included in this Operating Permit as detailed below:
1. EP-08B, Enclosed Flare has been removed from the site.
2. EP-020, 175 hp, 130.5 kW, 1.2 MMBtu/hr, Caterpillar Model No. XQ175-2, Engine Model CAT C6.6 ACERT. Combusts #2 fuel oil and constructed 6/19/14. This unit has been reclassified as a non-road, non-emergency unit, see Construction Permit History Section of this Statement of Basis.

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 Bridgeton Landfill, LLC was placed on public notice August 31, 2019 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 September 17, 2018, the Air Pollution Control Program received seven comments from Ms. Leslye Werner, EPA Region 7. Between September 28, 2018 and September 30, 2018, the Air Pollution Control Program received 122 comments from concerned citizens, requesting a public hearing and an extension of the public comment period. The Department granted an extension of the public comment period through April 11, 2019. The Public Hearing was held on April 4, 2019, at 6 PM, at the District 9 Machinists Hall in Bridgeton, Missouri. During the Public Hearing the court reporter recorded seventeen official statements. The Air Pollution Control Program also accepted twelve comments by email on April 11, 2019 from Mr. Ed Smith, Missouri Coalition for the Environment and Mr. Bob Menees, Great Rivers Environmental Law Center.

The Missouri Department of Natural Resources' Air Pollution Control Program appreciates the amount of public participation during the public notice and hearing for Bridgeton Landfill, LLC Part 70 operating permit. Some of the comments received during the public participation process relate to items the Department has no authority to change or modify and; therefore, the Department has not responded to these comments. Following is a list of all comments received; comments have been summarized for brevity and clarity. For a complete copy of the written comments and hearing transcription, please contact the Air Pollution Control Program.

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The Missouri Air Pollution Control Program shall now address the seven comments submitted by Ms. Leslye Werner, EPA Region 7.

Ms. Leslye Werner, Comment #1:
First, Emission/ Operational Limitation 5., in Permit Condition Subpart M, requires the permittee to record a notation on the deed to the facility property and on any other instrument that would normally be examined during a title search, within 60 days of site becoming inactive and the effective date of Subpart M. Bridgeton Landfill has been closed since 2005 and Subpart M became effective in 1984.

Therefore, it appears that Emission / Operational Limitation 5 should have already been completed and this requirement may no longer be applicable. Therefore, EPA suggests MoDNR consider removing Emission / Operational Limitation 5 as an applicable requirement in this operating permit.

Air Pollution Control Program Response Ms. Werner, Comment #1:
Emission/Operational Limitation 5 has been removed from the operating permit.

Bridgeton Landfill, LLC Response to Ms. Werner, Comment #1:
Bridgeton Landfill agrees with this comment. The referenced permit condition is unnecessary because the landfill has already complied with it by recording a notation on the deed to the facility property regarding the presence of asbestos.

Ms. Leslye Werner, Comment #2:
Second, Compliance Demonstration 2. B. iii., in Permit Condition 042018-005 / Permit Condition 6.065, requires the permittee to conduct sampling on a frequency detailed in Table 1. Table 1 is the Legend Requirements for warning signs to be displayed in accordance with Permit Condition M. It appears that Table 2 (LFG Sulfur Content Sampling Frequency) is a more appropriate table reference. Additionally, Table 2 allows for the frequency to change when SO_2 emissions are equal to values of either 75 or 50 on a 12 month rolling basis. EPA suggests MoDNR consider including the units of measure for both 75 and 50 and also consider specifying whether the 12 month rolling is total or average and the frequency of the rolling determination.

Air Pollution Control Program Response to Ms. Werner, Comment #2:
Table references and clarification of the 12 month rolling total and threshold units in tons have been made to the operating permit.

Bridgeton Landfill, LLC Response to Ms. Werner, Comment #2:
Bridgeton Landfill agrees with the recommended revisions.

Ms. Leslye Werner, Comment #3:
Third, Operational Standards for Collection and Control Systems requirements 3.a. and 3.b., in Permit Condition WWW, requires the use of Method 3C and Method 3A or 3C, respectively. EPA suggests MoDNR consider including the regulatory source reference for Methods 3A and 3C. Also, Reporting requirement 1., in Permit Condition WWW requires the permittee to submit a closure report within 30 days of waste acceptance cessation. Bridgeton Landfill has been closed since 2005, therefore it appears to EPA, that this requirement may no longer be applicable. MoDNR may want to consider whether or not Reporting requirement 1 is applicable to this operating permit.

Air Pollution Control Program Response to Ms. Werner, Comment #3:
The operating permit has been changed to specify the regulatory source references of 40 CFR part 60, Appendix A-2 for Methods 3A and 3C. Additionally, Reporting requirement 1 has been removed as the installation has satisfied this requirement and submitted the required closure report.

Ms. Leslye Werner, Comment #4:
Fourth, Notification, Records and Reports requirement 3., in Permit Condition AAAA, references requirements associated with the "bioreactor." However, neither the Installation Description nor Bridgeton Landfill Application for Authority to Operate indicate the presence of a "bioreactor" at the installation. EPA suggests MoDNR consider if Notification, Records and Reports requirement 3 remains an applicable requirement to be included in this operating permit.

Air Pollution Control Program Response to Ms. Werner, Comment #4:
The bioreactor provisions have been removed from the operating permit. The installation does not operate a bioreactor, therefore these provisions do not apply.

Bridgeton Landfill, LLC Response to Ms. Werner, Comment #4:
Bridgeton Landfill agrees that the bioreactor conditions are not applicable to the landfill.

Ms. Leslye Werner, Comment #5:
Fifth, Core Permit Requirement 10 CSR 10-6.170 requires the permittee to conduct inspection of its facilities to determine compliance with the restriction of particulate matter to the ambient air beyond the premise of origin. To improve the practical enforceability of 10 CSR 10-6.170, EPA suggests MoDNR consider including method(s) the permittee is to use to verify their compliance.

Air Pollution Control Program Response to Ms. Werner, Comment #5:
The operating permit contains practically enforceable compliance requirements for this regulation. Therefore, no changes were made to the permit in response to this comment.

Bridgeton Landfill, LLC Response to Ms. Werner, Comment #5:
Bridgeton Landfill believes the permit is sufficient as written to ensure the particulate matter restrictions are practically enforceable because the permit (1) specifies a variety of measures that can be employed to minimize fugitive emissions (e.g. construction procedures, paving or cleaning of roads, application of dust-free surfaces and water, and vegetative ground cover), (2) requires monitoring for compliance via a detailed inspection schedule (e.g. weekly, bi-weekly, or monthly, depending on when fugitive emissions were last observed), and (3) contains thorough recordkeeping requirements to ensure sufficient documentation will be available to allow MDNR and the public to identify any potential violations (e.g. records of all readings, any visible emission, and corrective actions taken). Nothing more should be needed to ensure the condition is enforceable as a practical matter.

Ms. Leslye Werner, Comment #6:
Sixth, General Permit Requirement 10 CSR 10-6.065(6)(C)l.I indicates certain aspects of the permittee's Operating, Maintenance and Monitoring Plan (OM&M Plan) are currently under review at the "Department." The term "Department" is vague and EPA suggests MoDNR consider adding specificity to term "Department."

Air Pollution Control Program Response to Ms. Werner, Comment #6:
The operating permit has been changed to clarify the reference to the Missouri Department of Natural Resources.

Bridgeton Landfill, LLC Response to Ms. Werner, Comment #6:
Bridgeton Landfill agrees with EPA that the term “Department” could be clarified by replacing it with MDNR.

Ms. Leslye Werner, Comment #7:
Finally, Attachment 042018-005 includes three (3) references to Table 1 and it appears to EPA that the more appropriate reference is Table 2. Additionally, the second paragraph in the Installation Description in the Statement of Basis, on page SB-2, includes a reference to Table 1 and it appears that Table 8 is a more appropriate reference. EPA suggests MoDNR consider modifying this reference.

Air Pollution Control Program Response to Ms. Werner, Comment #7:
The attachment has been updated to reference Table 2, and the Statement of Basis has been updated to reference Table 8.

Bridgeton Landfill, LLC Response to Ms. Werner, Comment #7:
Bridgeton agrees with the recommended revisions.

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The Missouri Air Pollution Control Program shall now address the twelve comments submitted by Mr. Ed Smith, Policy Director of Missouri Coalition for the Environment and Mr. Bob Menees, Great Rivers Environmental Law Center.

Mr. Smith and Mr. Menees, Comment #1:
The draft permit fails to mention the existence of the subsurface smoldering event (SSE) in the Introduction, Statement of Basis or anywhere in the permit. This fact is a major driver for air emissions at the landfill and is the basis for several requirements in the permit. Because a Part 70 permit is, in part, designed to inform the public about air quality issues and requirements at the facility, the draft permit should explain the existence of this condition and its relevance to various requirements in the draft permit.

Air Pollution Control Program Response to Mr. Smith and Mr. Menees, Comment #1:
Mr. Smith provided a similar comment during the public hearing. Both comments will be addressed here.

A subsurface smoldering event (SSE) has been ongoing within the South Quarry since December 2010. The SSE resulted in increased landfill gas generation and an increase in the emissions of pollutants from the South Quarry. Additional information is available at:
https://dnr.mo.gov/env/swmp/facilities/BridgetonSanitaryLandfill-Background.htm

The purpose of a Part 70 Operating Permit is to serve as a single document which contains all applicable regulations at the time of permit issuance. Bridgeton Landfill, with the SSE, is in compliance with all applicable regulations at the time of operating permit issuance. Therefore, no changes were made to the permit in response to this comment.

Bridgeton Landfill, LLC Response to Mr. Smith and Mr. Menees, Comments #1:
The comment incorrectly asserts that the "SSE" (which Bridgeton Landfill has previously referred to as a "subsurface reation" or "SSR") is a "major driver" of emissions. Although an SSE/SSR may change the character of the gas generated by a landfill somewhat, the standards, controls, and operational practices applicable to air emissions do not fundamentally change as a result of an SSE/SSR. The SSE/SSR does not appear in the permit because it is not directly relevant to the applicability of the regulatory requirements it contains. Thus, Bridgeton Landfill asks MDNR to make no changes to the permit or statement of basis in response to this comment.

Mr. Smith and Mr. Menees, Comment #2:
[Comment paraphrased] The draft permit fails to mention the occurrence of at least three surface fires during the duration of the previous permit or detail how surface fires and related air pollution will be addressed in the draft permit for public comment. The most recent fire occurred on November 2, 2018, on the south quarry where the ongoing smoldering fire continues to burn. Another fire occurred in a similar area of the south quarry in February 2014 followed by a surface fire near OU-1 Area 1 in October 2015. The fires portrayed in included pictures clearly violate the prohibition of particulate matter in the ambient air beyond the premises of origin (10 CSR 10-6.170). DNR should detail how an uncontrolled fire is regulated by the State of Missouri, especially in the case of a fire that burns landfill gas from a well. DNR should find a way to calculate these emissions toward the accounting for the yearly emissions to determine threshold levels for PM, CO, NO_2, SO_2 and other appropriate contaminants. Uncontrolled fires are a serious concern for the people who live closest to the landfill as plumes of smoke have reached the area where people live. Considering the recent history of fires, DNR should do everything necessary to protect people living closest to the landfill, including the immediate deployment of air monitoring equipment in residential areas.

Air Pollution Control Program Response to Mr. Smith and Mr. Menees, Comment #2:
The purpose of a Part 70 Operating Permit is to serve as a single document which contains all applicable regulations at the time of permit issuance. The Title V program does not impose new substantive air quality control or air monitoring requirements. It does contain requirements sufficient to demonstrate compliance with applicable regulations which enables the states, EPA, and public to understand better the requirements to which the source is subject and whether the source is meeting those requirements. If the installation is in compliance with its construction permits, the Department must issue the Part 70 Operating Permit in accordance with §643.078. Therefore, no changes were made to the permit in response to this comment.

The public is encouraged to contact the Air Pollution Control Program, our St. Louis Regional Office, and the St. Louis County Department of Public Health to discuss any concerns. Additionally, the public may submit environmental concerns online at: https://dnr.mo.gov/concern.htm. Contact information for the offices follows:

Missouri Department of Natural Resources
Air Pollution Control Program
P.O. Box 176
Jefferson City, MO 65102
Phone: (573) 751-4817

St. Louis County Department of Public Health
Air Pollution Control Program
6121 N. Hanley Road
Berkeley, MO 63134
Phone: (314) 615-8924

Missouri Department of Natural Resources
St. Louis Regional Office
7545 S. Lindbergh, Suite 210
St. Louis, MO 63125
Phone: (314) 416-2960

Bridgeton Landfill, LLC Response to Mr. Smith and Mr. Menees, Comments #2:
Like an SSE/SSR, the occurrence of a surface fire does not alter the regulatory requirements applicable to a specific landfill. Therefore, Bridgeton Landfill asks MDNR to make no changes to the permit or statement of basis in response to this comment.

Mr. Smith and Mr. Menees, Comment #3:
Permit Condition Subpart M- Asbestos
Emission/Operational Limitation #5 requires the recordation of a deed notification on the property regarding the presence of asbestos material within 60 days of the site becoming inactive. Since the permit states in the introduction that the site has been inactive since 2005, this deed restriction should have already been recorded. This permit condition is unnecessary unless BL has not complied with this requirement.

Air Pollution Control Program Response to Mr. Smith and Mr. Menees, Comment #3:
Mr. Smith provided a similar comment during the public hearing. Both comments will be addressed here. Emission/Operational Limitation 5 has been removed as suggested.

Bridgeton Landfill, LLC Response to Mr. Smith and Mr. Menees, Comment #3:
Bridgeton agrees with this comment. The referenced permit condition is unnecessary because the landfill has already complied with it by recording a notation on the deed to the facility property regarding the presence of asbestos.

Mr. Smith and Mr. Menees, Comment #4:
Permit Condition Subpart M- Asbestos
40 CFR 61.151 describes "standards" applicable to municipal solid waste landfills (MSWLs) that allow permittees to select from four options how the MSWL intends to prevent the discharge of asbestos materials into the ambient air. While 40 CFR 61.151(a)(1) is understood as an emission limit of zero, the options in 40 CFR 61.151(a)(2) through 40 CFR 61.151(a)(4) are more easily understood as standards, or perhaps operational limitations. To cover both emissions limitations, operational limitations, and standards, the Recordkeeping/Reporting section of Permit Condition Subpart M should state:

2. The permittee shall report any exceedance of the emission limitation, **operational limitation or standard** no later than ten days after the end of the month during which any record shows an exceedance of the emissions [or]**,** operational limitation**, or standard**.

Air Pollution Control Program Response to Mr. Smith and Mr. Menees, Comment #4:
Mr. Smith provided a similar comment during the public hearing. Both comments will be addressed here. The provisions of §61.151 contain four options. §61.151(a)(1) contains an emission limitation, while the other three options are operational limitations. 40 CFR part 61 Subpart M does not contain sufficient reporting requirements, therefore the operating permit must provide reporting requirements sufficient to demonstrate compliance. It is standard practice for emission limitations to have a ten day reporting period, and operational limitations to be reported on the semi-annual monitoring report and the annual compliance certification. The permit condition has been changed to clarify this intent.

Bridgeton Landfill, LLC Response to Mr. Smith and Mr. Menees, Comment #4:
Bridgeton Landfill does not oppose the comment, seeking additional language to clarify the nature of Permit Condition Subpart M.

Mr. Smith and Mr. Menees, Comment #5:
Permit Condition 042018-005- SOx
Special Condition #4.B.3 should refer to Table 2 (LFG Sulfur Content Sampling Frequency) not Table 1 (Legend Requirements).

Air Pollution Control Program Response to Mr. Smith and Mr. Menees, Comment #5:
The operating permit has been changed to update the table references, also see Ms. Werner, Comment #2.

Bridgeton Landfill, LLC Response to Mr. Smith and Mr. Menees, Comment #5:
Bridgeton agrees with the recommended revisions.

Mr. Smith and Mr. Menees, Comment #6:
Permit Condition 042018-005- SOx
Table 2 (LFG Sulfur Content Sampling Frequency) fails to mention a unit of measure for sulfur content (e.g. 75 (unit) or 50 (unit))

Air Pollution Control Program Response to Mr. Smith and Mr. Menees, Comment #6:
The operating permit has been changed to indicate units of tons, also see Ms. Werner, Comment #2.

Bridgeton Landfill, LLC Response to Mr. Smith and Mr. Menees, Comment #6:
Bridgeton Landfill agrees with the recommended revisions.

Mr. Smith and Mr. Menees, Comment #7:
Permit Condition 042018-005- SOx
EIQs from the facility demonstrate that in two of the last five reporting years (2015 and 2016), BL has emitted more than 100 tons per year (tpy) SO_2. BL has taken a voluntary reduced emission limitation of less than 100 tpy for the operation to qualify as a synthetic minor source for SO_x. While BL emitted 95.61 tons of SO_2 in 2017, it is very possible the BL will exceed the 100 tpy emission threshold for SO_2 due to the presence of the SSI. Special Condition #7 should therefore state that if BL exceeds this threshold, in addition to needing a new construction permit to reflect actual emissions, the facility must be classified as a major source for SO_2 and go through PSD requirements. This would comport with the monthly NOVs issued by MDNR to BL from February, 2015 through April, 2018. For example, the April 27, 2018 NOV issued to BL states:

> Based upon review of the landfill's "Odor Mitigation Pilot Study Report," submitted November 14, 2014, and the "Sulfur Removal Technology Evaluation, Stage 2," report submitted January 23, 2015, the Department's Air Pollution Control Program has conducted calculations for the landfill gas and determined the combined emissions from the flares exceeds 250 tons of sulfur dioxide per year. Therefore, the construction permits should have been submitted for review pursuant to 10 CSR 10-6.060(8), Prevention of Significant Deterioration (PSD) program. Bridgeton Sanitary Landfill will remain in violation of 10 CSR 10-6.060 until Bridgeton Sanitary Landfill obtains applicable PSD permit(s) pursuant to 10 CSR 10-6.060(8), or until Bridgeton Sanitary Landfill initiates control measures that reduce emissions to below de minimus levels allowing them to obtain a de minimus, Section (5) permit.

Strangely, BL was issued a Section (6) permit on April 3, 2018 (without public notice or comment) twenty-four (24) days before the issuance of this NOV which expressly requires BL to submit to PSD review or reduce emissions to de minimis levels. BL neither submitted to PSD review nor reduced its emissions to below de minimis levels. MDNR should explain why no public notice or comment

occurred for this construction permit despite MDNRs express statement that BL must obtain a PSD review, which requires public notice and comment. It is unfair that the public has endured the large amounts of SO_2 emitted by BL over the last several years that have clearly exceeded major thresholds and yet have had no opportunity in commenting on the issuance of the Section (6) construction permits to BL in lieu of PSD review.

Air Pollution Control Program Response to Mr. Smith and Mr. Menees, Comment #7:
Mr. Smith provided a similar comment during the public hearing. Both comments will be addressed here.

Construction permitting is regulated in 10 CSR 10-6.060, Construction Permits Required. The type of construction permit required for an installation is dependent on the project emissions and the attainment status of the area. At the time the construction permit was issued, St. Louis County was classified as a non-attainment area for the 2008 8-hour ozone standard and the 1997 $PM_{2.5}$ standard. Due to the non-attainment status, the major source thresholds were 100 tons/year of sulfur dioxide, SO_2 (a $PM_{2.5}$ precursor), 100 tons/year of nitrogen oxides, NO_x (a $PM_{2.5}$ and ozone precursor) and 100 tons/year of volatile organic compounds, VOC (an ozone precursor). Due to potential emissions greater than 100 tons/year for SO_2, the Bridgeton Landfill, LLC construction permit project was initially a major permit. However, Bridgeton Landfill, LLC accepted a federally enforceable plant-wide limitation of less than 100 tons of SO_2 to qualify for minor source permitting, as allowed by 10 CSR 10-6.060, Construction Permits Required. Minor source permits are not required to undergo public review, therefore the draft permit was not placed on public notice.

For permits that are required to undergo public notice, draft permits are provided at the following website: http://dnr.mo.gov/env/apcp/permit-public-notices.htm. The public notice website provides a sign up link to receive e-mail notifications when updated information is published on the website. For permits that are under review, but not yet issued, information may be obtained at the following website: http://dnr.mo.gov/env/apcp/pending-projects-search.php . This website allows searching of active projects on a county and city level. Issued permits are available at the following website: http://dnr.mo.gov/env/apcp/completed-projects-search.php , which also allows searching on a county and city level.

The issued construction permit, and subsequently this Part 70 Operating Permit, contain compliance demonstrations that are used to demonstrate that actual emissions are less than this limit. Should the required recordkeeping show this limit has been exceeded, the installation is required to submit an application to obtain a new construction permit, as detailed in Special Condition 7 of the construction permit. This requirement appears in Permit Condition 042018-005 of the operating permit. Therefore, no changes were made to the permit in response to this comment.

Emission Inventory Questionnaires (EIQs) are used by installations to report their actual emissions on a calendar year basis. It is important to note that emission limitations imposed by a construction permit issued pursuant to 10 CSR 10-6.060 are for a consecutive 12 month period, not a calendar year.

Bridgeton Landfill, LLC Response to Mr. Smith and Mr. Menees, Comment #7:
While the comment correctly notes that historical emission estimates reported in the annual "Emission Inventory Questionnaire" have been above 100 tpy in the past, new information based on more recent sampling results confirms that the current SO2 emission rate at Bridgeton Landfill is much lower and

dropping steadily. Annual SO2 emissions are already well below the new 100 tpy limit established to ensure the facility does not constitute a "major source" of SO2 under the rules designed to reduce fine particulate levels in the former St. Louis nonattainment area. Since St. Louis has now attained EPA's fine particulate standard (83 Fed Reg 38033, Aug 3, 2018), the 100 tpy limit is even more protective than necessary to ensure compliance with federal regulations, since the regulations for attainment areas only define landfills as "major sources" if they have the potential to emit 250 tpy.

Nevertheless, since Bridgeton Landfill is limited to 100 tpy of SO2 (and well below that level), it is not subject to the major source PSD program referenced in the comment. Thus, only a Section (6) permit was needed to make the 100 tpy limit enforceable, and public notice and comment procedures are not required for Section (6) permits. (10 CSR 10-6.060(12)(B) "Appendix B, Public Participation). Even if MDNR had accepted comment on that permit, there would have been no basis for any commenter to dispute MDNR's conclusion that the facility is not subject to major source PSD. Thus, Bridgeton Landfill believes no changes to the permit are necessary in response to this comment.

Mr. Smith and Mr. Menees, Comments #8 and #9:
Core Permit Requirement
10 CSR 10-6.165- The permit does not provide the testing method for determining odor levels. The following language should be added to the permit: "Measurements shall be made with a Nasal Ranger as manufactured by St. Croix Sensory, Inc. or by a similar instrument or technique that will give substantially similar results, or as approved by the department."

10 CSR 10-6.165(4) requires that Odor control plans be reviewed and updated as necessary a minimum of every five (5) years from the date last approved or when a modification occurs. Bridgeton Landfill's current Odor control plan is from June 20, 2014 so it must be updated by June 20, 2019. Bridgeton Landfill was required to submit an updated plan or a review letter by January 20, 2019. The Part 70 Permit should expressly incorporate the Odor control plan, and any updates, into this permit condition even if a state only requirement. This is especially true in light of history of odor complaints at and around the facility. In 2016, the St. Louis County Department of Public Health released the Bridgeton Respiratory Health Survey, which found that people living closest to the landfill are statistically more likely to be concerned about odors on a daily basis compared to the control group surveyed in parts of St. Louis County, farther away from the landfill. Following the release of the health survey by St. Louis County, the Missouri Department of Health & Senior Services (DHSS), with consultation from the Agency for Toxic Substances & Disease Registry (ATSDR), determined in a Health Consultation that the ongoing exposure to odors causes chronic stress, which is known to lead to negative health outcomes.

Air Pollution Control Program Response to Mr. Smith and Mr. Menees, Comments #8 and #9:
Mr. Smith provided a similar comment during the public hearing. Both comments will be addressed here.

Regarding 10 CSR 10-6.165, the regulation only requires odor control plan submittals from Class 1A Concentrated Animal Feeding Operations (CAFO), see 10 CSR 10-6.165(3)(A). This installation is not a Class 1A CAFO facility, and is not required to submit an odor control plan. Therefore, no changes were made to the permit regarding submittal of an odor control plan. The permit has been changed to incorporate the language in 10 CSR 10-6.165(5) regarding testing methods.

The public is encouraged to contact the Air Pollution Control Program, our St. Louis Regional Office, and the St. Louis County Department of Public Health to discuss any concerns. Additionally, the public may submit environmental concerns online at: https://dnr.mo.gov/concern.htm. Contact information for the offices is contained in Air Pollution Control Program Response to Mr. Smith and Mr. Menees, Comment #2.

Bridgeton Landfill, LLC Response to Mr. Smith and Mr. Menees, Comments #8 and #9:
Bridgeton Landfill does not oppose adding language from applicable regulations, although any state regulations should be marked "This is a State Only permit requirement." However, the state regulation referenced in the comment does not require the landfill to have an odor control plan at all. Section (3) of the referenced regulation (10 CSR 10-6.165) only requires odor control plans for Class 1A Concentrated Animal Feeding Operations, and there is no similar requirement or regulation for municipal solid waste landfills. Section (1)(B) of that rule even notes that only certain types of animal feeding operations are subject to the odor control plan requirements in section (3), further confirming that section (3) does not apply to other types of activities or facilities. Although the recordkeeping and reporting requirements in section (4) of the rule are not expressly limited to animal feeding operations, that section is clearly focused solely on the odor control plans required by section (3) and cannot be read as an extension of the odor control plan requirement to all sources generally. Therefore, MDNR should deny the commenters requires for a revision to the draft permit on this basis.

Mr. Smith and Mr. Menees, Comment #10:
General Permit Requirements
It appears that several of the citations to regulations have changed since the draft permit was issued. These citations should all be updated to reflect the most current version of MDNR's regulations.

Air Pollution Control Program Response to Mr. Smith and Mr. Menees, Comment #10:
Section IV, Core Permit Requirements and Section V, General Permit Requirements have been updated to reflect the current regulations.

Bridgeton Landfill, LLC Response to Mr. Smith and Mr. Menees, Comments #10:
Bridgeton Landfill does not oppose the requested updates to the permit, if such information is available at the time the permit is issued.

Mr. Smith and Mr. Menees, Comment #11:
General Permit Requirements
10 CSR 10-6.065(6)(C)1.I. Reasonably Anticipated Operating Scenarios. This provision should be amended to add language that BL must comply with the Operating, Maintenance and Monitoring Plan (OM&M), and all documents incorporated into the OM&M. Without such express reference, it is unclear whether documents incorporated by reference into the OM&M are enforceable terms of the permit. These elements of the OM&M plan, such as the Odor control plan should be enforceable terms of the permit.

Air Pollution Control Program Response to Mr. Smith and Mr. Menees, Comment #11:
The OM&M Plan contains items that are outside of the authority of the Clean Air Act, and subsequently air permitting, therefore the entire plan cannot be included in the operating permit. There are aspects of the plan concerning compliance with NSPS WWW. The plan is specifically mentioned in Permit

Condition WWW and Permit Condition AAAA to ensure it is enforceable. Therefore, no changes were made to the permit in response to this comment.

Bridgeton Landfill, LLC Response to Mr. Smith and Mr. Menees, Comment #11:
Bridgeton Landfill disagrees because the rest of the permit conditions addressing the OM&M Plan are clear as written. The permit already makes clear in two different conditions that compliance with the OM&M Plan is mandatory (see Permit Condition WWW, Permit Condition AAAA), so no further revisions to the permit are necessary.

Mr. Smith and Mr. Menees, Comment #12:
Statement of Basis
The Statement of Basis should be updated prior to issuance to include EIQ information from 2018, which should be available to the Department in the month of April if not already in the Department's possession.

Air Pollution Control Program Response to Mr. Smith and Mr. Menees, Comment #12:
The Statement of Basis has been changed to include the 2018 reported emissions.

Bridgeton Landfill, LLC Response to Mr. Smith and Mr. Menees, Comments #12:
Bridgeton Landfill does not oppose the requested updates to the statement of basis, if such information is available at the time the permit is issued.

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The Missouri Air Pollution Control Program shall now address the eighteen comments recorded during the Public Hearing. Mr. Ed Smith, Policy Director of Missouri Coalition for the Environment provided written comments on April 11, 2019 that were substantially similar to the six comments provided verbally during the public hearing. Responses to his comments, both verbal and written, appear earlier in this document.

Mr. Harvey Ferdman, Chair, West Lake Community Advisory Group:
From a layman's perspective, the Bridgeton Landfill subsurface is smoldering again. It is burning refuse, garbage, and to me it appears to be an incinerator. It's incinerating that garbage. But I guess what I'd like to encourage is that you look at if this were classified as an incinerator, is every possible technology that's available to protect the community in place as if it were an incinerator? And if not, I'd like to ask you why not.

Air Pollution Control Program Response to Mr. Harvey Ferdman:
10 CSR 10-6.020, Definitions and Common Reference Tables, defines an incinerator as "any article, machine, equipment, contrivance, structure, or part of a structure used to burn refuse or to process refuse material by burning other than by open burning..." 40 CFR part 60 Subpart CCCC, Standards of Performance for Commercial and Industrial Solid Waste Incinerator Units defines an incinerator as "means any furnace used in the process of combusting solid waste (as that term is defined by the Administrator in 40 CFR part 241) for the purpose of reducing the volume of the waste by removing combustible matter. Incinerator designs include single chamber and two-chamber." The subsurface smoldering event does not meet these definitions of incinerator. Therefore, no changes were made to the permit in response to this comment.

Bridgeton Landfill, LLC Response to Mr. Harvey Ferdman:
Landfill flares do not constitute an "incinerator" under any regulatory definition of that term because they do not incinerate or burn waste. Rather, the flares combust landfill gas for the purpose of reducing the emission of certain air pollutants and to minimize the potential for any odors from the collected waste as it decomposes.

Ms. K.C. Mackey, a citizen of North City:
I work with the black community in North City to maintain control of their communities and resist gentrification happening. I just wanted to express my complete solidarity with all of the communities that have been affected by the landfill and that's been exposed to radioactive materials that affected the families and were created by the bombs that were made in St. Louis to be dropped on Hiroshima during the World War II. I also want to express my total solidarity with organizing of Just Moms STL and all the awareness that they've raised about this issue, and that this has completely destroyed families and lives. I want to draw those connections and just express my solidarity, and say that whatever this community needs to be safe and healthy and have self-determination they have got to get. I just wanted to express my solidarity and say that the landfill, the EPA ignored this for years and years, and obviously the landfill company has no vested interest in the community itself. The landfill needs to be taken care of, and the people need to be obviously protected and have control of their health and their communities and families.

Air Pollution Control Program Response to Ms. K.C. Mackey:
It is the purpose of a Title V (Part 70) Operating Permit to serve as a single document which contains all applicable regulations at the time of permit issuance. The Title V program does not impose new substantive air quality control requirements. It does contain requirements sufficient to demonstrate compliance with applicable regulations; which enables the states, EPA, and public to understand better the requirements to which the source is subject and whether the source is meeting those requirements.

If Bridgeton Landfill, LLC undergoes any physical change in or change in the method of operation, then a construction permit evaluation must be conducted under the provisions of 10 CSR 10-6.060, Construction Permits Required. Ambient air monitoring and compliance with the NAAQS may be included in the permit review as provided in 10 CSR 10-6.060. Also, if any new applicable regulations are promulgated during the term of the Operating Permit, the installation must demonstrate compliance with the new regulations. Therefore, no changes were made to the permit in response to this comment.

Ms. Dawn Chapman, Just Moms STL, Comment #1:
I am concerned that this is just a minor permit and not a major permit. I think that, given the rules for what is possible at this time, I do think that they should have been considered a major permit.

Air Pollution Control Program Response to Ms. Dawn Chapman, Comment #1:
Major and minor source construction permitting is address in Air Pollution Control Program Response to Mr. Smith and Mr. Menees, Comment #7. Therefore, no changes were made to the permit in response to this comment.

Ms. Dawn Chapman, Just Moms STL, Comment #2:
I am disappointed in that we don't have any information on 2018 rolling SO_2 totals. I think that would have been good to have going into this tonight. I think they had something in April, Nicole said. I do think that maybe this meeting could have been postponed until you guys had it at the end so you could show us what they were.

Air Pollution Control Program Response to Ms. Dawn Chapman, Comment #2:
The current rolling twelve month SO_2 emissions data is presented in the following tables. This comment did not request changes to the permit, therefore, no changes were made to the permit in response to this comment.

Time Period	Rolling 12 month SO_2 (tons)
March 2018 through February 2019	60.81
February 2018 through January 2019	61.37
January 2018 through December 2018	63.43
December 2017 through November 2018	64.95
November 2017 through October 2018	67.43
October 2017 through September 2018	68.91
September 2017 through August 2018	71.16
August 2017 through July 2018	73.13
July 2017 through June 2018	74.81
June 2017 through May 2018	75.65
May 2017 through April 2018	77.59
April 2017 through March 2018	78.31
April 2017 through February 2018	72.02
April 2017 through January 2018	67.24
April 2017 through December 2017	61.16
April 2017 through November 2017	56.08
April 2017 through October 2017	49.68
April 2017 through September 2017	44.08
April 2017 through August 2017	37.11
April 2017 through July 2017	28.66
April 2017 through June 2017	21.34
April 2017 through May 2017	14.30
April 2017	5.39

Month	Monthly Emissions (tons SO2)	Month	Monthly Emissions (tons SO2)
February 2019	4.23	November 2017	6.39
January 2019	4.02	October 2017	5.61
December 2018	3.56	September 2017	6.97
November 2018	3.92	August 2017	8.45
October 2018	4.12	July 2017	7.31
September 2018	4.72	June 2017	7.04
August 2018	6.49	May 2017	8.90

July 2018	5.63	April 2017	5.39
June 2018	6.20	Starting tracking data for Construction Permit compliance purposes in April 2017	
May 2018	6.97		
April 2018	4.68		
March 2018	6.28		
February 2018	4.78		
January 2018	6.08		
December 2017	5.08		

Ms. Dawn Chapman, Just Moms STL, Comment #3:
We're interested in why the thermal oxidizer only checked when their plant is not considered an incinerator. At 1450 degree burning harmful chemicals from the leachate, it seems like that would qualify per the State's guideline of burning refuse, and using technology to do so. What we would like to see with that is a better understanding from the State if they could explain, either it does or it doesn't meet that qualification, and why they think so.

Air Pollution Control Program Response to Ms. Dawn Chapman, Comment #1:
The thermal oxidizer does not meet the definitions of incinerator, please see the definitions of incinerator provided in Air Pollution Control Program Response to Mr. Harvey Ferdman. Additionally, 10 CSR 10-6.020 defines refuse as "the garbage, rubbish, trade waste, leaves, salvageable material, agricultural wastes, or other wastes". Leachate gas does not fit the definition of refuse. Therefore, no changes were made to the permit in response to this comment.

Bridgeton Landfill, LLC Response to Mr. Harvey Ferdman:
Landfill flares do not constitute an "incinerator" under any regulatory definition of that term because they do not incinerate or burn waste. Rather, the flares combust landfill gas for the purpose of reducing the emission of certain air pollutants and to minimize the potential for any odors from the collected waste as it decomposes.

Ms. Dawn Chapman, Just Moms STL, Comment #4:
I understand that the construction permits from last year was not made available for public comments. I understand that we believe there was no requirement to do so. I would hope that in the future, if the State of Missouri would consider this a working relationship with the community and would feel obligated to come out and explain those documents to us regardless if you legally have to or not. I think that it would do us all well to have a better understanding of them.

Air Pollution Control Program Response to Ms. Dawn Chapman, Comment #4:
Major and minor construction permitting, and public notice requirements, are address in Air Pollution Control Program Response to Mr. Smith and Mr. Menees, Comment #7. Therefore, no changes were made to the permit in response to this comment.

Ms. Dawn Chapman, Just Moms STL, Comment #5:
I would like to know where the asbestos sign is at the site. In the document, it states clearly it has to be a 20 by 14, upright sign. To my knowledge, I've never seen such a sign, but we were not even aware as people that live in this community that have watched wells blow out and stuff fly out of them that there

was an asbestos issue that we need to be concerned about. I think that that's something that needs to be discussed and talked about.

Air Pollution Control Program Response to Ms. Dawn Chapman, Comment #5:
The provisions of §61.151(b) provides three options: install warning signs as detailed in §61.151(b)(1), or fence the perimeter as detailed in §61.151(b)(2), or provide a natural barrier to deter public access as detailed in §61.151(b)(3). The signage is only required if the installation chooses the option under §61.151(b)(1). Therefore, no changes were made to the permit in response to this comment.

Ms. Dawn Chapman, Just Moms STL, Comment #6:
The other thing that I'm concerned about is there appears to be too big of a gap between the testing only once a year if the SO_2 drops below 50. It's our understanding that as it stands as it gets near 75, then SO_2 testing is required monthly. I think going from monthly to once a year is a pretty big drop. So we would like that explained and addressed and to recommend it maybe could go down to quarterly and not yearly.

Air Pollution Control Program Response to Ms. Dawn Chapman, Comment #6
It is not the purpose of the Part 70 Operating Permit program to revise or reevaluate construction permitting. Revising the monitoring schedule is outside the scope of this permit. Therefore, no changes were made to the permit in response to this comment.

Ms. Dawn Chapman, Just Moms STL, Comment #7:
I've brought up some really great comments about this company not being forthcoming in the past. One of the things that is concerning to us in this document is the way odors are checked, the way this component is enforced. Is it the County? Is it the State? The last time that we had a meeting, it was St. Louis County Health Department. They were pretty specific that they were limited on the technology that they had to enforce and check up on the conditions of the permitted use sites. Obviously you all being down in Jefferson City, there's kind of a gap. What are we supposed to do if we see an odor? I know Nicole had mentioned that we could always call County. If we didn't get any resolution, go to you guys. I think having that outlined on a piece of paper or detailed: here's the number, here's who you call, here's who you ask for, here's how long it should take, and then if nothing, then here's the number for the State. There's got to be a better way for us to report not just odors but things that we see going on at the sites. I think that is going to be up to you guys to really enforce this permit. I have no problem going on the record swearing that I have no confidence in this company whatsoever, to tell the truth and to actually be honest with what's going on. I just don't. They've given us no reason to. So forgive us if we're a little weary of them. Not you guys, and we're probably going to be calling in a lot.

Air Pollution Control Program Response to Ms. Dawn Chapman, Comment #7
The public is encouraged to contact the Air Pollution Control Program, our St. Louis Regional Office, and the St. Louis County Department of Public Health to discuss any concerns. Additionally, the public may submit environmental concerns online at: https://dnr.mo.gov/concern.htm. Contact information for the offices is contained in Air Pollution Control Program Response to Mr. Smith and Mr. Menees, Comment #2. Therefore, no changes were made to the permit in response to this comment.

Ms. Dawn Chapman, Just Moms STL, Comment #8:
In the permit, it says that greenhouse emissions, although they're calculated at the site, they're not part of this permit, and that doesn't really make any sense. If you guys could in writing respond to us the reason why that was the case.

Air Pollution Control Program Response to Ms. Dawn Chapman, Comment #8:
The preamble of the Greenhouse Gas (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_2 emissions in their Missouri Emissions Inventory Questionnaire; therefore, the installation's CO_2 emissions were not included within this permit. Therefore, no changes were made to the permit in response to this comment.

Mr. Jim Usry, Assistant Chief, Pattonville Fire Protection District, Comment #1:
The Pattonville Fire District would like to again support what's already been discussed going from a minor to a major permit in regards to the facts that have already been presented. Due to the adjoining threats on site as well as the lack of compliance with reporting, having a party reporting, Republic, in regards to following up with the events, following up with equipment failures as speculated by the permit and standardized by the permit in place for several years now. Request stronger enforcement and penalties subjected for the lack of following up with their IAP and the process they have in place.

Air Pollution Control Program Response to Mr. Jim Usry:
Major and minor construction permitting is addressed in Air Pollution Control Program Response to Mr. Smith and Mr. Menees, Comment #7. The public is encouraged to contact the Air Pollution Control Program, our St. Louis Regional Office, and the St. Louis County Department of Public Health to discuss any concerns. Additionally, the public may submit environmental concerns online at: https://dnr.mo.gov/concern.htm. Contact information for the offices is contained in Air Pollution Control Program Response to Mr. Smith and Mr. Menees, Comment #2. Therefore, no changes were made to the permit in response to this comment.

Ms. Lore Sczepanski, Member, West Lake Community Advisory Group:
It's my understanding that they haven't been able to do testing on the flares because they're not enclosed and because of it being a candlestick flare. I would like to see in the permit, if it's possible, to make it an enclosed flare so it can be tested. Those flares are emitting, God knows what, into the community, and somebody needs to protect the community. I think MoDNR is probably going to have to be the one that does it.

Air Pollution Control Program Response to Ms. Lore Sczepanski:
The requirements to install flares are found in 40 CFR part 60, Subpart WWW, Standards of Performance for Municipal Solid Waste Landfills and 10 CSR 10-5.490, Municipal Solid Waste Landfills. These regulations provide three options for landfills that are required to install a gas collection and control system. The first option is to install an open (candlestick) flare, the second option is to install a control system that meets specific requirements, the third option is to treat the gas for subsequent sale or use. Bridgeton Landfill, LLC has chosen the first option, open (candlestick) flares. Since this option is compliant with the underlying regulations, the operating permit cannot require a different type of flare. Therefore, no changes were made to the permit in response to this comment.

Missouri Department of dnr.mo.gov
NATURAL RESOURCES
Michael L. Parson, Governor Carol S. Comer, Director

MAY 3 1 2019

Ms. Erin Fanning
Bridgeton Landfill, LLC
13570 St. Charles Rock Road
Bridgeton, MO 63044

Re: Renewal of Part 70 Operating Permit
Installation ID 189-0312, Permit Number: OP2019-019

Dear Ms. Fanning:

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:NW

Enclosures

c: PAMS File: 2014-09-028